

# Siebel

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## **Object Interfaces Reference**

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# Preface

This preface introduces information sources that can help you use the application and this guide.

## Using Oracle Applications

To find guides for Oracle Applications, go to the Oracle Help Center at <http://docs.oracle.com/>.

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# 1 What's New in This Release

## What's New in Siebel Object Interfaces Reference, Siebel CRM 20.3 Update

The following information lists the changes in this revision of the documentation to support Siebel CRM 20.3 Update.

Topic	Description
<i>Configuring TLS for the Siebel Java Data Bean Standalone Client</i>	New topic. Added information about configuring Transport Layer Security (TLS) for the Java Data Bean standalone client.

## What's New in Siebel Object Interfaces Reference, Siebel CRM 20.1 Update

The following information lists the changes in this revision of the documentation to support Siebel CRM 20.1 Update.

Topic	Description
Multiple topics	<p>Removed or modified topics. Removed all content referring to the Web Client Automation Server, which is no longer supported, as of Siebel CRM version 17.0. This object interface was previously used only with the high interactivity client, which is itself now obsolete.</p> <p><b>Note:</b> Customers who previously relied on the Web Client Automation Server must consider other approaches for integration. These might include the other Object Interfaces, DISA, Web Services, REST, and so on, depending on the specific requirements.</p> <p><b>Note:</b> The Mobile Web Client Automation Server, which is unrelated to the Web Client Automation Server, remains supported and documented.</p>
<i>SetProfileAttr Method for an Application</i>	Modified topic. For security reasons, to use SetProfileAttr in Browser Script, you must set the EditProfileAttr server parameter to True. The decision to override the default behavior must be done after careful consideration of the security risks.
ShowModalDialog Method for an Application	Removed topic. Removed the information about the ShowModalDialog method, which is now obsolete.

# What's New in Siebel Object Interfaces Reference, Siebel CRM 19.1 Update

No new features have been added to this guide for this release. This guide has been updated to reflect only product name changes.

## 2 About Object Interfaces and the Programming Environment

### About Object Interfaces and the Programming Environment

This chapter describes Oracle's Siebel Object Interfaces and the programming environment you use to customize them. It includes the following topics:

- *Object Interfaces You Can Use to Access Siebel Objects*
- *About the Siebel Programming Environment*
- *Siebel Object Interface Methods That You Can Use to Control Data and Objects*

### Object Interfaces You Can Use to Access Siebel Objects

This topic describes object interfaces you can use to access Siebel objects. It includes the following topics:

- *Overview of Interfaces You Use to Access Siebel Objects*
- *Objects You Can Access Through a Siebel Object Interface*
- *About the Siebel Java Data Bean Object Interface*
- *About the Siebel COM Object Interface*

### Overview of Interfaces You Use to Access Siebel Objects

A Siebel *object interface* is a collection of object interface methods that reside on Siebel objects that make their data and functions available to custom code that you write in Server Script, and also to other languages that are external to Siebel CRM. These interfaces provide access to Siebel business objects that contain object interface methods, object interface events, and data.

A Siebel object interface can provide an interface between Siebel CRM and an external application. Siebel object interface definitions reference Siebel business objects and object definitions that you can configure so that Siebel CRM automatically upgrades them during a release update.

You can integrate client and server applications from different third-party vendors. Application integration typically requires that software programs interactively pass data back and forth. Application integration sometimes requires that one application controls another application.

An *object interface method* is a function that allows you to control data and objects. Siebel CRM provides object interface methods to perform operations, such as manipulating files that Siebel CRM stores in the Siebel File System, or updating records through a Siebel object, such as a business component.

## Objects You Can Access Through a Siebel Object Interface

You can use the following Siebel object interfaces to create or modify a Siebel object:

- Scripting using Server Script or Browser Script
- Component Object Model (COM) using the COM Data Control, COM Data Server, or Mobile Web Client Automation Server
- Java using Siebel Java Data Bean

The following information lists the types of objects you can access. If a table cell includes Yes, then you can use the object type listed in the Object Type column with the Siebel object interface listed in the column header.

Object Type	Server Script	Browser Script	Mobile Web Client Automation Server	COM Data Control	COM Data Server	Siebel Java Data Bean
Applet	Yes	Yes	No	No	No	No
Application	Yes	Yes	Yes	Yes	Yes	Yes
Business Component	Yes	Yes	Yes	Yes	Yes	Yes
Business Object	Yes	Yes	Yes	Yes	Yes	Yes
Business Service	Yes	Yes	Yes	Yes	Yes	Yes
Property Set	Yes	Yes	Yes	Yes	Yes	Yes
Control	No	Yes	No	No	No	No

Siebel CRM uses other object types that this topic does not describe, including some specialized types. If this topic does not describe an object type, then it is not available through a Siebel object interface. If you reference it, then Siebel CRM might not pass it to an external DLL, such as a Microsoft Visual Basic COM DLL.

For more information about the objects that the table in this topic describes, see *Configuring Siebel Business Applications*.

### Applets

You can add a script to an applet to access this applet through an object interface. In Siebel Tools, you right-click the applet, and then choose the Edit Server Scripts or Edit Browser Scripts menu item. This work is similar to adding a script to a business component. For more information, see [Using Script to Add Business Logic to a Business Component](#).

You can use the following scripting languages with an applet:

- Siebel VB and Siebel eScript in a Server Script

- Browser JavaScript in Browser Script

## Business Services

A *business service* is an object type that contains a set of predefined methods. Siebel CRM uses C++ code to implement them. It can also contain custom methods that reside in Siebel script. It allows you to configure Siebel CRM to call C++ code or to call a scripted business service method from a script that you create. You can use a business service in the following ways:

- Called from a script or from an object interface.
- Reusable and can persist through a session.
- Simulate a global procedure.
- Provide a generic code library that Siebel CRM calls from multiple scripts.
- Modify object properties. You can write a script in Siebel VB or Siebel eScript that configures a business service that modifies object properties.

You can do one of the following to create a custom business service:

- Add a record in the Business Services list in Siebel Tools.
- Use administrative views in the Siebel client.

To use the a Browser Script to call a business service, you must register the business service in Siebel Tools as an application user property. This configuration prevents Service Not Found errors. For more information, see [GetService Method for an Application](#).

You can use the following types of business services:

- **Repository.** Defined in Siebel Tools and stored in the Siebel runtime repository.
- **Run-time.** Defined in the Siebel client and stored in the Siebel database.

For more information, see *Integration Platform Technologies: Siebel Enterprise Application Integration* .

## Repository Business Services

You can use the following types of repository business services:

- **Standard.** References the CSSService class. You can script or modify a standard business service.
- **Specialized.** References a specialized C++ class. If Siebel Bookshelf documents a specialized business service, then you can script or modify it.

You cannot configure Siebel CRM to modify a repository business service at run time, or to use a run-time script to override a predefined business service.

## Property Sets

A *property set* is a collection of properties that you can use to store data. It can include a child property set that forms a tree data structure. You use a property set to handle inputs to and outputs from a business service. For more information, see *Integration Platform Technologies: Siebel Enterprise Application Integration* .

## User Interface Controls

A *user interface control* is an object type that defines a user interface element, such as a text box, check box, or a button. Browser Script can access the properties of a control. The controls on the applet that are currently visible are the only controls that are available to Browser Script.

## About the Siebel Java Data Bean Object Interface

The *Siebel Java Data Bean* is a set of Java libraries that use the J2SE Development Kit (JDK). It is similar to the interfaces that are available through COM Data Control. It allows you to do the following work:

- Use an external application, external component, or Java applet to access Siebel objects without displaying the Siebel client.
- Access a Siebel application to read and write data.
- Incorporate the Java libraries in Java applications, applets, servlets, JSPs, or Enterprise Java Beans. You can add these items to your Java application.

For more information about:

- Developer resources for Java technology, see the following:  
<http://www.oracle.com/technetwork/java/index.html>
- Communication with an external application, see *How an External Application Communicates with a Siebel Application*.

## About the Siebel COM Object Interface

You can access a Siebel COM object interface in any of the following ways:

- COM Data Control
- COM Data Server
- Mobile Web Client Automation Server

You can use any of the following languages to access a Siebel COM interface:

- JavaScript
- Visual Basic
- C++

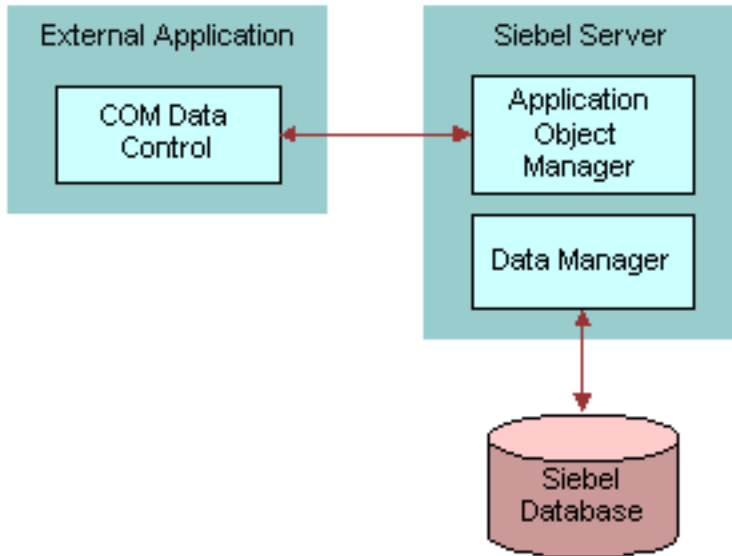
You cannot use the Perl programming language to access a Siebel COM interface.

The programming environment you use might limit the features that Siebel CRM can use the Siebel COM servers. For example, do not use Siebel VB code for the Data Server as a Windows NT service.

## How an External Application Communicates with a Siebel Application

*COM Data Control* is a type of Siebel Object Interface that allows an external application to connect and communicate with the *Siebel Application Object Manager*, which is a multithreaded, multiprocess application server that hosts Siebel business objects and allows session connections with Siebel clients. This connection allows the external application to access Siebel business objects. The Siebel Internet Session Network API (SISNAPI) protocol allows this communication.

The following image illustrates how an external application uses COM Data Control to communicate with the Siebel application.



To use COM Data Control to develop a Siebel application, you must install, configure, and make sure Siebel CRM is running a Siebel Application Object Manager on a Siebel Server. For more information, see *Siebel System Administration Guide*.

For information about the SISNAPI protocol, see *Siebel Deployment Planning Guide*.

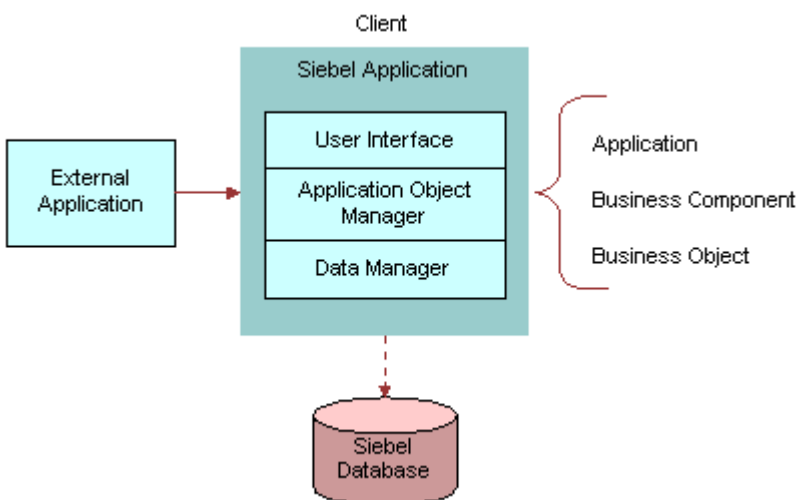
## Servers That the Siebel COM Interface Uses

This topic describes the servers that the Siebel COM Interface uses.

### Mobile Web Client Automation Server

The Mobile Web Client Automation Server accesses the server object that the Siebel application starts. If your configuration can access this object, then it can get other Siebel objects and run Siebel object interface methods through these other objects.

The following image illustrates how an external application can control a Siebel application that uses the Mobile Web Client Automation Server.



The Mobile Web Client Automation Server includes the following requirements:

- The Siebel Mobile Web Client must be running.
- A call that you configure Siebel CRM to make to the Mobile Web Client Automation Server is *out of process*. If your customization creates a DLL that runs *in process* with the Siebel application, then the calls that Siebel CRM makes from the DLL to the Mobile Web Client Automation Server are *out of process*. For more information, see [How Siebel CRM Uses Memory and Resources with the Mobile Web Client Automation Server](#).

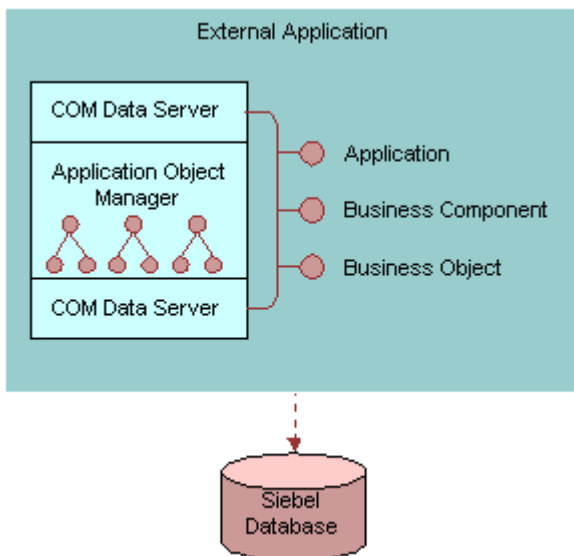
For more information, see [Accessing the Mobile Web Client Automation Server](#).

## How Siebel CRM Uses Memory and Resources with the Mobile Web Client Automation Server

Siebel CRM starts a process to run the Siebel Mobile Web Client. This process uses memory and resources that are specific to this process, which are *in process*. If your configuration communicates with the Siebel Mobile Web Client while it is running, then the resources that Siebel CRM uses in this communication are separate from the memory and resources that it uses in the process that it started to run the Siebel Mobile Web Client. These separate resources are *out of process*.

## COM Data Server

The following image illustrates how an external application uses the COM Data Server that does not include user interface objects. The COM Data Server uses the same technology that the Siebel Mobile Web Client uses to connect to the Siebel database.



The COM Data Server includes the following requirements:

- The way your configuration starts a Siebel COM server depends on the programming tool or language you use.
- The COM Data Server runs without the Siebel client, so you must use the Login method to set up your Data Server object.
- No current active Siebel objects exist, so you cannot use an object interface method that returns active Siebel objects. You must use your own Siebel objects.



- If you use Microsoft Visual Basic version 5.0 or later, then the sobjsrv.tlb file must reside in the same folder as the Siebel application configuration (CFG) file. If this file does not reside in the correct folder, then the COM Data Server does not work.
- Do not run the Microsoft VB Debug environment while your configuration communicates with the COM Data Server.
- If your configuration uses the COM Data Server, then the COM client cannot create multiple connections to the Siebel COM Server. You must restart the COM client before you can attempt another connection. Use COM Data Control instead.
- Calls made to the COM Data Server are *in process*. For more information, see [How Siebel CRM Uses Memory and Resources with the Mobile Web Client Automation Server](#).

Note the different ways that the following servers handle DLLs:

- **COM Data Server.** A DLL runs in the same address space where the calling program runs.
- **Mobile Web Client Automation Server.** An executable runs in a dedicated address space. A DLL that a server task accesses must be capable of running in a multithread environment.

For more information, see [Accessing the COM Data Server](#).

## About the Siebel Programming Environment

This topic describes the Siebel programming environment.

### Programming Languages

You can use the following programming languages to access object interface methods and object interface events:

- **Siebel VB (Siebel Visual Basic).** A programming language that is syntactically and semantically compatible with Microsoft Visual Basic. It includes an editor, debugger, interpreter, and compiler. It runs only on the Windows operating system.
- **Siebel eScript.** A programming language that is syntactically and semantically compatible with JavaScript. It uses the same tools that Siebel VB uses. Siebel eScript runs on the Windows and UNIX operating systems.

For more information, see [Using Siebel Visual Basic and Siebel eScript](#).

### Server Script

A *Server Script* is a type of script that the Siebel Server interprets and runs. You can use the following scripting languages in a Server Script:

- **Siebel VB.** Siebel VB uses most of the same commands and standards as Microsoft Visual Basic, so you can customize your Siebel application and reduce training costs. Siebel CRM supports Siebel VB only on the Microsoft Windows operating system.
- **Siebel eScript.** Siebel eScript uses most of the same commands and standards as JavaScript, so it provides you the same advantages in an alternative language. You can use Siebel eScript on all operating systems that Siebel CRM supports.

For more information, see *Using Siebel Visual Basic and Siebel eScript*.

## Browser Script

A *Browser Script* is a type of script that the browser interprets and runs. It interacts with the Document Object Model and with the Siebel Object Model in the browser through the Browser Interaction Manager. You write Browser Script in JavaScript. You can script the behavior of Siebel events and the browser events that the Document Object Model makes available. The Document Object Models for Internet Explorer and Netscape Navigator are different.

Siebel CRM version 7 introduced Browser Script. For more information, see *Document Object Model Events You Can Use*.

Do not use Browser Script to manipulate the location of a frame or a form in Siebel CRM because this configuration causes Siebel CRM to load a new page. This configuration is a violation of preferred security practices, so the result is a permission denied error.

For more information, see *Browser Script Quick Reference*. For information about creating Browser Script, see *Configuring Siebel Business Applications*.

## Siebel Script Editor

The *Siebel Script Editor* is an integrated editor that you can use to create, view, edit, and save custom code. It includes the Script Assist code editor. This editor includes the following features to help reduce errors when you develop a script:

- Autocomplete.
- Autoindentation.
- A list of object interface methods.
- Method signature capabilities. Some methods that the Script Assist editor lists include the input parameter names and types, outputs from the method, and the method type. For example, if a method returns chars, then it lists the following term: chars.

Siebel CRM version 7.8 introduced Script Assist. For more information, see *Using Siebel Tools*.

## Siebel Debugger

The *Siebel Debugger* is a tool that helps you detect errors that occur in the code of a Siebel programming language. It does not help you detect errors that occur outside of the context of the code. You can configure Siebel CRM to start the Siebel Debugger automatically from a Siebel application if a run-time error occurs. You can also start the debugger from the Debug toolbar or the Debug menu in Siebel Tools. For more information, see *Using Siebel Tools*.

## Siebel Compiler and Run-Time Engine

The *Siebel Compiler and Run-Time Engine* is a nonvisual component of a Siebel programming language that compiles and runs custom code. It is similar to Microsoft's Visual Basic Language Interpreter. Siebel CRM compiles Siebel code and stores it in the Siebel runtime repository.

You can click the Compile icon on the Debugger toolbar in Siebel Tools to start the Siebel Compiler and Run-Time Engine. You can also start it if you compile a project that contains an object definition that is associated with a Siebel script. The Siebel Compiler and Run-Time Engine do not include a user interface. The compiler compiles the custom code, and then returns a message that indicates success or failure.

## Compilation Order

The Siebel Compiler compiles Siebel VB functions and procedures in alphabetical order as they occur in the object definition. If a function or procedure calls another function or procedure that is not defined, then the compiler creates an error message that is similar to the following:

```
function_name Is An Unknown Function
```

To avoid this error, you can use the Declare statement to declare the function or procedure in the declarations section of the general section.

Siebel eScript does not require you to declare a function before you use it.

For more information, see *Siebel VB Language Reference*.

## ST eScript Engine

The ST eScript engine is available in Siebel CRM version 7.8 and later. It is the default Siebel eScript scripting engine in Siebel CRM version 8.0 and later. It allows you to use strongly typed objects that are compliant with the ECMAScript edition 4 specification. It also provides early and late binding. For information about:

- Binding, see *About Early and Late Binding*.
- The differences that exist between the ST eScript engine and the T engine, see *Siebel eScript Language Reference*
- Using the ST engine, see *Using Siebel Tools*.

## About Early and Late Binding

*Early binding* occurs if you bind a specific object instance to a variable. The following code binds an object to a variable at design time. It is an example of early binding:

```
var lo_bo = TheApplication().GetBusObject("Account");
```

*Late binding* occurs if you bind an object to a variable only at run time. The following code is an example of late binding:

```
if (TheApplication().ActiveBusObject().Name() == "Account")  
var ls_bo_name = TheApplication().ActiveBusObject().Name();
```

This late binding code does not specify a specific object. The compiler cannot identify this object and it cannot identify that the Name method is part of the object. Siebel CRM can only bind this object to a variable at run time.

## Siebel Script Profiler

The *Siebel Script Profiler* is a tool that gathers and displays data for the scripts that Siebel CRM runs when you start a Siebel application in Debug mode from Siebel Tools. Siebel Tools displays the profiler data in a window that is similar to the Watch window. It automatically updates information in this window while a script runs in the Siebel application.

The Script Profiler includes the following features:

- Tree view that displays how the script runs
- Allows you to profile functions and profile lines of chosen functions
- Allows you to use the Siebel Debugger and Script Profiler at the same time
- Allows you to view the compilation time that the script requires to run

You can use this data to do the following work:

- Monitor the performance of a script.
- Identify performance bottlenecks.
- Compare profile data with previous script runs.

You can use the Script Profiler only with the ST eScript Engine.

For more information, see *Using Siebel Tools* .

## Siebel Object Interface Methods That You Can Use to Control Data and Objects

This topic describes object interface methods that you can use to control data and objects. It includes the following topics:

- *Methods That Locate Objects*
- *Methods That Access Data from Business Components*
- *Methods That Control Navigation Flow of Siebel Applications*
- *Methods That Get and Display Information About the Current State*
- *Methods That Control Debug Tracing*

### Methods That Locate Objects

This topic describes object interface methods that allow your configuration to locate an active instance of an object that resides in a Siebel application so that another method can use this object:

- The active object is an instance of an object that Siebel CRM currently displays as active.
- The active control is the control that Siebel CRM currently displays as active.
- The active applet is the applet that contains the active control.
- The active business component is the business component that the active applet references.

If a Siebel object interface can locate an object, then it can use or manipulate this object.

You can use any of the following object interface methods in your configuration to locate an object:

- *ActiveMode Method for an Applet*
- *BusObject Method for an Applet*
- *ActiveBusObject Method for an Application*
- *ActiveViewName Method for an Application*

- *GetBusObject Method for an Application*
- *BusComp Method for a Control*
- *Name Method for a Control*
- *GetValue Method for a Property Set*
- *TheApplication Method*

## Methods That Access Data from Business Components

This topic describes the object interface methods that allow your configuration to access and modify data that resides in a Siebel application. A business component can provide data for each field of each business component record, such as the fields of an opportunity. You can use a business component to read data, manipulate data, and then write this data to the Siebel database.

You can use a custom script that you write in Siebel VB or Siebel eScript. For example, if you create a script in Siebel VB or Siebel eScript that references the NewRecord event in a business component, then Siebel CRM calls this script. This situation is true if any of the following items calls the event:

- The NewRecord method
- Another Siebel VB or Siebel eScript script
- A Siebel object interface

An event is available only with Siebel VB or Siebel eScript.

## Adding and Inserting Records

You can use Siebel VB or Siebel eScript to mimic one of the following commands in the context of a many-to-many relationship:

- **Add New Record.** Associates a new child record.
- **Insert Record.** Creates a new record in the child business component.

You can use one of the following methods to associate a new child record:

- GetAssocBusComp
- Associate

You can use one of the following methods to create a new record in the child record:

- The NewRecord method in a child business component
- The GetMVGBusComp method and the NewRecord method

## How Siebel CRM Saves a Record to the Siebel Database

Siebel CRM saves a record to the Siebel database in the following situations:

- Explicitly by using the BusComp.WriteRecord method.
- Navigating away from the current record by any of the following object interface methods:
  - BusComp.Associate.
  - BusComp.DeleteRecord. It moves the cursor to another record, so this method automatically saves the record.

- BusComp.FirstRecord.
  - BusComp.LastRecord.
  - BusComp.NextRecord.
  - BusComp.PreviousRecord.
- Closing a business component by setting the BusComp method to Nothing.

## Example of Accessing Data from an Existing Business Component Instance

If Siebel CRM starts an event, then the code in this example calls an object interface method that resides on an existing business component instance. The term *instance* describes the current, run-time state of an object. For example, a *business component instance* is a run-time occurrence of a business component. It includes all of the run-time data that the business component currently contains, such as the values for all business component fields and the values for all properties of this business component. For example, an instance of the Contact business component includes the current, run-time value of the City field that resides in this business component, such as San Francisco. You can configure Siebel CRM to get a business component instance, and then modify this data or call the methods that this business component references.

In the following example, the VB script resides in the SetFieldValue event of the business component:

```
Sub BusComp_SetFieldValue (FieldName As String)
Dim desc As String
Dim newDesc As String

TheApplication.TraceOn "c:\temp\trace.txt", "Allocation", "All"
If FieldName = "Type" Then

    newDesc = "Any valid string that contains the new description."
    desc = Me.GetFieldValue("Description")
    TheApplication.Trace "The previous description is " & desc
    Me.SetFieldValue "Description", newDesc
    TheApplication.Trace "The new description is " & newDesc

End If
TheApplication.TraceOff

End Sub
```

## Example of Accessing Data from a New Business Component Instance

The example in this topic describes how to create a new business object instance and a business component instance. It uses the PreSetFieldValue event of the Opportunity business component. If the user updates the Sales Stage to 07 - Verbal Agreement, then Siebel CRM requires the user to associate a decision maker with the opportunity. Otherwise, Siebel CRM resets it to the previous value. To determine if a vice president or president is associated with the opportunity, Siebel CRM searches the contacts that it associates with the opportunity.

The following steps describe the logical flow of object interface methods that Siebel CRM uses to create a new business component instance:

1. GetBusComp.
2. SetViewMode. This method is optional. You can use it to modify the default value of the view mode.
3. ActivateField.
4. ClearToQuery.
5. SetSearchSpec or SetSearchExpr.

It is not necessary to activate a field that includes a search specification and a search expression, unless the GetFieldValue method or the SetFieldValue method also references this field.

## 6. ExecuteQuery.

### Example of Using Siebel VB to Access Data from a New Business Component Instance

The following example uses Siebel VB to access data from a new business component instance:

```
Function BusComp_PreSetFieldValue (FieldName As String, FieldValue As String) As Integer

Dim RetValue As Integer
RetValue = ContinueOperation
Select Case FieldName
Case "Sales Stage"
If FieldValue = "08 - Negotiation" Then
' Do not allow the sales cycle to be changed to this value
' if the decision-maker is not a contact for the Oppty.
' Decision-maker defined as anyone with rank VP and above
Dim oBusObj As BusObject
Dim sRowId As String
Dim iViewMode As Integer
sRowId = GetFieldValue("Id")
iViewMode = GetViewMode
Set oBusObj = TheApplication.ActiveBusObject
' Parent-child relationship is established if
' BusComps are instantiated from the same BusObject.
' The ContactBC has all contact records for the
' current Oppty record.
Set ContactBC = oBusObj.GetBusComp("Contact")
With ContactBC
.ClearToQuery
.SetSearchSpec "Job Title", "*VP*"
.ExecuteQuery ForwardBackward
If (.FirstRecord = 1) Then
TheApplication.RaiseErrorText "Found a decision maker"
Else
RetVal = ContinueOperation
End If
End With
Set ContactBC = Nothing
Set oBusObj = Nothing
End If
End Select
BusComp_PreSetFieldValue = RetValue
End Function
```

### Example of Using Siebel eScript to Access Data from a New Business Component Instance

The following example uses Siebel eScript to access data from a new business component instance:

```
function BusComp_PreSetFieldValue (FieldName, FieldValue)
{
var RetValue = ContinueOperation;
switch (FieldName)
{
case "Sales Stage":
if (FieldValue == "08 - Negotiation")
{
//Do not allow the sales cycle to be changed to this value
//if the decision-maker is not a contact for the Oppty.
//Decision-maker defined as anyone with rank VP and above
var oBusObj;
var sRowId;
var iViewMode;
sRowId = this.GetFieldValue("Id");
iViewMode = this.GetViewMode();
oBusObj = TheApplication().ActiveBusObject();
```

```
//Parent-child relationship is established if
//BusComps are instantiated from the same BusObject.
//The ContactBC has all contact records for the
//current Oppty record.
ContactBC = oBusObj.GetBusComp("Contact");
with (ContactBC)
{
  ClearToQuery();
  SetSearchSpec("Job Title", "*VP*");
  ExecuteQuery(ForwardBackward);
  if (FirstRecord())
  {
    TheApplication().RaiseErrorText("Found a decision maker");
  }
  else
  {
    RetVal = ContinueOperation;
  }
}
ContactBC = null;
oBusObj = null;
}
break;
}
return(RetVal);
}
```

## Methods That Get Data From Business Components

The following object interface methods get data from a business component:

- *ActivateField Method for a Business Component*
- *ActivateMultipleFields Method for a Business Component*
- *Associate Method for a Business Component*
- *ClearToQuery Method for a Business Component*
- *CountRecords Method for a Business Component*
- *DeactivateFields Method for a Business Component*
- *DeleteRecord Method for a Business Component*
- *ExecuteQuery Method for a Business Component*
- *ExecuteQuery2 Method for a Business Component*
- *FirstRecord Method for a Business Component*
- *FirstSelected Method for a Business Component*
- *GetAssocBusComp Method for a Business Component*
- *GetFieldValue Method for a Business Component*
- *GetFormattedFieldValue Method for a Business Component*
- *GetMultipleFieldValues Method for a Business Component*
- *GetMVGBusComp Method for a Business Component*
- *GetNamedSearch Method for a Business Component*
- *GetPicklistBusComp Method for a Business Component*
- *GetSearchExpr Method for a Business Component*



- *GetSearchSpec Method for a Business Component*
- *GetSortSpec Method for a Business Component*
- *GetUserProperty Method for a Business Component*
- *GetViewMode Method for a Business Component*
- *InvokeMethod Method for a Business Component*
- *LastRecord Method for a Business Component*
- *NewRecord Method for a Business Component*
- *NextRecord Method for a Business Component*
- *ParentBusComp Method for a Business Component*
- *Pick Method for a Business Component*
- *PreviousRecord Method for a Business Component*
- *RefineQuery Method for a Business Component*
- *SetFieldValue Method for a Business Component*
- *SetFormattedFieldValue Method for a Business Component*
- *SetMultipleFieldValues Method for a Business Component*
- *SetNamedSearch Method for a Business Component*
- *SetSearchExpr Method for a Business Component*
- *SetSearchSpec Method for a Business Component*
- *SetSortSpec Method for a Business Component*
- *SetViewMode Method for a Business Component*
- *UndoRecord Method for a Business Component*
- *WriteRecord Method for a Business Component*

## Methods That Control Navigation Flow of Siebel Applications

The following object interface methods allow your configuration to control the navigation flow of a Siebel application:

- *FindControl Method for an Applet*
- *GotoView Method for an Application*

These object interface methods explicitly specify the view, applet, or control that Siebel CRM displays or makes active. The following items apply for these methods:

- Sets the active view to the view that you specify.
- Your configuration cannot call these methods from Browser Script.
- They are useful only if you access a Siebel object interface in one of the following ways:
  - From Siebel VB
  - From the Mobile Web Client Automation Server

If you access a Siebel object interface through COM Data Control, COM Data Server, or Siebel Java Data Bean, then no Siebel user interface is present.

Siebel CRM stores the properties of a Siebel object in the Siebel runtime repository. You cannot use an object interface method in Siebel VB to modify these properties at run time. A business component is an example of a Siebel object.

## Methods That Get and Display Information About the Current State

The following object interface methods allow your configuration to use the application object to get information about the current state of properties and functions. This information is useful if your configuration must process rows of data or create query criteria:

- *CurrencyCode Method for an Application*
- *EnableExceptions Method for an Application*
- *GetLastErrCode Method for an Application*
- *GetLastErrText Method for an Application*
- *LoginId Method for an Application*
- *LoginName Method for an Application*
- *LookupMessage Method for an Application*
- *PositionName Method for an Application*
- *RaiseError Method for an Application*
- *RaiseErrorText Method for an Application*
- *SetPositionId Method for an Application*
- *SetPositionName Method for an Application*

## Methods That Control Debug Tracing

The following object interface methods allow your configuration to control debug tracing:

- *Trace Method for an Application*
- *TraceOff Method for an Application*
- *TraceOn Method for an Application*

# 3 Customizing Siebel Object Interfaces

## Customizing Siebel Object Interfaces

This chapter describes how to customize Siebel object interfaces. It includes the following topics:

- *Process of Customizing a Siebel Object Interface*
- *Accessing a Siebel Object Interface*
- *Customizing Object Interface Events and Extension Events*
- *Configuring Error Handling*

## Process of Customizing a Siebel Object Interface

To customize a Siebel object interface, perform the following tasks:

1. *Determining the Type of Siebel Object Interface You Must Use*
2. *Setting the Connect String*
3. *Accessing a Siebel Object Interface*
4. *Customizing Object Interface Events and Extension Events*
5. *Configuring Error Handling*

## Determining the Type of Siebel Object Interface You Must Use

This task is a step in *Process of Customizing a Siebel Object Interface*.

This topic describes how to determine the type of Siebel Object Interface you must use.

### To determine the type of Siebel Object Interface you must use

1. In the following table, examine the Usage column, and then choose the row that most closely matches your requirements.
2. To identify the type of Siebel Object Interface you must use, examine the other columns in the following table, in the row that you identified in the preceding step.

Usage	Mobile Web Client Automation Server	COM Data Control	COM Data Server	Siebel Java Data Bean
Control the Siebel client from an external application.	Yes	No	No	No
Access Siebel business objects without using the Siebel client.	No	Yes	Yes	Yes

Usage	Mobile Web Client Automation Server	COM Data Control	COM Data Server	Siebel Java Data Bean
Run objects on the Siebel Server.	No	Yes	No	Yes
Run objects in the Siebel client in a mobile environment.	Yes	No	Yes	No

## Use Caution If You Customize a Siebel Object Interface

Oracle does not support the following items:

- Functions developed through custom programming
- Specific performance characteristics of third-party software

Oracle defines a Siebel business object or a Siebel object interface at the sole discretion of Oracle. Oracle reserves the right to modify the behavior, properties, and events of a Siebel business object or a Siebel object interface at any time without notice.

**CAUTION:** Your Siebel application is a Web application or a client and server application that can meet the sales and marketing information requirements of your organization. Use caution if you customize a Siebel application or access it through a Siebel object interface. Only trained, technical professionals must perform this work. Improper use of a Siebel object interface can reduce the performance and reliability of your Siebel application. Test your customization thoroughly before you deploy it.

## Setting the Connect String

The *connect string* is a text string that describes the URL that is required to connect to a server component on the Siebel Server. It specifies the protocol and the details of the Client Application Manager service on the Siebel Server. The Siebel client or a program that is external to Siebel CRM must use this string to connect to the Siebel Server.

### Format of the Connect String Parameter

The connect string uses the following format:

```
host="siebel.transport.encryption.compression://host:port/EnterpriseServer/  
AppObjMgr_lang" lang="lang_code"
```

For example:

```
SiebelApplication.Login "host=""siebel://host/EnterpriseServer/SCCObjMgr_enu"  
"lang="ENU"", "CCONWAY", "CCONWAY"
```

The following table describes how to set each variable in the connect string.

Variable	Description
transport	Use the default value, tcpip, or leave empty.

Variable	Description
encryption	Use one of the following values: <ul style="list-style-type: none"><li>• none. This value is the default value.</li><li>• mscrypto. You cannot use mscrypto with Siebel Java Data Bean.</li><li>• rsa. You can use rsa with Siebel Java Data Bean.</li></ul>
compression	Use one of the following values: <ul style="list-style-type: none"><li>• none.</li><li>• zlib. This value is the default value.</li></ul>
host	Use the name of the computer where you installed the Siebel Server.
port	Enter the number for the SCBroker port. The default value is 2321.  Modify this value only if you also modify the default value when you install the Siebel Server.  For information about load-balancing with SCBroker, see <i>Siebel Deployment Planning Guide</i> , <i>Siebel System Administration Guide</i> , and <i>Siebel Installation Guide</i> .
EnterpriseServer	Enter the name of the Siebel Enterprise Server.
AppObjMgr	Enter the name of the Application Object Manager that the Siebel client must access. You can enter a custom server component or one of the following predefined server components: <ul style="list-style-type: none"><li>• <b>ISSObjMgr_lang</b></li><li>• <b>SCCObjMgr_lang</b></li><li>• <b>SSEObjMgr_lang</b></li><li>• <b>SSVObjMgr_lang</b></li></ul> For more information, see <i>Siebel System Administration Guide</i> .

The format of the connect string is optional. You can enter only the transport variable and use a period (.) to separate it from **siebel**. For example:

```
siebel.tcpip://host/siebel/AppObjMgr_  
lang
```

If you specify any of the other variables, then you must use a period (.) as a placeholder for each variable that you do not specify. For example:

```
siebel...zlib://myhost/siebel/SCCObjMgr_enu
```

## Examples of Using the Connect String

This topic includes examples of using the connect string.

## Example Connect String for COM Data Control in Server Mode

The following example includes a connect string for COM Data Control that operates in server mode:

```
'COM Data Control : SERVER Mode
lstr = "host=" + ""siebel://frashid/Siebel/SSEObjMgr_enu""
'Format of the connect string is
'host=" + ""siebel://host/enterprise/App. Object Mgr_lang""
lng = "lang=" + ""ENU""
retval = siebDataCtl.Login(lng + lstr, "username", "password")
```

## Example Connect String for COM Data Control in Local Mode

The following example includes a connect string for COM Data Control that operates in Local Mode:

```
'COM Data Control : LOCAL Mode
lstr = "cfg=" + ""C:\Siebel\8.1\Client_2\BIN\ENU\siebel.cfg,ServerDataSrc""

'Format of the connect string is
'cfg=" + ""Absolute path of the CFG file, DataSource""
'Datasource = ServerDataSrc or Local or Sample
lng = "lang=" + ""ENU""
retval = siebDataCtl.Login(lng + lstr, "username", "password")
```

If in Local Mode, then COM Data Control must reside on the same computer as the Siebel Mobile Web Client.

## Example Connect String for COM Data Control When Using Siebel VB

The following example includes a connect string for COM Data Control that uses Siebel VB. The Char(34) code indicates a double quote:

```
ConnStr = "host =" & char(34) & "siebel://HOST/ENTERPRISE_SERVER/SCCObjMgr_enu/
SIEBEL_SERVER" & char(34) & " Lang =" & char(34) & "LANG" & char(34)
```

## Using Load Balancing with the Connect String

You can use Siebel native load balancing across Siebel Servers with the following Siebel object interface: Siebel Java Data Bean

To use load balancing with the connect string

1. Modify the predefined connect string so that it directs requests to an appropriate virtual host.  
This host includes specific Siebel Servers. Each Siebel Server includes the required object manager.
2. Specify the path to the file that defines the virtual host.

## Connect String That Uses Load Balancing with Siebel Java Data Bean

A connect string that uses native Siebel load balancing with Siebel Java Data Bean uses the following format:

```
host="siebel://VirtualHost/EnterpriseServer/AppObjMgr_lang"
```

If you use Java code to connect to the Siebel Server, then Siebel CRM reads virtual host definitions from the following property in the siebel.properties file:

siebel.conmgr.virtualhosts

The siebel.properties file must reside in the classpath of the Java Virtual Machine.

For information about using virtual hosts in the siebel.properties file, see *Transports and Interfaces: Siebel Enterprise Application Integration*.

## Accessing a Siebel Object Interface

This task is a step in *Process of Customizing a Siebel Object Interface*.

This topic describes how to access a Siebel Object Interface.

### To access a Siebel Object Interface

- To access a Siebel object interface, do one of the following:
  - *Accessing the Mobile Web Client Automation Server*
  - *Accessing the Siebel COM Interface*
  - *Accessing the COM Data Server*
  - *Accessing the COM Data Server with Microsoft Visual Studio*
  - *Accessing COM Data Control*
  - *Accessing the Siebel Java Data Bean*

These topics assume you use Microsoft Visual Basic to access the interface.

## Accessing the Mobile Web Client Automation Server

This topic describes how to access the Mobile Web Client Automation Server. For more information, see *Mobile Web Client Automation Server*.

### To access the Mobile Web Client Automation Server

1. Install the Siebel Mobile Web Client.  
Siebel CRM installs the Mobile Web Client Automation Server by default when you install the Siebel Mobile Web Client.
2. Start Microsoft Visual Basic.
3. Choose Standard EXE.
4. Choose the Project menu, and then the References menu item.
5. In the list box, choose Mobile Web Client Automation Server.
6. Add the required code.

For more information, see *Example of Accessing the Mobile Web Client Automation Server*.

### Example of Accessing the Mobile Web Client Automation Server

The following example includes the code you use in Microsoft Visual Basic 6.0 to access the Mobile Web Client Automation Server:

```
Private Sub Command1_Click()  
'Siebel Application Object  
Dim siebWebApp As SiebelWebApplication  
Dim siebBusObj As SiebelBusObject  
Dim siebBusComp As SiebelBusComp  
Dim siebSvc As SiebelService
```

```
Dim siebPropSet As SiebelPropertySet
Dim bool As Boolean
Dim errCode As Integer
Dim errText As String
Dim connStr As String
Dim lng As String
'Create The Siebel WebApplication Object
Set siebWebApp = CreateObject("TWSiebel.SiebelWebApplication.1")

If Not siebWebApp Is Nothing Then

'Create A Business Object
Set siebBusObj = siebWebApp.GetBusObject("Contact")
If Not siebBusObj Is Nothing Then
'Create a Business Component
Set siebBusComp = siebBusObj.GetBusComp("Contact")

Else
errCode = siebWebApp.GetLastErrCode
errText = siebWebApp.GetLastErrText
siebWebApp.RaiseErrorText "Business Object Creation failed." & _
errCode & ":@" & errText

End If

'Create A New Property Set
Set siebPropSet = siebWebApp.NewPropertySet
If Not siebPropSet Is Nothing Then
Set siebPropSet = Nothing

Else
errCode = siebWebApp.GetLastErrCode
errText = siebWebApp.GetLastErrText
siebWebApp.RaiseErrorText "Property Set Creation failed." & _
errCode & ":@" & errText
End If

'Get A Siebel Service
Set siebSvcs = siebWebApp.GetService("Workflow Process Manager")
If Not siebSvcs Is Nothing Then
Set siebSvcs = Nothing
Else
errCode = siebWebApp.GetLastErrCode
errText = siebWebApp.GetLastErrText
siebWebApp.RaiseErrorText "Could not Get Siebel Service." & _
errCode & ":@" & errText
End If

If Not siebBusComp Is Nothing Then
Set siebBusComp = Nothing
End If

If Not siebBusObj Is Nothing Then
Set siebBusObj = Nothing
End If

Set siebWebApp = Nothing
End If

End Sub
```



## Accessing the Siebel COM Interface

This topic describes how to access the Siebel COM Interface.

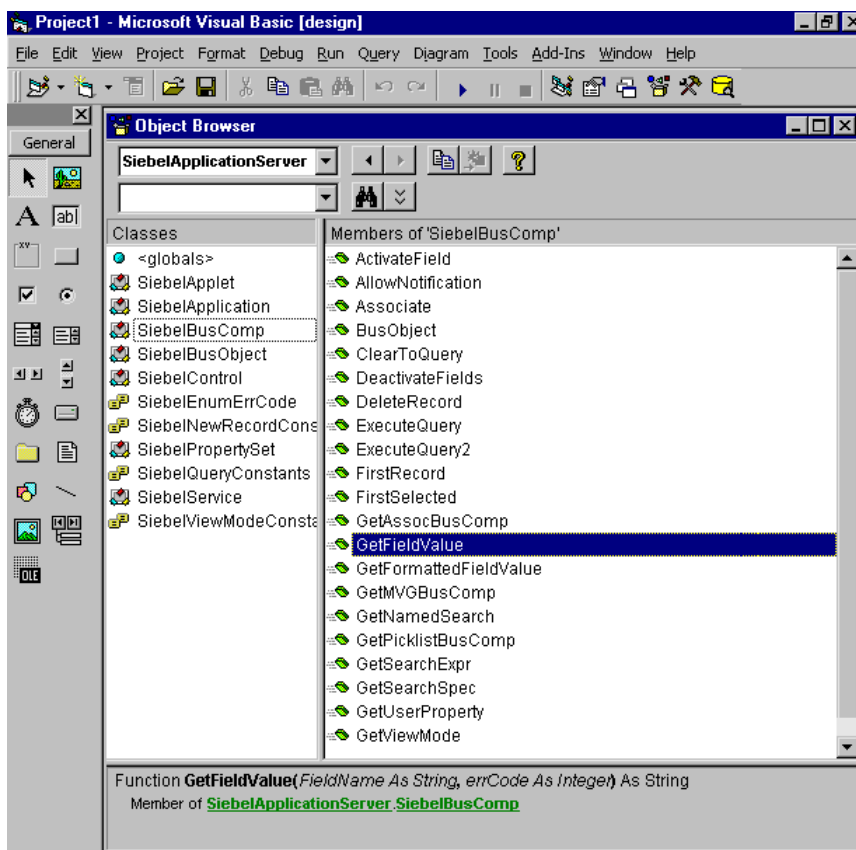
### To access the Siebel COM Interface

1. in the Siebel application configuration (CFG) file, set the EnableOLEAutomation parameter to TRUE.
2. Use the object browser of your COM programming tool to determine the correct format for the object interface method.

For more information, see *Example of an Object Browser*.

### Example of an Object Browser

The following image includes an example of the object browser in Microsoft Visual Basic 5.0, which is a COM programming tool. The format window displays the *method signature* for the method chosen in the Object Browser window. This signature includes information about the method, such as the inputs, data types, and the information the method returns.



## Accessing the COM Data Server

This topic describes how to access the COM Data Server. For more information, see [COM Data Server](#).

### To access the COM Data Server

1. Install the Siebel Mobile Web Client.  
Siebel CRM installs the COM Data Server by default when you install the Siebel Mobile Web Client.
2. In the Siebel application configuration (CFG) file, set the DataSource parameter to the Siebel database where Siebel CRM must connect.
3. Start Microsoft Visual Basic.
4. Choose Standard EXE.
5. Choose the Project menu, and then the References menu item.
6. In the References dialog box, in the Available References window, click Siebel Data BusObject Interfaces.  
Do not add a check mark to the Siebel Data BusObject Interfaces.
7. In the Siebel Data BusObject Interfaces section, note the name of the folder that contains the sobjsrv.tlb file.
8. In the Available References window, make sure the Siebel Data BusObject Interfaces item contains a check mark, and then click OK.
9. Add the required code.  
For more information, see [Example of Accessing the COM Data Server](#).

### Example of Accessing the COM Data Server

The following example includes the code you use in Microsoft Visual Basic 6.0 to access the COM Data Server. You must write and run this code outside of Siebel Tools. For example, in Microsoft Visual Basic:

```
Private Sub Command1_Click()  
    'Siebel Application Object  
    Dim siebApp As SiebelApplication  
    Dim siebBusObj As SiebelBusObject  
    Dim siebBusComp As SiebelBusComp  
    Dim siebSvcs As SiebelService  
    Dim siebPropSet As SiebelPropertySet  
    Dim bool As Boolean  
    Dim errCode As Integer  
    Dim errText As String  
    Dim connStr As String  
    Dim lng As String  
    Dim cfgLoc As String  
    ChDrive "C"  
    ChDir "C:\Server\siebsrvr\bin"  
  
    'Create The COM Data Server Object  
    Set siebApp = CreateObject("SiebelDataServer.ApplicationObject")  
  
    If Not siebApp Is Nothing Then  
  
        '''COM Data Server  
        cfgLoc = " C:\Siebel\8.1\Server\BIN\ENU\siebel.cfg,ServerDataSrc"  
        siebApp.LoadObjects cfgLoc, errCode  
        If errCode = 0 Then  
            'Log in to the Siebel Server  
            siebApp.Login "username", "password", errCode  
            If errCode = 0 Then
```

```
'Creat A Business Object
Set siebBusObj = siebApp.GetBusObject("Contact", errCode)
If errCode = 0 Then
'Create a Business Component
Set siebBusComp = siebBusObj.GetBusComp("Contact")
Else
errText = siebApp.GetLastErrorText
siebApp.RaiseErrorText("Business Object Creation failed: " & errCode & ":@" &
errText)
End If

'Create A New Property Set
Set siebPropSet = siebApp.NewPropertySet(errCode)
If errCode = 0 Then
Set siebPropSet = Nothing
Else
errText = siebApp.GetLastErrorText
siebApp.RaiseErrorText("Property Set Creation failed: " & errCode & ":@" &
errText)
End If

'Get A Siebel Service
Set siebSvcs = siebApp.GetService("Workflow Process Manager", errCode)
If Not siebSvcs Is Nothing Then
Set siebSvcs = Nothing
Else
errText = siebApp.GetLastErrorText
siebApp.RaiseErrorText("Could not Get Siebel Service: " & errCode & ":@" &
errText)
End If

If Not siebBusComp Is Nothing Then
Set siebBusComp = Nothing
End If
If Not siebBusObj Is Nothing Then
Set siebBusObj = Nothing
End If
Else
errText = siebApp.GetLastErrorText
siebApp.RaiseErrorText("Login Failed: " & errCode & ":@" & errText)
End If
Else
errText = siebApp.GetLastErrorText
siebApp.RaiseErrorText("Load Objects Failed: " & errCode & ":@" & errText)
End If

Set siebApp = Nothing

End If

End Sub
```

## Accessing the COM Data Server with Microsoft Visual Studio

This topic describes how to create a simple COM client in Microsoft Visual C++ and the Microsoft Foundation Class (MFC) library that accesses the Siebel Data Server.

### To access the COM Data Server with Microsoft Visual Studio

1. In Microsoft Visual C++, choose the File menu, New, and then the Project menu item.
2. Choose the MFC AppWizard (exe) project type.

3. In the Project name field, enter **SiebelCOM**, and then click OK.
4. In the MFC AppWizard, choose the Dialog-based option and then click Next.
5. In the What Other Support Would You Like to Include frame, do the following:
  - a. Make sure the Automation option contains a check mark.
  - b. Make sure the ActiveX Controls does not contain a check mark.
  - c. Click Next.
  - d. Click Next.
6. Click Finish, and then click OK.

The Application Wizard creates the MFC code that you use for this project, including the headers and libraries that COM automation requires. For more information about the MFC libraries, see the documentation for Microsoft MSDN Visual Studio.
7. Modify the new dialog box.

Microsoft Visual C++ displays a new dialog box. To resize and modify the text in this dialog box, right-click the label in the dialog box and edit the properties.
8. Choose the View menu, ClassWizard, and then the Automation menu item.
9. Click Add Class, and then click From a Type Library.
10. Navigate to the `SIEBSRV_ROOT\bin` folder, and then choose `sobjsrv.tlb`.
11. In the Confirm Classes dialog box, make sure all Siebel classes are chosen, click OK, and then click OK again to close the Class Wizard.
12. Add code to communicate with the Siebel COM Server.

- a. In the workspace window, click the FileView tab.
- b. Expand the Source Files folder and the Header Files folder.
- c. Double-click the `SiebelCOMDlg.h` file.
- d. In the code window, add the following code to the `SiebelCOMDlg.h` file. Add only the code that uses bold typeface:

```
#if _MSC_VER > 1000
#pragma once
#endif // _MSC_VER > 1000

#include "sobjsrv.h" // Include Siebel wrapper classes

class CSiebelCOMDlgAutoProxy;
////////////////////////////////////////

// CSiebelCOMDlg dialog
class CSiebelCOMDlg : public CDialog{
    DECLARE_DYNAMIC(CSiebelCOMDlg);
    friend class CSiebelCOMDlgAutoProxy;
    SiebelApplication sApp; // Declare Siebel object

//Construction
public:
    CSiebelCOMDlg(CWnd* pParent = NULL); //standard constructor
    virtual ~CSiebelCOMDlg();
```

- e. Choose Open from the File menu, and then choose the `SiebelCOMDlg.cpp` file.
- f. Add the following code to the `OnInitDialog` procedure. Add only the code that uses bold typeface:

```
CDialog::OnInitDialog();

...
```

```
// TODO: Add extra initialization here
// Start the Siebel Data Server
if (!sApp.CreateDispatch(_T("SiebelDataServer.ApplicationObject")))
{
    AfxMessageBox("Cannot start Siebel Data Server.");
EndDialog(-1); // Fail
} else
{
    AfxMessageBox("Siebel Data Server initialized.");
}

return TRUE; // Return TRUE unless you make a control active
...
```

- g. In the same file, add the following code to the OnOK procedure.

To add this code correctly, do the following:

- Make sure that the line that begins with sApp.LoadObjects references the location of the Siebel application configuration (CFG) file you intend to use.
- In the line that begins with sApp.Login, make sure you use a valid logon name and password.
- Add only the code that uses bold typeface.

```
void CSiebelCOMDlg::OnOK()
{
    short sErr;
    // Load configuration file
    // Make sure that the following line references the correct file
    sApp.LoadObjects(C:\Siebel\8.1\Server\BIN\ENU\siebel.cfg", &sErr);
    if(sErr)
    {
        AfxMessageBox("LoadObject failed.");
        return;
    } else
    {
        AfxMessageBox("CFG file loaded.");
    }

    // Log in as SADMIN
    sApp.Login("SADMIN", "SADMIN", &sErr);
    if(sErr)
    {
        AfxMessageBox("Login failed.");
        return;
    } else
    {
        AfxMessageBox("Logged in to Siebel database.");
    }

    // Get Account business object
    LPDISPATCH lpdBo;
    lpdBo = sApp.GetBusObject("Account", &sErr);
    if(sErr)
    {
        AfxMessageBox("GetBusObject failed.");
        return;
    } else
    {
        AfxMessageBox("Account business object returned.");
    }
    SiebelBusObject Bo(lpdBo);

    // Get Account business component
    LPDISPATCH lpdBc;
```

```

    lpdBc = Bo.GetBusComp("Account", &sErr);
    if (sErr)
    {
        AfxMessageBox("GetBusComp failed.");
        return;
    } else
    {
        AfxMessageBox("Account business component returned.");
    }
    SiebelBusComp Bc(lpdBc);

    // Get the name of the first account
    if (sErr) return;
    Bc.ClearToQuery(&sErr);
    if (sErr) return;
    Bc.SetSearchSpe("Name", "*", &sErr);
    if (sErr) return;
    Bc.ExecuteQuery(ForwardOnly, &sErr);
    if (sErr) return;
    Bc.FirstRecord(&sErr);
    if (sErr) return;

    // Display the account name in a message box
    CString csAcctName;
    csAcctName = Bc.GetFieldValue("Name", &sErr);
    AfxMessageBox(csAcctName);
    Bc = null;
    lpdBc = null;
    Bo = null;
    lpdBo = null;

    return;

    if (CanExit())
        CDialog::OnOK();
}

```

**13.** Test your work:

- a.** Start the Siebel client.

Make sure you use the same Siebel application configuration (CFG) file and login arguments that you specified in the code.

- b.** Navigate to the Accounts screen, and then the All Accounts view.  
**c.** Verify that at least one account is visible in the Account list applet.

If at least one account is not visible, then create one.

- d.** Exit the Siebel client.  
**e.** Open the Siebel application configuration (CFG) file you specified in the code and make sure the DataSource parameter indicates the correct Siebel database source.  
**f.** In Microsoft Visual C++, choose the Build menu, and then the SiebelCOM.exe menu item.

If Microsoft Visual C++ displays an error or warning in the output window, then correct the error and repeat this step.

- g.** Choose the Build menu, and then the Execute SiebelCOM.exe menu item.  
**h.** Wait for Microsoft Visual C++ to display the following message:

```
Siebel Data Server initialized.
```

- i.** Click OK.

The Siebel application displays the following series of messages:

```
CFG file loaded.  
Logged in to Siebel database.  
Account business object returned.  
Account business component returned.
```

The Siebel application displays the name of the first account in the All Accounts view.

## Accessing COM Data Control

This topic describes how to access COM Data Control. A call to COM Data Control is in process. For more information, see [How Siebel CRM Uses Memory and Resources with the Mobile Web Client Automation Server](#).

### To access COM Data Control

- 1.** Install COM Data Control.

Use the Siebel Enterprise Server Installer. Make sure the EAI Siebel Connectors option contains a check mark. For more information, see the *Siebel Installation Guide*.

- 2.** Start Microsoft Visual Basic.  
**3.** Choose Standard EXE.  
**4.** Choose the Project menu, and then the References menu item.  
**5.** In the References dialog box, in the Available References window, make sure the Siebel Business Object Interfaces Type Library item contains a check mark.  
**6.** To open the Object Browser, click OK.  
**7.** Determine the correct format for the object interface method.

You must use the `CreateObject` method and the `Login` method. You cannot use an object interface method that returns an active Siebel object because no Siebel objects are currently active. You must use your own Siebel objects.

8. Verify that you can view the Siebel objects.
9. Add the required code.

For more information, see *Example of Accessing COM Data Control*.

## Example of Accessing COM Data Control

The following example includes the code you use in Microsoft Visual Basic 6.0 to access COM Data Control:

```
Sub CreateDataControl()  
Dim errCode As Integer  
Set SiebelApplication = CreateObject("SiebelDataControl.SiebelDataControl.1")  
SiebelApplication.Login "host=""siebel://hostname/EnterpriseServer/AppObjMgr""",  
"CCONWAY", "CCONWAY"  
errCode = SiebelApplication.GetLastErrorCode()  
If errCode <> 0 Then  
    ErrText = SiebelApplication.GetLastErrorText  
    SiebelApplication.RaiseErrorText ErrText  
    Exit Sub  
End If  
set OpptyBO = SiebelApplication.GetBusObject("Opportunity",errCode)  
set OpptyBC = OpptyBO.GetBusComp("Opportunity", errCode)  
End Sub
```

To determine values to substitute for the variables in the login string, see *Setting the Connect String*.

## Example of Using Siebel Server ASP Script to Access COM Data Control

To set off an ASP script in HTML code, you use the following format:

- To indicate the beginning of the ASP script, you use the less than symbol and the percent symbol (<%).
- To indicate the end of the ASP script, you use the percent symbol and the greater than symbol (%>).

The following example code starts COM Data Control from a Siebel Server ASP script:

```
<%  
  
Dim SiebelApplication, BO, BC, ConnStr, logstat  
Dim strLastName, strFirstName, errCode, errText  
Set SiebelApplication = CreateObject("SiebelDataControl.SiebelDataControl.1")  
  
' Test to see if object is created  
If IsObject(SiebelApplication) = False then  
    Response.Write "Unable to initiate Siebel Session."  
Else  
    connStr = "host=" & Chr(34) & "siebel.tcpip.none.none://hostname:2321/  
EntServer/ObjMgr" & Chr(34) & " lang=" & Chr(34) & "lang" & Chr(34)  
    logstat = SiebelApplication.Login ConnStr, "SADMIN", "SADMIN"  
  
    response.write("Login Status: " & logstat)  
    Set BO = SiebelApplication.GetBusObject("Employee")  
    Set BC = BO.GetBusComp("Employee")  
End If  
%>
```



## Accessing the Siebel Java Data Bean

A Java client that uses the Siebel Java Data Bean to connect to the Siebel Server requires JAR files. These files allow the Java language to access the objects and methods of the Siebel Object Interface. These files are specific to the version of the Siebel application. Do not use these JAR files with other versions. For more information, see [About the Siebel Java Data Bean Object Interface](#).

### To access the Siebel Java Data Bean

1. Add the following JAR files to the CLASSPATH:
  - o Siebel.jar
  - o SiebelJI\_lang.jar
2. To install the Siebel Java Data Bean interface, do one of the following:
  - o Use the Siebel Enterprise Server installer. Make sure the EAI Connector option contains a check mark. For more information, see the *Siebel Installation Guide*.
  - o Install Siebel Tools. The Siebel Tools installer installs the Siebel Java Data Bean interface by default when you install Siebel Tools.
3. Start a new SiebelDataBean Java object.
4. To call the Login method for the object you started in the preceding step, use the following code:

```
SiebelDataBean l_sdb = new SiebelDataBean();
```

```
l_sdb.login(<parameters>);
```

You must use the Login method. You cannot use an object interface method that returns an active Siebel object because no Siebel objects are currently active. You must use your own Siebel objects. For more information, see step 2 in [Accessing the Siebel COM Interface](#).

### Example of Accessing the Siebel Java Data Bean

The following example code accesses the Siebel Java Data Bean. You can use a Java IDE to compile and run this code:

```
import com.siebel.data.*;
import com.siebel.data.SiebelException;

public class DataBeanDemo
{
    private SiebelDataBean m_dataBean = null;
    private SiebelBusObject m_busObject = null;
    private SiebelBusComp m_busComp = null;

    public static void main(String[] args)
    {
        DataBeanDemo demo = new DataBeanDemo();
    }

    public DataBeanDemo()
    {
        try
        {
            // instantiate the Siebel Java Data Bean
            m_dataBean = new SiebelDataBean();
        }
    }
}
```

```
// log in to the Siebel Server
// SiebelServerhost = the name or IP address of your Siebel Server
// SCBPort = listening port number for the SCBroker component (default 2321)
m_dataBean.login("Siebel://SiebelServerhost:SCBPort/enterpriseServer/
AppObjMgr_enu", CCONWAY, CCONWAY, "enu");

// get the business object
m_busObject = m_dataBean.getBusObject("Opportunity");

// get the business component
m_busComp = m_busObject.getBusComp("Opportunity");

// log off
m_dataBean.logoff();
}
catch (SiebelException e)
{
    System.out.println(e.getErrorMessage());
}
}
```

## Using Single Sign-on (SSO) with Siebel Java Data Bean

If you use single sign-on (SSO) with Siebel Java Data Bean, then you must include the following items in the login:

- Login ID of an employee as the username.
- The value of the TrustToken parameter in the connect string. To determine the value for the TrustToken, examine the TrustToken parameter in the Siebel application configuration (CFG) file. For more information, see *Setting the Connect String*.

For example:

```
m_dataBean.login("Siebel://gatewayserver:2321/enterpriseServer/SCCObjMgr_enu",
SADMIN, HELLO,"enu");
```

where:

- **SADMIN** is an employee.
- The TrustToken parameter is **HELLO** in the LDAPSecAdpt section of the Siebel application configuration (CFG) file.

## Customizing the Parameters a Third-Party Application Uses to Connect Through the Siebel Java Data Bean

You can customize the parameters that a third-party application uses when it connects to a Siebel application through the Siebel Java Data Bean.

To customize the parameters a third-party application uses to connect through the Siebel Java Data Bean

1. Open the siebel.properties file.  
This file is located in your classpath, which is an operating system environment variable that a Java program references. The siebel.properties file can exist in any location. The CLASSPATH environment variable must include an entry for this file so that the Java Virtual Machine can find the file when it starts.

2. Set the properties.

For more information, see *Properties of the Siebel Properties File*.

## Properties of the Siebel Properties File

The following table describes the properties of the siebel.properties file.

Property Type	Property	Description
Siebel Connection Manager	siebel.conmgr.txttimeout	The transaction timeout in milliseconds. The default value is 600000, which is 10 minutes. The maximum value is 2,147,483,647, which is approximately 25 days.
	siebel.conmgr.poolsize	The connection pool size. For more information, see <i>Determining the Total Number of Open Connections</i> .
	siebel.conmgr.sesstimeout	The transaction timeout in seconds on the Siebel client. The default value is 2700, which is 45 minutes. The maximum value is 2,147,483,647, which is approximately 68 years.
	siebel.conmgr.retry	The number of open session retries. The default value is 3.
	siebel.conmgr.jce	Sets the Java Cryptography Extension (JCE): <ul style="list-style-type: none"><li>To use JCE, set the value to 1.</li><li>To not use JCE, set the value is 0.</li></ul> For more information, see <i>Encrypting Communication Between the Java Data Bean and the Siebel Server</i> .
Siebel created code for Java EE Connector Architecture and Java Data Bean	siebel.connection.string	The Siebel connection string.
	siebel.user.name	The user name to log in to the Object Manager.
	siebel.user.password	The password to log in to the Object Manager.
	siebel.user.language	The preferred language for the user.
	siebel.user.encrypted	Determines if Siebel CRM encrypts the username and password.
	siebel.jdb.classname	The default Java Data Bean (JDB) classname.
Java System Properties	file.encoding	The character encoding on the Siebel client. For example, cp1252, utf8, unicodeBig, or cp942.  Java system properties are not Siebel properties.

## Example of the Siebel Properties File

The following code is an example of the siebel.properties file:

```
siebel.connection.string = siebel.tcpip.rsa.none://test.siebel.com/siebel/
```

```
sseobjmgr_enu/test

siebel.user.name = User1

siebel.user.password = password

siebel.user.language = enu

siebel.user.encrypted = false

siebel.conmgr.txttimeout = 3600

siebel.conmgr.poolsize = 5

siebel.conmgr.sesstimeout = 300000

siebel.conmgr.retry = 5

siebel.conmgr.jce = 1
```

## Determining the Total Number of Open Connections

The connection pool maintains a set of connections to a specific server process. The default value for the `siebel.conmgr.poolsize` property is 2. The maximum value is 500.

The `siebel.conmgr.poolsize` property and the Min MT Server parameter on the object manager determine the total number of open connections. Each MT server process is a Windows process that includes a connection pool. The total number of open connections is the value in the `siebel.conmgr.poolsize` property multiplied by the value in the Min MT Server parameter.

For example, if the `siebel.conmgr.poolsize` is 2, and if the Min MT Server parameter is 3, then the total number of open connections is six.

## Customizing Character Encoding for the Siebel Java Data Bean

The character encoding of the Siebel Server and the character encoding of the Siebel client must be the same. This allows the Siebel client and the Siebel Server to communicate correctly. If the Siebel client and the Siebel Server default character encoding cannot be the same, then you can modify the Siebel client character encoding.

### To customize character encoding for the Siebel Java Data Bean

- To set the `file.encoding` system property to the proper character encoding, do one of the following:

- Set it for the entire Java Virtual Machine on the command line. For example:

```
java -Dfile.encoding=ascii java_application
```

- Set it in the environment variable. For more information, see your particular Java Virtual Machine.
- Set it for a particular Java component. Add the following line to the Java component:

```
System.setProperty("file.encoding", CodePageValue);
```

where:

- `CodePageValue` is a Siebel value that specifies character encoding for the Java Data Bean.

The following information lists character encoding mappings you can use for the Java Data Bean. The Siebel Value column contains the codes you can specify in the CodePageValue variable.

Java Value	Siebel Value
ascii	1
cp1252	1252
iso8859_1	1252
iso8859-1	1252
unicodebig	1201
unicodelittle	1200
utf8	65001
big5	950
cp942	932
cp942c	932
cp943	932
cp943c	932
cp949	949
cp949c	949
cp950	950
cp1250	1250
cp1251	1251
cp1253	1253
cp1254	1254

Java Value	Siebel Value
cp1255	1255
cp1256	1256
cp1257	1257
cp1258	1258
gbk	936
ms874	874
ms932	932
ms936	936
ms949	949
ms950	950
sjis	932
tis620	874

## Configuring TLS for the Siebel Java Data Bean Standalone Client

You can configure Transport Layer Security (TLS) for the Siebel Java Data Bean standalone client.

To configure TLS for the Siebel Java Data Bean standalone client

1. Configure TLS for the Siebel Application Object Manager component.

For more information, see *Siebel Security Guide*.

2. Add or modify the following parameters in the siebel.properties file:

```
;;connection string
siebel.connection.string = siebel.TLS.None.None://<hostname>:<port>/siebel/SCCObjMgr_enu
;;key store property name
siebel.ssl.keystore = keystore_path
;;trust store property name
siebel.ssl.truststore = truststore_path
;;key store alias property name
siebel.ssl.keystorealias = encrypted_keystore_alias
;;key store password
siebel.ssl.keystorepassword = encrypted_keystore_password
;;trust store password
siebel.ssl.truststorepassword = encrypted_truststore_password
```

3. Encrypt the alias and password using `encryptstring.jar`.

## Encrypting Communication Between the Java Data Bean and the Siebel Server

To encrypt communication between the Siebel Java Data Bean and the Siebel Server, you can use the Rivest, Shamir and Adleman (RSA) encryption libraries.

To encrypt communication between the Siebel Java Data Bean and the Siebel Server

1. Enable encryption in the Object Manager server component that you use for the communication between the Java Data Bean and the Siebel Server.

For more information, see *Siebel System Administration Guide*.

2. Set the encryption parameter of the connect string in the Siebel Java Data Bean to `rsa`.

For example:

```
siebel.tcpip.rsa.none://gateway/enterprise/ObjMgr
```

where:

- `gateway` is the name of the gateway
- `enterprise` is the name of the enterprise
- `ObjMgr` is the name of the Object Manager

## Encrypting Communication on a Platform That the RSA Libraries do Not Support

To use encryption on a platform that the RSA libraries do not support, Oracle uses the Java Cryptography Extension (JCE) v1.2.1 specification. JCE provides a way to encrypt, create the encryption key, create the key agreement, and handle Message Authentication Code. With JCE, you can use some other qualified cryptography library as a service provider. For information about developer resources for Java technology, see the following Web site:

<http://www.oracle.com/technetwork/java/java-sun-com-138872.html>

To encrypt communication on a platform that the RSA libraries do not support

1. Download and install the JCE v1.2.1 software, policy files, and documentation.

For information about installing and configuring your Java Virtual Machine for use with JCE, see the following Web site:

<https://www.oracle.com/java/technologies/oracle-java-archive-downloads.html>

Note that you can only use a static specification of JCE providers with the Siebel Java Data Bean.

2. Modify the `java.security` file to specify your provider of choice.
3. Make sure the classpath variable includes the necessary provider JAR files.
4. Set the `siebel.conmgr.jce` property in the `siebel.properties` file to 1.

## Login Errors You Might Encounter When You Use the Siebel Java Data Bean

The Siebel Java Data Bean might return a login error that is similar to the following:

**Siebel Exception thrown invoking login Method. Code--1. Message-Logon request 75 was abandoned after 2ms connection.**

Any of the following items can cause this error:

- An Object Manager process is down.
- A hardware reset is required. For example, Object Manager hardware, router, switch, and so forth.
- There is a problem with an operating system setting or the operating system network.
- There is a network failure.
- There is a network address translation timeout.

## Using the Siebel Java Data Bean with Multiple Threads

Multiple threads of a single process must not access a common instance of the Siebel Java Data Bean. If a process with multiple threads must use the Siebel Java Data Bean, then each thread must create a separate instance of the Siebel Java Data Bean.

Do not reuse an instance of any other object that the Siebel Java Data Bean makes available across multiple threads of the same process. This requirement includes the following objects:

- SiebelBusObject
- SiebelBusComp
- SiebelService
- SiebelPropertySet

**CAUTION:** You must configure Siebel CRM to create one instance of the Siebel Java Data Bean for each thread that must use it. If a thread gets Siebel Java Data Bean Objects, then do not configure Siebel CRM to share these objects with any other thread.

# Customizing Object Interface Events and Extension Events

This topic describes object interface events and extension events. It includes the following topics:

- *Overview of Object Interface Events and Extension Events*
- *Format of the Object Interface Event*
- *Customizing the Outcome of an Object Interface Event*
- *Customizing How Siebel CRM Continues an Operation*
- *Using Tracing to Determine When an Event Occurs*

For more information, see the following topics:

- *Applet Events*
- *Application Events*
- *Business Component Events*



## Overview of Object Interface Events and Extension Events

An *object interface event* is a type of object interface method that Siebel Engineering creates. A Siebel object includes a set of events that correspond to different points of execution during the lifetime of the object. An event acts as a placeholder in this Siebel object. It replies to a method that executes on the object.

Some object interface events allow you to associate custom code with a Siebel application. This code is available in Server Script or Browser Script. If the Siebel application starts the event, then Siebel CRM calls the custom code and the predefined Siebel code that is associated with the event.

You can use the following types of object interface events:

- **Preoperation event.** Occurs before the predefined Siebel operation runs. The PreDeleteRecord event is an example of a preoperation event. This event occurs before the DeleteRecord event occurs. To modify the behavior of a predefined Siebel application, you can use a preoperation event. For example, to perform custom validation on a record that Siebel CRM is about to delete, you can use the PreDeleteRecord event. If the validation fails, then you can instruct Siebel CRM to cancel the DeleteRecord operation.
- **Postoperation event.** Starts after Siebel CRM finishes executing the preoperation event. The DeleteRecord event is an example of a postoperation event. For example, Siebel CRM starts the DeleteRecord event after it finishes executing the PreDeleteRecord event. The postoperation event handler is rarely scripted, but you can use it for some postoperation events, such as posting a notice to a log if the event completes successfully.

## Format of the Object Interface Event

The object interface event uses the following format:

```
ObjectReference_EventName (arguments) As RetValue
```

where:

- **ObjectReference** is the variable name of the object where Siebel CRM calls the event.
- **EventName** is the event that Siebel CRM calls.

## Customizing the Outcome of an Object Interface Event

A preoperation event handler exists for every Siebel operation event handler. You typically place a script in the preoperation event. The PreInvokeMethod event results in the most important outcome. In a PreInvokeMethod event, you can call an object interface method that substitutes the predefined Siebel code.

### To customize the outcome of an object interface event

- Attach a script to the preoperation event handler.

# Customizing How Siebel CRM Continues an Operation

This topic describes how to customize the way Siebel CRM continues an operation.

## To customize how Siebel CRM continues an operation

- To process data before the default event method runs, set the return value for this predefined event to `ContinueOperation`.

The return value for a preoperation event is `ContinueOperation`. It configures the calling Siebel object to continue processing the remaining operations that Siebel CRM associates with the event.

If you handle a custom method in a preevent, then that event must return `CancelOperation` or you must handle the custom method somewhere in the process. For important caution information, see [Caution About Using the Cancel Operation Event Handler](#).

## Caution About Using the Cancel Operation Event Handler

Including the `CancelOperation` return value configures the Siebel application to cancel the remaining operations that Siebel CRM associates with the event.

**CAUTION:** If you define a custom object interface method, then you must include the `CancelOperation` return value. If you do not, then Siebel CRM issues an unknown method name error.

`CancelOperation` does not stop the code in a script that follows `CancelOperation`, but it does prevent Siebel CRM from running any predefined code that is associated with the method or event that is running. If you handle the method or event entirely through scripting, and if you must prevent the predefined code from executing, then the method or event must return `CancelOperation`.

For information about how Siebel CRM handles a predefined business service method, see [How Siebel CRM Handles a Predefined Business Service Method](#) in [Service\\_PreInvokeMethod Event](#).

## Example of Using Siebel VB to Create a Validation

The following Siebel VB example creates a validation that queries a specific field to determine if the object interface event completed successfully or completed with a run-time error:

```
Function BusComp_PresetFieldValue (FieldName As String,  
    FieldValue As String) As Integer  
    ' code to check if a quote discount > 20%  
    ' if it is, notify user and cancel the operation  
    Dim value As Integer  
    Dim msgtext As String  
    If FieldName = "Discount" then  
        value = Val(FieldValue)  
        If value > 20 then  
            msgtext = "Discounts greater than 20% must be approved"  
            TheApplication.RaiseErrorText msgtext ' cancels the run  
            Else  
                BusComp_PresetFieldValue = ContinueOperation  
            End if  
        End If  
    End Function
```

Note the If statement in the following pseudocode:

```
If condition is true
  call custom code
  raise error text to cancel operation
Else
  returnValue = ContinueOperation
End If
```

In this If statement, Siebel CRM runs the custom code only if the condition is true:

- If the condition is true, then Siebel CRM uses the custom code instead of the predefined code.
- If the condition is not true, then the event handler returns ContinueOperation, and Siebel CRM uses the predefined code.

You can also use the following alternative If statement:

```
returnValue = Continue Operation
If condition is true
  call custom code
End If
```

Note that with a PreInvokeMethod event, you use the method name to determine if the script conditionally runs. For example, consider the following code in Siebel eScript:

```
if (methodName == "PushOpportunity")
```

## Example of Using Siebel eScript to Create a Validation

The following Siebel eScript example creates a validation that queries a specific field to determine if the object interface event completed successfully or completed with a run-time error:

```
function BusComp_PreSetFieldValue (FieldName, FieldValue)
{
  var iReturn = ContinueOperation;
  //code to check if a quote discount > 20%
  //if it is, notify user and cancel the operation
  var varvalue;
  var msgtext;
  if (FieldName == "Discount")
  {
    varvalue = ToNumber(FieldValue);
    if (varvalue > 20)
    {
      msgtext = "Discounts greater than 20% must be approved";
      TheApplication().RaiseErrorText(msgtext); // cancels the run
    }
    else
    {
      iReturn = ContinueOperation;
    }
  }
}
```

## Using Tracing to Determine When an Event Occurs

Many different events can occur if a view becomes current or if a script calls an object, so a simple way to determine when various events occurs does not exist. It is recommended that you use tracing to determine when events occur.

## To use tracing to determine when an event occurs

1. To determine the exact order of events, use the `Application_Start` event to enable tracing when the Siebel application starts.

In Siebel VB, use the following code:

```
TheApplication.TraceOn "filename, type, selection"  
TheApplication.Trace "Event_Name has fired."
```

In Siebel eScript, use the following code:

```
TheApplication().TraceOn("filename, type, selection");  
TheApplication().TraceOn(" Event_Name has fired.");
```

2. Add the following code in each event handler for the object:

```
TheApplication.Trace "Event_Name fired."
```

Make sure you add this code to each of the following items:

- Each relevant event, such as insert, delete, write, business component, and so forth
  - Each relevant preevent handler
3. Perform a few simple inserts, updates, and deletes.
  4. Make a note of each message as Siebel CRM displays it.

Your notes will list the order that Siebel CRM uses to start events on the view or for the object.

## Configuring Error Handling

This topic describes how to configure error handling.

### COM Error Handling

The `errCode` parameter is the last parameter for every COM Data Server interface method. It is not available in the following object interfaces:

- COM Data Control
- Mobile Web Client Automation Server
- Siebel Java Data Bean

### Examples of Configuring Error Handling

This topic includes examples of configuring error handling.

## Example of Configuring Error Handling for the COM Data Server

The following code is an example of error handling only for the COM Data Server:

```
GetBusObject (BusObjectName as string, errcode as integer) -> businessObject
```

## Example of Configuring Error Handling for COM Data Control and Mobile Web Client Automation Server

The following code is an example of error handling for COM Data Control and Mobile Web Client Automation Server:

```
GetBusObject (BusObjectName as string) -> businessObject
```

## Example of Configuring Error Handling for Siebel Java Data Bean

The SiebelException object handles errors in Siebel Java Data Bean. You can use the `getErrorCode` method and `getErrorMessage` method with the SiebelException object. The SiebelException object is defined in the `com.siebel.data.SiebelException` file. This file is a class file in one of the .jar files included in any java project that must communicate with Siebel CRM. For example:

```
...

import com.siebel.data.SiebelException;
import com.siebel.data.SiebelDataBean;
...
SiebelDataBean mySiebelBean=null;
try

{
    mySiebelBean = new SiebelDataBean();
    mySiebelBean.login("Siebel://SOMSERVER/somsiebel/AppObjMgr/", "CCONWAY",
"CCONWAY", "enu");
}
catch (SiebelException e){
    // Exception handling code
    System.out.println (e.getErrorMessage ());
    mySiebelBean = null; //avoid using mySiebelBean if login is unsuccessful
}

...
```

The ellipsis (...) in this code indicates code that was removed from the example in this book for brevity.

For more object interface methods on the SiebelException object, see the Siebel Java Data Bean JavaDoc that Oracle Universal Installer installs when you install Siebel Tools. Note that Oracle Universal Installer installs the JavaDoc only if you install the Siebel Java Integration option. It installs a zipped file that contains the JavaDoc in the `Tools_ROOT\CLASSES` folder.

## Error Message Tracking

For error message tracking, you can use exceptions or object interface methods. This topic describes the methods that you can use.

### EnableExceptions Method

The `EnableExceptions` method allows Siebel CRM to use native COM error handling. If the method is about to fail due to error, then Siebel CRM creates a COM exception and does not return the method. The COM host receives the control

instead. Siebel CRM might display the error message, which is the default behavior for Microsoft Internet Explorer or Siebel VB. You cannot use script to modify this behavior.

The following code is an example of using the `EnableExceptions` method:

```
EnableExceptions(enable as integer)
```

## Get LastErrCode Method and GetLastErrText Method

After Siebel CRM runs an object interface method, you can do the following:

- To determine if Siebel CRM returned an error from the previous operation, you can call the `GetLastErrCode` method.
- To return the text of the error message, you can call the `GetLastErrText` method.

For example:

```
GetLastErrCode() ' returns errCode As Integer  
GetLastErrText() ' returns text As String
```

# 4 Using Siebel Visual Basic and Siebel eScript

## Using Siebel Visual Basic and Siebel eScript

This chapter describes how to use Siebel Visual Basic and Siebel eScript. It includes the following topics:

- *Overview of Using Siebel Visual Basic and Siebel eScript*
- *Examples of Using Siebel Visual Basic and Siebel eScript*
- *Guidelines for Using Siebel VB and Siebel eScript*
- *Opening the Siebel Script Editor*
- *Declaring a Variable*
- *Calling More Than One Object Interface Method In a Script*
- *Using Script to Add Business Logic to a Business Component*
- *Using a MiniButton Control to Call a Custom Method*
- *Tracing a Script*

## Overview of Using Siebel Visual Basic and Siebel eScript

You can use Siebel VB or Siebel eScript to customize and configure Siebel CRM beyond the capabilities that defining object properties provides. These languages integrate with other Siebel tools, such as the Applet Designer, Siebel CTI, and Siebel SmartScript. To define object properties, you can use the Applet Designer or attach scripts.

It is recommended that you use coding only after you determine that you cannot use any other tool. Siebel Tools provides many ways to configure Siebel CRM without coding. The following reasons explain why you must use Siebel Tools before you write your own code:

- Using Siebel Tools is easier than writing code.
- Your code might not work with an upgrade. Siebel CRM automatically updates a customization that you create in Siebel Tools during an upgrade. It does not update custom code you create. It might be necessary for you to manually update the code.
- Configuration through Siebel Tools results in better performance than using the same features through code. For more information, see *Siebel Performance Tuning Guide*.

## Examples of Using Siebel Visual Basic and Siebel eScript

Siebel Visual Basic and Siebel eScript allow you to customize Siebel CRM behavior.

## Validating Data

To meet the validation requirements for your business, you can use Siebel Visual Basic or Siebel eScript to create a custom code that uses validation rules before Siebel CRM records or deletes a record. You can use data validation to access the following types of data:

- **Internal data.** For example, you can write custom code that configures Siebel CRM to verify that the revenue amount for an opportunity is greater than zero if the probability of the opportunity is greater than 20 percent.
- **External data.** For example, to verify the availability of a conference room before Siebel CRM inserts a new activity, you can write custom code that reads data from the database table of an external application.

## Modifying and Controlling Data

Siebel Visual Basic and Siebel eScript allow you to modify and control data, such as update, insert, or delete a record. For example, you can control the value of one field according to the value of another field:

- Set the probability of the opportunity, such as 98%, according to the sales stage of the opportunity, such as 03 - Closing.
- If the sales cycle is at or past the Quote Submitted stage, then do not allow the user to modify the Revenue field.

You can use an object interface method to manipulate data to notify a Siebel programming language of an error and provide it information. This capability allows you to configure the Siebel application to handle the error and take appropriate action.

Manipulating data in a Siebel programming language conforms to the same visibility rules that a predefined Siebel application uses. For example, assume the visibility rules that exist in a predefined Siebel application result in a business object that Siebel CRM can read but not edit. In this situation, a configuration that you create through a Siebel programming language can also read but not edit this same object. You cannot use a Siebel programming language to circumvent the visibility rules or the security constraints that a predefined Siebel application enforces.

## Customizing Behavior for User Interface Elements

To add a user interface element to an applet, you can use the Applet Layout Editor in Siebel Tools. To associate a behavior with this element, you can use a Siebel programming language. For example, you can add a button on an applet that opens another application, such as Microsoft Excel.

## Guidelines for Using Siebel VB and Siebel eScript

This topic describes guidelines for using Siebel VB and Siebel eScript. It includes the following topics:

- *Declare Your Variables*
- *Use a Standardized Naming Convention*
- *Use Constants to Standardize Code*
- *Avoid Nested If Statements*



- *Applying Multiple Object Interface Methods to a Single Object*
- *Use a Self-Reference to Indicate the Current Object*
- *Delete Objects You Have Created That You No Longer Require*
- *Make Sure Function Names Are Unique*
- *Manage the Script Buffer*
- *Using Siebel VB and Siebel eScript Formats*
- *Handling the Date Format in Siebel VB*
- *Returning Run-Time Errors in Siebel VB*

For introductory information about Siebel VB, see *Siebel VB Language Reference* .

## Declare Your Variables

To help other developers understand your code and to help you debug your code, it is recommended that you declare your variables.

### Declaring Your Variables in Siebel VB

You can use the Dim statement in the Option Explicit statement to declare a variable before you use it. To reduce the amount of memory that your code uses and to improve processing speed, it is recommended that you avoid using a Variant variable. You can declare a variable without specifying a data type. If you do not specify a data type, then Siebel VB assumes the Variant type. This type requires 16 bytes and uses twice as much memory as the next smallest data type.

## Use a Standardized Naming Convention

To improve efficiency and reduce errors, it is recommended that all developers in your programming group use the same standardized naming convention. The convention that you use does not matter. The following table describes a common convention that prefixes each variable with a letter that indicates the type. If necessary, you can also use a suffix.

Data Type	Naming Convention	Example
String	s	sName
Integer	i	iReturn
Long integer	l	lBigCount
Single-precision number	si	siAllowance
Double-precision number	d	dBudget
Object	o	oBusComp

Data Type	Naming Convention	Example
Currency	c	cAmtOwed

## Use Constants to Standardize Code

Siebel Visual Basic and Siebel eScript provide constants that you can use to make your code more readable by other developers. A constant clarifies the intent of the operation. Use the constant name in your code. Do not use the integer value in your code. The integer value is included only to aid in debugging. If you store the constant in a local variable, and if the value of the local variable is available, then Siebel CRM displays the integer value in the Debugger.

The following information lists the Siebel constants you can use.

It is recommended that you use the constant and that you do not use the integer value because integer values are subject to modification.

Used With	Constant Name	Integer Value
Pre Event Handler Methods	ContinueOperation	1
	CancelOperation	2
Search Methods	ForwardBackward	256
	ForwardOnly	257
NewRecord Method	NewBefore	0
NewRecord Method	NewAfter	1
NewRecord Method	NewBeforeCopy (Not available with Siebel Java Data Bean)	2
NewRecord Method	NewAfterCopy (Not available with Siebel Java Data Bean)	3
Siebel ViewMode Methods.	SalesRepView	0
Siebel ViewMode Methods.	ManagerView	1
Siebel ViewMode Methods.	PersonalView	2
Siebel ViewMode Methods.	AllView	3

Used With	Constant Name	Integer Value
Siebel ViewMode Methods.	OrganizationView	5
Siebel ViewMode Methods.	GroupView	7
Siebel ViewMode Methods.	CatalogView	8
Siebel ViewMode Methods. For more information, see <i>Constants you can use with the SetViewMode method in SetViewMode Method for a Business Component</i> .	SubOrganizationView	9

## Avoid Nested If Statements

To avoid a nested If statement, you can use one of the following statements:

- In Siebel VB, use the Select Case statement
- In Siebel eScript, use the Switch statement

Each of these statements chooses from multiple alternatives according to the value of a single variable. It is recommended that you use the Select Case statement instead of a series of nested If statements. It simplifies code maintenance and improves performance. Siebel CRM evaluates the variable only once.

The following is an example use of the Switch statement:

```
switch (FieldName)
{
  case "Status":
  {
    var sysdate = new Date();
    var sysdatestring = ((sysdate.getMonth() + 1) + "/" + sysdate.getDate() +
"/" + sysdate.getFullYear() + " " + sysdate.getHours() + ":" +
sysdate.getMinutes() + ":" + sysdate.getSeconds());
    this.SetFieldValue("Sales Stage Date",sysdatestring);
    if ((FieldValue) == "Not Attempted")
    {
      if (this.GetFieldValue("Primary Revenue Amount") > 0)
        this.SetFieldValue("Primary Revenue Amount",0);
    }
    break;
  }
  case "Revenue":
  {
    if (newrecSw == "Y")
    {
      newrecSw = "";
      this.SetFieldValue("Account Revenue", (FieldValue));
    }
    break;
  }
}
```

## Applying Multiple Object Interface Methods to a Single Object

To apply multiple object interface methods to a single object, you can use the With statement in Siebel VB or Siebel eScript. It reduces typing and makes the code easier to read.

### Example of Using the With Statement in Siebel VB

The following example uses the With statement in Siebel VB:

```
Set oBusObject = TheApplication.GetBusObject("Opportunity")
Set oBusComp = oBusObject.GetBusComp("Opportunity")
With oBusComp
    .ActivateField "Account"
    .ClearToQuery
    .SetSearchSpec "Name", varname
    .ExecuteQuery ForwardBackward
    If (.FirstRecord = 1) Then
        sAccount = .GetFieldValue "Account"
    End If
End With
. . .

Set oBusComp = Nothing
Set oBusObject = Nothing
```

The following example is not recommended. It does not use the With statement:

```
Set oBusObject = TheApplication.GetBusObject("Opportunity")
Set oBusComp = oBusObject.GetBusComp("Opportunity")
oBusComp.ActivateField "Account"
oBusComp.ClearToQuery
oBusComp.SetSearchSpec "Name", varname
oBusComp.ExecuteQuery ForwardBackward
If (oBusComp.FirstRecord = 1) Then
    sAccount = oBusComp.GetFieldValue "Account"
End If
. . .
```

### Example of Using the With Statement in Siebel eScript

The following example uses the With statement in Siebel eScript:

```
var oBusObject = TheApplication().GetBusObject("Opportunity");
var oBusComp = oBusObject.GetBusComp("Opportunity");
with (oBusComp)
{
    ActivateField("Account");
    ClearToQuery();
    SetSearchSpec("Name", varname);
    ExecuteQuery(ForwardBackward);
    if (FirstRecord())
    {
        var sAccount = GetFieldValue("Account");
    }
} //end with
```

The following example is not recommended. It does not use the With statement:

```
var oBusObject = TheApplication().GetBusObject("Opportunity");
var oBusComp = oBusObject.GetBusComp("Opportunity");
oBusComp.ActivateField("Account");
```

```
oBusComp.ClearToQuery();  
oBusComp.SetSearchSpec("Name", varname);  
oBusComp.ExecuteQuery(ForwardBackward);  
if oBusComp.FirstRecord();  
{  
    var sAccount = oBusComp.GetFieldValue("Account");  
}  
. . .
```

## Use a Self-Reference to Indicate the Current Object

To indicate the current object, you can use the following statements:

- In Siebel VB, use the Me statement.
- In Siebel eScript, use the This keyword.

You can use the statement or keyword instead of referencing an active business object.

### Example of Using the Me Statement

The following business component event handler uses the Me statement instead of the ActiveBusComp statement:

```
Function BusComp_PreSetFieldValue(Fieldname As String, FieldValue As String) As  
Integer  
  
If Val(Me.GetFieldValue("Rep %")) >75 Then  
    TheApplication.RaiseErrorText("You cannot set the Rep% to greater than 75")  
End If  
BusComp_PreSetFieldValue = ContinueOperation  
  
End Function
```

For examples of using the Me statement, see the following topics:

- *ParentBusComp Method for a Business Component*
- *SetViewMode Method for a Business Component*
- *BusComp\_PreQuery Event*
- *BusComp\_PreWriteRecord Event*
- *ActiveMode Method for an Applet*

### Example of Using the This Keyword

The following business component event handler uses the This keyword instead of the ActiveBusComp statement:

```
if (condition)  
{ ...  
    this.SetSearchSpec(...);  
    this.ExecuteQuery();  
    return (CancelOperation);  
}  
else  
    return(ContinueOperation);
```

## Delete Objects You Have Created That You No Longer Require

Although the interpreter performs object cleanup, it is recommend that you write code that explicitly deletes objects it created that you no longer require. Your code must delete each Siebel object in the same procedure it used to create it.

To delete objects, do the following:

- In Siebel VB, set each object to Nothing.
- In Siebel eScript, set each object to Null.

You can delete these objects in the reverse order that the code created them. Make sure you code deletes child objects before it deletes parent objects.

### Example of Deleting Objects in Siebel VB

The following code is an example of deleting objects in Siebel VB:

```
Set oBusObj = TheApplication.GetBusObject("Contact")
Set oBusComp= oBusObj.GetBusComp("Contact")

Your code here

Set oBusComp = Nothing
Set oBusObj = Nothing
```

### Example of Deleting Objects in Siebel eScript

The following code is an example of deleting objects in Siebel eScript:

```
var oBusObject = TheApplication().GetBusObject("Contact");
var oBusComp = oBusObject.GetBusComp("Contact");

Your code here

oBusComp = null;
oBusObject = null;
```

## Make Sure Function Names Are Unique

Make sure that the name is unique for every function you create. If two functions use the same name, and if those functions are in the same view, then results are unpredictable. Consider using a naming convention, such as using the view name as a function name prefix.

## Manage the Script Buffer

The size limit of a non-Unicode script buffer is 65530 bytes. The amount of available memory limits the Unicode script buffer. Make sure your computer possesses enough memory to accommodate this buffer.

## Using Siebel VB and Siebel eScript Formats

There are some important differences between the formats that Siebel VB and Siebel eScript use:

- Siebel eScript is case-sensitive. For example, theApplication is different from TheApplication. Siebel VB is not case-sensitive.
- Siebel eScript does not distinguish between a subroutine and a function. A subroutine cannot accept an argument. A function can accept an argument. In Siebel eScript, because every object interface method is a function, you must follow it with a pair of parentheses. You must use this technique if the function does or does not accept an argument.

In many instances, the only difference between the Siebel VB format and the Siebel eScript format is that the Siebel eScript format requires a pair of parentheses at the end. In these instances, this book only includes the Siebel VB format. To determine the Siebel eScript format, add the parentheses.

### Differences Between Siebel eScript and ECMAScript

*ECMAScript* is a programming language that developers use to script a client on the Web. JavaScript is a type of ECMAScript. Siebel eScript does not include user interface functions. You cannot use it to animate or control a Web page. It includes the following functions that are not part of ECMAScript:

- SELib
- Clib

You can use these functions to interact with the operating and file systems, and for performing input and output file operations. These objects include functions that are similar to functions that the C programming language uses. For more information, see *Siebel eScript Language Reference*.

ECMAScript does not require you to declare a variable. It declares a variable implicitly as soon as you use it.

## Handling the Date Format in Siebel VB

If you use an object interface method that includes a date, then use caution regarding the date format. The GetFieldValue method returns the date in the following format:

dd/mm/yyyy

The CVDate function expects the regional setting. If you apply it, then Siebel CRM might return an error. The GetFormattedFieldValue method uses the regional settings of the operating system that is installed on the computer that runs the Siebel client. The regional setting might specify the year with two digits, and can cause an error with the year 2000 problem. For these reasons, use the following procedure for performing date arithmetic.

### To handle the date format in Siebel VB

1. To return the value of the date fields, use the GetFieldValue object interface method.  
  
For more information, see *GetFieldValue Method for a Business Component*.
2. Use the DateSerial function convert the value of the date field to a date variable.
3. Perform the required date arithmetic.

For example, you can use the following Siebel VB code:

```
Dim strDate as String, varDate as Variant
strDate = oBC.GetFieldValue("Date Field")
varDate =DateSerial(Val(Mid(strDate,7,4)),Val(Left(strDate,2)),_
Val(Mid(strDate,4,2)))
any date arithmetic
```

## Returning Run-Time Errors in Siebel VB

This topic describes how to return run-time errors in Siebel VB.

### To return run-time errors in Siebel VB

- Return a run-time error code with one of the following items:
  - Predefined Siebel VB properties.** You can use some combination of Err, ErrText, and Error.
  - Custom Siebel VB method.** If you access a Siebel object interface through Component Object Model (COM) or ActiveX, then use the following code to view the text of the error message:

```
If errCode <> 0 Then
    ErrText = GetLastErrText
    TheApplication.RaiseErrorText ErrText
    Exit Sub
End If
```

The GetLastErrText method is only available if you use an interface that is external to Siebel Tools. You can use it in Microsoft VB but not in Siebel VB.

Object interface methods use numeric error codes in a range of 4000 to 4999.

For more information about error-handling and error codes, see *Siebel VB Language Reference*.

## Opening the Siebel Script Editor

This topic describes how to open the Siebel Script Editor.

### To open the Siebel Script Editor

- In Siebel Tools, in the Object Explorer, click the object type you must modify.  
For example, click Applet.
- In the Object List Editor, locate and then right-click the object you must modify.  
For example, in the Applets list, locate and then right-click Contact List Applet.
- In the Scripting Language dialog box, choose one of the following menu items:
  - Edit Server Scripts



- Edit Browser Scripts
- 4. In the Scripting Language dialog box, choose Visual Basic or eScript, and then click OK.

## Declaring a Variable

This topic describes how to declare a variable.

## Declaring a Local Variable

This topic describes how to declare a local variable. You can access the value of a local variable only in the script where you define the local variable.

### To declare a local variable

1. Open the Siebel Script Editor.

For more information, see *Opening the Siebel Script Editor*.

2. In the navigation tree of the script editing window, expand the object tree, and then click the script you must modify.

For example, expand the WebApplet tree, and then click WebApplet\_PreInvokeMethod.

3. In the script editing window, use one of the following statements in your custom script:
  - In Siebel VB, use the Dim statement.
  - In Siebel eScript, use the Var statement.

## Example of Declaring a Local Variable in Siebel VB

The following example declares a local variable in Siebel VB:

```
Sub WebApplet_Load
  Dim localStr As String
End Sub
```

## Example of Declaring a Local Variable in Siebel eScript

The following example declares a local variable in Siebel eScript:

```
function WebApplet_Load ()
{
  var localStr;
}
```

## Declaring a Module Variable

This topic describes how to declare a module variable. In this situation, a *module* is a group of methods contained in an object that you can script. For example, a business service, business component, application object, and so forth. You can access the value of a module variable in the script where you define the module variable and in other scripts in the

object or module where you define the module variable. To access a module variable, an instance of the object where you define the variable must exist.

## To declare a module variable

1. Open the Siebel Script Editor.

For more information, see *Opening the Siebel Script Editor*.

2. In the navigation tree of the script editing window, expand the general tree, and then click declarations.
3. In the script editing window, use one of the following statements in your custom script:
  - In Siebel VB, use the Dim statement.
  - In Siebel eScript, use the Var statement.

The following example declares a module variable in Siebel VB:

```
(general)
(declarations)
Dim ContactId as String
```

## Declaring a Global Variable

This topic describes how to declare a global variable.

### To declare a global variable

1. Open the Siebel Script Editor for the object you must modify.

For more information, see *Opening the Siebel Script Editor*.

2. Use the Global statement to declare the variable.

The following example includes the Global statement in Siebel eScript:

```
TheApplication().gVar = "some value";
```

3. Repeat these steps for each object that must access the value of the global variable.

## Do Not Use a Global Variable to Reference a Siebel Object

Do not use a global variable to reference a Siebel object, such as a business component or business object. If you must reference a Siebel object, then set the global variable to Nothing when you no longer require the object, or in the Application\_Close event.

If you do not set the variable to Nothing, then a memory problem might occur. Siebel CRM cannot release from memory the object that the global variable references until the variable no longer references the object. If you must create a global variable for a business component, then make sure a global variable for the business object exists.

For more information, see *Application\_Close Event*.

## Calling More Than One Object Interface Method In a Script

You can call more than one object interface method in a script.

### To call more than one object interface method in a script

- Use one of the following statements:
  - Select statement in Siebel VB
  - Switch statement in Siebel eScript.

## Example of Calling More Than One Object Interface Method in Siebel VB

The following example uses the Select statement in Siebel VB:

```
Dim iReturn As Integer
iReturn = ContinueOperation
Select Case methodName
    Case "PushOpportunity"
        your custom code
        iReturn = CancelOperation
    Case "Stage3"
        your custom code
        iReturn = CancelOperation
End Select
object_PreInvokeMethod = iReturn
```

## Example of Calling More Than One Object Interface Method in Siebel eScript

The following example is in Siebel eScript:

```
var iReturn;
switch (methodName)
{
    case "PushOpportunity":
        //your custom code
        iReturn = CancelOperation;
        break;
    case "Stage3":
        //your custom code
        iReturn = CancelOperation;
        break;

    default:
        iReturn = ContinueOperation;
}
```

```
return (iReturn);
```

## Using Script to Add Business Logic to a Business Component

You can use Server Script or Browser Script to add business logic to a business component.

### To use script to add business logic to a business component

1. Open the Siebel Script Editor.  
For more information, see *Examples of Using Siebel Visual Basic and Siebel eScript*.
2. In the navigation tree of the Siebel Script Editor, choose an event in the BusComp Tree.
3. In the Siebel Script Editor window, write your script.
4. Choose the Debug menu, and then the Check Syntax menu item.  
The Check Syntax menu item is available only for Server Script.
5. Save the modifications.
6. Choose the Tools menu, and then the Compile Selected Objects menu item.
7. Choose the Debug menu, and then the Start menu item.

## Using a MiniButton Control to Call a Custom Method

This topic describes how to use a minibutton control to call a custom method.

### To use a minibutton control to call a custom method

1. Open Siebel Tools.
2. Expose the Applet User Prop object type:
  - a. Choose the View menu, and then the Options menu item.
  - b. In the Development Tools Options dialog box, click the Object Explorer tab.
  - c. Expand the Applet tree, and then make sure the Applet User Prop object type contains a check mark.
  - d. Click Ok.
3. In the Object Explorer, click Applet.
4. In the Applets list, locate the applet you must modify.
5. In the Object Explorer, expand the Applet tree, and then click Control.
6. In the Controls list, add a new control using values from the following table.

Property	Value
Name	ButtonTest

Property	Value
Caption	Test
HTML Type	MiniButton
Method Invoked	MyTest

7. In the Applets list, right-click the applet and then choose the Edit Web Layout menu item.
8. In the Controls/Columns window, modify the template mode to Edit List.
9. Move the ButtonTest control from the Controls/Columns window to an appropriate location on the canvas of the Web Layout Editor.
10. Choose the File menu, and then the Save menu item.
11. Close the Web Layout Editor.
12. Enable the button:
  - a. In the Object Explorer, click Applet User Prop.
  - b. In the Applet User Props list, create a new user property using values from the following table.

Property	Value
Name	CanInvokeMethod: MyTest  For more information about the CanInvokeMethod applet user property, see <i>Siebel Developer's Reference</i> .
Value	TRUE

As an alternative, you can use script to enable the button. For more information, see [Using Script to Enable a Mini Button](#).

13. In the Applets list, right-click the applet, and then choose Edit Browser Scripts.
14. In the BrowserApplet window, add the following script:

```
function Applet_PreInvokeMethod (name, inputPropSet)
{
    switch (name) {
        case "MyTest":
            theApplication().SWEAlert("Browser Script!");
            return("CancelOperation");
            break;
    }
    return("ContinueOperation");
}
```

```
}
```

15. Close the BrowserApplet window.
16. In the Applets list, right-click the applet, and then choose Compile Selected Objects.
17. In the Object Compiler window, click Compile.
18. Start the Siebel client, and then navigate to the Accounts screen.
19. Click Test.  
This is the button you created in earlier in this procedure.
20. Make sure the Siebel client displays an alert box that includes the following message:

```
Browser Script!
```

## Using Script to Enable a MiniButton

To enable a minibutton, it is strongly recommended that you use the declarative technique described in *Using a MiniButton Control to Call a Custom Method*. In most situations, declarative programming does not negatively impact performance as much as scripting does. However, in certain situations, you can use a script to enable a button and improve performance. For example, you can use script to avoid a complicated Value expression that is longer than 255 characters that requires multiple calculated fields and declarative programming.

### To use script to enable a minibutton

1. Complete steps 1 through 11 in *Using a MiniButton Control to Call a Custom Method*.
2. In the Applets list, right-click the applet you must modify, and then choose Edit Server Scripts.
3. In the Scripting Language dialog box, choose Visual Basic or eScript, and then click OK.
4. In the Script Editor, expand the WebApplet tree, and then click the WebApplet\_PreCanInvokeMethod function.
5. In the Script Editor, add the following script:

```
function WebApplet_PreCanInvokeMethod (MethodName, &CanInvoke)
{

    if (MethodName == "MyTest")
    {

        CanInvoke = "TRUE";

        return(CancelOperation);

    }

    return(ContinueOperation);

}
```

6. Continue with step 13 in *Using a MiniButton Control to Call a Custom Method*.

## Tracing a Script

As part of debugging a script you can run a trace on allocations, events, and SQL commands. You can start tracing for a user account, such as your development team. The Siebel Server sends trace information to a log file.

For information about:

- Configuring server components, see *Siebel Applications Administration Guide*
- Logging events, see *Siebel System Monitoring and Diagnostics Guide*
- File tracing, see *Trace Method for an Application*

To enable logging for the local object manager, you can set the SIEBEL\_LOG\_EVENT environment variable to a value of 2 through 5. For more information, see *Siebel Applications Administration Guide*.

## To trace a script

1. In the Siebel client, navigate to the Administration - Server Configuration screen, and then the Servers view.
2. In the Components list, choose a component to log.
3. In the Events list, locate the Object Manager Extension Language Log event.

If this record does not exist, then you cannot use the component you chose earlier in this procedure for logging.

4. Set the Log Level to 1.
5. (Optional) Modify tracing parameters:
  - a. Click the Parameters tab.
  - b. In the Component Parameters list, click Menu, and then choose the Columns Displayed menu item.
  - c. Move the Parameter Alias and Subsystem columns to the Selected Columns window, and then click Save.
  - d. In the Component Parameters list, click Query.
  - e. Enter the following values, and then click Go.

Field	Value
Parameter Alias	Trace*
Subsystem	Object Manager

- f. Set one or more tracing parameters using values from the following table.

Information to Trace	Parameter Alias	Settings for Current Value and Value on Restart
Allocations	TraceAlloc	Enter 1 to enable logging. Enter 0 to disable logging.
Events	TraceEvents	Enter 1 to enable logging. Enter 0 to disable logging.
SQL Commands	TraceSql	Enter 1 to enable logging. Enter 0 to disable logging.
Users	TraceUser	Enter a list of user names. Use a comma to separate each user name. For example: sadmin,mmasters. Do not use spaces. You cannot enter more than 20 characters in this parameter.

Information to Trace	Parameter Alias	Settings for Current Value and Value on Restart
		<b>CAUTION:</b> Tracing on the Siebel Server can affect performance. If you simultaneously trace multiple users, then use caution.

To instruct Siebel CRM to immediately modify these parameters, enter values in the Current Value column.

To instruct Siebel CRM to modify these parameters only after a restart, enter values in the Value on Restart column.

6. Test your work, and then examine the results.
7. When you are finished logging, set the Log Level that you set to 1 earlier in this procedure, to 0.

The following is part of an example of the trace output:

```
2021 2003-04-09 15:37:20 2003-04-09 16:40:52 -0700 00000022 001 001f 0001 09
SCCObjMgr_enu 47126 1680 1584 C:\sea752\siebsrvr\log\SCCObjMgr_enu_47126.log 7.5.3
[16122] ENU

ObjMgrSessionInfo ObjMgrLogin 3 2003-04-09 15:37:20 Login name : SADMIN

ObjMgrSessionInfo ObjMgrAuth 3 2003-04-09 15:37:20 Authentication name : SADMIN

ObjMgrSessionInfo ObjMgrLogin 3 2003-04-09 15:37:20 Session Type: Regular Session

GenericLog GenericError 1 2003-04-09 15:37:20 Invocation of Applet Menu New
Service::NewExpense is not allowed.

GenericLog GenericError 1 2003-04-09 15:37:20 Invocation of Applet Menu New
Service::NewTimeSheet is not allowed.

ObjMgrExtLangLog ObjMgrExtLangLog 0 2003-04-09 15:38:27 [User: SADMIN] EVENT, BEGIN,
BusComp [Account], BusComp_Query.

ObjMgrExtLangLog ObjMgrExtLangLog 0 2003-04-09 15:38:27 [User: SADMIN] EVENT, END,
BusComp [Account], BusComp_Query.

ObjMgrExtLangLog ObjMgrExtLangLog 0 2003-04-09 15:38:58 [User: SADMIN] EVENT, BEGIN,
BusComp [Account], BusComp_NewRecord.

ObjMgrExtLangLog ObjMgrExtLangLog 0 2003-04-09 15:38:58 [User: SADMIN] EVENT, END,
BusComp [Account], BusComp_NewRecord.

ObjMgrExtLangLog ObjMgrExtLangLog 0 2003-04-09 15:39:08 [User: SADMIN] EVENT, BEGIN,
BusComp [Account], BusComp_PreSetFieldValue.

ObjMgrExtLangLog ObjMgrExtLangLog 0 2003-04-09 15:39:08 [User: SADMIN] EVENT, END,
BusComp [Account], BusComp_PreSetFieldValue.

ObjMgrSessionInfo ObjMgrLogin 3 2003-04-09 16:40:52 Username: SADMIN, Login Status:
Attempt, Session Id: !1.690.b816.3e94a0a0, IP Address: 172.20.94.66
```



# 5 Siebel Object Interfaces Reference

## Siebel Object Interfaces Reference

This chapter describes object interface methods and events. It includes the following topics:

- *Format of the Object Interface Method*
- *Technologies You Can Use to Access Object Interface Methods and Events*
- *Object Interfaces Reference*

## Format of the Object Interface Method

This topic describes formats for object interface methods, arguments, and return values. A Siebel object interface method uses the following format:

`ObjectType.MethodName(arg1[, arg2, ..., argn])`

where:

- Italicized text indicates a variable.
- Square brackets [ ] indicate an optional argument. The description of the argument indicates the default value for each optional argument.
- `ObjectType` is the object type. For example, `BusComp` indicates the business component that Siebel CRM defines for the object interface method.
- `MethodName` is the name of the object interface method that you call. A method can be a subroutine that does not return a value, such as `SetViewMode`, or a method that returns a value, such as `GetFieldValue`.
- `arg1`, `arg2`, or `argn` is a string, constant, integer, or object. Use parenthesis in the following ways:
  - In Siebel VB, if an object interface method returns a value, then enclose these arguments in parentheses.
  - in Siebel VB, if an object interface method does not return a value, then do not enclose these arguments in parentheses.
  - In Siebel eScript, always enclose these arguments in parentheses.

If you use parentheses ( ) when none are required, or if you fail to use them if they are required, then Siebel CRM creates a Type Mismatch error that includes error code 13. Siebel CRM also creates this error if you use an incorrect number of arguments.

If you use the COM Data Server interface, then you must include the `errCode` argument as the last argument.

Note how this book uses the following terms:

- *ObjectReference* is an `ObjectType` variable name that identifies the object that calls the object interface method. If you call a method on an object in the event handler of that object, then you are not required to explicitly specify the *ObjectReference*.

- *returnValue* is the value that the object interface method returns. Some methods, such as `GetBusComp`, return a business component object. Some methods return a string or integer. Some methods do not return any value.

## Formats for Siebel VB

If there is a return value, then use the following format:

```
returnValue = ObjectReference.MethodName(arg1, arg2, ..., argn)
```

If there are no arguments, then use the following format:

```
returnValue = ObjectReference.MethodName
```

If there is no return value, then use the following format:

```
ObjectReference.MethodName arg1, arg2, ..., argn
```

The following examples use Siebel VB:

```
acctName = acctBC.GetFieldValue("Name")  
  
acctBC.SetViewMode AllView
```

## Formats for Siebel eScript

If there is a return value, then use the following format:

```
returnValue = ObjectReference.MethodName(arg1, arg2, ..., argn);
```

If there are no arguments, then use the following format:

```
returnValue = ObjectReference.MethodName();
```

If there is no return value, then use the following format:

```
ObjectReference.MethodName(arg1, arg2, ..., argn);
```

The following examples use Siebel eScript:

```
acctName = acctBC.GetFieldValue("Name");  
  
acctBC.SetViewMode(AllView);
```

## Formats for the Component Object Model

The format that Siebel CRM uses for the Component Object Model (COM) depends on the language you use to call the COM interface. For Microsoft Visual Basic and equivalent languages, the format is similar to the format you use for Siebel VB, except that if you use COM Data Control, then Siebel CRM passes an error code as the final argument.

# Technologies You Can Use to Access Object Interface Methods and Events

This topic describes technologies you can use to access object interface methods and events. It includes the following topics:

- [Technologies You Can Use to Access Object Interface Methods](#)
- [Technologies You Can Use to Access Object Interface Events](#)

## Technologies You Can Use to Access Object Interface Methods

This topic lists the technologies you can use to access object interface methods. It includes the following topics:

- [Applet Methods](#)
- [Application Methods](#)
- [Business Component Methods](#)
- [Business Object Methods](#)
- [Business Service Methods](#)
- [Control Methods](#)
- [Property Set Methods](#)
- [Miscellaneous Methods](#)

The term Yes indicates an object interface that you can use with an application method.

### Applet Methods

The following information lists the technologies you can use to access applet object interface methods. You can use an applet object interface method only with Server Script and Browser Script.

Method	Server Script	Browser Script
<i>ActiveMode Method for an Applet</i>	No	Yes
<i>BusComp Method for an Applet</i>	Yes	Yes
<i>BusObject Method for an Applet</i>	Yes	Yes
<i>FindControl Method for an Applet</i>	No	Yes
<i>InvokeMethod Method for an Applet</i>	Yes	Yes
<i>Name Method for an Applet</i>	Yes	Yes

## Application Methods

The following information lists the technologies you can use to access application methods.

Method	Server Script	Browser Script	Mobile Web Client Automation Server	COM Data Control	COM Data Server	Java Data Bean
<i>ActiveApplet Method for an Application</i>	No	Yes	No	No	No	No
<i>ActiveBusComp Method for an Application</i>	No	Yes	No	No	No	No
<i>ActiveBusObject Method for an Application</i>	Yes	Yes	Yes	No	No	No
<i>ActiveViewName Method for an Application</i>	Yes	Yes	Yes	No	No	No
<i>Attach Method for an Application</i>	No	No	No	Yes	No	Yes
<i>CurrencyCode Method for an Application</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>Detach Method for an Application</i>	No	No	No	Yes	No	Yes
<i>EnableExceptions Method for an Application</i>	No	No	Yes	Yes	No	No
<i>FindApplet Method for an Application</i>	No	Yes	No	No	No	No
<i>GetBusObject Method for an Application</i>	Yes	No	Yes	Yes	Yes	Yes
<i>GetDataSource Method for an Application</i>  Called only with InvokeMethod	Yes	No	Yes	Yes	No	Yes
<i>GetLastErrorCode Method for an Application</i>	No	No	Yes	Yes	No	No

Method	Server Script	Browser Script	Mobile Web Client Automation Server	COM Data Control	COM Data Server	Java Data Bean
<i>GetLastErrText Method for an Application</i>	No	No	Yes	Yes	Yes	No
<i>GetProfileAttr Method for an Application</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>GetService Method for an Application</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>GetSharedGlobal Method for an Application</i>	Yes	No	Yes	Yes	Yes	Yes
<i>GotoView Method for an Application</i>	Yes	No	No	No	No	No
<i>InvokeMethod Method for an Application</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>IsViewReadOnly Method for an Application</i> Called only with InvokeMethod	Yes	Yes	Yes	Yes	Yes	Yes
<i>Language Method for an Application</i> Called only with InvokeMethod	Yes	No	No	No	No	No
<i>LoadObjects Method for an Application</i>	No	No	No	No	Yes	No
<i>LoadUserAttributes Method for an Application</i>	Yes	No	No	No	No	No
<i>Login Method for an Application</i>	No	No	Yes	Yes	Yes	Yes
<i>LoginId Method for an Application</i>	Yes	No	Yes	Yes	Yes	Yes
<i>LoginName Method for an Application</i>	Yes	No	Yes	Yes	Yes	Yes

Method	Server Script	Browser Script	Mobile Web Client Automation Server	COM Data Control	COM Data Server	Java Data Bean
<i>Logoff Method for an Application</i>	No	No	No	Yes	No	Yes
<i>LookupMessage Method for an Application</i>	Yes	No	No	No	No	No
<i>LookupValue Method for an Application</i>  Called only with InvokeMethod	Yes	No	Yes	Yes	No	Yes
<i>Name Method for an Application</i>	No	Yes	No	No	No	No
<i>NewPropertySet Method for an Application</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>PositionId Method for an Application</i>	Yes	No	Yes	Yes	Yes	Yes
<i>PositionName Method for an Application</i>	Yes	No	Yes	Yes	Yes	Yes
<i>RaiseError Method for an Application</i>	Yes	No	No	No	No	No
<i>RaiseErrorText Method for an Application</i>	Yes	No	No	No	No	No
<i>SetPositionId Method for an Application</i>	Yes	No	Yes	Yes	Yes	Yes
<i>SetPositionName Method for an Application</i>	Yes	No	Yes	Yes	Yes	Yes
<i>SetProfileAttr Method for an Application</i>	Yes	Yes*	Yes	Yes	Yes	Yes
<i>SetSharedGlobal Method for an Application</i>	Yes	No	Yes	Yes	Yes	Yes
<i>SWEAlert Method for an Application</i>	No	Yes	No	No	No	No

Method	Server Script	Browser Script	Mobile Web Client Automation Server	COM Data Control	COM Data Server	Java Data Bean
<i>Trace Method for an Application</i>	Yes	No	Yes	Yes	Yes	Yes
<i>TraceOff Method for an Application</i>	Yes	No	Yes	Yes	Yes	Yes
<i>TraceOn Method for an Application</i>	Yes	No	Yes	Yes	Yes	Yes

\*For security reasons, to use SetProfileAttr in Browser Script, you must set the EditProfileAttr server parameter to True.

## Business Component Methods

The following information lists the technologies you can use to access business component methods.

Method	Server Script	Browser Script	Mobile Web Client Automation Server	COM Data Control	COM Data Server	Java Data Bean
<i>ActivateField Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>ActivateMultipleFields Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>Associate Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>BusObject Method for a Business Component</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>ClearLOVCache Method for a Business Component</i> Called only with InvokeMethod	Yes	Yes	Yes	Yes	Yes	Yes
<i>ClearToQuery Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>CreateFile Method for a Business Component</i> Called only with InvokeMethod	Yes	No	Yes	Yes	Yes	Yes

Method	Server Script	Browser Script	Mobile Web Client Automation Server	COM Data Control	COM Data Server	Java Data Bean
<i>DeactivateFields Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>DeleteRecord Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>ExecuteQuery Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>ExecuteQuery2 Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>FirstRecord Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>FirstSelected Method for a Business Component</i>	Yes	No	No	No	No	No
<i>GenerateProposal Method for a Business Component</i> Called only with InvokeMethod	Yes	No	Yes	Yes	Yes	Yes
<i>GetAssocBusComp Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>GetFieldValue Method for a Business Component</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>GetFile Method for a Business Component</i> Called only with InvokeMethod	Yes	No	Yes	Yes	Yes	Yes
<i>GetFormattedFieldValue Method for a Business Component</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>GetLastErrCode Method for a Business Component</i>	No	No	Yes	Yes	No	No
<i>GetLastErrText Method for a Business Component</i>	No	No	Yes	Yes	No	No
<i>GetMultipleFieldValues Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes



Method	Server Script	Browser Script	Mobile Web Client Automation Server	COM Data Control	COM Data Server	Java Data Bean
<i>GetMVGBusComp Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>GetNamedSearch Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>GetPicklistBusComp Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>GetSearchExpr Method for a Business Component</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>GetSearchSpec Method for a Business Component</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>GetSortSpec Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>GetProperty Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>GetViewMode Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>InvokeMethod Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>LastRecord Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>Name Method for a Business Component</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>NewRecord Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>NextRecord Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>NextSelected Method for a Business Component</i>	Yes	No	No	No	No	No
<i>ParentBusComp Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes

Method	Server Script	Browser Script	Mobile Web Client Automation Server	COM Data Control	COM Data Server	Java Data Bean
<i>Pick Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>PreviousRecord Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>PutFile Method for a Business Component</i> Called only with InvokeMethod	Yes	No	Yes	Yes	Yes	Yes
<i>RefineQuery Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>RefreshBusComp Method for a Business Component</i> Called only with InvokeMethod	Yes	Yes	Yes	Yes	Yes	Yes
<i>RefreshRecord Method for a Business Component</i> Called only with InvokeMethod	Yes	Yes	Yes	Yes	No	Yes
<i>Release Method for a Business Component</i>	No	No	No	No	No	Yes
<i>SetAdminMode Method for a Business Component</i> Called only with InvokeMethod	Yes	No	Yes	Yes	Yes	Yes
<i>SetFieldValue Method for a Business Component</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>SetFormattedFieldValue Method for a Business Component</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>SetMultipleFieldValues Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>SetNamedSearch Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>SetSearchExpr Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes

Method	Server Script	Browser Script	Mobile Web Client Automation Server	COM Data Control	COM Data Server	Java Data Bean
<i>SetSearchSpec Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>SetSortSpec Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>SetUserProperty Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>SetViewMode Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>UndoRecord Method for a Business Component</i>	Yes	No	Yes	Yes	Yes	Yes
<i>WriteRecord Method for a Business Component</i>	Yes	Yes	Yes	Yes	Yes	Yes

## Business Object Methods

The following information lists the technologies you can use to access business object methods.

Method	Server Script	Browser Script	Mobile Web Client Automation Server	COM Data Control	COM Data Server	Java Data Bean
<i>GetBusComp Method for a Business Object</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>GetLastErrCode Method for a Business Object</i>	No	No	Yes	Yes	No	No
<i>GetLastErrText Method for a Business Object</i>	No	No	Yes	Yes	No	No
<i>Name Method for a Business Object</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>Release Method for a Business Object</i>	No	No	No	No	No	Yes

## Business Service Methods

The following information lists the technologies you can use to access business service methods.

Method	Server Script	Browser Script	Mobile Web Client Automation Server	COM Data Control	COM Data Server	Java Data Bean
<i>GetFirstProperty Method for a Business Service</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>GetNextProperty Method for a Business Service</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>GetProperty Method for a Business Service</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>InvokeMethod Method for a Business Service</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>Name Method for a Business Service</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>PropertyExists Method for a Business Service</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>Release Method for a Business Service</i>	No	No	No	No	No	Yes
<i>RemoveProperty Method for a Business Service</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>SetProperty Method for a Business Service</i>	Yes	Yes	Yes	Yes	Yes	Yes

## Control Methods

You can use the following control methods. You can use these methods only with Browser Script:

- *Applet Method for a Control*
- *BusComp Method for a Control*
- *GetProperty Method for a Control*
- *GetValue Method for a Control*

- *Name Method for a Control*
- *SetLabelProperty Method for a Control*
- *SetProperty Method for a Control*
- *SetValue Method for a Control*

## Property Set Methods

The following information lists the technologies you can use to access property set methods.

Method	Server Script	Browser Script	Mobile Web Client Automation Server	COM Data Control	COM Data Server	Java Data Bean
<i>AddChild Method for a Property Set</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>Copy Method for a Property Set</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>GetByteValue Method for a Property Set</i>	No	No	No	No	No	Yes
<i>GetChild Method for a Property Set</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>GetChildCount Method for a Property Set</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>GetFirstProperty Method for a Property Set</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>GetLastErrCode Method for a Property Set</i>	No	No	Yes	No	No	No
<i>GetLastErrText Method for a Property Set</i>	No	No	Yes	No	No	No
<i>GetNextProperty Method for a Property Set</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>GetProperty Method for a Property Set</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>GetPropertyCount Method for a Property Set</i>	Yes	Yes	Yes	Yes	Yes	Yes

Method	Server Script	Browser Script	Mobile Web Client Automation Server	COM Data Control	COM Data Server	Java Data Bean
<i>GetType Method for a Property Set</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>GetValue Method for a Property Set</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>InsertChildAt Method for a Property Set</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>PropertyExists Method for a Property Set</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>RemoveChild Method for a Property Set</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>RemoveProperty Method for a Property Set</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>Reset Method for a Property Set</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>SetByteValue Method for a Property Set</i>	No	No	No	No	No	Yes
<i>SetProperty Method for a Property Set</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>SetType Method for a Property Set</i>	Yes	Yes	Yes	Yes	Yes	Yes
<i>SetValue Method for a Property Set</i>	Yes	Yes	Yes	Yes	Yes	Yes

## Miscellaneous Methods

The following information lists technologies you can use to access other methods that you can use. You cannot use these methods with the following technologies:

- Mobile Web Client Automation Server
- COM Data Control
- COM Data Server

Method	Server Script	Browser Script	Java Data Bean
<i>GetErrorCode Method</i>	No	No	Yes
<i>GetErrorMessage Method</i>	No	No	Yes
<i>TheApplication Method</i>	Yes	Yes	No

## Technologies You Can Use to Access Object Interface Events

This topic lists the types of object interface events. It includes the following topics:

- *Applet Events*
- *Application Events*
- *Business Component Events*
- *Business Component Events*

These object interface events are available in Server Script or Browser Script in Siebel Tools.

### Applet Events

The following information lists applet events. You can use these events only with Server Script or Browser Script.

Event	Server Script	Browser Script
<i>Applet_ChangeFieldValue Event</i>	No	Yes
<i>Applet_ChangeRecord Event</i>	No	Yes
<i>Applet_InvokeMethod Event</i>	No	Yes
<i>Applet_Load Event</i>	No	Yes
<i>Applet_PreInvokeMethod Event</i>	No	Yes
<i>WebApplet_InvokeMethod Event</i>	Yes	No
<i>WebApplet_Load Event</i>	Yes	No
<i>WebApplet_PreCanInvokeMethod Event</i>	Yes	No
<i>WebApplet_PreInvokeMethod Event</i>	Yes	No

## Application Events

The following information lists application events. You can use these events only with Server Script or Browser Script.

Event	Server Script	Browser Script
<i>Application_Close Event</i>	Yes	No
<i>Application_InvokeMethod Event</i>	Yes	Yes
<i>Application_Navigate Event</i>	Yes	No
<i>Application_PreInvokeMethod Event</i>	Yes	Yes
<i>Application_PreNavigate Event</i>	Yes	No
<i>Application_Start Event</i>	Yes	No

## Business Component Events

The following information lists business component events. You can use these events only with Server Script or Browser Script.

Event	Server Script	Browser Script
<i>BusComp_Associate Event</i>	Yes	No
<i>BusComp_ChangeRecord Event</i>	Yes	No
<i>BusComp_CopyRecord Event</i>	Yes	No
<i>BusComp_DeleteRecord Event</i>	Yes	No
<i>BusComp_InvokeMethod Event</i>	Yes	No
<i>BusComp_NewRecord Event</i>	Yes	No
<i>BusComp_PreAssociate Event</i>	Yes	No
<i>BusComp_PreCopyRecord Event</i>	Yes	No
<i>BusComp_PreDeleteRecord Event</i>	Yes	No
<i>BusComp_PreGetFieldValue Event</i>	Yes	No



Event	Server Script	Browser Script
<i>Bus Comp_PreInvokeMethod Event</i>	Yes	No
<i>BusComp_PreNewRecord Event</i>	Yes	No
<i>BusComp_PreQuery Event</i>	Yes	No
<i>BusComp_PreSetFieldValue Event</i> Requires you to set a field property for the event that Siebel CRM immediately runs on the Siebel Server.	Yes	Yes
<i>BusComp_PreWriteRecord Event</i>	Yes	No
<i>BusComp_Query Event</i>	Yes	No
<i>BusComp_SetFieldValue Event</i>	Yes	No
<i>BusComp_WriteRecord Event</i>	Yes	No

## Business Service Events

The following table lists business service events. You can use these events only with Server Script or Browser Script.

Event	Server Script	Browser Script
<i>Service_InvokeMethod Event</i>	Yes	Yes
<i>Service_PreCanInvokeMethod Event</i>	Yes	Yes
<i>Service_PreInvokeMethod Event</i>	Yes	Yes

## Object Interfaces Reference

This topic describes reference information for Siebel object interfaces. It includes the following topics:

- *Applet Methods*
- *Applet Events*
- *Application Methods*

- *Application Events*
- *Business Component Methods*
- *Business Component Invoke Methods*
- *Business Component Events*
- *Business Object Methods*
- *Business Service Methods*
- *Business Service Events*
- *Control Methods*
- *Property Set Methods*
- *Miscellaneous Methods*

**CAUTION:** Oracle might modify or delete an undocumented method without notice. Use of an undocumented method is entirely at your own risk.

## About Specialized and Custom Methods

A *specialized method* is a Siebel object interface method that references one of the following specialized class:

- A specialized applet class
- A specialized business component class

A *specialized applet class* or a *specialized business component class* is a class other than the CSSFrame class or the CSSBusComp class.

A *custom method* is a Siebel object interface method that you modify.

## Applet Methods

This topic describes applet methods. It includes the following topics:

- *ActiveMode Method for an Applet*
- *BusComp Method for an Applet*
- *BusObject Method for an Applet*
- *FindControl Method for an Applet*
- *InvokeMethod Method for an Applet*
- *Name Method for an Applet*

In these methods, the Applet variable represents an applet instance.

### ActiveMode Method for an Applet

The ActiveMode method returns a string that contains the name of the current Web template mode.

Format

Applet.ActiveMode

No arguments are available.

Used With

Browser Script

Examples

The following example is in Browser Script:

```
function Applet_Load ()
{
    var currMode = this.ActiveMode();
    theApplication().SWEAlert("The active mode for the selected applet is: " +
    currMode);
}
```

## BusComp Method for an Applet

The BusComp method when used in the context of an applet returns the current business component instance that this applet references.

Format

Applet.BusComp();

No arguments are available.

Used With

Browser Script, Server Script

## BusObject Method for an Applet

The BusObject method returns the name of the business object that the business component references.

Format

Applet.BusObject()

No arguments are available.

Used With

Browser Script, Server Script

Examples

The following example is in Browser Script:

```
function Applet_Load ()
{
    var appletname = this.Name();
    var currBO = this.BusObject();
    var currBOName = currBO.Name();
    theApplication().SWEAlert("The active Business Object for the " + appletname +
    " is: " + currBOName);
}
```

The following example is in Siebel eScript:

```
function WebApplet_Load ()  
{  
  var busObj = this.BusObject();  
}
```

The following example is in Siebel VB:

```
Sub WebApplet_Load  
  Dim oBusObject As BusObject  
  Set oBusObject = Me.BusObject  
  
End Sub
```

## FindControl Method for an Applet

The FindControl method returns the name of a control. This applet must be part of the view that Siebel CRM displays.

### Format

Applet.FindControl(controlName)

The following table describes the arguments for the Browser Script format of the FindControl method.

Argument	Description
controlName	Literal string or string variable that contains the name of the control.

### Usage

The FindControl method does not do the following:

- Locate a control in an MVG applet, pick applet, associate applet, or detail applet. In Siebel Tools, these applets do not appear in the child View Web Template Items list of the view.
- Locate list columns in a list applet.

### Used With

Browser Script

## Examples of Using the FindControl Method

The following example is in Browser Script:

```
function Applet_PreInvokeMethod (name, inputPropSet)  
{  
  // Code to modify the Font Size of the "Location" label  
  if (name == "fontsize")  
  {  
    // Use FindControl() to get a reference to the control  
    var ctl = this.FindControl("Location");  
  
    ctl.SetLabelProperty("FontSize", "22"); // Set the font size  
    return ("CancelOperation");  
  }  
}
```

To use this example, see [SetLabelProperty Method for a Control](#).

## InvokeMethod Method for an Applet

The InvokeMethod method calls a specialized method. It returns the following:

- In Server Script, returns a string that contains the result of the method.
- In Browser Script, returns a property set.

### Browser Script Format

```
Applet.InvokeMethod(methodName, methodArgs_PropSet);
```

The following table describes the arguments for the Browser Script format of the InvokeMethod method.

Argument	Description
methodName	The name of the method.
methodArgs_PropSet	Property set that contains the method arguments.

### Server Script Format

```
Applet.InvokeMethod(methodName, methArg1, methArg2, methArgN);
```

The following table describes the arguments for the Server Script format of the InvokeMethod method.

Argument	Description
methodName	The name of the method.
You can use the following arguments: <ul style="list-style-type: none"><li>• methArg1</li><li>• methArg2</li><li>• methArgN</li></ul>	One or more strings that contain arguments for the methodName argument.

## Usage

Available with Server Script and Browser Script. Note the following:

- If the method that the methodName argument identifies exists in the browser, then Siebel CRM runs this method in the browser.
- If the method that the methodName argument identifies exists on the Siebel Server, then Siebel CRM runs this method on the Siebel Server.

## Caution About Using the InvokeMethod Method

You must use InvokeMethod only to call a method that this book describes.

## Used With

Browser Script, Server Script

## Examples

The following example is in Siebel eScript:

```
function WebApplet_PreInvokeMethod (MethodName)
{
    //Call a Siebel SmartScript from a custom button
    //using the applet.InvokeMethod method
    //Note the InvokeSScriptFromButton is from a custom
    //method added to a button
    if (MethodName == "InvokeSScriptFromButton")
    {
        var iReturn = ContinueOperation;
        var sArgs = new Array(3);
        sArgs[0] = "Demo Opportunity Profile";
        sArgs[1] = "";
        sArgs[2] = "";
        this.InvokeMethod("RunCallScript", sArgs);
        iReturn = CancelOperation;
    }
    else
    {
        iReturn = ContinueOperation;
    }
    return(iReturn);
}
```

## Name Method for an Applet

The Name method for an applet returns the name of an applet.

## Format

Applet.Name()

No arguments are available.

## Used With

Browser Script, Server Script

## Examples

The following example is in Browser Script:

```
function Applet_Load ()
{
    //Display the name of the applet if the applet loads using the
    //applet.Name() method that gets the name of the applet
    var appletName;
    appletName = this.Name();
    theApplication().SWEAlert("The name of the applet is: " + appletName);
}
```

The following example is in Siebel eScript:

```
function WebApplet_Load ()
{
    //Display the name of the applet if the applet loads using the
```

```
//applet.Name() method that gets the name of the applet
var appletName;
appletName = this.Name();
TheApplication().RaiseErrorText("The name of the applet is: " + appletName);
}
```

The following example is in Siebel VB:

```
Sub WebApplet_Load
' Display the name of the applet if the applet loads using the
' applet.Name() method that gets the name of the applet
Dim appletName As String
appletName = Me.Name
TheApplication.RaiseErrorText "The name of the applet is: " & appletName
End Sub
```

## Applet Events

This topic describes applet events. It includes the following topics:

- *Overview of Applet Events*
- *Applet\_ChangeFieldValue Event*
- *Applet\_ChangeRecord Event*
- *Applet\_InvokeMethod Event*
- *Applet\_Load Event*
- *Applet\_PreInvokeMethod Event*
- *WebApplet\_InvokeMethod Event*
- *WebApplet\_Load Event*
- *WebApplet\_PreCanInvokeMethod Event*
- *WebApplet\_PreInvokeMethod Event*

### Overview of Applet Events

Siebel CRM calls an applet event in reply to a user interaction. You can manage each event for each applet.

The format for an applet event that you use on the browser is:

Applet\_event

where:

- event is the name of the event.

For example:

**Applet\_ChangeFieldValue**

If the event includes the Applet prefix, then you can use it only on the browser.

The format for an applet event that you use on the Siebel Server is:

WebApplet\_event

where:

- event is the name of the event.

For example:

```
WebApplet_InvokeMethod
```

If the event includes the WebApplet prefix, then you can use it only on the Siebel Server.

## Applet\_ChangeFieldValue Event

The Applet\_ChangeFieldValue event starts if the user uses an applet to modify data in a field. It does not return any information. For more information, see [Applet\\_ChangeRecord Event](#).

### Format

Applet\_ChangeFieldValue(fieldname, fieldValue)

The following table describes the arguments for the Applet\_ChangeFieldValue event.

Argument	Description
FieldName	A string that contains the name of the field that the user modified.
FieldValue	A string that contains the value that the user modified.

### Usage

Note the following usage of the Applet\_ChangeFieldValue event:

- If the user moves to a different record but does not modify a value in the previous record, then the ChangeFieldValue event does not start.
- If the user modifies the value of a field, and if Siebel CRM modifies the value in another field that depends on some way on the value that the user modified, such as a calculated field, then the event starts once for each field whose value Siebel CRM modifies.
- If the user uses a pick applet or popup applet to modify the data that a field contains, then this event does not start.

### Used With

Browser Script

### Examples

The following example is in Browser Script:

```
function Applet_ChangeFieldValue (field, value)
{
  try
  {
    switch (field)
    {
      case "Primary Revenue Committed Flag":
        if (value == "Y")
        {
```



```
var thisBC = this.BusComp();
var sRev = thisBC.GetFieldValue("Primary Revenue Amount");
var sUpside = thisBC.GetFieldValue("Primary Revenue Upside Amount");
var total = sRev + sUpside;
if (total < 500000)
{
    thisBC.SetFieldValue("Primary Revenue Committed Flag", "N");
    theApplication().SWEAlert("Changing the Committed Flag to NO as
$500,000 in Revenue and Upside amount is required");
}
}
break;
}
}
catch(e)
{
    // error handling routine
}
```

## Applet\_ChangeRecord Event

Siebel CRM calls the Applet\_ChangeRecord event if the user moves to a different record or view. It does not return any information. For more information, see [Applet\\_ChangeFieldValue Event](#).

### Format

Applet\_ChangeRecord()

No arguments are available.

### Used With

You use the Applet\_ChangeRecord event with Browser Script. Note the following:

- To return the value of the field the user navigates to, use the BusComp.GetFieldValue method.
- To return the value of the field the user navigates away from, use the control.GetValue method.

## Examples

The following example is in Browser Script:

```
function Applet_ChangeRecord ()
{
    try
    {
        var thisBC = this.BusComp();
        var sFlag = thisBC.GetFieldValue("Primary Revenue Committed Flag");
        if (sFlag == "Y")
        {
            theApplication().SWEAlert("This record cannot be updated because it has
            been committed");
        }
    }
    catch(e)
    {
        // error handling routine
    }
}
```

## Applet\_InvokeMethod Event

The Applet\_InvokeMethod event can start if any of the following items occur:

- A call to applet.InvokeMethod occurs
- A call to a specialized method occurs
- A user chooses a menu item in a menu that the user defines

For more information, see [About Specialized and Custom Methods](#).

This method does not return any information.

### Format

Applet\_InvokeMethod(name, inputPropSet)

The following table describes the arguments for the Applet\_InvokeMethod event.

Argument	Description
name	The name of the method that Siebel CRM calls.
inputPropSet	A property set that identifies arguments that Siebel CRM sends to the event.

### Usage

This method sends information you specify in the inputPropSet argument to the PreInvokeMethod event. You can use the Applet\_InvokeMethod event to display or hide controls, or to set a search specification. To access a business component from this event handler, do the following:

- Use this.BusComp.
- Do not use TheApplication.ActiveBusComp.

### Used With

Browser Script

### Examples

Some methods can create, modify, or delete records. These actions might call an event at the applet or business component level. If you require Siebel CRM to perform a specific action before or after the method run, then you can use these events. The following example includes custom code in the InvokeMethod applet event. For more information, see [Applet\\_PreInvokeMethod Event](#).

```
function Applet_InvokeMethod(name,inputPropSet)
{
  if (name == "WriteRecord")
    theApplication.SWEAlert("Record successfully saved!");
}
```

## Applet\_Load Event

Siebel CRM calls the Applet\_Load event after it loads an applet and displays the data for that applet. It does not return any information.

### Format

Applet\_Load()

No arguments are available.

### Usage

To hide or manipulate controls or to set properties on an ActiveX Control in a form applet, you can use the Applet\_Load event. You can manipulate the following types of controls:

- CheckBox
- ComboBox
- TextBox
- TextArea
- Label

If you must display a dialog box, then do not use the SWEAlert method or the RaiseErrorText method with the Applet\_Load event. This technique can cause the browser to fail if Siebel CRM has not fully rendered the Siebel application in the browser.

### Used With

Browser Script

### Examples

You can use the following example only with code on a form applet:

```
function Applet_Load ()
{
  // Get the control instance.
  var ctrl = this.FindControl("FirstName");

  // Hide the control
  ctrl.SetProperty("Visible", "false");

  // Hide the label
  ctrl.SetLabelProperty("Visible", "hidden");
}
```

## Applet\_PreInvokeMethod Event

Siebel CRM calls the Applet\_PreInvokeMethod event immediately before it calls a specialized method on an applet. The Applet\_PreInvokeMethod event can start if any of the following items occur:

- A call to the InvokeMethod method on an applet occurs.
- A user chooses a custom menu item that you define in Siebel Tools.

This event returns ContinueOperation or CancelOperation. For more information, see *Caution About Using the Cancel Operation Event Handler*.

For more information, see [About Specialized and Custom Methods](#).

## Format

Applet\_PreInvokeMethod(name, inputPropSet)

The arguments you use with this format are the same as the arguments described in [Applet\\_InvokeMethod Event](#).

## Used With

Browser Script

## Examples

```
function Applet_PreInvokeMethod (name, inputPropSet)
{
  if(name == 'NewRecord')
  {
    if(confirm("Are you sure you want to create a new record?"))
      return ("ContinueOperation");
    else
      return ("CancelOperation");
    return ("ContinueOperation");
  }
}
```

## WebApplet\_InvokeMethod Event

Siebel CRM calls the WebApplet\_InvokeMethod event after a specialized method on the Web applet runs. WebApplet\_InvokeMethod starts only for a predefined method. It does not start for a custom method. For more information, see [About Specialized and Custom Methods](#).

This method does not return any information.

## Format

WebApplet\_InvokeMethod(methodName)

The following table describes the arguments for the WebApplet\_InvokeMethod event.

Argument	Description
methodName	String variable or literal that contains the name of the method that Siebel CRM calls.

## Used With

Server Script

## Examples

The following example is in Siebel eScript:

```
switch (MethodName)
{
  case "NewQuery":
    TheApplication().SetSharedGlobal("EnableButton", "N"); break;
  case "ExecuteQuery":
    TheApplication().SetSharedGlobal("EnableButton", ""); break;
}
```

```
case "UndoQuery":  
TheApplication().SetSharedGlobal("EnableButton", "");  
break;  
}
```

The following example is in Siebel VB:

```
Select Case MethodName  
Case "NewQuery"  
TheApplication.SetSharedGlobal "EnableButton", "N"  
Case "ExecuteQuery"  
TheApplication.SetSharedGlobal "EnableButton", ""  
Case "UndoQuery"  
TheApplication.SetSharedGlobal "EnableButton", ""  
End Select
```

## Related Topics

For more information, see the following topics:

- [Applet\\_InvokeMethod Event](#)
- [Application\\_InvokeMethod Event](#)
- [WebApplet\\_PreCanInvokeMethod Event](#)

## WebApplet\_Load Event

Siebel CRM calls the WebApplet\_Load event immediately after it loads an applet. It does not return any information.

### Format

WebApplet\_Load()

No arguments are available.

### Usage

- To avoid returning a null value, do not call TheApplication.ActiveBusObject from the WebApplet\_Load event. Instead, you can use this.BusObject to get a reference to the current business object.
- Do not call ExecuteQuery against the current BusComp in WebApplet\_Load.

### Used With

Server Script

## Examples

The following example is in Siebel eScript:

```
function WebApplet_Load ()  
{  
  try  
  {  
    var currBC = this.BusComp();  
    with (currBC)  
    {  
      SetViewMode(OrganizationView);  
      ClearToQuery();  
      SetSearchSpec("Last Name", "A*");  
    }  
  }  
}
```

```
catch (e)
{
  TheApplication().RaiseErrorText(e.errText);
}
}
```

The following example is in Siebel VB:

```
Sub WebApplet_Load
  Dim iReturn As Integer
  Dim currBC As BusComp
  Set currBC = Me.BusComp
  With currBC
    .SetViewMode OrganizationView
    .ClearToQuery
    .SetSearchSpec "Last Name", "A*"
  End With
End Sub
```

## Related Topics

For more information, see the following topics:

- [Applet\\_InvokeMethod Event](#)
- [Application\\_InvokeMethod Event](#)
- [WebApplet\\_PreCanInvokeMethod Event](#)

## WebApplet\_PreCanInvokeMethod Event

The WebApplet\_PreCanInvokeMethod event allows a script to determine if the user possesses the authority to call the applet method. Siebel CRM calls this method in the following situations:

- Before it calls the PreInvokeMethod event.
- If the user steps to a different record.
- If it loads an applet.

This method returns CancelOperation or ContinueOperation. For more information, see [Caution About Using the Cancel Operation Event Handler](#).

### Format

WebApplet\_PreCanInvokeMethod(MethodName, &CanInvoke)

The following table describes the arguments for the WebApplet\_PreCanInvokeMethod event.

Argument	Description
MethodName	A string that contains the name of the method that Siebel CRM must run.
&CanInvoke	A string that indicates if Siebel CRM call the applet method. You can use the following values: <ul style="list-style-type: none"><li>• <b>TRUE.</b> Siebel CRM can call the applet method.</li><li>• <b>FALSE.</b> Siebel CRM cannot call the applet method.</li></ul>

## Usage

Using the FirstSelected business component method with the PreCanInvokeMethod event can cause unexpected behavior in a pick applet that Siebel CRM calls from the applet where this event is called.

To enable and disable a method, it can be easier to use the CanInvokeMethod applet user property at the applet level. For an example, see [Using a MiniButton Control to Call a Custom Method](#). For information about the CanInvokeMethod user property, see *Siebel Developer's Reference*.

## Used With

Server Script

## Examples

The following example is in Siebel eScript:

```
function WebApplet_PreCanInvokeMethod (MethodName, &CanInvoke)
{
    if ( MethodName == "CustomMethod" )
    {
        CanInvoke = "TRUE";
        return( CancelOperation );
    }
    return (ContinueOperation);
}
```

The following example is in Siebel VB:

```
Function WebApplet_PreCanInvokeMethod (MethodName As String, CanInvoke As String)
As Integer
    Dim iReturn As Integer
    iReturn = ContinueOperation
    If MethodName = "Test" Then
        CanInvoke = "TRUE"
        iReturn = CancelOperation
    End If
    WebApplet_PreCanInvokeMethod = iReturn
End Function
```

## WebApplet\_PreInvokeMethod Event

Siebel CRM calls the WebApplet\_PreInvokeMethod event before it calls any of the following:

- A specialized method for the Web applet.
- A custom method that Siebel CRM calls through the *oWebApplet* object of the InvokeMethod method.

This method returns ContinueOperation or CancelOperation. For more information, see [Caution About Using the Cancel Operation Event Handler](#).

For more information, see [About Specialized and Custom Methods](#).

## Format

WebApplet\_PreInvokeMethod(methodName)

The arguments you can use with this format are the same as the arguments described in [WebApplet\\_InvokeMethod Event](#).

## Used With Server Script

## Examples

The following example is in Siebel eScript:

```
function WebApplet_PreInvokeMethod (MethodName)
{
    switch (MethodName)
    {
        case "CustomMethod":
            var applet = this;
            var BC = applet.BusComp();
            var ConId = BC.GetFieldValue("Contact Id");
            var WshShell = COMCreateObject("WScript.Shell");
            WshShell.Popup("My Custom Method was called. Here is the ID " + ConId);
            return(CancelOperation);
            break;
    }
    return (ContinueOperation);
}
```

The following example is in Siebel VB:

```
Function WebApplet_PreInvokeMethod (MethodName As String) As Integer
Dim iReturn As Integer
iReturn = ContinueOperation
Select Case MethodName
Case "CustomMethod"
Dim oBusComp As BusComp
Set oBusComp = Me.BusComp
Dim WshShell As Object
ConId = oBusComp.GetFieldValue("Contact Id")
Set WshShell = CreateObject("WScript.Shell")
WshShell.Popup("My Custom Method was called. Here is the ID " & ConId)
iReturn = CancelOperation
End Select
WebApplet_PreInvokeMethod = iReturn
End Function
```

# Application Methods

This topic describes application methods. It includes the following topics:

- *Overview of Application Methods*
- *ActiveApplet Method for an Application*
- *ActiveBusComp Method for an Application*
- *ActiveBusObject Method for an Application*
- *ActiveViewName Method for an Application*
- *Attach Method for an Application*
- *CurrencyCode Method for an Application*
- *Detach Method for an Application*
- *EnableExceptions Method for an Application*



- *FindApplet Method for an Application*
- *GetBusObject Method for an Application*
- *GetDataSource Method for an Application*
- *GetLastErrCode Method for an Application*
- *GetLastErrText Method for an Application*
- *GetProfileAttr Method for an Application*
- *GetService Method for an Application*
- *GetSharedGlobal Method for an Application*
- *GotoView Method for an Application*
- *InvokeMethod Method for an Application*
- *IsViewReadOnly Method for an Application*
- *Language Method for an Application*
- *LoadObjects Method for an Application*
- *Login Method for an Application*
- *LoginId Method for an Application*
- *LoginName Method for an Application*
- *Logoff Method for an Application*
- *LookupMessage Method for an Application*
- *LookupValue Method for an Application*
- *Name Method for an Application*
- *NewPropertySet Method for an Application*
- *PositionId Method for an Application*
- *PositionName Method for an Application*
- *RaiseError Method for an Application*
- *RaiseErrorText Method for an Application*
- *SetPositionId Method for an Application*
- *SetPositionName Method for an Application*
- *SetProfileAttr Method for an Application*
- *SetSharedGlobal Method for an Application*
- *SWEAlert Method for an Application*
- *Trace Method for an Application*
- *TraceOff Method for an Application*
- *TraceOn Method for an Application*

## Overview of Application Methods

An *application method* is a predefined method that returns the current Siebel application object instance:

- TheApplication, if called from Siebel VB that resides in the Siebel runtime repository
- TheApplication(), if called from Siebel eScript that resides in the Siebel runtime repository
- theApplication(), if called from Browser Script that resides in the Siebel runtime repository

Note the following:

- If an application method applies to only one scripting language, then the Syntax definition in the method includes one of these methods.
- If a method applies to an external interface or to more than one scripting language, then it must use more than one format. In this situation, the Syntax definition includes Application and results in the following situation:
  - If you use Siebel VB, Siebel eScript, or Browser Script, then Siebel CRM substitutes the applicable statement for Application
  - If you use an external interface, then Siebel CRM substitutes the name of an application instance for Application

Some examples in this chapter include an Application method that uses an external interface. These examples use SiebelApplication as the application instance. The examples assume that the script starts an instance of the Siebel application. This situation is true even if the example does not include the code that starts this instance.

## ActiveApplet Method for an Application

The ActiveApplet method returns a reference to the applet that Siebel CRM displays.

### Format

theApplication().ActiveApplet();

No arguments are available.

### Usage

Use this method to identify the applet that Siebel CRM currently displays. This applet typically includes a blue border to indicate that it is active.

### Used With

Browser Script

### Examples

```
function Applet_PreInvokeMethod (name, inputPropSet)
{
    switch (name)
    {
        case "Drilldown":
            var activeapplet = theApplication().ActiveApplet();
            var activeappletname = activeapplet.Name();
            theApplication().SWEAlert("Here is the applet we are drilling down from "
            + activeappletname);
            break;
    }
    return ("ContinueOperation");
}
```

## ActiveBusComp Method for an Application

The ActiveBusComp method returns the name of the business component that the active applet references.

### Format

theApplication().ActiveBusComp();

No arguments are available.

Used With

Browser Script

Examples

```
function Applet_Load ()
{
    var activeBC = theApplication().ActiveBusComp();
    activeBC = activeBC.Name();
    theApplication().SWEAlert(activeBC);
}
```

## ActiveBusObject Method for an Application

The ActiveBusObject method returns the name of the business object that the active view references.

Format

Application.ActiveBusObject

No arguments are available.

Usage for the ActiveBusObject Method

Do not use the ActiveBusObject method in an event handler that any of the following technologies can start:

- COM Data Server
- COM Data Control
- Siebel Java Data Bean

Used With

Browser Script, Mobile Web Client Automation Server, Server Script

Example in Browser Script

The following example is in Browser Script:

```
function Applet_Load ()
{
    var oBusObj;
    oBusObj = theApplication().ActiveBusObject();
    theApplication().SWEAlert("The active business object is " + oBusObj.Name() +
    ".")
}
```

Example of Using the ActiveBusObject Method to Call from a Custom Button on a Child Applet

The following examples include script that runs on the Siebel Server that Siebel CRM can call from a custom button on a child applet in a view. This script does the following work:

1. Determines if the Contact business object is active. If it is active, then Siebel CRM returns the email address of the currently active parent Contact record.
2. Uses the contact email address to call the custom SendEmail function.

Objects that the script references are currently active in the Siebel client, so Siebel CRM does not delete these objects at the end of the script.

The following example is in Siebel eScript:

```
function WebApplet_PreInvokeMethod (MethodName)
{
    if (MethodName == "Send Email")
    {
        var oBO = TheApplication().ActiveBusObject();

        if (oBO.Name() == "Contact")
        {
            var oBC = oBO.GetBusComp("Contact");
            var sEmail = oBC.GetFieldValue("Email Address");

            SendMail(sEmail);
            sEmail = "";
        }
        return (CancelOperation);
    }
    return (ContinueOperation);
}
```

The following example is in Siebel VB:

```
Function WebApplet_PreInvokeMethod (MethodName As String) As Integer
Dim iRtn As Integer
iRtn = ContinueOperation

If MethodName = "Send Email" Then

    Dim oBO As BusObject
    Set oBO = TheApplication.ActiveBusObject()

    If oBO.Name() = "Contact" Then

        Dim oBC As BusComp
        Dim sEmail As String

        Set oBC = oBO.GetBusComp("Contact")

        sEmail = oBC.GetFieldValue("Email Address")

        SendEmail(sEmail)

        sEmail = ""

    End If

    iRtn = CancelOperation

End If

WebApplet_PreInvokeMethod = iRtn
End Function
```

## ActiveViewName Method for an Application

The ActiveViewName method returns the name of the active view.

Format

Application.ActiveViewName

No arguments are available.

## Usage

Usage for the `ActiveViewName` method is very similar to usage for the `ActiveBusObject` method. For more information, see *Usage for the ActiveBusObject Method* in [ActiveBusObject Method for an Application](#).

## Used With

Browser Script, Mobile Web Client Automation Server, Server Script

## Examples

The following example is in Siebel eScript:

```
function BusComp_PresetFieldValue (FieldName, FieldValue)
{
    switch(FieldName)
    {
        case "Name":
        case "Location":
        case "Account Status":
        case "Alias":
        case "City":
        case "Country":
        case "Currency Code":
        case "Current Volume":
        case "DUNS Number":
        case "Expertise":
        case "Freight Terms":
        case "Freight Terms Info":
        case "Home Page":
        case "Industry":
        case "Location":
        case "Main Phone Number":
        case "Main Fax Number":
        case "Sales Rep":
            var sActiveViewName = TheApplication().ActiveViewName();
            if (sActiveViewName == "All Accounts across Organizations")
            {
                TheApplication().RaiseErrorText("You cannot update the " + FieldName +
                " on the " + sActiveViewName + " View");
            }
            break;
        }
        return (ContinueOperation);
    }
}
```

## Attach Method for an Application

The `Attach` method allows an external application to reconnect to an existing Siebel session. It returns a Boolean value that indicates if Siebel CRM successfully ran the method.

## Format

`Application.Attach(sessionString)`

The following table describes the arguments for the `Attach` method.

Argument	Description
sessionString	A string that contains the Siebel Session Id. This argument is typically the output of the Detach method.

## Used With

COM Data Control, Siebel Java Data Bean

## Examples

The examples in this topic do the following work:

1. Start an instance of COM Data Control.
2. Log in to a Siebel Server.
3. Detach the instance.
4. Determine the session string.
5. Start another instance of COM Data Control.  
The script does not log in again. Instead, it uses the session string to access the existing session. This technique reuses the connection that the first instance created.

The following example uses COM Data Control and is written in native Visual Basic:

```
Dim SiebelApplication_first As SiebelDataControl
Dim SiebelApplication_second As SiebelDataControl
Dim errCode As Integer
Dim sessionString As String
Dim attachResult As Boolean
Dim errText As String

' Instantiate the first instance
Set SiebelApplication_first = CreateObject("SiebelDataControl.SiebelDataControl.1")

' Login to Siebel
SiebelApplication_first.Login "host=""Siebel.tcpip.none.none://virtual ip:port/enterprise/object manager""", "user id", "password"

errCode = SiebelApplication_first.GetLastError
If errCode <> 0 Then
    errText = SiebelApplication_first.GetLastErrorText
    MsgBox errText
    Exit Sub
End If

' Detach this instance from Siebel and get session id
sessionString = SiebelApplication_first.Detach
MsgBox "The session string is: " & sessionString

' Instantiate the second instance
Set SiebelApplication_second =
CreateObject("SiebelDataControl.SiebelDataControl.1")

' Attach the existing session to this instance
attachResult = SiebelApplication_second.Attach(sessionString)
If (attachResult = True) Then
    MsgBox "Session attached!"
Else
    MsgBox "Session attach failed"
End If
```

```
SiebelApplication_second.LogOff  
Set SiebelApplication_second = Nothing  
Set SiebelApplication_first = Nothing
```

The following example uses the Siebel Java Data Bean:

```
import com.siebel.data.*;  
import com.siebel.data.SiebelException;  
  
public class JDBAttachDetachDemo  
{  
    private SiebelDataBean m_dataBean_first = null;  
    private SiebelDataBean m_dataBean_second = null;  
  
    public static void main(String[] args)  
    {  
        JDBAttachDetachDemo demo = new JDBAttachDetachDemo();  
    }  
  
    public JDBAttachDetachDemo()  
    {  
        try  
        {  
            // Instantiate the Siebel Java Data Bean  
            m_dataBean_first = new SiebelDataBean();  
  
            // Login to the Siebel Servers  
            m_dataBean_first.login("siebel.tcpip.none.none://virtualip:2320/  
enterprise/object manager name","user id","password");  
  
            System.out.println("Logged in to the Siebel Server ");  
  
            //Get the Detach Handle  
            String detachHandle = m_dataBean_first.detach();  
            System.out.println("The session id is: " + detachHandle);  
  
            // Instantiate another Siebel Java Data Bean  
            SiebelDataBean m_dataBean_second = new SiebelDataBean();  
  
            // Do Attach  
            System.out.println("Attaching in to the Siebel Server ");  
            m_dataBean_second.attach(detachHandle);  
            System.out.println("Attach Done ");  
  
            // Logoff  
            m_dataBean_second.logoff();  
        }  
  
        catch (SiebelException e)  
        {  
            System.out.println(e.getErrorMessage());  
        }  
    }  
}
```

## CurrencyCode Method for an Application

The CurrencyCode method returns the currency code that is associated with the division of the user position. For example, USD for U.S. dollars, EUR for the euro, or JPY for the Japanese yen.

Format

Application.CurrencyCode

No arguments are available.

## Used With

Browser Script, COM Data Control, COM Data Server, and Server Script

## Examples

The following example is in Siebel eScript:

```
function WebApplet_Load ()
{
    var currencycode;
    currencycode = TheApplication().CurrencyCode();
    var WshShell = COMCreateObject("WScript.Shell");
    WshShell.Popup(currencycode);
}
```

## Detach Method for an Application

The Detach method returns a string that contains the Siebel session Id.

### Format

Application.Detach

No arguments are available.

### Usage

Use the string that the Detach method returns only with the Attach method.

### Used With

COM Data Control, Siebel Java Data Bean

## Examples

For a Siebel Java Data Bean example and a native VB example that uses COM Data Control, see [Attach Method for an Application](#).

## EnableExceptions Method for an Application

The EnableExceptions method enables or disables native Component Object Model (COM) error handling. This method does not return any information.

### Format

Application.EnableExceptions(bEnable)

The following table describes the arguments for the EnableExceptions method.

Argument	Description
bEnable	You can one of the following values: <ul style="list-style-type: none"><li>TRUE</li></ul>



Argument	Description
	<ul style="list-style-type: none"><li>FALSE</li></ul>

## Usage

Setting the argument to TRUE enables native error handling. This allows Siebel CRM to intercept and display the exception ID and description. Native COM error handling is disabled by default.

## Used With

COM Data Control, Mobile Web Client Automation Server

## Example of Using the EnableExceptions Method with Siebel ActiveX Data Control

The native Visual Basic script in this example does the following work:

- Uses the Siebel ActiveX Data Control to connect to the Siebel application and to create an instance of a business object.
- Prompts the user to use or not use the native error handling.
- If the user answers yes, and if the script encounters an error, then it issues the error immediately.
- If the user answers no, then the script suppresses errors.

You can detect errors only with the GetLastErrorCode method.

The following code is an example of using the EnableExceptions method with Siebel ActiveX Data Control:

```
Dim SiebelApplication As SiebelDataControl
Dim errCode As Integer
Dim wrongBO As SiebelBusObject

Dim nativeHandle As String

Set SiebelApplication = CreateObject("SiebelDataControl.SiebelDataControl.1")

' Login to Siebel

SiebelApplication_first.Login "host=""Siebel.tcpip.none.none://virtual ip:port/enterprise/object manager""", "user id", "password"

nativeHandle = InputBox("Use native error handling?", "", "Yes")

If nativeHandle = "Yes" Then
    SiebelApplication.EnableExceptions (True)
Else
    SiebelApplication.EnableExceptions (False)
End If

Set wrongBO = SiebelApplication.GetBusObject("No Such One") 'intended to create an
error at this line by instantiating a nonexisting Business Object

errCode = SiebelApplication.GetLastErrorCode()
If errCode <> 0 Then 'if native error handle is disabled, this block detects it
    ErrText = SiebelApplication.GetLastErrorText
    MsgBox ErrText
    Exit Sub
End If
```

## Example of Using the EnableExceptions Method with Siebel Mobile Automation Server

The script in this example performs the same work that is described in the example of using the EnableExceptions method with Siebel ActiveX Data Control earlier in this topic, except that the script in this example uses the Siebel Mobile Automation Server:

```
Dim SiebelApp As SiebelWebApplication
Dim errCode As Integer
Dim wrongBO As SiebelBusObject

Set SiebelApp = CreateObject("TWSiebel.SiebelWebApplication.1")

Dim nativeHandle As String
nativeHandle = InputBox("Use native error handle?", "", "Yes")

If nativeHandle = "Yes" Then
    SiebelApp.EnableExceptions (True)
Else
    SiebelApp.EnableExceptions (False)
End If

Set wrongBO = SiebelApp.GetBusObject("No Such One") 'intended to create an error at
this line by instantiating a nonexisting Business Object

errCode = SiebelApp.GetLastErrCode()
If errCode <> 0 Then 'if native error handle is disabled, this block detects it
    ErrText = SiebelApp.GetLastErrText
    MsgBox ErrText
    Exit Sub
End If
```

## FindApplet Method for an Application

The FindApplet method returns the name of an applet.

### Format

theApplication().FindApplet(appletName)

The following table describes the arguments for the FindApplet method.

Argument	Description
appletName	String variable or literal that contains the name of an applet.

### Usage

The only applets available are applets that are visible in the active view.

### Used With

Browser Script

### Examples

The following example is in Browser Script:

```
function Applet_ChangeFieldValue (field, value)
```

```
{
  if (theApplication().ActiveViewName() == "Account List View")
  {
    var newapplet = theApplication().FindApplet("Account Entry Applet");
    var entryappletcontrol = newapplet.FindControl("Name");
    var entryappletvalue = entryappletcontrol.GetValue();
    theApplication().SWEAlert(entryappletvalue);
  }
}
```

## GetBusObject Method for an Application

The GetBusObject method creates a new instance of a business object. It returns the name of this new business object instance.

### Format

Application.GetBusObject(busObjectName)

The following table describes the arguments for the GetBusObject method.

Argument	Description
busObjectName	String variable or literal that contains the name of the business object.

### Usage

To delete the business object instance after it is no longer needed, you can set the business object to Nothing.

### Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

The examples in this topic create a new instance of the Account business object and returns the name of the instance of the Account business object.

The following example is in Siebel eScript:

```
var oBusObject = TheApplication().GetBusObject("Account");
var oBusComp = oBusObject.GetBusComp("Account");

Your custom code

oBusComp = null;
oBusObject = null;
```

The following example is in Siebel VB:

```
Dim AccntBO as BusObject
Dim AccntBC as BusComp
Dim AddrBC as BusComp
Set AccntBO = TheApplication.GetBusObject("Account")
Set AccntBC = AccntBO.GetBusComp("Account")

Your custom code
```

```
Set AccntBO = Nothing
Set AccntBC = Nothing
```

## Examples of Using the GetBusObject Method to Refer to the Business Object That Is Currently Active

The name of the business object instance that Siebel CRM returns might vary depending on the location where it calls the code, such as a Web applet event. The examples in this topic are useful if you must refer to the business object instance that is currently active.

The following example is for Siebel Java Data Bean:

```
private SiebelDataBean m_dataBean = null;
private SiebelBusObject m_busObject = null;
m_busObject = m_dataBean.getBusObject("Opportunity");
```

The following example is in Siebel eScript:

```
var oBO = TheApplication().GetBusObject(this.BusObject.Name);
```

The following example is in Siebel VB:

```
Dim oBO as BusObject
Dim oBC as BusComp
Set oBO = TheApplication.GetBusObject(Me.BusObject.Name)
```

## GetDataSource Method for an Application

The GetDataSource method returns the name of the data source that Siebel CRM defines in the DataSource server parameter for the session. The default value is ServerDataSrc.

### Format

dataSrc = Application.InvokeMethod("GetDataSource")

No arguments are available.

### Used With

To use this method, you can use an Application.InvokeMethod call with the following interfaces:

- COM Data Control
- Siebel Java Data Bean
- Mobile Web Client Automation Server
- Server Script

## Examples

The following Siebel eScript code detects the data source and displays the name of the data source in a dialog box:

```
var dataSrc = TheApplication().InvokeMethod("GetDataSource");
TheApplication().RaiseErrorText(dataSrc);
```

The following example is in Siebel VB:

```
Dim dataSrc As String
dataSrc = TheApplication.InvokeMethod("GetDataSource")
TheApplication.RaiseErrorText(dataSrc)
```

## GetLastErrCode Method for an Application

The GetLastErrCode method returns the error code for the error that Siebel CRM logged most recently. This code is a short integer. 0 (zero) indicates no error.

### Format

Application.GetLastErrCode

No arguments are available.

### Usage for the GetLastErrCode Method

After you run an object interface method, you can call the GetLastErrCode method to determine if Siebel CRM returned an error from the previous operation. You can use the GetLastErrText method to return the text of the error message. Each call to a method resets the run status. For more information, see [GetLastErrText Method for an Application](#).

### Used With

COM Data Control, Mobile Web Client Automation Server

### Examples

The following example is for COM Data Control:

```
errcode = SiebelApplication.GetLastErrCode
If errcode <> 0 Then
  ErrText = SiebelApplication.GetLastErrText
  MsgBox ErrText
  Exit Sub
End If
```

## GetLastErrText Method for an Application

The GetLastErrText method returns a string that contains the text message for the error that Siebel CRM logged most recently.

### Format

Application.GetLastErrText

No arguments are available.

### Usage for the GetLastErrText Method

The text that the GetLastErrText method returns includes a Siebel error code that you can use to investigate the error. For more information, see [GetLastErrCode Method for an Application](#). For more information about a specific error, see My Oracle Support.

### Used With

COM Data Control, COM Data Server, Mobile Web Client Automation Server

### Examples

The following example is for COM Data Control:

```
errcode = SiebelApplication.GetLastErrCode
If errcode <> 0 Then
  ErrText = SiebelApplication.GetLastErrText
```

```
MsgBox ErrText
Exit Sub
End If
```

## GetProfileAttr Method for an Application

The GetProfileAttr method returns the name of an attribute in a user profile. For more information, see [SetProfileAttr Method for an Application](#).

### Format

Application.GetProfileAttr(name)

The following table describes the arguments for the GetProfileAttr method.

Argument	Description
name	A string that indicates the name of the attribute.

### Usage

For more information, see *Using System Fields with the SetProfileAttr Method* in [SetProfileAttr Method for an Application](#).

### Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

The following example is in Browser Script:

```
var myprofile = theApplication().GetProfileAttr("Hobby");
```

The following example is in Siebel eScript:

```
var myprofile = TheApplication().GetProfileAttr("Hobby");
```

The following example is in Siebel VB:

```
Dim myprofile As String
myprofile = TheApplication.GetProfileAttr("Hobby")
```

## GetService Method for an Application

The GetService method locates a business service. If this business service is not already running, then Siebel CRM starts it. This method returns the name of the business service.

### Format

Application.GetService(serviceName)

The following table describes the arguments for the GetService method.

Argument	Description
serviceName	The name of the business service to start.

## Usage

The GetService method searches through the predefined services that are stored in the Siebel runtime repository. If it does not find the business service that you specify in the serviceName argument, then it searches the business services defined in the run-time Business Services table.

Siebel CRM normally deletes a business service from memory as soon as it clears all references to this business service. The act of setting the business service to another value usually clears these references. If you set the Cache property on the business service to TRUE, then Siebel CRM keeps this business service in memory as long as the Siebel application is running.

## Registering a Business Service with a Siebel Application

If you use a Browser Script to call a business service, then you must register that business service with the Siebel application. You must do this to prevent a Service Not Found error. It is not necessary to specify this business service in the CFG file. This requirement does not apply to Server Script.

### To register a business service with a Siebel application

1. In Siebel Tools, in the Object Explorer, click Application.
2. In the Applications list, locate the Siebel application you must modify.

For example, Siebel Universal Agent.

3. In the Object Explorer, expand the Application tree, and then click Application User Prop.
4. In the Application User Props list, create new application user properties using values from the following table.

Name	Value
ClientBusinessService0	XML Converter
ClientBusinessService1	My Business Service

You must enter the ClientBusinessService records sequentially, starting with ClientBusinessService0 and incrementing by 1 for each new ClientBusinessService user property you add.

## Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following examples start a new instance of a business service named Workflow Process Manager.

The following example is in Browser Script:

```
function Applet_PreInvokeMethod (name, inputPropSet)
```

```
{
  if (name == "MyCustomMethod")
  {
    var oBS;
    var inpPS;
    var outPS;
    inpPS = theApplication().NewPropertySet();
    outPS = theApplication().NewPropertySet();
    oBS = theApplication().GetService("Workflow Process Manager");
    outPS = oBS.InvokeMethod("RunProcess", inpPS);
    inpPS = null;
    outPS = null;
    return ("CancelOperation");
  }
  else
  {
    return ("ContinueOperation");
  }
}
```

The following example is in Siebel eScript:

```
function WebApplet_PreInvokeMethod (MethodName)
{
  if (MethodName == "MyCustomMethod")
  {
    var oBS;
    var inpPS;
    var outPS;
    inpPS = TheApplication().NewPropertySet();
    outPS = TheApplication().NewPropertySet();
    oBS = TheApplication().GetService("Workflow Process Manager");
    oBS.InvokeMethod("RunProcess", inpPS, outPS);
    inpPS = null;
    outPS = null;
    oBS = null;
    return (CancelOperation);
  }
  else
  {
    return (ContinueOperation);
  }
}
```

The following example is in Siebel VB:

```
Function WebApplet_PreInvokeMethod (MethodName As String) As Integer
If MethodName = "MyCustomMethod" Then
  Dim oBS As Service
  Dim inpPS As PropertySet
  Dim outPS As PropertySet
  Set inpPS = TheApplication.NewPropertySet
  Set outPS = TheApplication.NewPropertySet
  Set oBS = TheApplication.GetService("Workflow Process Manager")
  oBS.InvokeMethod "RunProcess", inpPS, outPS
  Set inpPS = Nothing
  Set outPS = Nothing
  Set oBS = Nothing
  WebApplet_PreInvokeMethod = CancelOperation
Else
  WebApplet_PreInvokeMethod = ContinueOperation
End If
End Function
```



## GetSharedGlobal Method for an Application

The `GetSharedGlobal` method returns the shared global variables. A *shared variable* is a type of variable that any script in the user session can access. It is shared among all scripts.

A shared global variable is unique to the user and the user session. A global variable for a given user is not visible to any other user. A global variable is visible only to the current user and user session. You can access the global variable from any event.

### Format

`Application.GetSharedGlobal(varName)`

The following table describes the arguments for the `GetSharedGlobal` method.

Argument	Description
<code>varName</code>	String literal or variable that contains the name of the global variable.

### Usage

Consider the following code:

```
GetSharedGlobal("varName")
```

This code returns the string that the following code sets:

```
SetSharedGlobal "varName", "stringValue".
```

### Used With

COM Data Control, COM Data Server, Mobile Web Client Automation Server, Server Script

### Example of Using the GetSharedGlobal Method

To get the `myGlobalVar` global variable, the examples in this topic call the `GetSharedGlobal` method in the `BusComp_WriteRecord` event. This global variable is set through the `SetSharedGlobal` method in the `Application_Start` event. For more information, see [SetSharedGlobal Method for an Application](#).

The following example is for the Component Object Model (COM):

```
Dim sReturn as String
oleVar = SiebelApplication.GetSharedGlobal("myGlobalVar", errCode)
SiebelApplication.SetSharedGlobal "myGlobalVar", " helloworld", errCode
```

The following example is in Siebel eScript:

```
function Application_Start (CommandLine)
{
    TheApplication().SetSharedGlobal("myGlobalVar", "helloworld");
}

function BusComp_WriteRecord ()
{
    var myVar;
    myVar = TheApplication().GetSharedGlobal("myGlobalVar");
}
```

The following example is in Siebel VB:

```
Sub Application_Start (CommandLine As String)
  TheApplication.SetSharedGlobal "myGlobalVar", "helloworld"
End Sub

Sub BusComp_WriteRecord
  Dim myVar as String
  myVar = TheApplication.GetSharedGlobal("myGlobalVar")
End Sub
```

## GotoView Method for an Application

The GotoView method does the following work:

1. Deactivates any business object, business component, applet, or control that is active.
2. Activates a view.
3. Creates an instance of the business object that the view references. This business object instance becomes the active business object.
4. Activates the primary applet of the view and the business component that this applet references.
5. Activates the first tab sequence control of the primary applet.

This method does not return any information.

### Format

Application.GotoView(ViewName[, BusinessObjectName])

The following table describes the arguments for the GotoView method.

Argument	Description
ViewName	The name of the view that the Siebel application must display.
BusinessObjectName	Optional. The business object that Siebel CRM uses to display the view. You cannot specify the current active business object. If you do not provide this argument, or if you specify Nothing in this argument, then Siebel CRM activates a new business object in the normal way.

### Usage

If an instance of the business object does not exist, then you must set the value for the *BusinessObjectName* argument to Nothing.

You cannot use the GotoView method in the following events:

- Application\_Navigate
- Application\_PreNavigate
- Application\_Start
- Navigate
- PreNavigate
- WebApplet\_Load

The following Siebel VB script uses GotoView to programmatically navigate to the Opportunity List view:

```
TheApplication.GotoView "Opportunity List View", Nothing
```

If your Siebel application already started an instance of an Opportunity object with the object reference of objOppty, then the following usage in Siebel VB is acceptable:

```
TheApplication.GotoView "Opportunity List View", objOppty
```

If you use the GotoView method in a Siebel VB or Siebel eScript script, then Siebel CRM runs the method last. This situation is true regardless of where you use this method in the script.

If script on a control uses the GotoView method, then do not set the Show Popup property on this control to TRUE. If you set the Show Popup to TRUE in this situation, then Siebel CRM opens the view in a new browser window. You cannot use a Multiple Document Interface (MDI) with the Siebel client, so you cannot use this configuration.

## Used With Server Script

## Examples

The following examples use the GoToView method with and without the optional business object parameter.

The following example is in Siebel eScript:

```
function BusComp_WriteRecord ()
{
    var leadQuality;
    var actName;
    var actBO;
    var actBC;

    //Get the lead quality for this opportunity
    leadQuality = this.GetFieldValue("Quality");
    if(leadQuality == "1-Excellent")
    {

        //If it is a excellent lead,
        //go to the account for this opportunity
        actName = this.GetFieldValue("Account");
        actBO = TheApplication().GetBusObject("Account");
        actBC = actBO.GetBusComp("Account");

        with (actBC)
        {
            SetViewMode(AllView);
            ClearToQuery();
            SetSearchSpec("Name", actName);
            ExecuteQuery(ForwardBackward);
        }

        TheApplication().GotoView("All Account List View",actBO);

    }
    else
    {
        TheApplication().GotoView("Opportunity Detail - Activities View");
    }

    actBC = null;
    actBO = null;
}
```

The following example is in Siebel VB:

```
Sub BusComp_WriteRecord
  Dim leadQuality As String
  Dim actName As String
  Dim actBO As BusObject
  Dim actBC As BusComp

  'Get the lead quality For this opportunity
  leadQuality = Me.GetFieldValue("Quality")
  If (leadQuality = "1-Excellent") Then

    'If it is an excellent lead
    'go to the account For this opportunity
    actName = Me.GetFieldValue("Account")
    Set actBO = TheApplication.GetBusObject("Account")
    Set actBC = actBO.GetBusComp("Account")

    With actBC
      .SetViewMode AllView
      .ClearToQuery
      .SetSearchSpec "Name", actName
      .ExecuteQuery
    End With

    TheApplication.GotoView "All Account List View",actBO

  Else
    TheApplication.GotoView "Opportunity Detail - Activities View"
  End If

  Set actBC = Nothing
  Set actBO = Nothing

End Sub
```

## InvokeMethod Method for an Application

The InvokeMethod method calls a method. It returns the following values:

- In Server Script, it returns a string that contains the result of the method.
- In Browser Script, it returns a Boolean value.

For more information, see [About Specialized and Custom Methods](#).

### Browser Script Format

theApplication().InvokeMethod(methodName, methArg1, methArg2, methArgN);

The following table describes the arguments for the InvokeMethod method.

Argument	Description
methodName	The name of the method.
You can use the following arguments: <ul style="list-style-type: none"><li>• methArg1</li><li>• methArg2</li></ul>	One or more strings that contain arguments for the methodName argument.

Argument	Description
<ul style="list-style-type: none"><li>methArgN</li></ul>	

## Server Script Format

Application.InvokeMethod(methodName, methArg1, methArg2, methArgN);

The arguments you can use with this format are the same as those described in the table of arguments for the browser script format.

## Usage

The InvokeMethod method allows you to call a method on an application object that is made available directly through the Siebel application interface. For more information, see *Caution About Using the InvokeMethod Method* in *InvokeMethod Method for an Applet* and *LoadObjects Method for an Application*.

## Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

For an example, see *Examples of Using the FindControl Method* in *FindControl Method for an Applet*.

## IsViewReadOnly Method for an Application

You can use the IsViewReadOnly method to determine if a view is read-only. This method returns the following information:

- TRUE if the view is read-only
- FALSE if the view is not read-only

If this method does not return TRUE or FALSE, then an error occurred. If this method does not return TRUE or FALSE, then your script must provide a handler.

## Format

Application.InvokeMethod("IsViewReadOnly",viewName)

The following table describes the arguments for the IsViewReadOnly method.

Argument	Description
viewName	The name of a view. You can include the name of this view in double quotes or in a variable that contains the name of the view.

## Usage

You can set a view as read-only for a particular responsibility in the Responsibility Administration view. You can use the IsViewReadOnly method to determine if a view is read-only for the current responsibility before you attempt to edit a field.

Siebel CRM does not automatically set a button to read-only when that button resides in a view that is read-only. You can use the `IsViewReadOnly` method to set a button to read-only in a view where `IsViewReadOnly` returns `TRUE`.

## Used With

To use this method, you can use an `Application.InvokeMethod` call with the following interfaces:

- Browser Script
- COM Data Control
- COM Data Server
- Siebel Java Data Bean
- Mobile Web Client Automation Server
- Server Script

## Examples

The following example for Siebel eScript determines if the active view is read only:

```
function ShowViewROStatus()  
{  
    var sActive = TheApplication().ActiveViewName();  
    if (TheApplication().InvokeMethod("IsViewReadOnly",sActive) == "TRUE")  
        TheApplication().RaiseErrorText(sActive + "is read only.");  
    else  
        TheApplication().RaiseErrorText(sActive + "is not read only.");  
}
```

## Language Method for an Application

The `Language` method returns the language code of the language that the active Siebel application is running. For example, `ENU`.

## Format

`Application.InvokeMethod("Language");`

No arguments are available.

## Used With

To use this method, you can use an `Application.InvokeMethod` call with `Server Script`.

## Examples

The following example uses Siebel VB:

```
Dim curLang As String  
  
curLang = TheApplication.InvokeMethod("Language")
```

The following example uses Siebel eScript:

```
var curLang;  
  
curLang = TheApplication().InvokeMethod("Language");
```

## LoadObjects Method for an Application

The LoadObjects method starts the COM Data Server. This method must be the first call to the COM Data Server. This method returns the following information:

- If the COM Data Server starts successfully, then the LoadObjects method returns nothing.
- If the COM Data Server does not start successfully, then the LoadObjects method returns an error.

### Format

Application.LoadObjects(absoluteCFGfileName)

The following table describes the arguments for the LoadObjects method.

Argument	Description
absoluteCFGfileName	<p>The path and name of the Siebel application configuration (CFG) file to open. For example:</p> <pre>C:\Siebel\8.1\Server\BIN\ENU</pre> <p>As an option, to identify the data source you can append the CFG file string with the data source, separated by a comma. For example:</p> <pre>C:\Siebel\8.1\Server\BIN\ENU\siebel.cfg,ServerDataSrc</pre> <p>If you do not specify the data source, then the LoadObjects method assumes the data source is local.</p>

### Usage

Prior to calling the LoadObjects method, you must modify the current folder to the `siebel\bin` folder.

If you use the COM Data Server, then the COM client cannot create multiple connections to the COM Server. For example, a second attempt to call the LoadObjects method causes an error message that is similar to the following:

```
The object definition manager has already been initialized.
```

You must restart the COM client before you can make another successful connection. Use COM Data Control instead.

### Used With

COM Data Server

### Examples

The following example uses COM Data Server:

```
Private Sub LoadConfig_Click()  
    Dim errCode As Integer  
    LoadConfig.Enabled = False  
    SiebelApplication.LoadObjects "C:\Siebel\8.1\Client_2\BIN\ENU\uagent.cfg", _  
    errCode  
  
    If errCode = 0 Then
```

```
ConfigOK = 1
End If

Status.Text = SiebelApplication.GetLastErrText
End Sub
```

## LoadUserAttributes Method for an Application

The LoadUserAttributes method loads a user profile to the session. This method does not return any information.

### Format

LoadUserAttributes(row\_id)

The following table describes the arguments for the LoadUserAttributes method.

Argument	Description
row_id	The row ID of the user whose profile Siebel CRM must load.

### Usage

To access the user profile, you can use the You profile from personalization rules, with the following exception: if the row ID is the row ID of the current user, then Siebel CRM loads the profile to the Me profile.

If you call this function with no argument, then it unloads the loaded user profile.

For information about user profiles, see *Siebel Personalization Administration Guide*.

### Used With

Server Script

### Examples

The following Siebel VB example loads a user profile to the session. The function is made available on the Siebel application object:

```
Function LoadUserProfile As Integer
TheApplication.InvokeMethod ("LoadUserAttributes", "0-10N07")
End Function
```

The following Siebel VB example unloads the loaded user profile:

```
Function LoadUserProfile As Integer
TheApplication.InvokeMethod ("LoadUserAttributes", "")
End Function
```

## Login Method for an Application

The Login method allows an external application to do the following:

1. Log in to the COM Data Server, COM Data Control, or Siebel Java Data Bean.
2. Access Siebel objects.

The Login method allows the end user to call the Siebel application without being prompted for a login and password. The Login method determines the privileges granted, and the role and responsibility of the end user for that session.



This method returns a string that contains the error code.

## Format

Application.Login([connectString,] username, password)

The following table describes the arguments for the Login method.

Argument	Description
connectString	Connect string that uses a token.
username	Username for the login.
password	User password for the login.

## Usage

Verify that the `siebel\bin` folder is the current folder. To access Data Control, you must do the following work:

- Make sure the default Data Source references the Siebel database that you must access. For more information, see [Setting the Connect String](#).
- In the Siebel application configuration (CFG) file, make sure the EnableOLEAutomation parameter is TRUE.

## Used With

COM Data Control, COM Data Server, Mobile Web Client Automation Server, Siebel Java Data Bean

## Examples

The connect string for COM Data Control uses a token. For example:

```
host = "Siebel://my_computer/SIEBEL/objsrvr/my_computer" lang = "ENU"
```

Most languages use quotes to enclose a text string, so you must use quotes in parentheses. For example:

- To use COM Data Control in Visual Basic:  

```
m_dataBean.login("siebel.tcpip.none.none://gateway:gatewayport/  
enterpriseserver/SCCObjMgr", "username", "password");
```
- To use COM Data Control in C++:  

```
Login("host=\"siebel://my_computer/SIEBEL/objsvr/my_computer\" lang =  
\"ENU\"","user","password");
```

The following example logs in to the Siebel Server and determines if errors exist:

```
Call SiebelAppControl.Login("host=""siebel://gtwy/enterprise/ObjMgr"",  
"SADMIN", "SADMIN")  
  
//Check for errors  
If SiebelAppControl.GetLastError <> 0 Then  
frmMain.txtStatus.Text = SiebelAppControl.GetLasErrText  
Else
```

```
frmMain.txtStatus.Text = "Connected successfully..."  
End If
```

The following is a Siebel Java Data Bean example that logs in to a Siebel Server and then logs off:

```
import com.siebel.data.*;  
import com.siebel.data.SiebelException;  
  
public class JDBLoginLogoffDemo  
{  
    private SiebelDataBean m_dataBean = null;  
    public static void main(String[] args)  
    {  
        JDBLoginLogoffDemo demo = new JDBLoginLogoffDemo();  
    }  
  
    public JDBLoginLogoffDemo()  
    {  
        try  
        {  
  
            // instantiate the Siebel Java Data Bean  
            m_dataBean = new SiebelDataBean();  
  
            // login to the Siebel Servers  
            m_dataBean.login("siebel.tcpip.none.none://gateway:port/enterprise/  
object manager","userid","password");  
            System.out.println("Logged in to the Siebel Server ");  
  
            //perform function code  
  
            //release the business object  
  
            // logoff  
            m_dataBean.logoff();  
            System.out.println("Logged off the Siebel Server ");  
        }  
  
        catch (SiebelException e)  
        {  
            System.out.println(e.getMessage());  
        }  
    }  
}
```

## LoginId Method for an Application

The LoginId method returns the login ID of the user who started the Siebel application.

### Format

Application.LoginId

No arguments are available.

### Usage

The login ID is the value of the ROW\_ID column in the user login record in the S\_USER table. You can use the login ID as a search specification.

### Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

In this Siebel VB example in the BusComp\_PreSetFieldValue event, the LoginId method determines if the user possesses the rights to modify a record:

```
Function BusComp_PreSetFieldValue (FieldName As String,  
    FieldValue As String) As Integer  
    Select Case FieldName  
    Case "Account Status"  
        if Me.GetFieldValue("Created By") <> _  
            TheApplication.LoginId then  
            TheApplication.RaiseErrorText("You cannot modify Account Status " & _  
                "because you did not create the record.")  
        end if  
    End Select  
    BusComp_PreSetFieldValue = ContinueOperation  
End Function
```

## LoginName Method for an Application

The LoginName method returns the login name of the user who started the Siebel application. This login name is the name that the user types in the login dialog box. For more information, see [Login Method for an Application](#).

### Format

Application.LoginName

No arguments are available.

### Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

For examples, see [ExecuteQuery Method for a Business Component](#) and [TheApplication Method](#).

## Logoff Method for an Application

The Logoff method disconnects the Siebel client from the Siebel Server. This method does not return any information.

### Format

Application.Logoff

No arguments are available.

### Usage

For clients that include a user interface, the Logoff method removes every window except for the topmost window. Logoff also removes every object, except for the topmost object, on the Siebel client and Siebel Server.

If you remove the main object, then Siebel CRM automatically calls the Logoff method.

### Used With

COM Data Control, Siebel Java Data Bean, Mobile Web Client Automation Server

## LookupMessage Method for an Application

The LookupMessage method returns message text for a key. It returns this information in the current language.

## Format

`Application.LookupMessage (category, key, [arg1], [arg2],..., [argN])`

The following table describes the arguments for the `LookupMessage` method.

Argument	Description
category	Name of the Message Category object that is the parent of the Key value. You can define this value in Siebel Tools.
key	Name of the Message object whose text contains the value that Siebel CRM must format. You can define this value in Siebel Tools.
Other arguments: <ul style="list-style-type: none"><li>• arg1</li><li>• arg2</li><li>• argN</li></ul>	If the error message contains a substitution argument, such as %1, then Siebel CRM uses these optional arguments to format the error message.

## Usage

Useful for retrieving locale specific custom error messages.

## Used With

Server Script

## Examples

The following Siebel eScript example returns the following text:

```
Enter Account Title before stepping off.
```

To test this code in the User Defined Errors message category, create a new record with the following text:

```
Enter %1 before stepping off.
```

Siebel CRM uses the Account Title parameter to substitute the %1 variable:

```
var sVal = TheApplication().LookupMessage("User Defined Errors", "Test", "Account  
Title");
```

## LookupValue Method for an Application

If all of the following items are true, then the `LookupValue` method locates a row in the `S_LST_OF_VAL` table:

- The value in the `TYPE` column matches the value in the `type` argument.
- The value in the `CODE` column matches the value in the `lang_ind_code` argument.
- The value in the `LANG_ID` column matches the language code of the currently active language.

You can use this method to get the translation of the untranslated value in the LOV to the language that is currently active.

The `LookupValue` method returns a string that contains the display value from the VAL column for the row. If it does not find the display value, then it returns the language independent code as the value. If no language independent code value exists for the row, then this method returns a null value.

### Format

```
val = Application.InvokeMethod("LookupValue", type, lang_ind_cd)
```

The following table describes the arguments for the `LookupValue` method.

Argument	Description
type	The type that is specified in the List of Values administration view.
lang_ind_cd	Value for the language independent code that is specified in the List of Values administration view.

### Used With

To use the `LookupValue` method, you can use an `Application.InvokeMethod` call with the following interfaces:

- COM Data Control
- Siebel Java Data Bean
- Mobile Web Client Automation Server
- Server Script

### Examples

The following example is in Siebel eScript:

```
var LOVText = TheApplication().InvokeMethod("LookupValue", "SR_AREA", "Network") ;
```

## Name Method for an Application

The `Name` method returns the name of the Siebel application.

### Format

```
Application.Name
```

No arguments are available.

### Used With

Browser Script

## NewPropertySet Method for an Application

The `NewPropertySet` method creates a new property set. It returns a property set.

### Format

```
Application.NewPropertySet
```

No arguments are available.

## Usage

You can use the `NewPropertySet` method to create input and output arguments for a business service.

If you use the `NewPropertySet` method on an existing `PropertySet` object, then old references to this `PropertySet` are lost. If you reuse a `PropertySet`, then use the `Reset` method on this `PropertySet`.

## Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

This example creates a new property set. It uses Browser Script:

```
function Applet_PreInvokeMethod (name, inputPropSet)
{
  if (name == "MyCustomMethod")
  {
    var oBS;
    var inpPS;
    var outPS;
    inpPS = theApplication().NewPropertySet();
    outPS = theApplication().NewPropertySet();
    oBS = theApplication().GetService("New Value Business Service");
    outPS = oBS.InvokeMethod("New Value Method", inpPS);
    inpPS = null;
    outPS = null;
    oBS = null;
    return ("CancelOperation");
  }

  else
  {
    return ("ContinueOperation");
  }
}
```

The following example is for the Component Object Model (COM):

```
Dim oBS As SiebelService
Dim inpPS As SiebelPropertySet
Dim outPS As SiebelPropertySet
Dim errCode as integer

Set inpPS = SiebelApplication.NewPropertySet(errCode)
Set outPS = SiebelApplication.NewPropertySet(errCode)
Set oBS = SiebelApplication.GetService("New Value Business Service", errCode)
oBS.InvokeMethod "New Value Method", inpPS, outPS, errCode
Set inpPS = Nothing
Set outPS = Nothing
Set oBS = Nothing
```

The following example is in Siebel eScript:

```
function WebApplet_PreInvokeMethod (MethodName)
{
  if (MethodName == "MyCustomMethod")
  {
    var oBS;
    var inpPS;
```

```
var outPS;  
inpPS = TheApplication().NewPropertySet();  
outPS = TheApplication().NewPropertySet();  
oBS = TheApplication().GetService("New Value Business Service");  
oBS.InvokeMethod("New Value Method", inpPS, outPS);  
inpPS = null;  
outPS = null;  
oBS = null;  
return (CancelOperation);  
}  
  
else  
{  
return (ContinueOperation);  
}  
  
}
```

The following example is in Siebel VB:

```
Function WebApplet_PreInvokeMethod (MethodName As String) As Integer  
If MethodName = "MyCustomMethod" Then  
Dim oBS As Service  
Dim inpPS As PropertySet  
Dim outPS As PropertySet  
Set inpPS = TheApplication.NewPropertySet  
Set outPS = TheApplication.NewPropertySet  
Set oBS = TheApplication.GetService("New Value Business Service")  
oBS.InvokeMethod "New Value Method", inpPS, outPS  
Set inpPS = Nothing  
Set outPS = Nothing  
Set oBS = Nothing  
WebApplet_PreInvokeMethod = CancelOperation  
Else  
WebApplet_PreInvokeMethod = ContinueOperation  
End If  
  
End Function
```

## PositionId Method for an Application

The PositionId method returns the position ID of the user position. This position ID is the ROW\_ID from the S\_POSTN table. Siebel CRM sets this value by default when the Siebel application starts. To modify this value, the user can use the Edit menu, and then the Change Position menu item.

### Format

Application.PositionId

No arguments are available.

### Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## PositionName Method for an Application

The PositionName method returns the name of the current user position. Siebel CRM sets this value by default when it starts the Siebel application.

## Format

Application.PositionName

No arguments are available.

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following Siebel VB example determines the position of a user who is attempting to modify the sales stage. If the position does not allow this modification, then this code prevents the modification:

```
Function BusComp_PreSetFieldValue (FieldName As String, FieldValue As String) As Integer

Dim sPosName As String sMsgText As String
Select Case FieldName
Case "Sales Stage"
If FieldValue = "Approved" Then
' Do not allow the sales cycle to be modified to
' this value if the User is not a manager or VP.
sPosName = TheApplication.PositionName
If NOT ((sPosName="Manager") OR (sPosName="VP")) Then
TheApplication.RaiseErrorText("Only a Manager or Vice President can
approve a Pipeline Item. Please notify your Manager that you _
want to have this Pipeline Item approved.")
End If
BusComp_PreSetFieldValue = ContinueOperation
End Select

End Function
```

## RaiseError Method for an Application

The RaiseError method sends a scripting error message to the browser. The error code is a standard number.

To determine the error text, Siebel CRM uses the key to look up the current language from the User-Defined Errors category. To define these errors in Siebel Tools, you can use the Message Category object. You can use the optional arguments to format the string if it contains a substitution argument, such as %1 or %2. This method does not return any information.

## Format

Application.RaiseError(key, [arg1], [arg2],..., [argN])

The arguments you can use in this format are the same as the arguments that are described in [LookupMessage Method for an Application](#) except that the RaiseError Method does not include a category argument.

## Usage for the RaiseError Method

The RaiseError method causes Siebel CRM to terminate the script and send a notification to the browser. Therefore, you are not required to use CancelOperation after you use the RaiseError method. For more information, see [Caution About Using the Cancel Operation Event Handler](#).

The RaiseError method and the RaiseErrorText method create a Server Script exception. If you use error handling in your script, then the error handling can suppress RaiseError and RaiseErrorText functionality.



If you use On Error Goto error handling in Siebel VB, and if you use the RaiseError method or the result from the RaiseErrorText method, then Siebel CRM transfers the script run to the error handler. If you use On Error Resume Next error handling, then Siebel CRM suppresses the RaiseError method and the RaiseErrorText method.

**CAUTION:** Be careful if you use RaiseError because it cancels operations. For example, if you use it in the BusComp\_PreWriteRecord event, then the user or code cannot step off the current record until Siebel CRM addresses the condition that causes the call to the RaiseError method.

## Used With Server Script

## Examples

In the following Siebel eScript example, the RaiseError method results in Siebel CRM raising a scripting exception and transferring control to the Catch statement.

```
function BusComp_PreDeleteRecord ()
{
  try {
    var status = this.GetFieldValue("Account Status");
    if (status == "Gold") {
      TheApplication().RaiseError(user defined error name);
    } // end if (status == "Gold")
    else {
      return (ContinueOperation);
    } // end else
  } // end try
  catch (e) {
    // Put here any logic that must be executed before displaying an error to user
    throw e;
  } // end catch
} // end function
```

In the following Siebel eScript example, if the user deletes an opportunity that includes the Pipeline revenue class, then Siebel CRM sends an error message:

```
function BusComp_PreDeleteRecord ()
{
  try {
    var revClass = this.GetFieldValue("Primary Revenue Class");
    if (revClass == "1-Pipeline") {
      TheApplication().RaiseError("user-defined test error1", "PreDelete",
        "RaiseError Method" );
    } // end if (revClass == "1-Pipeline")
    else {
      return (ContinueOperation);
    } // end else
  } // end try
  catch (e) {
    // Put here any logic that must be executed before displaying an error to user
    throw e;
  } // end catch
} // end function
```

Siebel CRM sends the following error message:

This user-defined test error is used in PreDelete, as an example for RaiseError Method

Note the following key:

```
user-defined test error1
```

This key is predefined as the following:

```
This user-defined test error is used in %1, as an example for %2.
```

When the script runs, Siebel CRM does the following:

- Substitutes PreDelete for %1
- Substitutes RaiseError Method for %2

## RaiseErrorText Method for an Application

The RaiseErrorText method sends a scripting error message to the browser. This method does not return any information.

### Format

Application.RaiseErrorText(value, [arg1], [arg2],..., [argN])

The following table describes the arguments for the RaiseErrorText method.

Argument	Description
value	The error text message.
Other arguments: <ul style="list-style-type: none"><li>• arg1</li><li>• arg2</li><li>• argN</li></ul>	If the error message contains a substitution argument, such as %1, then Siebel CRM uses these optional arguments to format the error message.

### Usage

Usage for the RaiseErrorText method is very similar to usage for the RaiseError method. For more information, see *Usage for the RaiseError Method* in [RaiseError Method for an Application](#).

### Used With

Server Script

### Examples

In the following Siebel eScript example, the RaiseErrorText method causes Siebel CRM to raise a scripting exception and then transfer control to the Catch statement.

```
function BusComp_PreDeleteRecord ()
{
  try {
    var status = this.GetFieldValue("Account Status");
    if (status == "Gold") {
      TheApplication().RaiseErrorText("Unable to delete Gold Account");
    } // end if (status == "Gold")
    else {
      return (ContinueOperation);
    } // end else
  }
}
```

```
    } // end try  
} // end function
```

In the following Siebel eScript example, if the user deletes an opportunity that includes Pipeline as the revenue class, then Siebel CRM sends an error:

```
function BusComp_PreDeleteRecord ()  
{  
  try {  
    var revClass = this.GetFieldValue("Primary Revenue Class");  
    if (revClass == "1-Pipeline") {  
      TheApplication().RaiseErrorText("Exception occurred in %1. Unable to  
delete Opportunity with %2 revenue class.", "PreDeleteRecord", revClass);  
    } // end if (revClass == "1-Pipeline")  
    else {  
      return (ContinueOperation);  
    } //end else  
  } // end try  
  catch (e)  
  {  
    // Put here any logic that must be executed before displaying an error to user  
  
    throw e;  
  } //end catch  
} // end function
```

## SetPositionId Method for an Application

The SetPositionId method sets the active position to a Position Id. This method returns a Boolean value that indicates if Siebel CRM successfully completed the operation.

### Format

Application.SetPositionId(positionId)

The following table describes the arguments for the SetPositionId method.

Argument	Description
positionId	A string that contains the Position Id.

### Usage

The positionId argument must contain the Position Id that is associated with the user who is currently logged in to the Siebel application.

### Used With

COM Data Server, COM Data Control, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## SetPositionName Method for an Application

The SetPositionName method sets the active position to a position name. The method returns a Boolean value that indicates if the method succeeded.

### Format

Application.SetPositionName(positionName)

The following table describes the arguments for the SetPositionName method.

Argument	Description
positionName	A string that contains the name of the position.

## Usage

The positionName argument must contain the Position name that is associated with the user who is currently logged in to the Siebel application.

## Used With

COM Data Server, COM Data Control, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## SetProfileAttr Method for an Application

Personalization uses the SetProfileAttr method to set a value for an attribute in a user profile. This method does not return any information.

## Format

Application.SetProfileAttr(name, value)

The following table describes the arguments for the SetProfileAttr method.

Argument	Description
name	A string that contains the name of the attribute.
value	The value of the attribute.

## Usage

The SetProfileAttr method sets the value of the *value argument* to an attribute in the user profile that the name argument contains. Siebel CRM does the following work:

- If this attribute already exists, then Siebel CRM updates the corresponding persistent profile attribute in the Siebel application. This value is defined in the Personalization Profile business component.
- If the profile attribute does not exist in the list of persistent profile attributes, then Siebel CRM creates it as a dynamic profile attribute. It does not include quotation marks at the beginning or end of the name.
- For security reasons, to use SetProfileAttr in Browser Script, you must set the EditProfileAttr server parameter to True. The decision to override the default behavior must be done after careful consideration of the security risks.
- If you use the SetProfileAttr method in Browser Script, then Siebel CRM performs a round trip to the Siebel Server and back to the browser each time it uses this method. This processing creates a performance overhead.

For more information about user profile attributes, see *Siebel Applications Administration Guide* .

## Using System Fields with the SetProfileAttr Method

You cannot use the SetProfileAttr method with a system field. These fields are not explicitly defined in the Personalization Profile business component. You cannot use the SetProfileAttr method with the Id field because attempting to modify the ROW\_ID column of a table creates an error. For more information about system fields, see *Configuring Siebel Business Applications*.

Personalization uses the GetProfileAttr method. Siebel CRM does not explicitly define system fields in the Personalization Profile business component, so you cannot use this method with a system field, except for the Id field. For more information, see *Siebel Personalization Administration Guide*.

## Used With

Browser Script (when the EditProfileAttr server parameter is True), COM Data Control, COM Data Server, Server Script, Siebel Java Data Bean, Mobile Web Client Automation Server

## Examples

The following examples exchange information between an applet Server Script and an applet Browser Script:

- In the applet Server Script, Siebel CRM uses the SetProfileAttr method to set a customer profile attribute named MyProAttr to Hello World.
- In the applet Browser Script, you can use the GetProfileAttr method to return the profile attribute.

The following example is in Browser Script:

```
function Applet_InvokeMethod(name,inputPropSet)
{
  if (name == "MyCustomMethod") {
    var sMessage = theApplication.GetProfileAttr("MyProAttr");
    theApplication.SWEAlert(sMessage);
  }
}
```

The following example is in Siebel eScript:

```
function WebApplet_PreInvokeMethod (MethodName)
{
  if (MethodName == "MyCustomMethod") {

    TheApplication().SetProfileAttr("MyProAttr", "Hello World Siebel eScript");
    return (CancelOperation);
  }
  return (ContinueOperation);
}
```

The following example is in Siebel VB:

```
Function WebApplet_PreInvokeMethod (MethodName As String) As Integer

If MethodName = "MyCustomMethod" Then

  TheApplication.SetProfileAttr "MyProAttr", "Hello World VB"
  WebApplet_PreInvokeMethod = CancelOperation
Else
  WebApplet_PreInvokeMethod = ContinueOperation
End If

End Function
```

## SetSharedGlobal Method for an Application

The SetSharedGlobal method sets a shared global variable that your code can access with the GetSharedGlobal method. The SetSharedGlobal method does not return any information.

### Format

Application.SetSharedGlobal(varName, value)

*SetSharedGlobal Method for an Application* describes the arguments for the SetSharedGlobal method.

Argument	Description
varName	String variable or literal that contains the name of the shared global variable that Siebel CRM must set.
value	String variable or literal that contains the value of the shared global variable.

### Used With

COM Data Control, COM Data Server, Mobile Web Client Automation Server, Server Script

### Examples

The following example is for the Component Object Model (COM):

```
comVar = SiebelApplication.GetSharedGlobal("myVar", errCode)
SiebelApplication.SetSharedGlobal "myVar", "BLAH", errCode
```

The following example is in Siebel VB:

```
TheApplication.SetSharedGlobal "myVar", "FOO"
myVar = TheApplication.GetSharedGlobal("myVar")
```

The remaining examples for using the SetSharedGlobal method are the same as the examples for using the GetSharedGlobal method. For more information, see *Example of Using the GetSharedGlobal Method* in *GetSharedGlobal Method for an Application*.

## SWEAlert Method for an Application

The SWEAlert method displays a modal dialog box that includes a message. This method does not return any information.

### Format

the Application().SWEAlert(message)

### Usage

Use the SWEAlert method instead of alert. Note the following:

- If you use the SWEAlert method, then Siebel CRM does not send the parent applet to the background.
- If you use alert, then Siebel CRM sends pop-up applets to the background. MVGs and pick applets are examples of pop-up applets. If a browser event sends a JavaScript alert, then Siebel CRM hides the pop-up applet.

## Used With

### Browser Script

## Examples

The following Browser Script example displays a status message:

```
function BusComp_PreSetFieldValue (fieldName, value) {  
  
    if (fieldName == "Account Status") {  
        var cVolume = this.GetFieldValue("Current Volume");  
        if ((value == "Inactive") && (cVolume > 0)) {  
            theApplication().SWEAlert("Unable to inactivate an account that has a  
current volume greater than 0");  
  
            return ("CancelOperation");  
        }  
        else  
            return ("ContinueOperation");  
        }  
    else  
        return ("ContinueOperation");  
}
```

## Trace Method for an Application

The Trace method appends a message to the trace file. Trace helps to debug an SQL query and to monitor how Siebel CRM allocates objects. This method does not return any information.

This tracing is not the same as the tracing that you can activate in the Siebel application configuration (CFG) file. For more information, see [Tracing a Script](#).

It is recommended that you do not use the Trace method or the TraceOn method in a production environment. For more information, see [TraceOn Method for an Application](#).

## Format

Application.Trace(message)

The following table describes the arguments for the Trace method.

Argument	Description
message	String variable or literal that contains message text that Siebel CRM appends to the trace file.

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following example is for COM Data Server:

```
Private Sub TraceOn_Click()  
    Dim ErrCode As Integer  
    SiebelApplication.TraceOn "c:\temp\trace.txt", "allocation", _  
        "all", ErrCode
```

```
If (ErrCode = 0) Then SiebelApplication.TraceOn
"c:\temp\trace.txt", "SQL", "", ErrCode
If (ErrCode = 0) Then SiebelApplication.Trace
"Start of Tracing!",
ErrCode
End Sub
```

The following example is in Siebel VB:

```
Sub Button2_Click
TheApplication.TraceOn "C:\temp\trace.txt", "allocation", "all"
TheApplication.TraceOn "C:\temp\trace.txt", "sql", ""
TheApplication.Trace "start of tracing!"
End Sub
```

## Example Trace Output

The following is example output of an Allocation trace section:

```
03/05/98,17:27:47,START,4.0.4 [1425_P3] ENU
03/05/98,17:27:47,ALLOC,1,BusObject,Account,Basic
03/05/98,17:27:48,ALLOC,2,BusComp,Account,Basic
03/05/98,17:27:48,RELEASE,1
03/05/98,17:27:48,RELEASE,2
```

The following is example output of an SQL trace section:

```
01/22/98,21:03:49,START,4.0.2 [1416] ENU
01/22/98,21:04:02,COMMENT,Start of Tracing!
01/22/98,21:04:10,SQLSTMT,1,SELECT,"SELECT
T1.ROW_ID,
T1.MODIFICATION_NUM,

T1.CREATED_BY,
T1.LAST_UPD_BY,
T1.CREATED,
T1.LAST_UPD,
T1.CONFLICT_ID,
T1.NAME,
T1.DESC_TEXT,
T1.PRIV_FLG,
T1.QUERY_STRING
FROM
DEV32.S_APP_QUERY T1
WHERE
(T1.CREATED_BY = :1 OR T1.PRIV_FLG = :2) AND
((T1.NAME LIKE :3 OR T1.NAME LIKE :4 OR T1.NAME LIKE :5 OR
T1.NAME LIKE :6) AND UPPER(T1.NAME) = UPPER(:7))
ORDER BY
T1.NAME, T1.DESC_TEXT"
01/22/98,21:04:10,SQLBIND,1,1,1-6NF
01/22/98,21:04:10,SQLBIND,1,2,N
01/22/98,21:04:10,SQLBIND,1,3,ac%
01/22/98,21:04:10,SQLBIND,1,4,Ac%
01/22/98,21:04:10,SQLBIND,1,5,aC%
01/22/98,21:04:10,SQLBIND,1,6,AC%
01/22/98,21:04:10,SQLBIND,1,7,Account
```

## Related Topics

For more information, see the following topics:

- [TraceOff Method for an Application](#)
- [TraceOn Method for an Application](#)



## TraceOff Method for an Application

The TraceOff method turns off tracing that the TraceOn method starts. This method does not return any information.

### Format

Application.TraceOff

No arguments are available.

### Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

This following example in Siebel VB sets the value in the Sales Stage field to the first value in the drop-down list for the field. It uses tracing to track the result:

```
Sub BusComp_NewRecord
  TheApplication.TraceOn "C:\lvpick.doc", "SQL", ""
  Dim oBC as BusComp
  set oBC = me.GetPicklistBusComp("Sales Stage")

  With oBC
    .SetViewMode AllView
    .ActivateField "Sales Stage Order"
    .ClearToQuery
    .SetSortSpec "Sales Stage Order"
    .ExecuteQuery ForwardOnly
    if .FirstRecord then
      .Pick
    end if
  End With

  set oBC = Nothing

  TheApplication.TraceOff

End Sub
```

## TraceOn Method for an Application

The TraceOn method turns on tracing for allocations and deallocations of Siebel objects and SQL statements that Siebel CRM creates. This method does not return any information.

### Format

Application.TraceOn(filename, type, selection)

The following table describes the arguments for the TraceOn method.

Argument	Description
filename	Output filename for trace messages. If you do not use this argument, then Siebel CRM logs tracing information to the Object Manager log file. More information about the filename argument is provided later in this topic.
type	The type of tracing to start. You can use the following values:

Argument	Description
	<ul style="list-style-type: none"><li>• <b>Allocation.</b> Traces allocations and deallocations of Siebel objects. This feature is useful if you suspect a memory leak exists in your code.</li><li>• <b>SQL.</b> Traces SQL statements that the Siebel application creates.</li></ul>
selection	Identifies the Siebel objects that Siebel CRM must trace for the Allocation trace type. This argument is "" if the trace type is SQL: <ul style="list-style-type: none"><li>• <b>Script.</b> Traces Siebel VB and Siebel eScript objects.</li><li>• <b>OLE.</b> Traces allocations for data server or automation server programs.</li><li>• <b>All.</b> Traces all objects that Siebel CRM creates as a result of scripting. This value does not trace Siebel objects that are defined through Siebel Tools.</li></ul>

## Filename Argument of the TraceOn Method

You can use the following values for the filename argument:

- **\$p.** Substitutes the process Id for the filename.
- **\$t.** Substitutes the thread Id for the file name.

For example:

```
TheApplication().TraceOn("C:\\temp\\trace_$p_$t.txt", "Allocation", "All");
```

This code causes Siebel CRM to log trace files to the trace\_1496\_1412.txt file in the c:\temp\trace folder.

To make sure the filename argument is unique, you must place a separator between the \$p and \$t values. For example, assume you do not use a separator and the following items are true:

- The process id for user A is 1 and the thread id is 12.
- The process id for user B is 11 and the thread id is 2.

In this situation, the file name is trace\_112.txt for user A and for user B, so Siebel CRM logs trace information for each user to the same file.

If you add a separator between the process id and the thread id, then the file names are unique and Siebel CRM logs trace information to a separate file for each user. For example:

- trace\_1\_12.txt
- trace\_11\_2.txt

## Usage

To turn off tracing, you must call the TraceOff method. If you attempt to call the TraceOn method with a different filename without first calling TraceOff, then Siebel CRM writes trace information to the new trace file name. The old file remains open and is locked. You can issue multiple TraceOn statements to the same trace file.

It is recommended that you do not use the Trace method or the TraceOn method in a production environment. For more information, see *Trace Method for an Application*.

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following example is for COM Data Server:

```
Private Sub TraceOn_Click()  
    Dim ErrCode As Integer  
    SiebelApplication.TraceOn "c:\temp\trace.txt", "allocation",  
    "all", ErrCode  
    If (ErrCode = 0) Then SiebelApplication.TraceOn  
    "c:\temp\trace.txt", "SQL", "", ErrCode  
    If (ErrCode = 0) Then SiebelApplication.Trace  
    "Start of Tracing!",  
    ErrCode  
End Sub
```

The following example is in Siebel eScript:

```
function BusComp_PresetFieldValue (FieldName, FieldValue)  
  
{  
    TheApplication().TraceOn("C:\\temp\\trace.txt", "Allocation", "All");  
    TheApplication().TraceOn("C:\\temp\\trace.txt", "SQL", "");  
    TheApplication().Trace("start tracing!");  
  
    return (ContinueOperation);  
}
```

The following example is in Siebel VB:

```
Sub Button2_Click  
    TheApplication.TraceOn "C:\temp\trace.txt", "allocation",  
    "all"  
    TheApplication.TraceOn "C:\temp\trace.txt", "sql", ""  
    TheApplication.Trace "start of tracing!"  
End Sub
```

For example trace output, see [Trace Method for an Application](#).

The following examples use Trace, Traceoff, and TraceOn methods to create a trace file with SQL statements issues by the scripting query.

The following example is in Siebel eScript:

```
function BusComp_NewRecord ()  
{  
    TheApplication().TraceOn("C:\\trace_output.txt", "SQL", "");  
    TheApplication().Trace("Start of tracing!");  
    var oBC = this.GetPicklistBusComp("Sales Stage");  
  
    with (oBC)  
    {  
        SetViewMode(AllView);  
        ClearToQuery();  
        SetSortSpec("Sales Stage Order(ASCENDING)");  
        ExecuteQuery(ForwardOnly);  
        if (FirstRecord())  
        {  
            Pick();  
        }  
    }  
}
```

```
oBC = null;  
TheApplication().Trace("End of tracing!");  
TheApplication().TraceOff();  
}
```

The following example is in Siebel VB:

```
Sub BusComp_NewRecord  
  
TheApplication.TraceOn "C:\trace_output.txt", "SQL", ""  
TheApplication.Trace "Start of tracing!"  
Dim oBC as BusComp  
Set oBC = Me.GetPicklistBusComp("Sales Stage")  
  
With oBC  
  .SetViewMode AllView  
  .ClearToQuery  
  .SetSortSpec "Sales Stage Order(ASCENDING)"  
  .ExecuteQuery ForwardOnly  
  If .FirstRecord Then  
    .Pick  
  End If  
End With  
  
Set oBC = Nothing  
TheApplication.Trace "End of tracing!"  
TheApplication.TraceOff  
End Sub
```

## Related Topics

For more information, see the following topics:

- [Trace Method for an Application](#)
- [TraceOff Method for an Application](#)

## Application Events

This topic describes application events. It includes the following topics:

- [Application\\_Close Event](#)
- [Application\\_InvokeMethod Event](#)
- [Application\\_Navigate Event](#)
- [Application\\_PreInvokeMethod Event](#)
- [Application\\_PreNavigate Event](#)
- [Application\\_Start Event](#)

You can use these events only on the Siebel Server, except for the following events that you can use on the Siebel Server or on the browser:

- Application\_InvokeMethod Event
- Application\_PreInvokeMethod Event

## Application\_Close Event

You can call the Application\_Close event before the Siebel application exits. This technique allows scripts to perform cleanup, such as closing a connection to a COM server. Note the following:

- If Windows notifies the Siebel application that it must close, then Siebel CRM calls this event.
- If the process is terminated directly, then Siebel CRM does not call this event. For example, a direct termination occurs if the user clicks Close (the X icon in the corner of the window).

This event does not return any information.

### Format

Application\_Close

No arguments are available.

### Used With

Server Script

Siebel Business Processes call this event. For more information, see *Siebel Business Process Framework: Workflow Guide*.

## Application\_InvokeMethod Event

Siebel CRM calls the Application\_InvokeMethod event after a specialized method is called. This method returns TRUE if the call succeeds or FALSE if the call does not succeed. For more information, see [About Specialized and Custom Methods](#).

### Browser Script Format

Application\_InvokeMethod(name, inputPropSet)

The arguments you use with this format are the same as the arguments described in [Applet\\_InvokeMethod Event](#).

This method sends the values you enter in the inputPropSet argument to the Invoke Method event.

### Server Script Format

Application\_InvokeMethod(methodName)

The arguments you use with this format are the same as the arguments described in [Applet\\_InvokeMethod Event](#) except there is no inputPropSet argument.

### Used With

Browser Script, Server Script

### Related Topics

For more information, see the following topics:

- [Customizing the Outcome of an Object Interface Event](#)
- [Application\\_PreInvokeMethod Event](#)

## Application\_Navigate Event

Siebel CRM calls the Application\_Navigate event after the user navigates to a view. This event does not return any information.

### Format

Application\_Navigate

No arguments are available.

### Used With

Server Script

## Application\_PreInvokeMethod Event

Siebel CRM calls the Application\_PreInvokeMethod event before one of the following items calls a specialized method:

- A custom applet menu that you define
- The InvokeMethod method

This method returns ContinueOperation or CancelOperation. For more information, see *Caution About Using the Cancel Operation Event Handler*.

For more information about this method, see *About Specialized and Custom Methods* and *Customizing the Outcome of an Object Interface Event*.

### Browser Script Format

Application\_PreInvokeMethod (methodName, inputPropSet)

The arguments you use with this format are the same as the arguments described in *Applet\_InvokeMethod Event*.

### Server Script Format

Application\_PreInvokeMethod(methodName)

The arguments you use with this format are the same as the arguments described in *Applet\_InvokeMethod Event*, except that there is no inputPropSet argument.

### Usage

If the method you instruct Siebel CRM to call is part of an If statement, then you must set the return value for the PreInvokeMethod before the End If statement. The following code is an example of this usage:

```
If MethodName = "ResetQuery" then
    Application_PreInvokeMethod = CancelOperation
End If
```

### Used With

Browser Script, Server Script

### Examples

The following example is in Siebel VB:

```
Function Application_PreInvokeMethod (MethodName _
```

```
As String) As Integer

Dim i As Integer
Dim iReturn As Integer
iReturn = ContinueOperation

Select Case MethodName
Case "LaunchWord"
i = Shell("C:\Program Files\Microsoft Office\Office\WINWORD.EXE",1)
iReturn = CancelOperation

Case "LaunchExcel"
i = Shell("C:\Program Files\Microsoft Office\Office\EXCEL.EXE",1)
iReturn = CancelOperation
End Select

Application_PreInvokeMethod = iReturn

End Function
```

The following is the equivalent example in Siebel eScript. Note that for this script to run, the entire `Clib.system` statement must reside on a single line in the editor:

```
function Application_PreInvokeMethod (MethodName)

var iReturn = ContinueOperation;

switch (MethodName)
{
case "LaunchWord":
Clib.system("C:\\Program Files\\Microsoft Office\\Office\\WINWORD.EXE",1);
iReturn = CancelOperation;
break;

case "LaunchExcel":
Clib.system("C:\\Program Files\\Microsoft Office\\Office\\EXCEL.EXE",1);
iReturn = CancelOperation;
}

return (iReturn);
}
```

## Application\_PreNavigate Event

Siebel CRM calls the `Application_PreNavigate` event before it displays the view where the user navigates. This event returns `CancelOperation` or `ContinueOperation`. For more information, see [Caution About Using the Cancel Operation Event Handler](#).

### Format

`Application_PreNavigate(DestViewName, DestBusObjName)`

The following table describes the arguments for the `Application_PreNavigate` event.

Argument	Description
<code>DestViewName</code>	Name of the view where the user navigates.
<code>DestBusObjName</code>	Business object that the destination view references.

Used With  
Server Script

## Examples

In the following Siebel eScript example, the script identifies the current business object and sets the current contact Id as a global variable. You can use this variable to keep context:

```
function Application_PreNavigate (DestViewName, DestBusObjName)
{
    try
    {
        var currentView = this.ActiveViewName();
        var BO = this.ActiveBusObject();
        if(BO.Name() == "Contact")
        {
            var BC = BO.GetBusComp("Contact");
            var id = BC.GetFieldValue("Id");
            TheApplication().SetSharedGlobal("ContactId", id);
        }
    }
    catch (e)
    {
        this.Trace("Exception caught: "+e.toString());
    }
    return (ContinueOperation);
}
```

## Application\_Start Event

Siebel CRM calls the Application\_Start event when the Siebel client starts and again when it displays the client interface for the first time. This event does not return any information.

**CAUTION:** Do not use the RaiseErrorText method in the Application\_Start event. The RaiseErrorText method does not work in the Application\_Start event, and can cause the Application Object Manager to abort.

Format

Application\_Start(commandline)

The following table describes the arguments for the Application\_Start event.

Argument	Description
commandline	Text of the command line that starts the Siebel application.

Siebel Business Processes call this event. For more information, see *Siebel Business Process Framework: Workflow Guide*.

Used With  
Server Script



## Examples

This example Siebel VB code returns the first and last name of the user who logs in to the Siebel application:

```
Sub Application_Start(CommandLine As String)
Dim oEmpBusObj as BusObject
Dim oEmpBusComp as BusComp
Dim oEmpBusComp as BusComp
Dim sLoginName as String
Dim sUserName as String

sLoginName = TheApplication.LoginName
Set oEmpBusObj = TheApplication.GetBusObject("Employee")
Set oEmpBusComp = oEmpBusObj.GetBusComp("Employee")
With oEmpBusComp
.ActivateField "First Name"
.ActivateField "Last Name"
.ClearToQuery
.SetSearchSpec "Login Name", sLoginName
.ExecuteQuery
If (.FirstRecord = 1) Then
sUserName = .GetFieldValue("First Name")
sUserName = sUserName + " " + .GetFieldValue("Last Name")
End If
End With

Set oEmpBusComp = Nothing
Set oEmpBusObj = Nothing
End Sub
```

## Business Component Methods

This topic describes business component methods. It includes the following topics:

- *ActivateField Method for a Business Component*
- *ActivateMultipleFields Method for a Business Component*
- *Associate Method for a Business Component*
- *BusObject Method for a Business Component*
- *ClearToQuery Method for a Business Component*
- *CountRecords Method for a Business Component*
- *DeactivateFields Method for a Business Component*
- *DeleteRecord Method for a Business Component*
- *ExecuteQuery Method for a Business Component*
- *ExecuteQuery2 Method for a Business Component*
- *FirstRecord Method for a Business Component*
- *FirstSelected Method for a Business Component*
- *GetAssocBusComp Method for a Business Component*
- *GetFieldValue Method for a Business Component*
- *GetFormattedFieldValue Method for a Business Component*
- *GetLastErrCode Method for a Business Component*

- *GetLastErrText Method for a Business Component*
- *GetMultipleFieldValues Method for a Business Component*
- *GetMVGBusComp Method for a Business Component*
- *GetNamedSearch Method for a Business Component*
- *GetPicklistBusComp Method for a Business Component*
- *GetSearchExpr Method for a Business Component*
- *GetSearchSpec Method for a Business Component*
- *GetSortSpec Method for a Business Component*
- *GetProperty Method for a Business Component*
- *GetViewMode Method for a Business Component*
- *InvokeMethod Method for a Business Component*
- *LastRecord Method for a Business Component*
- *Name Method for a Business Component*
- *NewRecord Method for a Business Component*
- *NextRecord Method for a Business Component*
- *NextSelected Method for a Business Component*
- *ParentBusComp Method for a Business Component*
- *Pick Method for a Business Component*
- *PreviousRecord Method for a Business Component*
- *RefineQuery Method for a Business Component*
- *Release Method for a Business Component*
- *SetFieldValue Method for a Business Component*
- *SetFormattedFieldValue Method for a Business Component*
- *SetMultipleFieldValues Method for a Business Component*
- *SetNamedSearch Method for a Business Component*
- *SetSearchExpr Method for a Business Component*
- *SetSearchSpec Method for a Business Component*
- *SetSortSpec Method for a Business Component*
- *SetUserProperty Method for a Business Component*
- *SetViewMode Method for a Business Component*
- *UndoRecord Method for a Business Component*
- *WriteRecord Method for a Business Component*

The oBusComp and BusComp variables that this topic describes refer to an instance of a business component.

## ActivateField Method for a Business Component

The ActivateField method activates a field. This method does not return any information. You must use the ActivateField method to activate a field before you can perform a query for the business component. For more information, see *DeactivateFields Method for a Business Component*.

**CAUTION:** Do not use the `ActivateField` method to activate a field in a UI context business component. This technique might cause unexpected Siebel application behavior. For more information about UI context objects, see Doc ID 477419.1 on My Oracle Support.

## Format for the Activate Field Method

`BusComp.ActivateField(FieldName)`

The following table describes the arguments for the `ActivateField` method.

Argument	Description
FieldName	String variable or literal that contains the name of the field.

You must enclose the `FieldName` argument in double quotes. The value you enter for the `FieldName` argument must match exactly the field name that displays in Siebel Tools, including the same case. For example:

```
ActivateField("ActivityCreatedByName")
```

## Usage for the ActivateField Method

By default, a field is inactive except in the following situations:

- The field is a system field, such as `Id`, `Created`, `Created By`, `Updated`, or `Updated By`.
- The `Force Active` property of the field is `TRUE`.

If you write an event handler on a business component, then you must use the `ForceActive` user property on the control to make sure the field is active. For more information, see *Siebel Developer's Reference*.

- The `Link Specification` property of the field is `TRUE`.
- The field is included in an applet, and this applet references a business component that is active. For a field in a list applet, the `Show In List` list column property is `TRUE`.
- Siebel CRM calls the `ActivateField` method on the field, and then runs the `ExecuteQuery` method.

Note the following:

- If Siebel CRM activates a field after it queries a business component, then it must query the business component before the user can access the value in that field. If Siebel CRM does not query the business component, then it returns a value of 0.
- If Siebel CRM calls the `ActivateField` method after it calls the `ExecuteQuery` method, then the `ActivateField` method deletes the query context.
- The `ActivateField` method causes Siebel CRM to include the field in the SQL statement that the `ExecuteQuery` method starts. If Siebel CRM activates a field, and then if a statement in the `GetFieldValue` method or the `SetFieldValue` method references the field before Siebel CRM performs a statement from the `ExecuteQuery` method, then the activation has no effect. The query contains an empty value because Siebel CRM does not return the activated field through this query.
- Siebel CRM does not restrict the maximum number of fields that the `ActivateField` method can activate. This number depends on the SQL query limitations of the database that your deployment uses.

## Avoiding a Corrupted Database

If Siebel CRM does not activate a field before it performs a WriteRecord command, then it writes data to the Siebel database, but a corruption problem might occur if a mobile user synchronizes. This situation applies only to mobile users.

To avoid a corrupted database

1. Use the ActivateField method to call a field.
2. Call the ExecuteQuery method.
3. Call the WriteRecord method.

Using this sequence makes sure Siebel CRM writes the field correctly to the transaction log. During synchronization, it saves any modifications that the mobile user makes back to the Siebel database correctly.

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following example is in Siebel VB. For an equivalent Siebel eScript example, see [ClearToQuery Method for a Business Component](#):

```
Dim oEmpBusObj As BusObject
Dim oEmpBusComp As BusComp
Dim sLoginName As String

Set oEmpBusObj = TheApplication.ActiveBusObject
Set oEmpBusComp = oEmpBusObj.GetBusComp("Employee")
oEmpBusComp.SetViewMode AllView
oEmpBusComp.ClearToQuery
oEmpBusComp.SetSearchSpec "Login Name", sLoginName
oEmpBusComp.ExecuteQuery ForwardBackward
Set oEmpBusComp = Nothing
Set oEmpBusObj = Nothing
```

## ActivateMultipleFields Method for a Business Component

The ActivateMultipleFields method activates multiple fields. This method returns one of the following values:

- TRUE if the activation is successful
- FALSE if the activation is not successful

## Format

BusComp.ActivateMultipleFields(SiebelPropertySet)

The following table describes the arguments for the ActivateMultipleFields method.

Argument	Description
SiebelPropertySet	Property set that identifies a collection of properties. These properties identify the fields that Siebel CRM must activate.

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following example is for Siebel Java Data Bean:

```
import com.siebel.data.*;
...
//Create Siebel Java Data Bean.
//log in to Siebel Java Data Bean
...
//Create Siebel Bus Object.
//Get the Bus Object from SiebelDataBean
...
//Create Siebel Bus Comp siebBusComp
//Get the business component using SiebelBusObject

SiebelPropertySet ps = new mdata_bean.NewPropertySet();
ps.setProperty("Account Products","");
ps.setProperty("Agreement Name","");
ps.setProperty("Project Name","");
ps.setProperty("Description","");
ps.setProperty("Name","");
siebBusComp.ActivateMultipleFields(ps);
...
```

The following Siebel eScript example queries the Contact business component and returns the First Name and Last Name of the first contact that it finds:

```
var ContactBO = TheApplication().GetBusObject("Contact");
var ContactBC = ContactBO.GetBusComp("Contact");
with (ContactBC)
{

    SetViewMode(AllView);
    var fieldsPS = TheApplication().NewPropertySet();
    var valuesPS = TheApplication().NewPropertySet();
    fieldsPS.SetProperty("Last Name", "");
    fieldsPS.SetProperty("First Name", "");
    ActivateMultipleFields(fieldsPS);
    ClearToQuery();
    ExecuteQuery(ForwardBackward);
    if (FirstRecord())
    {
        GetMultipleFieldValues(fieldsPS, valuesPS);
        var slName = valuesPS.GetProperty("Last Name");
        var sfName = valuesPS.GetProperty("First Name");
    }
}
```

## Related Topics

For more information, see the following topics:

- [\*SetMultipleFieldValues Method for a Business Component\*](#)
- [\*GetMultipleFieldValues Method for a Business Component\*](#)

## Associate Method for a Business Component

The Associate method creates a new many-to-many relationship for the parent object through an association business component. This method does not return any information. For more information, see [GetAssocBusComp Method for a Business Component](#).

### Format

BusComp.Associate(wherIndicator)

The following table describes the arguments for the Associate method.

Argument	Description
wherIndicator	<p>You must use one of the following predefined constants:</p> <ul style="list-style-type: none"><li>• NewBefore</li><li>• NewAfter</li></ul> <p>For more information, see <a href="#">Use Constants to Standardize Code</a>.</p>

### Usage

To set field values on a child record that is associated with a parent record, use the context of the multivalue group business component.

### Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

The following VB example updates the Opportunity Assignment Type field. The parent business component can be any business component that includes the Sales Rep multivalue group:

```
Dim oParentBC as BusComp
Dim oMvgBC as BusComp
Dim oAssocBC as BusComp

Set oParentBC = me.BusComp
Set oMvgBC = OpBC.GetMVGBusComp("Sales Rep")
Set oAssocBC = oMvgBC.GetAssocBusComp
With oAssocBC
    .SetSearchSpec "Id", newPosId
    .ExecuteQuery
    .Associate NewAfter
End With

oMvgBC.SetFieldValue "Opportunity Assignment Type", "NewType"
oMvgBC.WriteRecord
Set oAssocBC = Nothing
Set oMvgBC = Nothing
Set oParentBC = Nothing
```

The following Siebel eScript example finds a contact when the Last Name is Abanilla, and then adds a new organization named CKS Software to the Organization multivalue group:

```
var ok = 0;
```

```
var ContactBO= TheApplication().GetBusObject("Contact");
var ContactBC = ContactBO.GetBusComp("Contact");
with (ContactBC)
{
    ClearToQuery();
    SetViewMode(AllView);

    // Searches by Last Name
    SetSearchSpec ("Last Name", "Abanilla");
    ExecuteQuery(ForwardOnly);
    if (FirstRecord())
    {

        // Instantiates Organization MVG
        var oMvgBC = GetMVGBusComp("Organization");
        var oAssocBC = oMvgBC.GetAssocBusComp();
        oAssocBC.ClearToQuery();
        oAssocBC.SetSearchSpec("Name", "CKS Software");
        oAssocBC.ExecuteQuery();

        // Checks if the Organization was found
        if (oAssocBC.FirstRecord())
        {

            // Organization was found
            try
            {
                oAssocBC.Associate(NewAfter);
                ok = 1;
            }

            catch (e)
            {
                ok = 0;
                TheApplication().RaiseErrorText("Error Associating new Organization");
            }

        } // if oAssocBC.FirstRecord

    } // if FirstRecord

    oAssocBC = null;
    oMvgBC = null;

} // With ContactBC

ContactBC = null;
ContactBO = null;
```

## Related Topics

For more information, see the following topics:

- [NewRecord Method for a Business Component](#)
- [FirstSelected Method for a Business Component](#)
- [GetMVGBusComp Method for a Business Component](#)

## BusObject Method for a Business Component

The `BusObject` method returns the name of the business object that the business component references. For more information, see [ActiveBusObject Method for an Application](#).

## Format

BusComp.BusObject

No arguments are available.

## Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

For an example, see [SetViewMode Method for a Business Component](#).

## ClearToQuery Method for a Business Component

The ClearToQuery method clears the current query but does not clear sort specifications on a business component. This method does not return any information. For more information, see [RefineQuery Method for a Business Component](#).

## Format

BusComp.ClearToQuery

No arguments are available.

## Usage

You must use the ActivateField method to activate a field before you can use the ClearToQuery method. For more information, see [ActivateField Method for a Business Component](#).

Search and sort specifications sent to a business component are cumulative. The business component retains and logically performs an AND operation for the queries that accumulate since the last time Siebel CRM performed the ClearToQuery method. This situation is true except if there is a new search specification on a field, and if that field already included a search specification. In this situation, the new search specification replaces the old search specification.

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following example is in Siebel eScript.

```
var oEmpBusObj = TheApplication().ActiveBusObject();
var oEmpBusComp = oEmpBusObj().GetBusComp("Employee");
var sLoginName;

oEmpBusComp.ClearToQuery();
oEmpBusComp.SetSearchSpec("Login Name", sLoginName);
oEmpBusComp.ExecuteQuery(ForwardBackward);

oEmpBusComp = null;
oEmpBusObj = null;
```



For more examples, see the following:

- For Siebel VB examples, see the following topics:
  - [Applet\\_PreInvokeMethod Event](#)
  - [ActivateField Method for a Business Component](#)
  - [ExecuteQuery Method for a Business Component](#).
- For another Siebel eScript example, see [GotoView Method for an Application](#).

## CountRecords Method for a Business Component

The CountRecords method returns the number of records that the most recent call to the ExecuteQuery method returned.

### Format

BusComp.CountRecords()

No arguments are available.

### Used With

Server Script

### Examples

The following example is in Siebel eScript:

```
function Service_PreInvokeMethod (MethodName, Inputs, Outputs)
{
    if (MethodName == "Call_eScript")
    {
        var bo = TheApplication().GetBusObject("Opportunity");
        var bc = bo.GetBusComp("Opportunity");
        with (bc)
        {
            ClearToQuery();
            SetSearchSpec ("Name", "A*");
            ExecuteQuery (ForwardBackward);
            var count = CountRecords();
        }

        // other code..

        bc = null;
        bo = null;

        return (CancelOperation);
    }

    return (ContinueOperation);
}
```

## DeactivateFields Method for a Business Component

The DeactivateFields method deactivates fields from the SQL query statement of a business component. It deactivates fields that are currently active. This situation is true except in the following situations:

- The Force Active property is TRUE

- A link requires the field to remain active.
- A business component class requires the field to remain active.

This method does not return any information.

## Format

BusComp.DeactivateFields

No arguments are available.

## Usage

You must use the `ActivateField` method to activate a field before you perform a query for a business component. For more information, see [ActivateField Method for a Business Component](#).

After you deactivate a field, you must query the business component again or the Siebel application fails.

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following example is for the Component Object Model (COM):

```
Dim oBO As BusObject
Dim oBC As BusComp
Dim errCode

Set oBO = SiebelApplication.GetBusObject("Account", errCode)
Set oBC = oBO.GetBusComp("Account", errCode)
oBC.ActivateField "Name", errCode
oBC.ActivateField "Location", errCode
oBC.ClearToQuery errCode
oBC.ExecuteQuery ForwardOnly, errCode

' Manipulate the data

oBC.DeactivateFields errCode
Set oBC = Nothing
Set oBO = Nothing
```

The following example is in Siebel eScript:

```
var oBC;
var oBO;

oBO = TheApplication().GetBusObject("Account");
oBC = oBO.GetBusComp("Account");
oBC.ActivateField("Name");
oBC.ActivateField("Location");
oBC.ClearToQuery();
oBC.ExecuteQuery(ForwardOnly);

// Manipulate the data

oBC.DeactivateFields();
oBC = null;
oBO = null;
```

The following example is in Siebel VB:

```
Dim oBO As BusObject
Dim oBC As BusComp

Set oBO = TheApplication.GetBusObject("Account")
Set oBC = oBO.GetBusComp("Account")
oBC.ActivateField "Name"
oBC.ActivateField "Location"
oBC.ClearToQuery
oBC.ExecuteQuery ForwardOnly

' Manipulate the data

oBC.DeactivateFields
Set oBC = Nothing
Set oBO = Nothing
```

## DeleteRecord Method for a Business Component

The DeleteRecord method removes the current record from a business component. This method does not return any information.

### Format

BusComp.DeleteRecord

No arguments are available.

### Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

This Siebel VB example deletes accounts with a status of Inactive:

```
Sub DeleteInactiveAccounts()
    Dim objBO as BusObject
    Dim objBC as BusComp

    Set objBO = TheApplication.GetBusObject("Account")
    Set objBC = objBO.GetBusComp("Account")
    With objBC
        .ClearToQuery
        .SetSearchSpec "Status", "Inactive"
        .ExecuteQuery ForwardBackward
        Do While .FirstRecord
            .DeleteRecord
        Loop
    End With
    Set objBC = Nothing
    Set objBO = Nothing
End Sub
```

Siebel CRM moves the cursor to the next record after it runs the DeleteRecord method. Do not use the NextRecord method after you use the DeleteRecord method in a loop because this configuration causes Siebel CRM to skip deleting the last record in the loop. If you use the DeleteRecord method on the last record, then the cursor points to nothing.

## ExecuteQuery Method for a Business Component

The ExecuteQuery method uses criteria from another method, such as the SetSearchSpec method, to return a set of business component records. This method allows you to specify the order that Siebel CRM uses to process records.

## Format

BusComp.ExecuteQuery ([cursorMode])

The following table describes the arguments for the ExecuteQuery method.

Argument	Description
cursorMode	<p>An integer. You must use one of the following constants:</p> <ul style="list-style-type: none"><li>• <b>ForwardBackward.</b> Siebel CRM processes records from first to last or from last to first. If you do not provide a value for the cursorMode argument, then Siebel CRM uses ForwardBackward.</li><li>• <b>ForwardOnly.</b> Siebel CRM processes records only from the first record to the last record. Siebel CRM does return to a prior record.</li></ul> <p>For more information, see <a href="#">Use Constants to Standardize Code</a>.</p>

## Usage

To achieve maximum performance, use ForwardOnly. If you use ForwardOnly, make sure that your Siebel application code does not use PreviousRecord or FirstRecord to navigate backward without a requery. Do not use ForwardOnly with a UI business component unless the Siebel application code performs a requery with the cursorMode argument set to ForwardBackward.

A *UI business component* is a type of business component that Siebel CRM is actively using in the Siebel client. You can write a script that creates a UI business component that does not reference the data the user manipulates. A user might scroll up and down a record set, so you must use ForwardBackward.

## You Must Activate Fields Before You Can Query Them

Before you can query a business component, you must use the ActivateField method to activate all fields that are involved in the query. If you write an event handler on a business component, then you must use the ForceActive user property on the control to make sure the field is activate.

## Reducing a Large Query Set

If you use ForwardBackward, and if the query matches over 10,000 records, then the object manager returns an error message that is similar to the following:

**There were more rows than could be returned. Refine your query to bring back fewer rows.**

To reduce the number of queries, you can use a parent-child relationship between business components that the business object establishes. For example, the Opportunity business object establishes a parent-child relationship between the Opportunity business component and the Contact business component. If you instruct Siebel CRM to query the Opportunity business component, then it can read values from the corresponding records in the Contact business component without performing another query. You must instruct Siebel CRM to query the parent business component first, and then to query the child business component. If you query the child business component first, then Siebel CRM returns no records.

## How Siebel CRM Handles Duplicate Records with the ExecuteQuery Method

A faulty join configuration or duplicate data in joined tables might cause a business component to return duplicate records. If Siebel CRM detects duplicate records when it executes the ExecuteQuery method, then it does the following work depending on the value of the *cursorMode* argument:

- **ForwardBackward.** It automatically filters duplicate records to make sure each record is unique.
- **ForwardOnly.** It does not filter records. It returns all records that match the criteria, including duplicate records. If you update all records that Siebel CRM returns, then it displays an error that is similar to the following:

```
The selected record has been modified by another user since it was retrieved. Please continue.
```

This error can occur if the code attempts to update the duplicate of a record that it already updated.

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

This Siebel VB example sets up and runs a query that locates the primary on the account team. Only the primary can modify the primary address.

```
(general)
(declarations)
Option Explicit
Function BusComp_PresetFieldValue (FieldName As String,
FieldValue As String) As Integer
Dim i As Integer
Dim iFoundP As Integer ' 1 = found (TRUE), 0 = not found (FALSE)
Dim oMVGBC as BusComp

iFoundP = FALSE
Select Case FieldName
Case "SSA Primary Field"
Set oMVGBC = me.ParentBusComp.GetMVGBC("Sales Rep")
With oMVGBC ' this is the position BC
.ActivateField "Active Login Name"
.ActivateField "SSA Primary Field"
.ClearToQuery
.ExecuteQuery ForwardBackward
i = .FirstRecord
Do While i <> 0
If .GetFieldValue("SSA Primary Field") = "Y" Then
iFoundP = TRUE 'mark that found a primary
If .GetFieldValue("Active Login Name") <> TheApplication.LoginName Then
TheApplication.RaiseErrorText("You cannot modify the Primary address
because you are not the Primary on the Account Team")
End If
Exit Do
Loop
If iFoundP = FALSE Then
.FirstRecord
TheApplication.RaiseErrorText("No Primary Found - Contact an Administrator")
End If
End With
End Select

Set oMVGBC = Nothing
BusComp_PresetFieldValue = ContinueOperation
```

**End Function**

For other examples, see the following topics:

- [Applet\\_PreInvokeMethod Event](#)
- [GotoView Method for an Application](#)
- [ClearToQuery Method for a Business Component](#):

**Related Topics**

For more information, see the following topics:

- [ActivateField Method for a Business Component](#)
- [ClearToQuery Method for a Business Component](#)
- [SetSearchSpec Method for a Business Component](#)

## ExecuteQuery2 Method for a Business Component

The ExecuteQuery2 method uses criteria from another method, such as SetSearchSpec, to return a set of business component records. Allows you to control the number of records Siebel CRM returns.

**Format**

BusComp.ExecuteQuery2 ([cursorMode], ignoreMaxCursorSize)

The following table describes the ignoreMaxCursorSize argument for the ExecuteQuery2 method. For information about the cursorMode argument, see [ExecuteQuery Method for a Business Component](#).

Argument	Description
ignoreMaxCursorSize	<p><b>You can use one of the following values:</b></p> <ul style="list-style-type: none"><li>• <b>TRUE.</b> Returns every record from a business component. This value might result in lower performance.</li><li>• <b>FALSE.</b> Returns the number of records according to the value in the MaxCursorSize argument. You can define the MaxCursorSize argument in the Siebel application configuration (CFG) file.</li></ul>

**Used With**

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## FirstRecord Method for a Business Component

The FirstRecord method moves the record pointer to the first record in a business component, making that record the current record. It also calls any associated script events. This method returns the following information:

- An integer in Siebel VB. It returns 1 or nonzero if it finds at least one record. It returns 0 (zero) if it does not find any records.
- A Boolean value in Siebel eScript or COM.

If you issue a query on a business component, then Siebel CRM creates SQL for any child business component that is active. Calling the FirstRecord method starts the BusComp\_ChangeRecord event and causes Siebel CRM to run the same SQL for the child business component again.

For more information, see *NextRecord Method for a Business Component*.

## Format

BusComp.FirstRecord

No arguments are available.

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

To determine if an account displayed in a child applet includes a service request, the following examples use the FirstRecord method. The outcome of this query can determine if Siebel CRM must run other code for this account record. In this example, the Account List Applet is a child applet in the Contact Detail - Accounts View.

The following example is in Siebel eScript:

```
function BusComp_PreInvokeMethod (MethodName)
{
    // 'CheckSR' method called from a custom button on 'Account List Applet - child'
    applet.
    if (MethodName == "CheckSR")
    {
        var oBO = TheApplication().ActiveBusObject();
        var oBC = oBO.GetBusComp("Service Request");
        var strAcctId = this.GetFieldValue("Id");

        with (oBC)
        {
            SetViewMode(AllView);
            ClearToQuery();
            SetSearchSpec("Account Id", strAcctId);
            ExecuteQuery(ForwardOnly);
            if (FirstRecord())
            {
                // more code placed here
            }

            else
            {
                TheApplication().RaiseErrorText("No Service Requests Associated To This
Account.");
            }

        }

        return (CancelOperation);
    }

    return (ContinueOperation);
}
```

The following example is in Siebel VB:

```
Function BusComp_PreInvokeMethod (MethodName As String) As Integer

    Dim iRtn As Integer

    iRtn = ContinueOperation
```

```
'CheckSR' method called from a custom button On 'Account List Applet - child'
Applet.
If MethodName = "CheckSR" Then
  Dim oBO As BusObject
  Dim oBC As BusComp
  Dim strAcctId As String

  Set oBO = TheApplication.ActiveBusObject
  Set oBC = oBO.GetBusComp("Service Request")
  strAcctId = me.GetFieldValue("Id")

  With oBC
    .SetViewMode AllView
    .ClearToQuery
    .SetSearchSpec "Account Id", strAcctId
    .ExecuteQuery ForwardOnly
    If .FirstRecord Then
      '[more code placed here]
    Else
      TheApplication.RaiseErrorText("No Service Requests Associated To This
Account.")
    End If
  End With

  Set oBC = Nothing
  Set oBO = Nothing

  iRtn = CancelOperation
End If

BusComp_PreInvokeMethod = iRtn
End Function
```

## FirstSelected Method for a Business Component

The FirstSelected method makes the first record of the multiple selection in a business component active. It also calls any associated events. It returns the same information as the FirstRecord method. For more information, see *FirstRecord Method for a Business Component*.

### Format

BusComp.FirstSelected

No arguments are available.

### Used With

COM Data Server, Server Script

### Examples

The following examples use the FirstSelected method and the NextSelected method to allow you to customize multirecord deletion. If the user clicks a custom button in an applet, then Siebel CRM can call this code and it can call the Delete Selected custom method.

The following example is in Siebel eScript:

```
function BusComp_PreInvokeMethod (MethodName)
{
  if (MethodName == "Delete Selected")
  {
    with (this)
```



```
{  
var iRecord = FirstSelected();  
  
while (iRecord)  
{  
DeleteRecord();  
iRecord = NextSelected();  
}  
  
}  
  
return (CancelOperation);  
}  
  
return (ContinueOperation);  
}
```

The following example is in Siebel VB:

```
Function BusComp_PreInvokeMethod (MethodName As String) As Integer  
  
Dim iRtn As Integer  
  
iRtn = ContinueOperation  
If MethodName = "Delete Selected" Then  
  
With me  
Dim iRecord As Integer  
  
iRecord = .FirstSelected  
  
While iRecord  
.DeleteRecord  
iRecord = .NextSelected  
Wend  
  
End With  
  
iRtn = CancelOperation  
  
End If  
  
BusComp_PreInvokeMethod = iRtn  
End Function
```

## GetAssocBusComp Method for a Business Component

The GetAssocBusComp method returns a string that contains the name of the association business component. You can use the association business component to manipulate the association.

### Format

BusComp.GetAssocBusComp

No arguments are available.

## Usage for the GetAssocBusComp Method

It is appropriate to use the GetAssocBusComp method and the Associate method only with a many-to-many relationship that uses an intersection table. For example, account and industry. In the context of a many-to-many relationship, you can use Siebel VB to do the following:

- To associate a new record, add it to the child business component. To *add* a record, you use the GetAssocBusComp method and the Associate method. You set the GetAssocBusComp method to Nothing in Siebel VB or null in Siebel eScript.
- To insert a record, create a new record in the child business component. To *insert* a record, you use the GetMVGBusComp method and the NewRecord method.

If a many-to-many link exists, and if an association applet is defined for the child applet, then you can use the GetAssocBusComp method with the child business component of a parent-child view. You can use this technique instead of modifying the multivalue group business component.

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following example is in Siebel VB. It uses the GetAssocBusComp method to add a new industry to an account:

```
Dim oAssocBC As BusComp

Set oAssocBC = oMainBc.GetMVGBusComp("Industry").GetAssocBusComp
With oAssocBC
    .ClearToQuery
    .SetSearchExpr "[SIC Code] = ""5734""
    .ExecuteQuery ForwardOnly

    If .FirstRecord Then .Associate NewBefore
End With
Set oAssocBC = Nothing
```

The following is the same example in Siebel eScript:

```
//get the business Object and the business component
var oAssocBC = oMainBc.GetMVGBusComp("Industry").GetAssocBusComp();
with (oAssocBC)
{
    ClearToQuery;
    SetSearchExpr("[SIC Code] = '5734'");
    ExecuteQuery(ForwardOnly)
    if (FirstRecord())
        Associate(NewBefore);
}
oAssocBC = null;
```

## Related Topics

For more information, see the following topics:

- [GetMVGBusComp Method for a Business Component](#)
- [GetPicklistBusComp Method for a Business Component](#)

## GetFieldValue Method for a Business Component

The GetFieldValue method returns one of the following items:

- A string that contains the value of a field from the current record of a business component.
- An empty string if the field is empty.
- An error message if the field is inactive. To avoid this situation, activate the field before you use the GetFieldValue method. For more information, see [ActivateField Method for a Business Component](#).

The GetFieldValue method uses the MM/DD/YYYY format when it returns a date field regardless of what format the local date uses. To return the date in the same format that the local date uses, you can use the GetFormattedFieldValue method. For more information, see [GetFormattedFieldValue Method for a Business Component](#).

In Browser Script, you can use the GetFieldValue method only if the field is available in the applet and for system fields.

### Format

BusComp.GetFieldValue(FieldName)

The arguments you can use in this format are the same as the arguments described in [ActivateField Method for a Business Component](#).

### Usage for the GetFieldValue Method

If you require a value from a business component that is a parent of the current business component, then you must make sure the Link Specification property for that field is set to TRUE in Siebel Tools. If it is not, then the child business component cannot access the value in the parent business component. For more information, see [Siebel Object Types Reference](#).

### Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

The following example is in Siebel VB:

```
Function BusComp_PresetFieldValue (FieldName As String, FieldValue As String) As Integer

Dim bcOppty As BusComp
Dim boBusObj As BusObject
Dim srowid As String

srowid = GetFieldValue("Id")
Set boBusObj = TheApplication.GetBusObject("Opportunity")
Set bcOppty = boBusObj.GetBusComp("Opportunity")
With bcOppty
    .SetViewMode SalesRepView
    .ActivateField "Sales Stage"
    .SetSearchSpec "Id", srowid
    .ExecuteQuery ForwardOnly
End With

Set bcOppty = Nothing
Set boBusObj = Nothing

End Function
```

The following example is in Siebel eScript:

```
function BusComp_PresetFieldValue (FieldName, FieldValue)

var boBusObj = TheApplication().GetBusObject("Opportunity");
var bcOppty = boBusObj.GetBusComp("Opportunity");
var srowid = GetFieldValue("Id");

with (bcOppty)
{
  SetViewMode(SalesRepView);
  ActivateField("Sales Stage");
  SetSearchSpec("Id", srowid);
  ExecuteQuery(ForwardOnly);
}

bcOppty = null;
boBusObj = null;
}
```

## GetFormattedFieldValue Method for a Business Component

The GetFormattedFieldValue method returns the following information:

- A string that contains a field value that is in the same format that the Siebel client uses.
- An empty string if the field is inactive or empty.

### Format

BusComp.GetFormattedFieldValue(FieldName)

The arguments you can use in this format are the same as the arguments that are described in *ActivateField Method for a Business Component*.

### Usage

You can use the GetFormattedFieldValue method with code that your implementation uses in multiple countries that use different formats for currency, date, or numbers.

### Usage with Phone Data and Date Data

The following behavior exists for phone data and date data:

- **DTYPE\_PHONE.** If you use the GetFormattedFieldValue method with a field whose Type property is DTYPE\_PHONE, then this method returns a formatted phone number.

Example 1:

```
phone = bc.GetFieldValue("Main Phone Number")
TheApplication.Trace "The number is " & phone
```

Result:

```
The number is 8869629123
```

Example 2:

```
phone = bc.GetFormattedFieldValue("Main Phone Number")
TheApplication.Trace "The number is " & phone
```

Result:

The number is (886) 962-9123

- **DTYPE\_DATE.** If you use the `GetFormattedFieldValue` method with a field whose `Type` property is `DTYPE_DATE`, then the result is the same as the `GetFieldValue` method or the `SetFieldValue` method except that the `GetFormattedFieldValue` method returns the value in the same format as the Regional Setting.

The following table describes the formats that the `GetFieldValue` method and the `SetFieldValue` method use.

Type of Data	Format
Dates	mm/dd/yyyy
Times	hh:nn:ss
Date-times	mm/dd/yyyy hh:nn:ss

If you attempt to use the `SetFieldValue` method, and if the Regional Setting format is different, then Siebel CRM displays an error that is similar to the following:

Error: The value '31-Dec-99' can not be converted to a date time value.

To avoid this error, use the `GetFormattedFieldValue` format or the `SetFormattedFieldValue` method.

## Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following Siebel VB example uses the `GetFormattedFieldValue` method and calculates the number of days between two dates:

```
Sub Button_Click
  Dim DateDiff as Integer
  Dim oBC as BusComp
  Set oBC= me.BusComp
  x = oBC.GetFormattedFieldValue("Start Date")
  y = oBC.GetFormattedFieldValue("Done")
  dx = DateValue(x)
  dy = DateValue(y)
  DateDiff = dy - dx
End Sub
```

## Related Topics

For more information, see the following topics:

- [ActivateField Method for a Business Component](#)
- [GetFieldValue Method for a Business Component](#)
- [SetFieldValue Method for a Business Component](#)

- [SetFormattedFieldValue Method for a Business Component](#)

## GetLastErrCode Method for a Business Component

The GetLastErrCode method returns the error code for the error that Siebel CRM logged most recently. This code is a short integer. 0 (zero) indicates no error.

### Format

BusComp.GetLastErrCode

No arguments are available.

### Usage

For more information, see *Usage for the GetLastErrCode Method* in [GetLastErrCode Method for an Application](#).

### Used With

COM Data Control, Mobile Web Client Automation Server

## GetLastErrText Method for a Business Component

The GetLastErrText method returns a string that contains the text message for the error that Siebel CRM logged most recently.

### Format

BusComp.GetLastErrText

No arguments are available.

### Usage

For more information, see *Usage for the GetLastErrText Method* in [GetLastErrText Method for an Application](#).

### Used With

COM Data Control, Mobile Web Client Automation Server

## GetMultipleFieldValues Method for a Business Component

The GetMultipleFieldValues method returns a value for each field specified in a property set. It also returns the following information:

- TRUE if it finds the fields.
- FALSE if it does not find the fields.

For more information, see [SetMultipleFieldValues Method for a Business Component](#).

### Format

BusComp.GetMultipleFieldValues(fieldNamesPropSet, fieldValuesPropSet)

The following table describes the arguments for the GetMultipleFieldValues method.

Argument	Description
fieldNamesPropSet	A property set that identifies a collection of fields.
fieldValuesPropSet	A property set that provides values for the fields specified in the fieldNamesPropSet argument.

## Usage

You cannot use the same instance of a property set for the fieldNamesPropSet argument and for the fieldValuesPropSet argument.

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following example is in Siebel eScript:

```
try {  
  
    var oPsDR_Header:PropertySet = TheApplication().NewPropertySet();  
  
    // Cannot use the same property set in GetMultipleFieldValues, must use a different  
    // one for the values. The process will not error, but the values will not be placed  
    // in the property set.  
  
    var lPS_values:PropertySet = TheApplication().NewPropertySet();  
  
    oPsDR_Header.SetProperty("Last Name", "");  
  
    oPsDR_Header.SetProperty("First Name", "");  
  
    oPsDR_Header.SetProperty("Middle Name", "");  
  
    var boContact = TheApplication().GetBusObject("Contact");  
  
    var bcContact = boContact.GetBusComp("Contact");  
  
    with (bcContact) {  
  
        ClearToQuery();  
  
        SetViewMode(AllView);  
  
        ActivateMultipleFields(oPsDR_Header);  
  
        SetSearchSpec("Last Name", "Mead*");  
  
        ExecuteQuery(ForwardOnly);  
  
        var isParent = FirstRecord();  
  
        do {  
  
            // Use a different property set for the values. If you use the same one  
            // for arguments you get no values back.  
  
            GetMultipleFieldValues(oPsDR_Header, lPS_values);  
  
        }  
    }  
}
```

```
// Get the value from the output property set.  
  
TheApplication().Trace("Last Name = " +  
lPS_values.GetProperty("Last Name"));  
  
} while (NextRecord());  
  
} //end with  
  
} //end try  
  
catch(e) {  
  
TheApplication().Trace(e.toString());  
  
} //end catch
```

## GetMVGBusComp Method for a Business Component

The GetMVGBusComp method returns the multivalue group business component that is associated with a business component field.

### Format

BusComp.GetMVGBusComp(Field Name)

The arguments you can use in this format are the same as the arguments that are described in *ActivateField Method for a Business Component* except that the GetMVGBusComp method uses the FieldName argument to identify the multivalue group business component.

### Usage

A *multivalue group* is a set of detail records attached to the current record in a business component that holds the corresponding multivalue field. After you run the GetMVGBusComp method, it is recommended that you set the multivalue group business component to one of the following:

- Nothing in Siebel VB
- Null in Siebel eScript

### Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

The following example Siebel VB code uses the GetMVGBusComp method to add a new address to the Hong Kong Flower Shop account:

```
Dim AccntBO as BusObject  
Dim AccntBC as BusComp  
Dim AddrBC as BusComp  
Set AccntBO = TheApplication.GetBusObject "Account"  
Set AccntBC = AccntBO.GetBusComp "Account"  
  
With AccntBC  
    .SetViewMode SalesRepView  
    .ClearToQuery  
    .SetSearchSpec "Name", "Hong Kong Flower Shop"  
    .ExecuteQuery  
    If (.FirstRecord) Then Set AddrBC = .GetMVGBusComp ("Street Address")
```



```
With AddrBC
.NewRecord NewAfter
.SetFieldValue "City", "Denver"
.SetFieldValue "Street Address", "123 Main Street"
.WriteRecord
End With

End If

End With

Set AddrBC = Nothing
Set AccntBC = Nothing
Set AccntBO = Nothing
```

For more examples, see the following topics:

- [ExecuteQuery Method for a Business Component](#)
- [FirstSelected Method for a Business Component.](#)

For more information about inserting records,

see [Usage for the GetAssocBusComp Method](#) in [GetAssocBusComp Method for a Business Component](#).

## GetNamedSearch Method for a Business Component

The GetNamedSearch method returns a string that contains the name of a search specification.

### Format

BusComp.GetNamedSearch(searchName)

The following table describes the arguments for the GetNamedSearch method.

Argument	Description
searchName	Name of the search specification that references the search string.

### Usage

The search specification uses the same format that a predefined query uses.

### Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Related Topics

For more information, see the following topics:

- [GetSearchSpec Method for a Business Component](#)
- [SetNamedSearch Method for a Business Component](#)

## GetPicklistBusComp Method for a Business Component

The GetPicklistBusComp method returns the name of the pick business component that is associated with a field in the current business component. If there is no picklist associated with this field, then this method returns an error.

### Format

BusComp.GetPicklistBusComp(FieldName)

The arguments you can use in this format are the same as the arguments that are described in *ActivateField Method for a Business Component*, except that the GetPicklistBusComp method uses the FieldName argument to identify the pick business component.

### Usage

To manipulate a picklist, you can use the name of the pick business component that the GetPicklistBusComp method returns.

After you run the GetPicklistBusComp method, it is recommended that you set the pick business component to one of the following:

- Nothing in Siebel VB
- Null in Siebel eScript

### Picking a Record on a Constrained Picklist

If Siebel CRM uses the GetPicklistBusComp method or the Pick method to pick a record on a constrained picklist, then the constraint is active. The pick business component that these methods return contains only those records that fulfill the constraint.

### To Pick a Value From a Picklist in Siebel VB

You can pick a value from a picklist in Siebel VB.

### To pick a value from a picklist in Siebel VB

1. Use the GetPicklistBusComp method to create an instance of the picklist business component.
2. Navigate in the pick business component to the record you must pick.
3. Use Pick to pick the value.
4. To explicitly delete this instance of the pick business component, use the following code:

```
Set objBCPickList = Nothing.
```

### Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

The following example is in Siebel eScript:

```
if (this.GetFieldValue("City") == "San Mateo")
{
    var oBCPick = this.GetPicklistBusComp("State");
    with (oBCPick)
    {
        ClearToQuery();
    }
}
```

```
SetSearchSpec("Value", "CA");
ExecuteQuery(ForwardOnly);
if (FirstRecord())
Pick();
}
oBCPick = null;
}
```

The following example is for Siebel Java Data Bean. It chooses a product from a picklist:

```
Sieb_busObject = Sieb_dataBean.getBusObject("Service Request");
Sieb_busComp = Sieb_busObject.getBusComp("Service Request");
Sieb_busComp.newRecord(false);

. . .

SiebelBusComp productBusComp = Sieb_busComp.getPicklistBusComp("Product");
productBusComp.clearToQuery();
productBusComp.setSearchSpec("Name", "ATM Card");
productBusComp.executeQuery(false);
isRecord =productBusComp.firstRecord();
try
{
    if (isRecord)
        productBusComp.pick();
    Sieb_busComp.writeRecord();
}

catch (SiebelException e)
{
    System.out.println("Error in Pick " + e.getErrorMessage());
}

}
```

The following example is in Siebel VB:

```
If Me.GetFieldValue("City") = "San Mateo" Then
Set oBCPick = Me.GetPicklistBusComp("State")
With oBCPick
.ClearToQuery
.SetSearchSpec "Value", "CA"
.ExecuteQuery ForwardOnly
If .FirstRecord Then .Pick
End With
Set oBCPick = Nothing
End If
```

## Related Topics

For more information, see the following topics:

- [\*FirstSelected Method for a Business Component\*](#)
- [\*GetMVGBusComp Method for a Business Component\*](#)

## GetSearchExpr Method for a Business Component

The GetSearchExpr method returns a string that contains the current search expression that is defined for a business component. For example:

```
[Revenue] > 10000 AND [Probability] > .5
```

If an instance of the business component does not exist, then the `GetSearchExpr` method returns nothing. If you use the `GetSearchExpr` method in Browser Script with the `Applet_PreInvokeMethod` event, then it returns a null value even if you add a query filter.

### Format

`BusComp.GetSearchExpr`

No arguments are available.

### Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Related Topics

For more information, see the following topics:

- [GetNamedSearch Method for a Business Component](#)
- [GetSearchSpec Method for a Business Component](#)
- [SetSearchExpr Method for a Business Component](#)

## GetSearchSpec Method for a Business Component

The `GetSearchSpec` method returns a string that contains the search specification that is defined for a business component. For example, `> 10000`.

### Format

`BusComp.GetSearchSpec(Field Name)`

The arguments you can use in this format are the same as the arguments that are described in [ActivateField Method for a Business Component](#), except the `GetSearchSpec` method uses the `Field Name` argument to identify the search specification.

### Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Related Topics

For more information, see the following topics:

- [GetNamedSearch Method for a Business Component](#)
- [GetSearchExpr Method for a Business Component](#)
- [GetSortSpec Method for a Business Component](#)
- [SetSearchSpec Method for a Business Component](#)

## GetSortSpec Method for a Business Component

The `GetSortSpec` method returns the sort specification for a business component.

## Format

```
this.GetSortSpec();
```

No arguments are available.

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Related Topics

For more information, see the following topics:

- [GetSearchSpec Method for a Business Component](#)
- [SetSortSpec Method for a Business Component](#)

## GetUserProperty Method for a Business Component

The GetUserProperty method returns the value of a user property.

## Format

```
BusComp.GetUserProperty(propertyName)
```

The following table describes the arguments for the GetUserProperty method.

Argument	Description
propertyName	The name of the user property.

## Usage for the GetUserProperty Method

A user property is similar to an instance variable of a business component. You can use the GetUserProperty method to access a user property from anywhere in the code, even from another application through COM.

An *instance variable* is a type of variable that is defined at the top level of the business component in the general declarations section. You can access an instance variable only in Siebel VB, and in the same object where you declare the instance variable. For more information, see [SetUserProperty Method for a Business Component](#).

Siebel CRM resets the value of a user property every time you create a business component instance.

The GetUserProperty method does not interact directly with user properties that you define in Siebel Tools.

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## GetViewMode Method for a Business Component

The GetViewMode returns a Siebel ViewMode constant or the corresponding integer value for this constant. This constant identifies the current visibility mode for a business component. This mode effects the records that queries return according to the visibility rules. For more information, see [SetViewMode Method for a Business Component](#) and [Use Constants to Standardize Code](#).

## Format

BusComp.GetViewMode

No arguments are available.

## Usage

The GetViewMode method returns NoneSetView mode until one of the following situations is true:

- Siebel CRM queries a business component.
- The SetViewMode method sets the view mode for the business component.

The NoneSetViewMode value indicates that no visibility rules are applied to the business component. If Siebel CRM creates a business component through a call to the GetBusComp method, then the value for that business component is NoneSetViewMode. If you require a specific view mode, then you must use the SetViewMode method to set this view mode. If you do not use the SetViewMode method, then Siebel CRM sets the view mode according to the most restrictive visibility mode that is defined for that business component. It does this the first time that it creates a business component instance.

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## InvokeMethod Method for a Business Component

The InvokeMethod method calls a method. It returns a string that contains the result of the method. For more information, see *About Specialized and Custom Methods*.

## Siebel VB Format

BusComp.InvokeMethod methodName, methArg1, methArg2, methArgN

The following table describes the arguments for the Siebel VB format of the InvokeMethod method.

Argument	Description
methodName	The name of the method. For information about the values you can enter for this argument, see <i>Business Component Invoke Methods</i> .
You can use the following arguments: <ul style="list-style-type: none"><li>• methArg1</li><li>• methArg2</li><li>• methArgN</li></ul>	A single string that contains arguments for the methodName argument.  You can also pass this string in an array that contains the method parameters.

## Siebel eScript Format

BusComp.InvokeMethod(methodName, methArg1, methArg2, ..., methArgn);

The arguments you can use in this format are the same as the arguments that are described for the Server Script format in *InvokeMethod Method for an Applet*.

## Usage

You can use the `InvokeMethod` method to call a method on a business component object that is not available directly through the object interface. For more information, see *Caution About Using the InvokeMethod Method* in *InvokeMethod Method for an Applet*.

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

For examples of using the `InvokeMethod` method, see the following topics:

- *ClearLOVCache Method for a Business Component*
- *CreateFile Method for a Business Component*
- *GetFile Method for a Business Component*
- *PutFile Method for a Business Component*

## LastRecord Method for a Business Component

The `LastRecord` method moves the record pointer to the last record in a business component. It returns one of the following items:

- An integer in Siebel VB
- A Boolean value in COM, Siebel Java Data Bean, or Siebel eScript

For more information, see *FirstRecord Method for a Business Component* and *NextRecord Method for a Business Component*.

## Format

`BusComp.LastRecord`

No arguments are available.

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following example is for the Mobile Web Client Automation Server:

```
Private Sub LastRecord_Click()  
  
    Dim errCode As Integer  
    Dim oBusComp as SiebelBusComp  
    FieldValue.Text = ""  
    oBusComp.ClearToQuery  
    oBusComp.ExecuteQuery ForwardBackward  
    oBusComp.LastRecord errCode  
    If errCode = 0 Then  
        FieldValue.Text = oBusComp.GetFieldValue(FieldNames.Text, _  
            errCode)  
    End If  
  
    Status.Text = SiebelApplication.GetLastErrorText
```

End Sub

## Name Method for a Business Component

The Name method returns a string that contains the name of a business component.

### Format

BusComp.Name()

No arguments are available.

### Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

The following example is in Browser Script:

```
function BusComp_PresetFieldValue (fieldName, value)
{
    theApplication().SWEAlert(this.Name());
}
```

## NewRecord Method for a Business Component

The NewRecord method adds a new record to a business component. This method does not return any information.

### Format

BusComp.NewRecord(whereIndicator)

The following table describes the arguments for the NewRecord method.

Argument	Description
whereIndicator	<p>Predefined constant that configures where Siebel CRM must add the new record. You can use one of the following values:</p> <ul style="list-style-type: none"><li>• NewBefore</li><li>• NewAfter</li><li>• NewBeforeCopy</li><li>• NewAfterCopy</li></ul> <p>For more information, see <i>Use Constants to Standardize Code</i>.</p> <p>If you use Siebel Java Data Bean, then you can use one of the following values:</p> <ul style="list-style-type: none"><li>• <b>FALSE</b>. This value is equivalent to the NewBefore constant.</li><li>• <b>TRUE</b>. This value is equivalent to the NewAfter constant.</li></ul>



## Usage

If you use the `NewRecord` method to add a new record, then Siebel CRM does the following:

1. Places the new record before or after the current record, depending on the value you enter for the `WhereIndicator` argument.
2. Sets this new record as the current record.

You can use the `NewRecord` method to copy a record. To place the copy before the original record, you use the following command:

```
Object.NewRecord NewBeforeCopy
```

To place the copy after the original record, you use the following command:

```
Object.NewRecord NewAfterCopy
```

## Performance with the NewRecord Method

In some situations, using the `NewRecord` method in a Server Script can result in this method performing slowly. In this situation, Siebel CRM does not display an error message. It creates the record but the reply time is not optimal. This situation is due to the expected behavior of the Siebel application when it creates a new record.

To position the new record in the record set, Siebel CRM gets the cursor for the record set. This record set must include data before Siebel CRM creates the new record. In the context of a script, Siebel CRM must run a query on the business component before it calls the `NewRecord` method. If the script does not explicitly run the query, then Siebel CRM runs a full table query. This situation can cause suboptimal performance. For more information, see Doc ID 477556.1 on My Oracle Support.

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following example is in Siebel VB:

```
Dim oBusObj as BusObject
Dim oBC as BusComp

Set oBusObj = TheApplication.ActiveBusObject
Set oBC = oBusObj.GetBusComp("Action")
oBC.NewRecord NewAfter
oBC.SetFieldValue "Type", "To Do"
oBC.SetFieldValue "Description", "Find Decision Makers"
oBC.WriteRecord

set oBC = Nothing
set oBusObj = Nothing
```

## NextRecord Method for a Business Component

The `NextRecord` method moves the record pointer to the next record in a business component, making that record the current record. This method returns the following information:

- In Siebel VB, an integer that includes one of the following values:
  - 1. Indicates the method successfully moved the record pointer to the next record.

- **0 (zero).** Indicates the method did not move the record pointer because it points to the last record.
- In Siebel eScript and COM, a Boolean value.

## Format

BusComp.NextRecord

No arguments are available.

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script, Browser Script

## Examples

The following example is in Siebel eScript:

```
var isRecord;

with (this)
{

    ClearToQuery();
    SetSearchSpec("Name", "A*");
    ExecuteQuery(ForwardBackward);
    isRecord = FirstRecord();
    while (isRecord)
    {

        // do some record manipulation
        isRecord = NextRecord();

    }

}
```

For a similar Siebel VB example, see [FirstRecord Method for a Business Component](#).

## NextSelected Method for a Business Component

The NextSelected method makes the next record of the current multiple selection the active record. It returns the same information as the NextRecord method. For more information, see [NextRecord Method for a Business Component](#).

## Format

BusComp.NextSelected

No arguments are available.

## Used With

Server Script

## Examples

For examples, see [FirstSelected Method for a Business Component](#).

## ParentBusComp Method for a Business Component

The ParentBusComp method returns the name of the parent business component of a link.

### Format

BusComp.ParentBusComp

No arguments are available.

### Usage

The ParentBusComp method allows you to write code in the child business component that can access a field value or perform actions in the parent business component. To use this method, it might be necessary to set the Link Specification property. For more information, see *Usage for the GetFieldValue Method* in [GetFieldValue Method for a Business Component](#).

### Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

The following example is in Siebel VB. For another example, see [ExecuteQuery Method for a Business Component](#):

```
Dim strParentName as String
...
strParentName = Me.ParentBusComp.GetFieldValue("Name")
```

## Pick Method for a Business Component

The Pick method places the currently chosen record in a pick business component into the appropriate fields of the parent business component. This method does not return any information.

You cannot use the Pick method to modify the record in a read-only picklist field.

### Format

BusComp.Pick

No arguments are available.

### Usage

For more information, see *Picking a Record on a Constrained Picklist* in [GetPicklistBusComp Method for a Business Component](#).

### Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

The following Siebel VB example sorts the values in the Sales Stage field:

```
Sub BusComp_NewRecord
  Dim oBC as BusComp
  set oBC = me.GetPicklistBusComp("Sales Stage")

  With oBC
```

```
.ClearToQuery  
.SetSearchSpec "Sales Stage", "2 - Qualified"  
.ExecuteQuery ForwardOnly  
if .FirstRecord then .Pick  
End With  
  
set oBC = Nothing  
End Sub
```

The following is the equivalent example in Siebel eScript:

```
function BusComp_NewRecord ()  
{  
  var oBC = this.GetPicklistBusComp("Sales Stage");  
  with (oBC)  
  {  
    ClearToQuery();  
    SetSearchSpec("Sales Stage", "2 - Qualified");  
    ExecuteQuery(ForwardOnly);  
    if (FirstRecord())  
    Pick();  
  }  
  oBC = null;  
}
```

## PreviousRecord Method for a Business Component

The PreviousRecord method moves the record pointer to the previous record in a business component, making that record the current record. This method returns one of the following values:

- An integer in Siebel VB that includes one of the following values:
  - **1**. Indicates the method successfully moved the record pointer to the next record.
  - **0 (zero)**. Indicates the method did not move the record pointer because it points to the last record.
- A Boolean value in Siebel eScript and COM.

### Format

BusComp.PreviousRecord

No arguments are available.

### Usage

You can use the PreviousRecord method only on a business component that Siebel CRM has queried with the CursorMode mode argument set to ForwardBackward. For more information, see *ExecuteQuery Method for a Business Component*.

### Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

The following Siebel eScript example locates the next-to-last record in a query and then manipulates it:

```
with (this)  
  
{  
  ActivateField("Name")
```

```
ClearToQuery();

SetSearchSpec("Name", "A*");

ExecuteQuery(ForwardBackward);

isRecord = FirstRecord();

while (isRecord)
{
    // do some record manipulation

    isRecord = NextRecord();
} // end while loop

nextToLastRecord = PreviousRecord();

if (nextToLastRecord) // verify that there is a penultimate record
{
    // do some more record manipulation that applies only to next-to-last record
} // end if
} // end with
```

For more information, see *ExecuteQuery Method for a Business Component*.

## RefineQuery Method for a Business Component

The RefineQuery method refines a query. This method does not return any information.

### Format

BusComp.RefineQuery

No arguments are available.

### Usage

Unlike the ClearToQuery method, the RefineQuery method retains the existing query specification and allows you to add search conditions that include those fields that Siebel CRM has not set through a previous search expression. The RefineQuery method is most useful if you use it with the GetNamedSearch method. For more information, see *ClearToQuery Method for a Business Component* and *GetNamedSearch Method for a Business Component*.

### Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

The following Siebel VB code uses RefineQuery:

```
me.SetSearchSpec "Status", "Open"
me.ClearToQuery
me.ExecuteQuery
me.RefineQuery
me.SetSearchSpec "Substatus", "Assigned"
me.ExecuteQuery
```

## Release Method for a Business Component

The Release method releases a business component and the resources for this business component that exist on the Siebel Server. This method does not return any information.

### Format

BusComp.release()

No arguments are available.

### Used With

Siebel Java Data Bean

### Examples

The following example is for Siebel Java Data Bean:

```
import com.siebel.data.*;
{
    ...
    // create Siebel Java Data Bean
    // log in to Siebel Java Data Bean
    ...
    // Create Siebel Bus Object.
    // get the Bus Object from SiebelDataBean
    ...
    // Create Siebel Bus Comp siebBusComp
    // Get the business component using SiebelBusObject
    ...
    // Use the bus. Component
    ...
    // make sure to release the business component and its resources on the Siebel Server
    siebBusComp.release();
    // release the resources occupied by Siebel Bus Object and Siebel Java Data Bean
    after their use.
}
```

The following example logs in to a Siebel Server. It then creates an instance for each of the following items:

- Business object
- Business component
- Business service

It then releases each of these items in reverse order:

```
import com.siebel.data.*;
import com.siebel.data.SiebelException;

public class JDBReleaseDemo
{
    private SiebelDataBean m_dataBean = null;
    private SiebelBusObject m_busObject = null;
    private SiebelBusComp m_busComp = null;
    private SiebelService m_busServ = null;

    public static void main(String[] args)
    {
        JDBReleaseDemo demo = new JDBReleaseDemo();
    }
}
```

```
public JDBReleaseDemo()
{
    try
    {

        // instantiate the Siebel Java Data Bean
        m_dataBean = new SiebelDataBean();

        // login to the Siebel Servers
        m_dataBean.login("siebel.tcpip.none.none://gateway:port/enterprise/
object manager","userid","password");
        System.out.println("Logged in to the Siebel Server ");

        // get the business object
        m_busObject = m_dataBean.getBusObject("Account");

        // get the business component
        m_busComp = m_busObject.getBusComp("Account");

        // get the business service
        m_busServ = m_dataBean.getService("Workflow Process Manager");

        //release the business service
        m_busServ.release();
        System.out.println("BS released ");

        //release the business component
        m_busComp.release();

        System.out.println("BC released ");

        //release the business object
        m_busObject.release();
        System.out.println("BO released ");

        // logoff
        m_dataBean.logoff();
        System.out.println("Logged off the Siebel Server ");
    }

    catch (SiebelException e)
    {
        System.out.println(e.getErrorMessage());
    }

}
}
```

For more information, see [Logoff Method for an Application](#).

## SetFieldValue Method for a Business Component

The SetFieldValue method sets a new value for a field in the current record of a business component. This method does not return any information.

### Format

BusComp.SetFieldValue FieldName, FieldValue

The following table describes the arguments for the SetFieldValue method.

Argument	Description
FieldName	String that contains the name of the field.
FieldValue	String that contains the value to set.

The format for the FieldName argument uses the same format that is described in *Format for the Activate Field Method* in *ActivateField Method for a Business Component*.

The length of the FieldValue argument must not exceed the length of the field. For example, if you pass a 20 character string to a field that is defined as 16 characters in length, then Siebel CRM creates a run-time error that is similar to the following:

```
Value too long for field 'xxxxx' (maximum size nnn).
```

You must make sure the length of the string you pass is no longer than the length of the destination field.

## Usage

You can use the SetFieldValue method only on a field that is active. For more information, see *ActivateField Method for a Business Component*.

You cannot use the SetFieldValue method with a calculated field. You cannot use the SetFieldValue method recursively.

## Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following example is in Siebel VB:

```
If Val(Me.GetFieldValue("Rep %")) < 75 Then
    Me.SetFieldValue "Rep %", "75"
    Me.WriteRecord
End If
```

The following is the equivalent example in Siebel eScript:

```
if (ToInteger(this.GetFieldValue("Rep %")) < 75)
{
    this.SetFieldValue("Rep %", "75");
    this.WriteRecord();
}
```

The following Siebel VB example sets a field to null:

```
oBC.SetFieldValue "FieldName", ""
```

## SetFormattedFieldValue Method for a Business Component

The SetFormattedFieldValue method sets a new value in a field in the current record of a business component. It accepts the field value in the current local format. This method does not return any information.



## Format

BusComp.SetFormattedFieldValue FieldName, FieldValue

The arguments you can use this format are the same as the arguments described in *SetFieldValue Method for a Business Component*.

## Usage

The SetFormattedFieldValue method is useful if you write code for a Siebel application that you deploy in multiple countries that use different currency, date, and number formats.

You can use the SetFormattedFieldValue method only on a field that is active. For more information, see *ActivateField Method for a Business Component*.

## Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following Siebel VB example is a fragment from a program that tracks the progress of an opportunity through sales stages:

```
Function BusComp_PreWriteRecord As Integer

Dim OpportunityBO as BusObject, StageBC as BusComp
Dim OppStageId as String, SalesRep as String, Stage as String
Dim StagePrev As String, StageDate as String, StageDatePrev as String
Dim Dx as Double, Dy as Double, Diff as Double, DiffStr as String
Dim OppID As String, OppStageId as String, StageID As String
Dim SalesStageBO as BusObject, SalesStageBC as BusComp

Set OpportunityBO = TheApplication.GetBusObject ("Opportunity")
Set SalesStageBO = TheApplication.GetBusObject ("Sales Cycle Def")
Set SalesStageBC = SalesStageBO.GetBusComp("Sales Cycle Def")

With SalesStageBC
    .SetViewMode AllView
    .ClearToQuery
    .SetSearchSpec "Sales Cycle Stage", StagePrev
    .ExecuteQuery ForwardOnly
    If (.FirstRecord) Then
        StageId = .GetFieldValue("Id")
    End With

    'Instantiate stage BC
    Set StageBC = OpportunityBO.GetBusComp("Opportunity Stage")

    'Check that we do not already have a record for the stage

    With StageBC
        .SetViewMode AllView
        .ClearToQuery
        .SetSearchSpec "Sales Stage Id", StageId
        .ExecuteQuery ForwardOnly

        'Proceed further only if we do not already have record
        'opportunity sales stage

        If (.FirstRecord = 0) Then
            'Create a new stage record and write it out
```

```
.NewRecord NewAfter
'Record Id for future use
OppStageId = .GetFieldValue("Id")
.SetFieldValue "Opportunity Id", OppId
.SetFieldValue "Sales Stage Id", StageId
.SetFieldValue "Sales Rep", SalesRep
.SetFormattedFieldValue "Entered Date", StageDatePrev
.SetFormattedFieldValue "Left Date", StageDate
Dx = DateValue (StageDatePrev)
Dy = DateValue (StageDate)
Diff = Dy - Dx
DiffStr = Str(Diff)
.SetFieldValue "Days In Stage", DiffStr
.WriteRecord
End If
End With

Set SalesStageBC = Nothing
Set SalesStageBO = Nothing
Set StageBC = Nothing
Set OpportunityBO = Nothing

End Function
```

## SetMultipleFieldValues Method for a Business Component

The SetMultipleFieldValues method sets new values in the fields of the current record of a business component. This method does not return any information.

### Format

BusComp.SetMultipleFieldValues oPropertySet

The following table describes the arguments for the SetMultipleFieldValues method.

Argument	Description
oPropertySet	Property set that identifies a collection of properties. This argument identifies the fields to set and the value to set for each field.

The FieldName argument in the property set must match exactly the field name in Siebel Tools, including the correct case. In the following example, the FieldName is Name and the FieldValue is Acme:

```
oPropertySet.SetProperty "Name", "Acme"
```

### Usage

You can use the SetMultipleFieldValues method only on a field that is active.

Do not use the SetMultipleFieldValues method on a field that uses a picklist.

### Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

The following example is in Siebel eScript:

```
var bo = TheApplication().GetBusObject("Opportunity");
var bc = bo.GetBusComp("Opportunity");
var ps = TheApplication().NewPropertySet();

with (ps)
{
    SetProperty ("Name", "Call Center Opportunity");
    SetProperty ("Account", "Marriott International");
    SetProperty ("Sales Stage", "2-Qualified");
}

bc.ActivateMultipleFields(ps);
bc.NewRecord(NewBefore);
bc.SetMultipleFieldValues(ps);
bc.WriteRecord;

ps = null;
bc = null;
bo = null;
```

The following Siebel Java Data Bean example sets multiple fields:

```
SiebelDataBean Sieb_dataBean = null;
SiebelBusObject Sieb_busObject = null;
SiebelBusComp Sieb_busComp = null;
SiebelPropertySet ps = null;

try {

    Sieb_dataBean = new SiebelDataBean();
    ...
    Sieb_busObject = Sieb_dataBean.getBusObject("Account");
    Sieb_busComp = Sieb_busObject.getBusComp("Account");
    ps = Sieb_dataBean.newPropertySet();

    with(ps) {

        SetProperty("Name", "Frank Williams Inc");
        SetProperty("Location", "10 Main St");
        SetProperty("Account Status", "Active");
        SetProperty("Type", "Customer");

    }

    Sieb_busComp.activateField ("Name");
    Sieb_busComp.activateField ("Location");
    Sieb_busComp.activateField ("Account Status");
    Sieb_busComp.activateField ("Type");

    Sieb_busComp.newRecord(true);
    Sieb_busComp.setMultipleFieldValues(ps);
    Sieb_busComp.writeRecord();

}

catch (SiebelException e) {

    system.out.println("Error : " + e.getErrorMessage());

}

ps.release();
Sieb_busComp.release();
Sieb_busObject.release();
Sieb_dataBean.release();
```

## Related Topics

For more information, see the following topics:

- [ActivateMultipleFields Method for a Business Component](#)
- [GetMultipleFieldValues Method for a Business Component](#)

## SetNamedSearch Method for a Business Component

The SetNamedSearch method sets the named search specification on a business component. This method does not return any information.

### Format

BusComp.SetNamedSearch searchName, searchSpec

The following table describes the arguments for the SetNamedSearch method.

Argument	Description
searchName	String that identifies the name of the search specification.
searchSpec	String that contains the search specification.

The searchSpec argument works in the same way as the argument you use after the equal sign in a predefined query. For more information, see [SetSearchExpr Method for a Business Component](#) and [SetSearchSpec Method for a Business Component](#).

### Usage

A *named search specification* is a type of search specification that Siebel CRM applies in conjunction with the existing search specification. It applies the named search specification every time it calls the ExecuteQuery method. For example, with a predefined query or with the search specification on a business component.

You can only modify a named search specification programmatically. You cannot use the administrative interface to modify a named search specification.

The ClearToQuery method does not clear the named search specification. To clear it, you must explicitly set the searchSpec argument to "". If Siebel CRM creates a new instance of a business component, then it clears the named search specification.

Using the SetNamedSearch method to define a search does not create a predefined query. You specify this search only in script. To return this search specification, you can use the GetNamedSearch method. To return the values of an attribute in a user profile, Personalization uses the GetProfileAttr method.

### Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

The examples in this topic set a named search specification for a business component depending on the position of the current user.

The following example is in Siebel eScript:

```
function BusComp_PreQuery ()
{
  if (TheApplication().GetProfileAttr("Position") == "Siebel Administrator");
  {
    this.SetNamedSearch ("Candidates", "[Status] LIKE 'Candidate'")
  }

  return (ContinueOperation);
}
```

The following example is in Siebel VB:

```
Function BusComp_PreQuery () As Integer
  If TheApplication.GetProfileAttr("Position") = "Siebel Administrator" Then
    Me.SetNamedSearch "Candidates", "[Status] LIKE 'Candidate'"
  End If

  BusComp_PreQuery = ContinueOperation
End Function
```

## SetSearchExpr Method for a Business Component

The SetSearchExpr method sets a search expression for a business component. This method does not return any information.

### Format

BusComp.SetSearchExpr searchSpec

The following table describes the arguments for the SetSearchExpr method.

Argument	Description
searchSpec	String that identifies the search specification.

### Usage

You can call the SetSearchExpr method after you call the ClearToQuery method and before you call the ExecuteQuery method. It is not necessary to use the ActivateField method on a field that you specify in the SetSearchExpr method.

The maximum length of a predefined query is 2000 characters.

The searchSpec argument works in the same way as the argument you use after the equal sign in a predefined query. For example, consider the following predefined query:

```
'Account'.Search = "[Name] ~ LIKE '"A. C. Parker'" "
```

You can use the following equivalent search specification in various interface methods:

```
BC.SetSearchExpr "[Name] ~ LIKE '"A. C. Parker'" "
```

In this example, Name is a field in a business component. You must enclose it in square brackets, [ ].

To create a query that includes a sort specification, use the `SetSortSpec` method. You cannot use the `SetSearchExpr` method to set a sort specification. Do not use the `SetSearchExpr` method and the `SetSearchSpec` method together. These methods are mutually exclusive.

Any date you use with the `SetSearchExpr` method must use the MM/DD/YYYY format, regardless of the Regional control panel settings on the Siebel Server or the Siebel client.

### Using the `SetSearchExpr` Method with a Keyword

If a field value contains a search keyword, then you must use two pairs of double quotes around the field value. Example keywords include NOT, AND, or OR. For example, if the Sub-Status field includes the string Not an Issue as a field value, then you must use the following Siebel VB format to avoid an SQL error:

```
substatus = GetFieldValue("Sub-Status")
searchst = "[Value] = "" & substatus & """"
BC.SetSearchExpr searchst
```

The following Siebel VB format creates an SQL error:

```
substatus = GetFieldValue("Sub-Status")
searchst = "[Value] = " & substatus
BC.SetSearchExpr searchst
```

### Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

The following example in Siebel eScript demonstrates how to log the current search specification to a file:

```
var Ob = TheApplication().ActiveBusObject();
var BC = Ob.GetBusComp("Opportunity");
var Account = "Turston Steel";
var Oppty = "CAD/CAM implementation";
var searchst = "[Name] = '" + Oppty + "' AND [Account] = '" + Account + "'";

TheApplication().TraceOn("c:\\temp\\trace.txt", "Allocation", "All");
TheApplication().Trace("the search expression is: " + searchst);
BC.ClearToQuery();
BC.SetSearchExpr(searchst);
BC.ExecuteQuery(ForwardBackward);
```

### Related Topics

For more information, see the following topics:

- [ClearToQuery Method for a Business Component](#)
- [ExecuteQuery Method for a Business Component](#)
- [SetSearchSpec Method for a Business Component](#)
- [SetSortSpec Method for a Business Component](#)

## SetSearchSpec Method for a Business Component

The `SetSearchSpec` method sets the search specification for a business component. This method does not return any information.

**CAUTION:** Do not use the `SetSearchExpr` method and the `SetSearchSpec` method together. They are mutually exclusive.

## Format

`BusComp.SetSearchSpec` `FieldName`, `searchSpec`

The following table describes the arguments for the `SetSearchSpec` method.

Argument	Description
<code>FieldName</code>	String that identifies the name of the field where Siebel CRM sets the search specification.
<code>searchSpec</code>	String that contains the search specification.

## Usage

You must call the `SetSearchSpec` method before you call the `ExecuteQuery` method.

To avoid an unexpected compound search specification on a business component, it is recommended that you call the `ClearToQuery` method before you call the `SetSearchSpec` method. It is not necessary to use the `ActivateField` method on a field that you reference in the `SetSearchSpec` method.

## Making Multiple Calls to the `SetSearchSpec` Method

If you instruct Siebel CRM to make multiple calls to the `SetSearchSpec` method for a business component, then it handles the multiple search specifications in the following ways:

- If the existing search specification is on the same field as the new search specification, then Siebel CRM replaces the existing search specification with the new search specification. For example, consider the following code:

```
myBusComp.SetSearchSpec("Status", "<> 'Renewal'");  
myBusComp.SetSearchSpec("Status", "<> 'Dropped'");
```

This code results in the following WHERE clause:

```
WHERE Status <> 'Dropped'
```

- If the existing search specification is not on the same field as the new search specification, then Siebel CRM creates a search specification that is a logical AND of the existing and the new search specifications. For example:

```
myBusComp.SetSearchSpec("Type", "<> 'Renewal'");  
myBusComp.SetSearchSpec("Status", "<> 'Sold' AND [Status] <> 'Cancelled' AND  
[Status] <> 'Renewed'");
```

This code results in the following WHERE clause:

```
WHERE Type <> 'Renewal' AND (Status<> 'Sold' AND Status <> 'Cancelled' AND Status
```

```
<> 'Renewed')
```

- If the existing search specification includes one or more of the same fields as the new search specification, then Siebel CRM replaces only that part of the existing search specification that includes fields that the new search specification also includes. For example:

```
myBusComp.SetSearchSpec("Status", "<> 'In Progress'")
```

This code results in the following WHERE clause:

```
WHERE Type <> 'Renewal' AND Status <> 'In Progress'
```

Siebel CRM replaces the search specification only on the Status field.

## Combining Declarative and Scripted Search Specifications

If you define a search specification declaratively in Siebel Tools, and if you use the SetSearchSpec method to define another search specification in script, then Siebel CRM creates a search specification that is a logical AND of the declarative search specification and the scripted search specification. For example, consider the following scripted search specification:

```
myBusComp.SetSearchSpec("Status", "<> 'Cancelled'")
```

Consider the following declarative search specification:

```
[Type] <> 'Renewal' AND [Status] <> 'Sold'
```

When Siebel CRM creates a logical AND between these search specifications, the following WHERE clause results:

```
WHERE Type <> 'Renewal' AND (Status <> 'Sold' AND Status <> 'Cancelled')
```

## Using Logical and Comparison Operators in a Search Specification

You can use logical operators and comparison operators. Consider the following example, in Siebel VB:

```
BC.SetSearchSpec "Status", "<> 'Closed' AND ([Owner] = LoginName () OR [Refer To] =  
LoginName ()) OR ([Owner] IS NULL AND [Support Group] = 'TS-AE')"
```

## Using Special Characters in a Search Specification

The search specification can contain any of the following special characters:

- " (double quote)
- ' (single quote)
- = (equal sign)
- > (greater than symbol)
- < (less than symbol)
- ( (opening parenthesis)
- ) (closing parenthesis)
- [ (opening square bracket)
- ] (closing square bracket)
- , (comma)
- ~ (tilde)



You must enclose each of these special characters in quotes. This rule applies to operators that are part of the search expression and to the search text.

## Using Quotes and Other Characters in a Search Specification

If the search expression contains quotes or another special character, then you must enclose the entire search specification in double quotes. An apostrophe is an example of a special character.

If the search object includes a special character, then you must double that character. For example, assume your specification must search for text that contains a single double quote:

"We must

In this situation, you must do the following work:

1. Use two double quotes before the word We:

```
"We must
```

2. Enclose the string you created in the preceding step with single quotes:

```
'"We must'
```

3. Enclose the entire expression in double quotes:

```
""We must""
```

4. Add the expression to the search specification:

```
SetSearchSpec "Comments", ""We must""
```

In another example, assume your search specification must search for the following text in the Name field:

```
Phillie's Cheese Steaks
```

In this situation, you must use the following search specification:

```
SetSearchSpec "Name", "'Phillie's Cheese Steaks'"
```

## Using Quotes and Other Characters in a Search Specification in Siebel eScript or Browser Script

To mark a special character in Siebel eScript or Browser Script, you must use a backslash instead of a double quote. For example:

- To include double quotes before the word We, you must use the following format:

```
SetSearchSpec("Comments", "\"We must\"")
```

- To include the string Phillie's Cheese Steaks, you must use the following format:

```
SetSearchSpec("Name", "'Phillie's Cheese Steaks'")
```

## Using a Search Specification to Search Text in a Nontext Field

If any of the following situations are true, then you must use double quotes to enclose the text you use in a search specification:

- The search expression queries a field of any type other than a text field.

- The search expression includes any character that is not included in the following list:
  - Any upper-case letter of the alphabet. For example:  
ABCDEFGHIJKLMNOPQRSTUVWXYZ
  - Any lower-case letter of the alphabet. For example:  
abcdefghijklmnopqrstuvwxyz
  - Any of the following special characters:
    - underscore (\_)
    - question mark (?)
    - back slash (\)
    - double quote (")
    - single quote (')
    - opening bracket ([)
    - closing bracket (])

## Using a Search Specification to Return All Records

To return all records, use the `ClearToQuery` method and then the `ExecuteQuery` method. Do not use the `SetSearchSpec` method. For more information, see [ClearToQuery Method for a Business Component](#) and [ExecuteQuery Method for a Business Component](#).

## Using a Search Specification to Search for a Null Field

To search for a null field, use the following form:

```
SetSearchSpec "Account", "is NULL"
```

If your search specification requests an empty string, then the search returns every record. For example:

```
SetSearchSpec "Account", ""
```

### Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

The following Siebel VB code searches for a contact by name, and then navigates to a view that displays this record:

```
(general)
(declarations)
Option Explicit

Sub Button1_Click
Dim theCurrComp As BusComp
Dim TargetView As String
Dim TargetBusObj As String
Dim TargetBusComp As String
Dim NewBusObj As BusObject
Dim NewComp As BusComp
Dim RecId1 As String
Dim RecId2 As String
Dim RecId3 As String

TargetView = "Visible Contact List View"
TargetBusObj = "Contact"
```

```
TargetBusComp = "Contact"
Set theCurrComp = Me.BusComp
RecId1 = theCurrComp.GetFieldValue("Last Name")
RecId2 = theCurrComp.GetFieldValue("First Name")
RecId3 = theCurrComp.GetFieldValue("Account Id")
Set NewBusObj = TheApplication.GetBusObject(TargetBusObj)
Set NewComp = NewBusObj.GetBusComp(TargetBusComp)
NewComp.ClearToQuery
NewComp.SetSearchSpec "Last Name", RecId1
NewComp.SetSearchSpec "First Name", RecId2
NewComp.SetSearchSpec "Account Id", RecId3
NewComp.ExecuteQuery ForwardBackward

TheApplication.GotoView TargetView , NewBusObj

Set NewComp = Nothing
Set NewBusObj = Nothing
Set theCurrComp = Nothing

End Sub
```

For other Siebel VB examples, see [FirstRecord Method for a Business Component](#), [SetFormattedFieldValue Method for a Business Component](#), and [BusComp\\_PreQuery Event](#).

The following example is in Siebel eScript:

```
var oAcctBO = TheApplication().GetBusObject("Account");
var oAcctBC = oAcctBO.GetBusComp("Account");
var oAddrBC;

with (oAcctBC)
{
  SetViewMode(SalesRepView);
  ClearToQuery();
  SetSearchSpec("Name", "Hong Kong Flower Shop");
  ExecuteQuery(ForwardBackward);

  if (FirstRecord())

    oAddrBC = GetMVGBusComp("Street Address");
    with (oAddrBC)
    {
      NewRecord(NewAfter);
      SetFieldValue("City", "Denver");
      SetFieldValue("Street Address", "123 Main Street");
      WriteRecord();
    }

}

oAddrBC = null;
oAcctBC = null;
oAcctBO = null;
```

For another Siebel eScript example, see [ClearToQuery Method for a Business Component](#).

## SetSortSpec Method for a Business Component

The SetSortSpec method sets the sort specification for a business component. This method does not return any information.

## Format

BusComp.SetSortSpec sortSpec

The following table describes the arguments for the SetSortSpec method.

Argument	Description
sortSpec	String that contains the sort specification.

The sortSpec argument uses the following format:

```
"fieldName1,fieldName2,... (ASCENDING) "
```

or

```
"fieldName1,fieldName2,... (DESCENDING) "
```

You must enclose the entire string in double quotes. To sort on various fields in different orders, you can use a comma to separate field names and order specifications.

## Usage

If you use the SetSortSpec method, then you must call it after you call the ClearToQuery method and before you call the ExecuteQuery method.

The SortSpec argument works in the same way as the equal sign in a predefined query. For example, consider the following predefined query:

```
'Account'.Sort = "Name(ASCENDING)"
```

You can use the following equivalent search specification in various interface methods:

```
BC.SetSortSpec "Name(ASCENDING)"
```

Note that Name is the value in the Name property of the business component field. This example queries the Name field.

Any date you use with the SetSortSpec method must use the MM/DD/YYYY format, regardless of the Regional control panel settings of the Siebel Server or Siebel client.

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The Siebel VB example in this topic sorts the Opportunity list first by Account in reverse order, and then in alphabetical order by Site. Note that the column names in the Opportunity list applet are not the same as the names in the underlying business component.

For demonstration purposes, this example sorts in ascending and descending order. In actual practice, do not sort in two directions in a single sort specification because this type of sorting can significantly degrade performance.

```
Function BusComp_PreQuery As Integer

With Me
    .ActivateField("Account")
    .ActivateField("Account Location")
    .ClearToQuery
    .SetSortSpec "Account(DESCENDING), Account Location(ASCENDING) "
    .ExecuteQuery ForwardBackward
End With

End Function
```

The following is the equivalent example in Siebel eScript:

```
function BusComp_PreQuery {

    with (this)
    {
        ActivateField("Account");
        ActivateField("Account Location");
        ClearToQuery();
        SetSortSpec("Account (DESCENDING), Account Location (ASCENDING)");
        ExecuteQuery (ForwardBackward);
    }

}
```

## Related Topics

For more information, see the following topics:

- [GetSortSpec Method for a Business Component](#)
- [SetSearchExpr Method for a Business Component](#)
- [SetSearchSpec Method for a Business Component](#)

## SetUserProperty Method for a Business Component

The SetUserProperty method sets the value of a user property in a business component. A user property is similar to an instance variable of a business component. This method does not return any information.

### Format

BusComp.SetUserProperty propertyName, newValue

The following table describes the arguments for the SetUserProperty method.

Argument	Description
propertyName	String that identifies the name of the user property.
newValue	String that contains the new value.

### Usage

Usage for the SetUserProperty method is similar to the usage for the GetUserProperty method. For more information, see *Usage for the GetUserProperty Method* in [GetUserProperty Method for a Business Component](#).

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following example is in Siebel VB:

```
Sub BusComp_SetFieldValue (FieldName As String)
  Select Case FieldName
    Case "Committed"
      me.SetUserProperty "Flagged", "Y"
  End Select
End Sub
```

The following is the equivalent example in Siebel eScript:

```
function BusComp_SetFieldValue (FieldName)
{
  switch (FieldName)
  {
    case "Committed":
      this.SetUserProperty("Flagged", "Y");
  }
}
```

## SetViewMode Method for a Business Component

The SetViewMode method sets the visibility type for a business component. This method does not return any information. For more information, see [GetViewMode Method for a Business Component](#).

### Format

BusComp.SetViewMode mode

The following table describes the arguments for the SetViewMode method.

Argument	Description
<i>mode</i>	A Siebel ViewMode constant or the corresponding integer value for the constant. More information about the constants that you can use with the SetViewMode method is provided later in this topic.

Siebel ViewMode constants correspond to applet visibility types. For more information about applet visibility types, see *Siebel Security Guide*.

### Constants You Can Use with the SetViewMode Method

The following table describes the constants you can use with the SetViewMode method. The Owner Type column indicates the value that must be set in the Owner Type property of the BusComp view mode object of the business component. For more information, see [Use Constants to Standardize Code](#).

Siebel ViewMode Constant	Integer Value	Owner Type	Description
SalesRepView	0	Position	This constant does the following:

Siebel ViewMode Constant	Integer Value	Owner Type	Description
			<ul style="list-style-type: none"> <li>Applies access control according to a single position or a sales team.</li> <li>Displays records according to one of the following items: <ul style="list-style-type: none"> <li>The user position.</li> <li>The sales team that includes the user position. The Visibility field or Visibility MVField of the business component determines the visibility.</li> </ul> </li> </ul>
ManagerView	1	Position	<p>Displays records that the user and the users who report to the user can access. For example, the records that Siebel CRM displays in the My Team's Accounts visibility filter.</p> <p>If the business component that the view references uses single position access control, then this constant displays records that Siebel CRM associates directly with the active position of the user and with subordinate positions.</p> <p>If the business component that the view references uses sales team access control, then this constant displays records according to one of the following positions:</p> <ul style="list-style-type: none"> <li>The primary position for the user on a team.</li> <li>A subordinate position that is the primary member on a team.</li> </ul> <p>If the user position does not include a subordinate position, then Siebel CRM does not display any records.</p>
PersonalView	2	Position	<p>Displays records that the user can access, as determined by the Visibility Field property of the BusComp view mode object. For example, the records that Siebel CRM displays in the My Accounts visibility filter.</p>
AllView	3	Not applicable	<p>Displays all records that includes valid owner. For example, the records that Siebel CRM displays in the All Accounts Across Organizations visibility filter.</p>
OrganizationView	5	Position	<p>Displays records where a valid owner is associated with the record and the user position is associated with the organization. For example, the records that Siebel CRM displays in the All Accounts List View visibility filter.</p> <p>Applies access control for a single organization or for multiple organizations, as determined by the Visibility field or Visibility MVField of the BusComp view mode object of the business component.</p>
GroupView	7	Not applicable	<p>This constant does one of the following:</p> <ul style="list-style-type: none"> <li>Displays a list of the subcategories that the user can access.</li> <li>Displays records in the current category, depending on the current applet. If the user is at the catalog level, then Siebel CRM displays the first level categories.</li> </ul>

Siebel ViewMode Constant	Integer Value	Owner Type	Description
CatalogView	8	Catalog Category	Displays a list of records in categories across every catalog that the user can access. Siebel CRM typically uses this visibility in a product picklist and other list of products, such as a recommended product list.
SubOrganizationView	9	Organization	<p>If the business component that the view references uses single organization access control, then this constant displays records that Siebel CRM associates directly with one of the following organizations:</p> <ul style="list-style-type: none"><li>• The organization that is currently active for the user.</li><li>• A descendent organization. This descendent organization is part of the organization hierarchy.</li></ul> <p>For example, the records that Siebel CRM displays in the All Opportunities Across My Organization visibility filter.</p> <p>If the business component that the view references uses multiple organization access control, then this constant displays records for the primary active organization or for the primary descendent organization.</p>

## Used With

COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following example is in Siebel VB. For another example, see [BusComp\\_PreDeleteRecord Event](#):

```
(general)
(declarations)
Option Explicit
Dim oBO as BusObject
Dim oBC as BusComp

Set oBO = TheApplication.GetBusObject(Me.BusObject.Name)
Set oBC = oBO.GetBusComp(Me.Name)
With oBC
    .SetViewMode SalesRepView
    .ClearToQuery
    .SetSearchSpec "Name", Me.GetFieldValue("Name")
    .SetSearchSpec "Id", "<>" & Me.GetFieldValue("Id")
    .ExecuteQuery ForwardOnly
    If .FirstRecord Then
        TheApplication.Trace"Entry for name " & Me.GetFieldValue("Name") & " exists."
    End If
End With

Set oBC = Nothing
Set oBO = Nothing
```

The following is the equivalent example in Siebel eScript:

```
var oBO = TheApplication().GetBusObject(this.BusObject().Name());
var oBC = oBO.GetBusComp(this.Name);

TheApplication().TraceOn("c:\\trace.txt", "Allocation", "All");
```



```
with (oBC)
{
    SetViewMode(SalesRepView);
    ClearToQuery();
    SetSearchSpec("Name", this.GetFieldValue("Name"));
    SetSearchSpec("Id", "<> " + this.GetFieldValue("Id"));
    ExecuteQuery(ForwardOnly);
    if (FirstRecord())
        TheApplication().Trace("Entry for name " + this.GetFieldValue("Name") + "
exists.");
}

TheApplication().TraceOff();
oBC = null;
oBO = null;
```

## UndoRecord Method for a Business Component

The UndoRecord method reverses any unsaved modifications that Siebel CRM has made on a record. This includes reversing unsaved modifications to fields, and deleting an active record that is not saved to the Siebel database. This method does not return any information.

### Format

BusComp.UndoRecord

No arguments are available.

### Usage

You can use the UndoRecord method in the following ways:

- **To delete a new record.** Use it after Siebel CRM calls the NewRecord method and before it saves the new record to the Siebel database.
- **To reverse modifications made to field values.** Use it before Siebel CRM uses the WriteRecord method to save these modifications, or before the user steps off the record.

UndoRecord reverses unsaved modifications to a record. If you require a fine degree of control over the modifications that Siebel CRM reverses, then do the following:

1. Place the code in one of the following events:
  - PreNewRecord
  - PreSetFieldValue
  - PreWriteRecord
2. Issue a CancelOperation to cancel the modifications that the event calls.

For more information, see *Caution About Using the Cancel Operation Event Handler* and *NewRecord Method for a Business Component*.

### Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## WriteRecord Method for a Business Component

The WriteRecord method saves to the Siebel database any modifications made to the current record. This method does not return any information.

### Format

oBusComp.WriteRecord

No arguments are available.

### Usage

After creating new records and setting values for fields, you can call the Write Record method to save the new record to the Siebel database.

### Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

The Siebel VB example in this topic implements the following logic: if the user sets the Sales Stage field to 02, then insert an activity:

```
(general)
(declarations)
Option Explicit
# Sub BusComp_SetFieldValue (FieldName As String)
' Run this code from the Opportunities Activities view.
' Opportunity is presumed to be the parent business component.

Select Case FieldName
Case "Sales Stage"
if Me.GetFieldValue(FieldName) LIKE "02*" Then
' reference the Action business component
Dim oBCact as BusComp
Set oBCact = me.BusObject.GetBusComp("Action")
With oBCact
.NewRecord NewAfter
.SetFieldValue "Type", "Event"
.SetFieldValue "Description", "THRU SVB, Stage _
changed to 02"
.SetFieldValue "Done", Format(Now(), _
"mm/dd/yyyy hh:mm:ss")
.SetFieldValue "Status", "Done"
.WriteRecord
End With
set oBCact = Nothing
end if
End Select
End Sub
```

For more examples, see [GetMVGBusComp Method for a Business Component](#) and [NewRecord Method for a Business Component](#)

## Business Component Invoke Methods

This topic describes methods you can use with the `InvokeMethod` method. It includes the following topics:

- *Overview of Methods That Manipulate the File System*
- *ClearLOVCache Method for a Business Component*
- *CreateFile Method for a Business Component*
- *GenerateProposal Method for a Business Component*
- *GetFile Method for a Business Component*
- *PutFile Method for a Business Component*
- *RefreshBusComp Method for a Business Component*
- *RefreshRecord Method for a Business Component*
- *SetAdminMode Method for a Business Component*

### Overview of Methods That Manipulate the File System

To manipulating the file system, you can use the following methods:

- `CreateFile`
- `GetFile`
- `PutFile`

You can store a file in the local file system on the Siebel Server where your configuration runs the script. You can also return this file. You can use a UNC (Universal Naming Convention) format. For example, `\\server\dir\file.txt`. You can use a DOS folder. For example, `c:\dir\file.txt`.

The Siebel Server must be able to access the UNC path or mounted file system. If you use a Java client to run the Siebel Java Data Bean, then the Siebel Server must be able to access all files.

You can use these methods with business components that use the `CSSBCFile` class. These methods do not serialize the files from the client of a third-party application or place files from the client of a third-party application in the Siebel file system.

### ClearLOVCache Method for a Business Component

The `ClearLOVCache` method clears the cache for the list of values (LOV) in the object manager. It works in a way that is similar to the Clear Cache button that Siebel CRM displays in the List of Values view of the Administration - Data screen. This method does not return any information.

The `ClearLOVCache` method clears only the object manager cache. It does not clear the session cache.

#### Format

```
BusComp.InvokeMethod("ClearLOVCache")
```

No arguments are available.

## Used With

To use this method, you can use a `BusComp.InvokeMethod` call with the following interfaces:

- Browser Script
- COM Data Control
- COM Data Server
- Siebel Java Data Bean
- Mobile Web Client Automation Server
- Server Script

## Examples

The following Siebel eScript example is for Server Script:

```
function WebApplet_PreInvokeMethod (MethodName)
{
    if (MethodName == "TestMethod") {
        var lov_bo = TheApplication().GetBusObject("List Of Values");
        var lov_bc = lov_bo.GetBusComp("List Of Values");

        lov_bc.NewRecord(NewAfter);

        lov_bc.SetFieldValue("Type", "ACCOUNT_STATUS");
        lov_bc.SetFieldValue("Name", "Hello");
        lov_bc.SetFieldValue("Value", "Hello");
        lov_bc.SetFieldValue("Order By", "12");
        lov_bc.SetFieldValue("Translate", "Y");

        lov_bc.WriteRecord();

        lov_bc.InvokeMethod("ClearLOVCache");

        lov_bc = null;
        lov_bo = null;

        return (CancelOperation);
    }

    return(ContinueOperation);
}
```

## CreateFile Method for a Business Component

To create a file in the Siebel file system from an external source, you can use the `CreateFile` method. This method returns one of the following values:

- **Success.** The operation succeeded.

- **Error.** The operation did not succeed.

## Format

BusComp.InvokeMethod("CreateFile", SrcFilePath, KeyFieldName, KeepLink)

The following table describes the arguments for the CreateFile method.

Argument	Description
SrcFilePath	The fully qualified path to the source file on the Siebel Server or the Siebel client.
KeyFieldName	The name of the field in the business component that contains the File Name. For example, AccntFileName in the Account Attachment business component.
KeepLink	<p>Applies to URLs. You can use one of the following values:</p> <ul style="list-style-type: none"><li>• <b>Y.</b> Use this value if the link to the file is stored as an attachment.</li><li>• <b>N.</b> Use this value if you reference the actual file.</li></ul> <p>The actual file is compressed in a Siebel proprietary format. Siebel CRM uploads and stores it in that format on the Siebel File System.</p>

## Usage

Before you call the CreateFile method, call the NewRecord method to make sure Siebel CRM creates a new business component record.

## Used With

To use this method, you can use a BusComp.InvokeMethod call with the following interfaces:

- COM Data Control
- COM Data Server
- Siebel Java Data Bean
- Mobile Web Client Automation Server
- Server Script

## Examples

The following example is in Siebel VB:

```
Dim RetValue as String
Dim fileBC as BusComp

'Instantiate fileBC as the appropriate attachment business component

fileBC.NewRecord NewAfter
RetValue = fileBC.InvokeMethod ("CreateFile", "c:\Demo\Image.bmp", "AccntFileName",
"Y")
fileBC.WriteRecord
```

The following example is in Siebel eScript:

```
var fileBC;
```

```
// Instantiate fileBC as the appropriate attachment business component

fileBC.NewRecord(NewAfter);
RetVal = fileBC.InvokeMethod ("CreateFile", "C:\\Demo\\Image.bmp",
"AcctFileName", "Y");
fileBC.WriteRecord();
```

The following example is in COM Data Control:

```
Dim errCode as Integer
Dim Args(2) as String
Dim RetValue as String
Dim fileBC as BusComp

'Instantiate fileBC as the appropriate attachment business component

Args(0) = "C:\\Demo\\Image.bmp"
Args(1) = "AcctFileName"
Args(2) = "Y"

fileBC.NewRecord NewAfter, errCode
RetVal = fileBC.InvokeMethod ("CreateFile", Args, errCode)
fileBC.WriteRecord
```

## GenerateProposal Method for a Business Component

To create a new proposal record, the GenerateProposal method uses a template and settings from the DocServer as input. The DocServer is third-party software that specializes in searching, storing, and serving documents. It creates the proposal.

### Format

To specify a custom template, use the following format:

```
BusComp.InvokeMethod("GenerateProposal", RecordExists, Replace, TemplateFile)
```

To use the default proposal template, use the following format:

```
BusComp.InvokeMethod("GenerateProposal", RecordExists, Replace)
```

The following table describes the arguments for the GenerateProposal method.

Argument	Description
RecordExists	<p>You can use one of the following values:</p> <ul style="list-style-type: none"> <li><b>TRUE.</b> Siebel CRM uses the proposal that is currently chosen.</li> <li><b>FALSE.</b> Siebel CRM creates a new record.</li> </ul>
Replace	<p>You can use one of the following values:</p> <ul style="list-style-type: none"> <li><b>TRUE.</b> Siebel CRM copies the template file from the template to the proposal as a draft file.</li> <li><b>FALSE.</b> You typically set the Replace argument to FALSE.</li> </ul>
TemplateFile	<p>Optional. You can use one of the following values:</p>

Argument	Description
	<ul style="list-style-type: none"><li>• <b>A string that specifies the name of the template to use.</b> If this argument receives a string, then the proposal searches for the first template record whose name contains the string passed.</li><li>• <b>NULL.</b> Uses the default template. This is default value.</li></ul>

## Used With

To use this method, you can use a *BusComp.InvokeMethod* call with the following interfaces:

- Browser Script
- COM Data Control
- COM Data Server
- Siebel Java Data Bean
- Mobile Web Client Automation Server
- Server Script

## GetFile Method for a Business Component

The GetFile method gets a file from the Siebel file system and places that file in the local file system on the Siebel Server or the Siebel client. This method returns one of the following values:

- **Operation succeeded.** Returns a string that contains `Success`, `OutFilePath` .

where:

`OutFilePath` is the fully qualified path to the file that resides in the user temp folder on the Siebel client or on the Siebel Server.

- **Operation failed.** Returns a string that contains `Error`.

## Format

`BusComp.InvokeMethod("GetFile", KeyFieldName)`

The following table describes the arguments for the GetFile method.

Argument	Description
KeyFieldName	The name of the business component field that contains the file name. For example, <code>AccttFileName</code> in the Account Attachment business component.

## Usage for the GetFile Method

The record pointer must point to the record you seek. If necessary, you must query for the record ID, using the `NextRecord` method to advance through the returned set of records until the record pointer points to the record you seek.

## Used With

To use this method, you can use a `BusComp.InvokeMethod` call with the following interfaces:

- COM Data Control
- COM Data Server
- Siebel Java Data Bean
- Mobile Web Client Automation Server
- Server Script

## Examples

The following example uses Siebel VB:

```
Dim RetValue as String
Dim fileBC as BusComp

'Instantiate fileBC as the appropriate attachment business component
'Query for the required attachment record

RetValue = fileBC.InvokeMethod ("GetFile", "AccntFileName")
```

The following example uses Siebel eScript:

```
var RetValue;
var fileBC;

// Instantiate fileBC as the appropriate attachment business component
// Query for the required attachment record

var RetValue = fileBC.InvokeMethod("GetFile", "AccntFileName");
```

The following example uses COM Data Control:

```
Dim errCode as Integer
Dim Args as String
Dim RetValue as String
Dim fileBC as BusComp

'Instantiate fileBC as the appropriate attachment business component
'Query for the required attachment record

Args = "AccntFileName"
RetValue = fileBC.InvokeMethod ("GetFile", Args, errCode)
```

## PutFile Method for a Business Component

The `PutFile` method updates a file in the Siebel file system with a newer file. This method returns one of the following values:

- **Success.** The operation succeeded.
- **Error.** The operation did not succeed.

### Format

`BusComp.InvokeMethod("PutFile", SrcFilePath, KeyFieldName)`

The following table describes the arguments for the `PutFile` method.



Argument	Description
SrcFilePath	The fully qualified path to the file on the Siebel Server or the Siebel client.
KeyFieldName	The name of the field in the business component that identifies the file name. For example, AccntFileName in the Account Attachment business component.

## Usage

Usage for the PutFile method is similar to usage for the GetFile method. For more information, see *Usage for the GetFile Method* in [GetFile Method for a Business Component](#).

After Siebel CRM uses the PutFile method to save a file attachment, you must make sure it calls the WriteRecord method so that the updated attachment is visible in the Siebel client. For more information, see [WriteRecord Method for a Business Component](#).

## Used With

To use this method, you can use a *BusComp.InvokeMethod* call with the following interfaces:

- COM Data Control
- COM Data Server
- Siebel Java Data Bean
- Mobile Web Client Automation Server
- Server Script

## Examples

The following example uses Siebel VB:

```
Dim RetValue as String
Dim fileBC as BusComp

'Instantiate fileBC to the appropriate attachment business component
'Query for the attachment record to be updated

RetValue = fileBC.InvokeMethod ("PutFile", "c:\Demo\Image.bmp", "AccntFileName")
fileBC.WriteRecord
```

The following example uses Siebel eScript:

```
var RetValue;
var fileBC;

// Instantiate fileBC to the appropriate attachment business component
// Query for the attachment record to be updated

RetValue = fileBC.InvokeMethod("PutFile", "c:\\Demo\\Image.bmp", "AccntFileName");
fileBC.WriteRecord();
```

The following example uses COM Data Control:

```
Dim errCode as Integer
Dim Args(1) as String
Dim RetValue as String
Dim fileBC as BusComp
```

```
'Instantiate fileBC to the appropriate attachment business component  
'Query for the attachment record to be updated  
  
Args(0) = "C:\Demo\Image.bmp"  
Args(1) = "AcctFileName"  
RetVal = fileBC.InvokeMethod ("PutFile", Args, errCode)  
fileBC.WriteRecord
```

## RefreshBusComp Method for a Business Component

The RefreshBusComp method runs the current query again for a business component and makes the record that was previously active the active record. The user can see that Siebel CRM updated the view but the same record remains highlighted in the same position in the list applet. This method does not return any information.

### Format

BusComp.InvokeMethod("RefreshBusComp")

No arguments are available.

### Used With

To use this method, you can use a BusComp.InvokeMethod call with the following interfaces:

- Browser Script
- COM Data Control
- COM Data Server
- Siebel Java Data Bean
- Mobile Web Client Automation Server
- Server Script

This method only works with a business component that uses the CSSBCBase class.

## RefreshRecord Method for a Business Component

The RefreshRecord method updates the currently highlighted record, including updating business component fields in the Siebel client. It positions the cursor on the highlighted record. It does not update other records that are currently available in the Siebel client. This method does not return any information.

### Format

retVal = BusComp.InvokeMethod("RefreshRecord")

No arguments are available.

### Used With

To use this method, you can use a BusComp.InvokeMethod call with the following interfaces:

- Browser Script
- COM Data Control
- Siebel Java Data Bean
- Mobile Web Client Automation Server

- Server Script

This method only works with a business component that uses the CSSBCBase class.

## SetAdminMode Method for a Business Component

The SetAdminMode method can enable or disable visibility rules for a business component. It sets the Admin property of a view. This method does not return any information.

### Format

```
BusComp.InvokeMethod("SetAdminMode", flag)
```

The following table describes the arguments for the SetAdminMode method.

Argument	Description
flag	You can use one of the following values: <ul style="list-style-type: none"><li>• <b>TRUE.</b> Siebel CRM calls the business component in Admin mode.</li><li>• <b>FALSE.</b> Siebel CRM does not call the business component in Admin mode.</li></ul>

### Used With

To use this method, you can use a BusComp.InvokeMethod call with the following interfaces:

- COM Data Control
- COM Data Server
- Siebel Java Data Bean
- Mobile Web Client Automation Server
- Server Script

## Business Component Events

This topic describes business component events. It includes the following topics:

- *Monitoring Modifications That the User Makes to a Multivalue Field*
- *BusComp\_Associate Event*
- *BusComp\_ChangeRecord Event*
- *BusComp\_CopyRecord Event*
- *BusComp\_DeleteRecord Event*
- *BusComp\_InvokeMethod Event*
- *BusComp\_NewRecord Event*
- *BusComp\_PreAssociate Event*
- *BusComp\_PreCopyRecord Event*

- *BusComp\_PreDeleteRecord Event*
- *BusComp\_PreGetFieldValue Event*
- *Bus Comp\_PreInvokeMethod Event*
- *BusComp\_PreNewRecord Event*
- *BusComp\_PreQuery Event*
- *BusComp\_PreSetFieldValue Event*
- *BusComp\_PreWriteRecord Event*
- *BusComp\_Query Event*
- *BusComp\_SetFieldValue Event*
- *BusComp\_WriteRecord Event*

You can use these events only on the Siebel Server, except for the PreSetFieldValue event, which you can use only on the browser.

You can call an event from a data operation on a business component. You define these events for each business component. You can call an event before or after Siebel CRM performs the predefined behavior.

## Monitoring Modifications That the User Makes to a Multivalue Field

To monitor modifications the user makes to a multivalue field, you must use the multivalue group business component.

If the user uses the multivalue group applet to modify a value in a multivalue field, then Siebel CRM calls the PreSetFieldValue event and the SetFieldValue event for the field. It does not call any event on the parent business component.

If the user does not use the multivalue group applet to modify a value in a multivalue field, then Siebel CRM does not start the PreSetFieldValue event or the SetFieldValue event for the field. The only time Siebel CRM starts these events is if the user updates the field in the multivalue group applet.

## BusComp\_Associate Event

If the user adds a business component record to create an association, then Siebel CRM calls the BusComp\_Associate event. This method does not return any information.

### Format

BusComp\_Associate

No arguments are available.

### Usage

The usage for the BusComp\_Associate event is the same as the usage for the Bus Comp\_NewRecord event. For more information, see *BusComp\_NewRecord Event*.

### Used With

Server Script

## BusComp\_ChangeRecord Event

If a business component record becomes the current record, then Siebel CRM calls the BusComp\_ChangeRecord event. This method does not return any information.

## Format

### BusComp\_ChangeRecord

No arguments are available.

## Usage

Siebel CRM runs code in the ChangeRecord event handler each time the active record changes. To allow smooth scrolling in a list applet, you must avoid lengthy operations in this event handler.

## Used With

Server Script

## Examples

The Siebel VB example in this topic uses subprograms in the declarations section of the general section to set up an audit trail for service requests. This example uses the ChangeRecord event handler to initialize the values from the service record so that Siebel CRM can compare them with current values:

```
(general)
(declarations)
Option Explicit
Dim OldClosedDate, OldCreated, OldOwner, OldOwnerGroup
Dim OldSeverity, OldSource, OldStatus
Declare Sub CreateAuditRecord
Declare Sub InitializeOldValues

Sub CreateAuditRecord (FieldName As String, NewValue As String, OldValue As String,
ChangedText As String)

    Dim ActionBC As BusComp
    Dim CurrentBO As BusObject
    Dim theSRNumber

    Set CurrentBO = TheApplication.GetBusObject("Service Request")
    Set ActionBC = CurrentBO.GetBusComp("Action")
    theSRNumber = GetFieldValue("SR Number")

    With ActionBC
        .ActivateField "Activity SR Id"
        .ActivateField "Description"
        .ActivateField "Private"
        .ActivateField "Service request id"
        .ActivateField "Type"
        .NewRecord NewAfter

        .SetFieldValue "Activity SR Id", theSRNumber
        .SetFieldValue "Description", ChangedText
        .SetFieldValue "Private", "Y"
        .SetFieldValue "Type", "Administration"
        .WriteRecord
    End With
End Sub

Sub InitializeOldValues
    OldClosedDate = GetFieldValue("Closed Date")
    OldOwner = GetFieldValue("Owner")
    OldSeverity = GetFieldValue("Severity")
    If GetFieldValue("Severity") <> OldSeverity Then
        NewValue = GetFieldValue("Severity")
        ChangedText = "Changed Priority from " + OldSeverity + _
```

```
" to " + NewValue
CreateAuditRecord "Severity", NewValue, OldSeverity, _
ChangedText
End If
End Sub

Sub BusComp_ChangeRecord
InitializeOldValues
End Sub
```

## BusComp\_CopyRecord Event

If the user copies a business component record, and if the user makes this record the active record, then Siebel CRM calls the BusComp\_CopyRecord event. This method does not return any information.

### Format

BusComp\_CopyRecord

No arguments are available.

### Usage

If a new record is created in one of the following ways, then Siebel CRM calls the BusComp\_CopyRecord method instead of the BusComp\_NewRecord method:

- Siebel CRM creates a new record through one of the following:
  - BusComp.NewRecord NewAfterCopy
  - BusComp.NewRecord NewBeforeCopy
- A user uses a copy record feature in the Siebel Client. For example, if the user chooses the Copy Record menu item from the Edit menu, or presses CTRL+B.

### Used With

Server Script

## BusComp\_DeleteRecord Event

If the user deletes a business component record, then Siebel CRM calls the BusComp\_DeleteRecord event. The fields of the deleted record are no longer available. This method does not return any information.

### Format

BusComp\_DeleteRecord

No arguments are available.

### Usage for the BusComp\_DeleteRecord Event

Siebel CRM does not start the BusComp\_PreDeleteRecord event or the BusComp\_DeleteRecord event for a child record that it deletes according to the Cascade Delete property on a link. For performance reasons, Siebel CRM performs these deletes directly in the data layer. Siebel CRM calls script events from the object layer, so it does not run them.

### Used With

Server Script

## BusComp\_InvokeMethod Event

If Siebel CRM calls the InvokeMethod method on a business component, then it also calls the BusComp\_InvokeMethod event. This method does not return any information.

### Format

BusComp\_InvokeMethod(methodName)

The arguments you can use with this format are the same as the arguments described in [WebApplet\\_InvokeMethod Event](#).

### Usage

If you call a specialized method on a business component, or if you call the InvokeMethod method explicitly on a business component, then Siebel CRM calls the BusComp\_InvokeMethod event. For more information, see [About Specialized and Custom Methods](#).

### Used With

Server Script

## BusComp\_NewRecord Event

If the user creates a business component record, and if the user makes this record the active record, then Siebel CRM calls the BusComp\_NewRecord event. You can use this event to set up default values for a field. This method does not return any information.

### Format

BusComp\_NewRecord

No arguments are available.

### Usage

If a new record is created in one of the following ways, then Siebel CRM calls the BusComp\_CopyRecord method instead of the BusComp\_NewRecord method:

- Siebel CRM creates a new record using one of the following formats:
  - BusComp.NewRecord NewAfterCopy
  - BusComp.NewRecord NewBeforeCopy
- A user uses a copy record feature in the Siebel client. For example, the user chooses the Copy Record menu item from the Edit menu, or presses CTRL+B.

### Used With

Server Script

### Examples

For an example, see [Pick Method for a Business Component](#).

## BusComp\_PreAssociate Event

If Siebel CRM detects that the user is about to add a business component record to create an association, then it calls the BusComp\_PreAssociate event before it adds the record. This method returns ContinueOperation or CancelOperation. For more information, see *Caution About Using the Cancel Operation Event Handler*.

### Format

BusComp\_PreAssociate

No arguments are available. The format is the same as for BusComp\_PreNewRecord event. For more information, see *BusComp\_PreNewRecord Event*.

### Used With

Server Script

## BusComp\_PreCopyRecord Event

If Siebel CRM detects that the user is about to copy a business component record, then it calls the BusComp\_PreCopyRecord event before it copies the record. You can use this event to perform precopy validation. This method returns ContinueOperation or CancelOperation. For more information, see *Caution About Using the Cancel Operation Event Handler*.

### Format

BusComp\_PreNewRecord

No arguments are available.

### Used With

Server Script

## BusComp\_PreDeleteRecord Event

If Siebel CRM detects that the user is about to delete a business component record, then it calls the BusComp\_PreDeleteRecord event. You can use this event to prevent the deletion or to perform any actions before Siebel CRM deletes the record. This method returns ContinueOperation or CancelOperation. For more information, see *Caution About Using the Cancel Operation Event Handler*.

### Format

BusComp\_PreDeleteRecord

No arguments are available.

### Usage

Usage for the BusComp\_PreDeleteRecord event is the same as usage for the BusComp\_DeleteRecord event. For more information, see *Usage for the BusComp\_DeleteRecord Event* in *BusComp\_DeleteRecord Event*.

### Used With

Server Script



## Examples

The following Siebel VB example prevents the deletion of an account that includes associated opportunities:

```
(general)
(declarations)
Option Explicit

Function BusComp_PreDeleteRecord As Integer
    Dim oBC as BusComp
    Dim oBO as BusObject
    Dim sAcctRowId as string

    sAcctRowId = me.GetFieldValue("Id")
    set oBO = TheApplication.GetBusObject("Opportunity")
    set oBC = oBO.GetBusComp("Opportunity")

    With oBC
        .SetViewMode AllView
        .ClearToQuery
        .SetSearchSpec "Account Id", sAcctRowId
        .ExecuteQuery ForwardOnly
        If (.FirstRecord = 1) Then
            RaiseErrorText("Opportunities exist for the Account - _
Delete is not allowed")
        End If
    End With

    BusComp_PreDeleteRecord = ContinueOperation

    Set oBC = Nothing
    Set oBO = Nothing

End Function
```

## BusComp\_PreGetFieldValue Event

If a user accesses a business component field, then Siebel CRM calls the BusComp\_PreGetFieldValue event. This method returns the field name and field value that exists before Siebel CRM displays the field. It also returns ContinueOperation or CancelOperation. For more information, see [Caution About Using the Cancel Operation Event Handler](#).

### Format

BusComp\_PreGetFieldValue(Fieldname, FieldValue)

The following table describes the arguments for the BusComp\_PreGetFieldValue event.

Argument	Description
FieldName	String that contains the name of the field that the user accessed.
FieldValue	String that contains the value of the field that the user accessed.

## Usage

Siebel CRM calls the `BusComp_PreGetFieldValue` event in the following situations:

- At least one time for each user interface element that displays the value for a business component field
- Every time it updates the Siebel client
- As a result of other internal uses

## Improving Performance when Calling the `BusComp_PreGetFieldValue` Method

Siebel CRM runs any script that is attached to this event very frequently. It even calls empty scripts. These calls might cause a Siebel application appear to be unresponsive.

## To improve performance when calling the `BusComp_PreGetFieldValue` method

- Remove scripts from the `BusComp_PreInvokeMethod` event that you do not require:
  - a. In Siebel Tools, open a script you do not require.
  - b. Delete the entire contents of the script, including the following content:
    - In Siebel VB, delete the Function statement and the End Function statement.
    - In Siebel eScript, delete the function () statement and the {} function statement.
  - c. Repeat these steps for all other scripts you do not require.

## Used With

Server Script

## `BusComp_PreInvokeMethod` Event

If Siebel CRM calls a specialized method on a business component, then it calls the `BusComp_PreInvokeMethod` event before it calls this specialized method. The `BusComp_PreInvokeMethod` event returns `ContinueOperation` or `CancelOperation`. For more information, see [About Specialized and Custom Methods](#), and [Caution About Using the Cancel Operation Event Handler](#).

## Format

`BusComp_PreInvokeMethod(methodName)`

The arguments you can use with this format are the same as the arguments described in [WebApplet\\_InvokeMethod Event](#).

## Used With

Server Script

## `BusComp_PreNewRecord` Event

If Siebel CRM detects that the user is about to create a new business component record, then it calls the `BusComp_PreNewRecord` event before it creates the record. You can use this event to perform preinsert validation. This method returns `ContinueOperation` or `CancelOperation`. For more information, see [Caution About Using the Cancel Operation Event Handler](#).

## Format

BusComp\_PreNewRecord

No arguments are available.

## Used With

Server Script

## BusComp\_PreQuery Event

Siebel CRM calls the BusComp\_PreQuery event before it runs a query. This method returns ContinueOperation or CancelOperation. For more information, see *Caution About Using the Cancel Operation Event Handler*.

## Format

BusComp\_PreQuery

No arguments are available.

## Usage

To modify the search criteria or to restrict Siebel CRM from running certain queries, you can use the BusComp\_PreQuery event.

## Used With

Server Script

## Examples

The following example is in Siebel VB:

```
Function BusComp_PreQuery() As Integer
    Dim strPosition As String
    Dim strSearchSpec As String
    Dim intReturn As Integer
    intReturn = ContinueOperation
    strPosition = TheApplication.PositionName
    strSearchSpec = Me.GetSearchSpec("Owned By")
    If strPosition <> "System Administrator" Then
        if Len(strSearchSpec) = 0 or InStr(strSearchSpec,
            strPosition) = 0 Then
            Me.SetSearchSpec "Owned By", strPosition
        end if
    End if
    BusComp_PreQuery = intReturn
End Function
```

## BusComp\_PreSetFieldValue Event

Siebel CRM calls the BusComp\_PreSetFieldValue event in the following situations:

- After the user modifies a field value in the Siebel client and then attempts to leave the field
- A call to the SetFieldValue method occurs, but before it performs any field-level validation

This event allows you to use custom validation before Siebel CRM applies predefined validation. This method returns ContinueOperation or CancelOperation. For more information, see *Caution About Using the Cancel Operation Event Handler*.

## Format

BusComp\_PreSetFieldValue(Fieldname, FieldValue)

The arguments you can use with this format are the same as the arguments described in [Applet\\_ChangeFieldValue Event](#).

## Usage

If your script returns CancelOperation for a field, then Siebel CRM does not enter data for this field. However, Siebel CRM still starts BusComp\_PreSetFieldValue for the other fields that the picklist uses to enter data. For more information, see [Caution About Using the Cancel Operation Event Handler](#).

If a user uses a picklist to enter data for multiple fields, then it starts the BusComp\_PreSetFieldValue method for each field that the user uses to enter data. For example, in an applet that the user accesses to enter data for the Last Name, First Name, and Contact ID. In this example, Siebel CRM starts the BusComp\_PreSetFieldValue method three times, one time for each field.

Siebel CRM does not call the BusComp\_PreSetFieldValue event on a picklist or multivalue field.

## Usage With Roundtrips

Siebel CRM does the following during a roundtrip to the Siebel Server:

- In Browser Script, if the Immediate Post Changes property of the business component field is set to TRUE, then it calls the BusComp\_PreSetFieldValue method after the round trip to the Siebel Server completes.
- In Server Script, it calls the BusComp\_PreSetFieldValue method as the first event in the Siebel Server round trip.

To prevent infinite recursions, if the BusComp\_PreSetFieldValue event is running, then Siebel CRM does not run it again for the same business component instance, even if Siebel CRM uses it on a different field in the business component.

## Used With

Browser Script, Server Script

## Examples

The following Siebel VB example uses the PreSetFieldValue event to determine if a quote discount is greater than 20 percent, and to take the appropriate action if it is. For other examples of BusComp\_PreSetFieldValue, see [LoginId Method for an Application](#), and [ExecuteQuery Method for a Business Component](#):

```
Function BusComp_PreSetFieldValue (FieldName As String,  
    FieldValue As String) As Integer  
    'code to check if a quote discount>20%  
    'if it is, notify user and cancel operation  
    Dim value as Integer  
    Dim msgtext as String  
    If FieldName = "Discount" then  
        value = Val(FieldValue)  
        If value > 20 then  
            msgtext = "Discounts greater than 20% must be approved"  
            RaiseError msgtext  
            BusComp_PreSetFieldValue = CancelOperation  
        Else  
            BusComp_PreSetFieldValue = ContinueOperation  
        End if  
    End If  
End Function
```

The following is the equivalent example in Siebel eScript:

```
function BusComp_PresetFieldValue (FieldName, FieldValue)
{
  var msgtext = "Discounts greater than 20% must be approved";
  if (FieldName == "Discount")
  {
    if (FieldValue > 20)
    {
      TheApplication().RaiseErrorText(msgtext);
    }
    else
    {
      return (ContinueOperation);
    }
  }
  else
  {
    return (ContinueOperation);
  }
}
```

## BusComp\_PreWriteRecord Event

Siebel CRM calls the BusComp\_PreWriteRecord event before it writes a record to the Siebel database. This method returns ContinueOperation or CancelOperation. For more information, see *Caution About Using the Cancel Operation Event Handler*.

### Format

BusComp\_PreWriteRecord

No arguments are available.

### Usage

For important caution information, see *Caution for Using an Error Method with a Write Record Event in BusComp\_WriteRecord Event*.

You can use this event to perform any final validation before Siebel CRM performs any predefined internal record-level validation.

Siebel CRM starts the BusComp\_PreWriteRecord event only if the user modifies or inserts a field value, or if the user deletes a record. If the user deletes a record, then Siebel CRM calls the BusComp\_PreWriteRecord method to delete the implied join that joins any records to the initial record.

## Using a Write Record Event with a Multivalue Group

If Siebel CRM associates a multivalue group record that uses a many to many relationship with the business component that calls the association, then it starts the BusComp\_PreWriteRecord event and the BusComp\_WriteRecord event. It starts these events even if the association does not update any fields in the multivalue group business component or in the calling business component. It runs the BusComp\_PreWriteRecord event and the BusComp\_WriteRecord event to acknowledge the update to the intersection table.

### Used With

Server Script

## Examples

The following example calls the BusComp\_PreWriteRecord event:

```
Function BusComp_PreWriteRecord As Integer

' This code resets the probability before the write
' if necessary

if Me.GetFieldValue("Sales Stage") LIKE "07*" then
' Resets the Probability to 75 if less than 75
if Val(Me.GetFieldValue("Rep %")) < 75 then
Me.SetFieldValue "Rep %", "75"
end If
end if

BusComp_PreWriteRecord = ContinueOperation
End Function
```

## BusComp\_Query Event

Siebel CRM calls the BusComp\_Query event after it completes a query but before it displays the query results. This event does not return any information.

### Format

BusComp\_Query

No arguments are available.

### Used With

Server Script

## Examples

In the following Siebel VB example, the Action business component uses a special activity type. If the user starts an account query, then this code determines if important information is available. If it is available, then Siebel CRM displays it in a message box:

```
Sub BusComp_Query

Dim oBusObj As BusObject, oCurrFinAct As BusComp,
Dim oActivities as BusComp, oAppl as Applet
Dim sName as String, sDescription as String

On error goto leave

set oBusObj = TheApplication.ActiveBusObject
Set oCurrFinAct = TheApplication.ActiveBusComp

If oCurrFinAct.FirstRecord <> 0 then
sName = oCurrFinAct.GetFieldValue("Name")
Set oActivities = oBusObj.GetBusComp("Finance _
Important Info Activity")
With oActivities
.ActivateField("Description")
.ClearToQuery
.SetSearchSpec "Account Name", sName
.SetSearchSpec "Type", "Important Info"
.ExecuteQuery ForwardOnly
If .FirstRecord <> 0 then
sDescription = .GetFieldValue("Description")

```

```
TheApplication.Trace("Important Information: " + sDescription)
do while .NextRecord <> 0
sDescription = .GetFieldValue("Description")
TheApplication.Trace("Important Information: " + sDescription)
loop
End If
End With
End If

leave:

Set oCurrFinAct = Nothing
set oBusObj = Nothing

End Sub
```

## BusComp\_SetFieldValue Event

If Siebel CRM sends a value to a business component from the Siebel client or through a call to the SetFieldValue method, then it calls the BusComp\_SetFieldValue event. It does not call this event for a predefaulted field or for a calculated field. This event does not return any information.

### Format

BusComp\_SetFieldValue(Field Name)

The arguments you can use in this format are the same as the arguments described in *ActivateField Method for a Business Component*.

### Used With

Server Script

### Examples

In the following Siebel VB example, if Siebel CRM calls the SetFieldValue event, then it calls methods on an existing business component:

```
Sub BusComp_SetFieldValue (FieldName As String)
Dim desc As String
Dim newDesc As String
If FieldName = "Type" Then
newDesc = [can be any valid string that contains the new description]
desc = GetFieldValue("Description")
SetFieldValue "Description", newDesc
End If
End Sub
```

The following is the equivalent example in Siebel eScript:

```
function BusComp_SetFieldValue (FieldName)
{
if (FieldName == "Type" && GetFieldValue(FieldName) == "Account")
{
SetFieldValue("Description", "Record is of Type 'Account'." );
}
}
```

## BusComp\_WriteRecord Event

Siebel CRM starts the BusComp\_WriteRecord event after it saves the record to the Siebel database. This event does not return any information.

## Format

BusComp\_WriteRecord

No arguments are available.

## Usage

Do not use the BusComp\_SetFieldValue event in a BusComp\_WriteRecord event. If you must use the BusComp\_SetFieldValue event, then use it in the BusComp\_PreWriteRecord event. For more information, see *BusComp\_PreWriteRecord Event*.

For information about using the BusComp\_WriteRecord event with a multivalue group, see *Using a Write Record Event with a Multivalue Group* in *BusComp\_PreWriteRecord Event*.

## Caution for Using an Error Method with a Write Record Event

**CAUTION:** Be careful if you use the RaiseError method or the RaiseErrorText method in the BusComp\_WriteRecord event or in the BusComp\_PreWriteRecord event. For example, if you use the RaiseErrorText method in the BusComp\_PreWriteRecord method, then the user or the code cannot step off the current record until the condition that causes Siebel CRM to call the RaiseErrorText method is addressed.

## Used With

Server Script

# Business Object Methods

This topic describes business object methods. It includes the following topics:

- *GetBusComp Method for a Business Object*
- *GetLastErrCode Method for a Business Object*
- *GetLastErrText Method for a Business Object*
- *Name Method for a Business Object*
- *Release Method for a Business Object*

In this topic, the term *oBusObj* indicates a variable that contains a BusObject.

## GetBusComp Method for a Business Object

The GetBusComp method returns the name of a business component instance. If an instance of the business component that the BusCompName argument specifies:

- Exists, then the GetBusComp method returns the name of that instance.
- Does not exist, then the interpreter starts a new business component instance, and then the GetBusComp method returns the name of this instance.

## Format

*oBusObj*.GetBusComp (BusCompName)

The following table describes the arguments for the GetBusComp method.



Argument	Description
BusCompName	String that contains the name of a business component.

The BusCompName argument is case-sensitive. It must match the case of the name that Siebel Tools displays in the Name property of the business component.

## Usage

If a business component instance exists but you must create a new instance, then you can do the following:

1. Use the GetBusObject method to create a new business object instance.
2. For this new business instance, use the GetBusComp method to create a new business component. These steps create a new business component instance that is different from the business component instance that already exists.

If you use a business object instance that already exists, then your configuration includes any other business components that reference that business object instance, even if you use the GetBusComp method.

If you no longer require the business component instance, then use one of the following keywords:

- In Siebel VB, use Nothing ().
- In Siebel eScript or Browser Script, use null ().

In Browser Script, the GetBusComp method can only access business component instances in the current view. In Server Script, the GetBusComp method can access every business component instance that exists in the active business object.

## Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Server Script

## Examples

The following examples are in Siebel eScript:

- To access a business component in a UI context:  

```
var ActiveBO = TheApplication().ActiveBusObject();  
var ConBC = ActiveBO.GetBusComp("Contact");
```
- To access a business component in a nonUI context:  

```
var BO = TheApplication().GetBusObject("Account");  
var ConBC = BO.GetBusComp("Contact");
```

## GetLastErrCode Method for a Business Object

The GetLastErrCode method returns the error code for the error that Siebel CRM logged most recently. This code is a short integer. 0 (zero) indicates no error.

## Format

oBusObj.GetLastErrCode

No arguments are available.

### Usage

For more information, see *Usage for the GetLastErrCode Method* in [GetLastErrCode Method for an Application](#).

### Used With

COM Data Control, Mobile Web Client Automation Server

## GetLastErrText Method for a Business Object

The GetLastErrText method returns a string that contains the text message for the error that Siebel CRM logged most recently.

### Format

`oBusObj.GetLastErrText`

No arguments are available.

### Usage

For more information, see *Usage for the GetLastErrText Method* in [GetLastErrText Method for an Application](#).

### Used With

COM Data Control, Mobile Web Client Automation Server

## Name Method for a Business Object

The Name method returns a string that contains the name of a business object.

### Format

`oBusObj.Name`

No arguments are available.

### Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

For an example, see [Name Method for a Business Component](#).

## Release Method for a Business Object

The Release method for a business object releases a business object and the resources for this business object on the Siebel Server. This method does not return any information.

### Format

`oBusObj.release()`

No arguments are available.

## Used With

Siebel Java Data Bean

## Examples

The following example is for Siebel Java Data Bean:

```
import com.siebel.data.*;
{
...

// create Siebel Java Data Bean
SiebelDataBean Sieb_dataBean = null;
Sieb_dataBean = new SiebelDataBean();

// log in to Siebel Java Data Bean

...

// Create Siebel Bus Object.
// get the Bus Object from SiebelDataBean
SiebelBusObject busObj = null;
busObj = Sieb_dataBean.getBusObject("Account");

...

// Use the business Object
// Release the business object resources

...

busObj.release();
}
```

## Business Service Methods

This topic describes business service methods. It includes the following topics:

- *GetFirstProperty Method for a Business Service*
- *GetNextProperty Method for a Business Service*
- *GetProperty Method for a Business Service*
- *InvokeMethod Method for a Business Service*
- *Name Method for a Business Service*
- *PropertyExists Method for a Business Service*
- *Release Method for a Business Service*
- *RemoveProperty Method for a Business Service*
- *SetProperty Method for a Business Service*

In this topic, the oService variable identifies a business service instance.

## GetFirstProperty Method for a Business Service

The GetFirstProperty method returns a string that contains the name of the first property that is defined for a business service.

### Format

oService.GetFirstProperty()

No arguments are available.

### Usage for a Method that Gets a Business Service Property

The order that Siebel CRM uses to store properties in a property set is random. For example, the Name property is the first property that Siebel Tools displays in the Business Services list for every business service. However, the GetFirstProperty method might return any business service property, not necessarily the Name property. To correct this situation it is recommended that you add the properties in a property set to an array, and then sort that array.

To get or modify a property value, you can do the following:

1. Use the GetFirstProperty method or GetNextProperty method to return the name of a property.
2. Use the name you returned in the preceding step in one of the following ways:
  - To return a property value, as an argument in the GetProperty method.
  - To set a property value, as an argument in the SetProperty method.

For more information, see the following topics:

- [GetNextProperty Method for a Business Service](#)
- [GetProperty Method for a Business Service](#)
- [SetProperty Method for a Business Service](#)

### Used With

Browser Script, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Example of Using Methods that Return a Business Service Property

The example in this topic returns the number of property sets that belong to a business service.

The following example is in Siebel eScript:

```
function countPropSets(busService)
{
    var propSetName = busService.GetFirstProperty();
    var count = 0;

    while(propSetName != "")
    {
        count++;
        propSetName = busService.GetNextProperty();
    }

    return count;
}
```

The following example is for Siebel Java Data Bean:

```
public int countPropSets(SiebelService busService)
```

```
{
    int count = 0;
    try
    {
        String propSetName = busService.getFirstProperty();
        while(propSetName != "")
        {
            count++;
            propSetName = busService.getNextProperty();
        }

    }

    catch(SiebelException sExcept)
    {
        return 0;
    }

    return count;
}
```

## GetNextProperty Method for a Business Service

The `GetNextProperty` method returns a string that contains the name of the next property of a business service. If no more properties exist, then this method returns an empty string.

### Format

`oService.GetNextProperty()`

No arguments are available.

### Usage for the GetNextProperty Method

After you call the `GetFirstProperty` method to return the name of the first property of a business service, you can call the `GetNextProperty` to return the name of the next property. This next property is the next property that is defined for a business service after the first property.

You can use the `GetNextProperty` consecutively to cycle through all the properties of a business service until no more properties exist, at which point Siebel CRM returns an empty string.

Usage for the `GetNextProperty` is similar to usage for the `GetFirstProperty` method. For more information, see *Usage for a Method that Gets a Business Service Property* in [GetFirstProperty Method for a Business Service](#).

### Used With

Browser Script, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

For examples, see *Example of Using Methods that Return a Business Service Property* in [GetFirstProperty Method for a Business Service](#).

## GetProperty Method for a Business Service

The `GetProperty` method returns a string that contains the value of a property. If the property does not exist, then this method returns `NULL`.

## Format

oService.GetProperty(propName)

The following table describes the arguments for the GetProperty method.

Argument	Description
propName	A string that contains the name of the property that Siebel CRM returns.

## Usage

To return the value for this property you must know the name of the property. To return a property name, use the GetFirstProperty method or the GetNextProperty method. For more information, see *Usage for a Method that Gets a Business Service Property* in [GetFirstProperty Method for a Business Service](#).

## Used With

Browser Script, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## InvokeMethod Method for a Business Service

The InvokeMethod method calls a method on a business service. This method can be a specialized method or a custom method. For more information, see [About Specialized and Custom Methods](#). This method does not return any information.

## Siebel eScript Format

oService.InvokeMethod(methodName, InputArguments, OutputArguments)

The following table describes the arguments for the Siebel eScript format of the InvokeMethod method.

Argument	Description
methodName	A string that contains the name of the method that Siebel CRM must run.
InputArguments	A property set that identifies the arguments that the method uses as input.
OutputArguments	A property set that identifies the arguments that the method returns as output.

## Siebel VB Format

oService.InvokeMethod methodName, InputArguments, OutputArguments

The arguments you use in this format are the same as the arguments that are described for the Siebel eScript format.

## Browser Script Format

outputPropSet=Service.InvokeMethod(MethodName, inputPropSet)

The arguments you use with this format are the same as the arguments described in [Applet\\_InvokeMethod Event](#).

In Browser Script, you cannot use an output property set for this format.

## Usage

A predefined business service works in a way that is similar to how a call to a business component method works. You can call a specialized method on a business service that is not available directly through the object interface.

You must use this method only with Siebel VB or Siebel eScript scripts. You must use Siebel Tools to write these scripts. You can call these scripts from an external interface.

A run-time business service can include a custom method.

Although the `InvokeMethod` function does not return a value, the properties in the `OutputArguments` property set might be modified.

For more information, see *Arguments for the Siebel eScript Format of the InvokeMethod Method* in [InvokeMethod Method for an Applet](#).

## Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Related Topics

For more information, see the following topics:

- [Service\\_InvokeMethod Event](#)
- [Service\\_PreInvokeMethod Event](#)

## Name Method for a Business Service

The `Name` method returns a string that contains the name of a business service.

## Format

`oService.Name`

No arguments are available.

## Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following example is in Browser Script:

```
var svc = theApplication().GetService("Data Quality Manager");
theApplication().SWEAlert("The active service is " + svc.Name());
```

## PropertyExists Method for a Business Service

The PropertyExists method returns one of the following values to indicate if a property exists:

- In Siebel VB, this method returns one of the following integers:
  - **1**. Indicates the property exists.
  - **0 (zero)**. Indicates the property does not exist.
- In other interfaces, this method returns a Boolean value.

### Format

`oService.PropertyExists(propName)`

The following table describes the arguments for the PropertyExists method.

Argument	Description
<code>propName</code>	A string that contains the name of the property.

### Usage

Use the PropertyExists method in an If statement to determine if a specific property is set.

### Used With

Browser Script, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Release Method for a Business Service

The Release method for a business service releases a business service and the resources that this business service uses on the Siebel Server.

### Format

`oBusSvc.release()`

No arguments are available.

### Used With

Siebel Java Data Bean

### Examples

The following example logs in to a Siebel Server. It then creates a business object instance, a business component instance, and a business service instance. Next, it releases them in reverse order.

```
import com.siebel.data.*;
import com.siebel.data.SiebelException;

public class JDBReleaseDemo
{
    private SiebelDataBean m_dataBean = null;
    private SiebelBusObject m_busObject = null;
    private SiebelBusComp m_busComp = null;
```



```
private SiebelService m_busServ = null;

public static void main(String[] args)
{
    JDBReleaseDemo demo = new JDBReleaseDemo();
}

public JDBReleaseDemo()
{
    try
    {

        // instantiate the Siebel Java Data Bean
        m_dataBean = new SiebelDataBean();

        // login to the Siebel Servers
        m_dataBean.login("siebel.tcpip.none.none://gateway:port/enterprise/
object manager","userid","password");
        System.out.println("Logged in to the Siebel Server ");

        // get the business object
        m_busObject = m_dataBean.getBusObject("Account");

        // get the business component
        m_busComp = m_busObject.getBusComp("Account");

        // get the business service
        m_busServ = m_dataBean.getService("Workflow Process Manager");

        //release the business service
        m_busServ.release();
        System.out.println("BS released ");

        //release the business component
        m_busComp.release();

        System.out.println("BC released ");

        //release the business object
        m_busObject.release();
        System.out.println("BO released ");

        // logoff
        m_dataBean.logoff();
        System.out.println("Logged off the Siebel Server ");
    }

    catch (SiebelException e)
    {
        System.out.println(e.getErrorMessage());
    }

}

}
```

## RemoveProperty Method for a Business Service

The RemoveProperty method removes a property from a business service. This method does not return any information.

### Format

oService.RemoveProperty(propName)

The following table describes the arguments for the RemoveProperty method.

Argument	Description
propName	A string that contains the name of the property that Siebel CRM must remove.

### Usage

This method removes the property that the propName argument identifies from the business service that the oService parameter specifies. As a result, a subsequent call to the PropertyExists method for that property returns FALSE. For more information, see *PropertyExists Method for a Business Service*.

### Used With

Browser Script, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## SetProperty Method for a Business Service

The SetProperty method sets a value in the property of a business service. This method does not return any information.

### Format

oService.SetProperty(propName, propValue)

The following table describes the arguments for the SetProperty method.

Argument	Description
propName	A string that contains the name of the property that Siebel CRM must modify.
propValue	A string that contains the value that Siebel CRM sets in the property that the propName argument identifies.

### Usage

You can use the SetProperty method to set the value of a property of a business service from one of the methods of this business service or from an external object. For more information, see *GetProperty Method for a Business Service*.

### Used With

Browser Script, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

For an example, see *Service\_PreInvokeMethod Event*.

## Business Service Events

This topic describes business service events. It includes the following topics:

- [Service\\_InvokeMethod Event](#)
- [Service\\_PreCanInvokeMethod Event](#)
- [Service\\_PreInvokeMethod Event](#)

### Service\_InvokeMethod Event

Siebel CRM calls the `Service_InvokeMethod` event after it calls the `InvokeMethod` method on a business service. This event does not return any information. For more information, see [Service\\_PreInvokeMethod Event](#).

#### Server Script Format

`Service_InvokeMethod(MethodName, InputArguments, OutputArguments)`

The arguments you can use in this format are the same as the arguments that are described in [InvokeMethod Method for a Business Service](#).

#### Browser Script Format

`OutputArguments=oService.InvokeMethod(methodName, InputArguments)`

The following table describes the arguments for the Browser Script format of the `Service_InvokeMethod` Event

Argument	Description
methodName	A string that contains the name of the method that Siebel CRM must run.
InputArguments	A property set that identifies the arguments that the method uses as input.

In Browser Script, you cannot use an output property set for this format.

#### Usage

You can use this event in the following ways:

- **In Server Script.** It can add properties to or modify values of the properties in the property set that the *OutputArguments* argument identifies.
- **In Browser Script.** It cannot modify, store, or update the values of the properties in the output property set.

If you call a business service method through Browser Script, then the business service that this method calls can use a browser or the Siebel Server. Siebel CRM determines if the business service resides in the browser. If the business service does not reside in the browser, then it sends the request to the Siebel Server.

Browser Script can call a business service on the browser or the Siebel Server. Server Script can call only a business service on the Siebel Server.

## Used With

Browser Script, Server Script

## Examples

To handle transactions that are not approved, the following example in Siebel eScript adds custom logic to the predefined Credit Card Transaction Service business service:

```
function Service_InvokeMethod (MethodName, Inputs, Outputs)

if (Outputs.GetProperty("SiebelResponseMessage") != "Approved")

{

    // special handling for failed transactions here

}
```

## Service\_PreCanInvokeMethod Event

Siebel CRM calls the Service\_PreCanInvokeMethod event before it calls the PreInvokeMethod event. This configuration allows you to determine if the user possesses the authority to call a business service method. This method returns CancelOperation or ContinueOperation. For more information, see [Caution About Using the Cancel Operation Event Handler](#).

## Server Script Format

Service\_PreCanInvokeMethod(MethodName, &CanInvoke)

The following table describes the arguments for the Server Script format of the Service\_PreCanInvokeMethod event.

Argument	Description
MethodName	A string that contains the name of the method that Siebel CRM must run.
&CanInvoke	A string that indicates if Siebel CRM can call the business service method. You can use one of the following values: <ul style="list-style-type: none"><li><b>TRUE.</b> Siebel CRM can call the business service method.</li><li><b>FALSE.</b> Siebel CRM cannot call the business service method.</li></ul>

## Browser Script Format

Service\_PreCanInvokeMethod(MethodName)

The arguments you can use with this format are the same as the arguments described in [WebApplet\\_InvokeMethod Event](#).

## Used With

Browser Script, Server Script

## Service\_PreInvokeMethod Event

Siebel CRM calls the Service\_PreInvokeMethod event before it calls a specialized method on a business service. For more information, see *About Specialized and Custom Methods* and *Service\_InvokeMethod Event*.

This method returns ContinueOperation or CancelOperation. For more information, see *Caution About Using the Cancel Operation Event Handler*.

### Server Script Format

Service\_PreInvokeMethod(MethodName, InputArguments, OutputArguments)

The arguments you can use in this format are the same as the arguments that are described in *InvokeMethod Method for a Business Service*.

### Browser Script Format

Service\_PreInvokeMethod(name, inputPropSet)

The arguments you can use in this format are the same as the arguments that are described in *Applet\_InvokeMethod Event*.

### Usage with Server Script

Siebel CRM uses the Server Script version of the Service\_PreInvokeMethod event to perform the following work:

- Performing business logic
- Setting an output in the output property set
- If you use a custom business service, then returning CancelOperation

### Usage with Browser Script

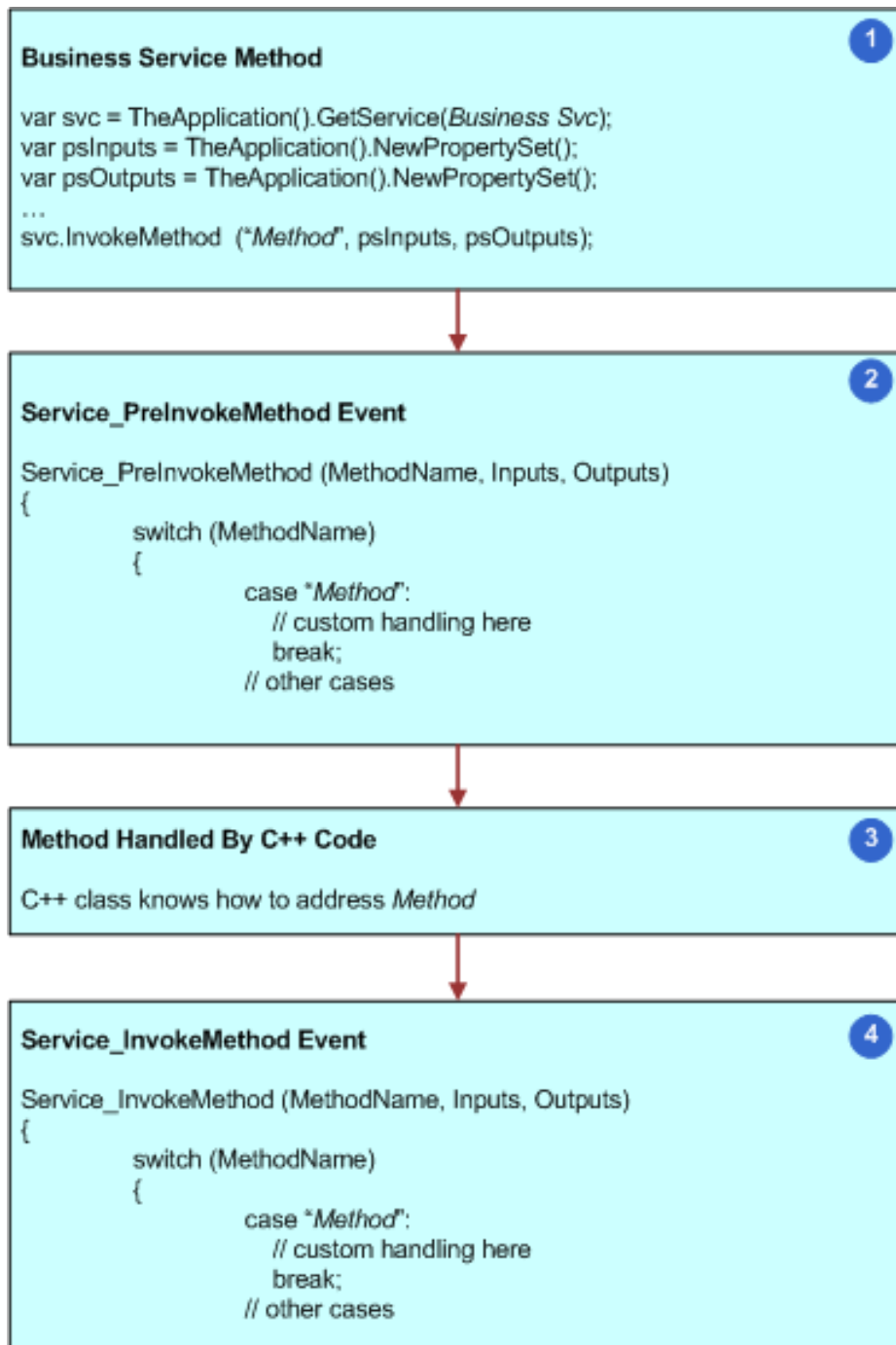
Siebel CRM uses the Browser Script version of the Service\_PreInvokeMethod event to perform the following work:

- Performing a user interaction, such as asking for input data.
- Setting an input property.
- Canceling a user operation. For example, prompting the user to confirm a record deletion.

The Browser Script version is not intended to perform business logic. It does not return an output property set.

### How Siebel CRM Handles a Predefined Business Service Method

The following image illustrates how Siebel CRM handles a predefined business service method.

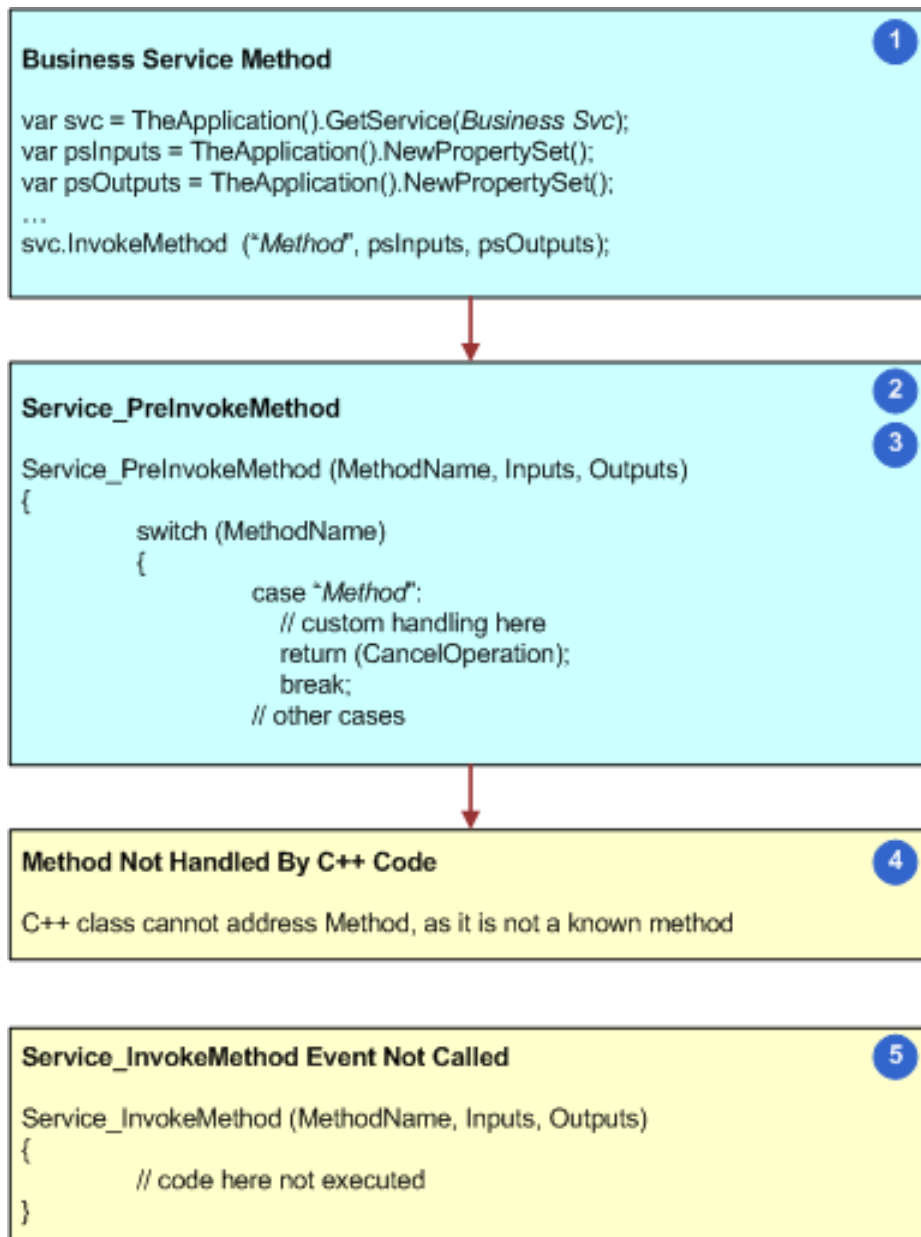


With a predefined business service method, the script can do the following - as shown in the previous image:

1. Call the Business Service Method.
2. In the Service\_PreInvokeMethod event, process the *Method* and perform any necessary custom work before it runs the C++ code.
3. When the C++ code runs, it sets values in the outputs that the service code defines.
4. If the C++ code runs successfully, then the Service\_InvokeMethod event can inspect and modify the output, or perform other tasks depending on the successful completion of the C++ code. At this point, the calling function takes control of the script flow.

## How Siebel CRM Handles a Custom Business Service Method

The following image illustrates how Siebel CRM handles a custom business service method.



With a custom business service method, the script can do the following – as shown in the previous image:

1. Call the Business Service Method.
2. In the Service\_PreInvokeMethod event, process *the method* and take any necessary custom actions.
3. The script must return CancelOperation. This operation configures Siebel CRM to cancel the remaining operations that it associates with the event. If Siebel CRM does not cancel the remaining operations, then the flow continues to the C++ code.

4. This C++ code cannot handle the custom method, so it issues an error that is similar to the following error message:

Unknown method name

5. Siebel CRM cancels the call to the method, so it does not run the Service\_InvokeMethod event.

For more information, see *Caution About Using the Cancel Operation Event Handler*.

## Used With

Browser Script, Server Script

## Examples

The following Siebel VB example sets properties in the custom Shipping Engine business service:

```
Function Service_PreInvokeMethod (MethodName As String, Inputs As PropertySet,
Outputs As PropertySet) As Integer

    If MethodName = "CalculateShipping" Then

        Dim sShipper As String, sShipMethod As String
        Dim dWeight As Double, dSize As Double, dCost As Double
        Dim sZone As String, DelDate As Variant
        Dim sCost As String, iReturn As Integer

        iReturn = ContinueOperation
        sShipper = Inputs.GetProperty("Shipping Company")
        sShipMethod = Inputs.GetProperty("Ship Method")
        dWeight = Val(Inputs.GetProperty("Weight"))
        dSize = Val(Inputs.GetProperty("Volume"))
        iZone = Val(Inputs.GetProperty("Zone"))
        DelDate = DateValue(Now)

        Select Case sShipper
            Case "GlobalEx"
                Select Case sShipMethod
                    Case "Next-Day Air"
                        dCost = 14 + dWeight
                        DelDate = DelDate + 1
                    Case "Second-Day Air"
                        dCost = 11 + (dWeight * .54)
                        DelDate = DelDate + 2
                End Select

            Case "Airline"
                Select Case sShipMethod
                    Case "Next-Day Air"
                        dCost = 5 + (dWeight * .3) + (dSize * .33) + _
                            (Val(sZone) * .5)
                        DelDate = DelDate + 1
                    Case "Second-Day Air"
                        dCost = 4 + (dWeight * .3) + (dSize * .2) + _
                            (Val(sZone) * .3)
                        DelDate = DelDate + 2

                Case "Ground"
                        dCost = 3 + (dWeight * .18) + (dSize * .1) + _
                            (Val(sZone) * .1)
                        DelDate = DelDate + 2 + Int(Val(sZone) * .8)
                End Select
            End Select

        sCost = Format(dCost, "Currency")
```



```
Outputs.SetProperty "Cost", sCost
Outputs.SetProperty "Delivery Date", DelDate
iReturn = CancelOperation

End If

Service_PreInvokeMethod = iReturn

End Function
```

## Control Methods

This topic describes control methods. It includes the following topics:

- *Applet Method for a Control*
- *BusComp Method for a Control*
- *GetProperty Method for a Control*
- *GetValue Method for a Control*
- *Name Method for a Control*
- *SetLabelProperty Method for a Control*
- *SetProperty Method for a Control*
- *SetValue Method for a Control*

In this topic, the controlVar variable indicates the name of the control that causes Siebel CRM to call the method. For example, Button1\_Click.

### Applet Method for a Control

The Applet method returns a string that contains the name of the applet that contains the control.

#### Format

controlVar.Applet

No arguments are available.

#### Usage

Getting the name of the applet that contains the control allows you to configure Siebel CRM to do operations on the applet, not only on the control.

#### Used With

Browser Script

### BusComp Method for a Control

The BusComp method returns a string that contains the name of the business component that an applet references. The control resides in this applet.

#### Format

controlVar.BusComp

No arguments are available.

### Used With

Browser Script

### Examples

For an example, see *Name Method for a Business Component*.

## GetProperty Method for a Control

The GetProperty method returns a string that contains the value of a property. If the property does not exist, then this method returns NULL.

### Format

controlVar.GetProperty(propName)

No arguments are available.

### Usage

You can use the GetProperty method with the following controls:

- CheckBox
- ComboBox
- TextBox
- TextArea
- Label

You can use the GetProperty method to get values for the following properties:

- Background Color
- Enabled
- FontType
- FontColor
- FontSize
- FontStyle
- Height
- Width
- Read Only
- Visible

For more information about these properties, see *Properties to Set for a Label* in *SetLabelProperty Method for a Control*.

To return more than one property, you must use a separate statement for each property.

### Used With

Browser Script

## Examples

The following example uses the `GetProperty` method to return values for the `FontSize`, `BackgroundColor`, `Width`, and `Height` properties:

```
theApplication().SWEAlert("checkbox.FontSize : " +  
objCheckBox.GetProperty("FontSize"));  
theApplication().SWEAlert("checkbox.BgColor : " +  
objCheckBox.GetProperty("BgColor"));  
theApplication().SWEAlert("checkbox.Width : " + objCheckBox.GetProperty("Width"));  
theApplication().SWEAlert("checkbox.Height : " +  
objCheckBox.GetProperty("Height"));
```

## GetValue Method for a Control

The `GetValue` method returns the value that a control displays for the data type of the field that the control references. The type of value depends on the specific control. This method returns the value in a string.

The `GetValue` method cannot return a literal value that a user provides as input to a control. This method returns the value that Siebel CRM stores for the user entry, according to the data type of the field that the control references.

### Format

`controlVar.GetValue`

No arguments are available.

### Usage

For more information, see *Usage for the GetValue Method and the SetValue Method* in [SetValue Method for a Control](#).

### Used With

Browser Script

## Examples

For an example, see *Examples for the GetValue Method and the SetValue Method* in [SetValue Method for a Control](#).

## Name Method for a Control

The `Name` method for a control returns a string that contains the name of a control.

### Format

`controlVar.Name`

No arguments are available.

### Used With

Browser Script

## Examples

For an example, see [Name Method for a Business Component](#).

## SetLabelProperty Method for a Control

The SetLabelProperty method sets the properties of a label. This method does not return any information.

### Format

`controlVar.SetLabelProperty(propName, propValue)`

The following table describes the arguments for the SetLabelProperty method.

Argument	Description
propName	The name of the property that Siebel CRM must set. The values that you can enter are described later in this topic.
propValue	The value to set for the property. The values that you can enter are described later in this topic.

### Usage

If you must set more than one property, then you must use a separate statement for each property.

### Enabling the SetLabelProperty Method

Siebel CRM does not enable the SetLabelProperty method by default. You must enable it in Siebel Tools before you use it in a script.

To enable the SetLabelProperty method

1. Open Siebel Tools.
2. Display the Control User Prop object type:
  - a. Choose the View menu, and then the Options menu item.
  - b. Click the Object Explorer tab.
  - c. Scroll down through the Object Explorer Hierarchy window until you locate the Applet tree.
  - d. Expand the Applet tree, expand the Control tree, and then make sure the Control User Prop object type includes a check mark.
  - e. Click OK.
3. In the Object Explorer, click Applet.
4. In the Applets list, locate the applet that includes the control you must modify.
5. In the Object Explorer, expand the Applet tree, and then click Control.
6. In the Controls list, locate the control you must modify.
7. In the Object Explorer, expand the Control tree, and then click Control User Prop.
8. In the Control User Props list, add a new control user property using values from the following table.

Property	Value
Name	useLabelID
Value	TRUE

Property	Value

## Properties to Set for a Label

The following table lists the properties you can set for a label.

Property	Value	Description
BgColor	string	Determines the background color for a label. For example: <ul style="list-style-type: none"><li>Red is #ff0000.</li><li>Green is #00ff00.</li><li>Blue is #0000ff.</li></ul>
FontColor	string	Determines the font color for a label. For example, green is #00ff00.
FontType	string	Determines the font type for a label. For example, Times Roman.
FontSize	string	Determines the font size for a label. For example, 12 pt.
FontStyle	string	Determines the font style for a label. For example, italic.
FontWeight	string	Determines the font weight for a label. You can use the following values: <ul style="list-style-type: none"><li>bold</li><li>bolder</li><li>lighter</li><li>normal</li><li>100, 200, 300, or 400. These values are equivalent to light.</li><li>500, 600, or 700. These values are equivalent to normal.</li><li>800 or 900. These values are equivalent to bold.</li></ul> The default value is normal.
Height	string	Determines height for a label, in pixels. For example, 5.
Visible	visible or hidden	Determines if the label is visible. The default value is the value in the Siebel runtime repository.
Width	string	Determines the width for a label, in pixels. For example, 80.

Used With  
Browser Script

## Examples

The following code uses the SetLabelProperty method:

```
function Applet_PreInvokeMethod (name, inputPropSet){

switch (name) {

// Example of changing the font size of the Location label
case ("fontsize"):
{

var ctl = this.FindControl("Location");
var fSize = prompt("Specify the required label font size (numeric value
only).");
ctl.SetLabelProperty("FontSize", fSize);
return ("CancelOperation");

}

// Example of changing the background color of the Location label
case ("bgcolor"):
{

var ctl = this.FindControl("Location");
var bgColor = prompt("Specify the background color of the label. Enter a valid
six hexadecimal digit RGB value preceded by #");
ctl.SetLabelProperty("BgColor", bgColor);
return ("CancelOperation");

}

// Example of changing the font type of the Location label
case ("fonttype"):
{

var ctl = this.FindControl("Location");
var fontType = prompt("Specify the font type for the label.");
ctl.SetLabelProperty("FontType", fontType);
return ("CancelOperation");

}

// Example of changing the font color of the Location label
case ("fontcolor"):
{

var ctl = this.FindControl("Location");
var fontColor = prompt("Specify the font color of the label. Enter a valid six
hexadecimal digit RGB value preceded by #");
ctl.SetLabelProperty("FontColor", fontColor);
return ("CancelOperation");

}

break;

}

}
```

## SetProperty Method for a Control

The SetProperty method sets the properties of a control. This method does not return any information.

## Format

`controlVar.SetProperty(propName, propValue)`

The following table describes the arguments for the SetProperty method.

Argument	Description
<i>propName</i>	The name of the property that Siebel CRM must set. The values you can enter are described later in this topic.
<i>propValue</i>	The value that Siebel CRM must set for the property. The values that you can enter are described later in this topic.

## Usage

You can use the SetProperty method with the following controls:

- CheckBox
- ComboBox
- TextBox
- TextArea

If you must set more than one property, then you must use a separate statement to set each property.

## Properties to Set for a Control

The following table describes the properties you can set for a control.

Property	Value	Description
Enabled	TRUE or FALSE	Determines if the control is active. The default value is the value in the Siebel runtime repository.
Shown	TRUE or FALSE	Determines if Siebel CRM displays the control. The default value is the value in the Siebel runtime repository.
ReadOnly	TRUE or FALSE	Determines if the control is read-only. The default value is the value in the Siebel runtime repository.
BgColor FontColor FontType FontSize FontStyle FontWeight	N/A	To modify these control properties, you can use these same properties you use to modify a label. For a description of the values you can enter, see <i>Properties You Can Set For a Label</i> in <a href="#">SetLabelProperty Method for a Control</a> .

Property	Value	Description
Height		
Visible		
Width		

Used With  
Browser Script

## Using the SetProperty Method to Control Font Weight

To use the SetProperty method to control font weight, you must use the FontWeight property. For example:

```
control.SetProperty("FontWeight", "600")
```

You cannot use the FontStyle argument to control font weight. For example, the following code fails:

```
control.SetProperty("FontStyle", "Bold")
```

## Examples

The following code uses the SetProperty method:

```
objCheckBox.SetProperty("FontColor", "#00ff00");  
objCheckBox.SetProperty("FontStyle", "italic");  
objCheckBox.SetProperty("FontType", "Verdana");  
objCheckBox.SetProperty("FontSize", "14 pt");  
objCheckBox.SetProperty("BgColor", "#00f000");  
objCheckBox.SetProperty("Width", "100");  
objCheckBox.SetProperty("Height", "100");
```

## SetValue Method for a Control

The SetValue method sets the contents for a control. This method does not return any information.

### Format

controlVar.SetValue(controlValue)

The following table describes the arguments for the SetValue method.

Argument	Description
controlValue	String that contains the value that Siebel CRM must set for the control.

## Usage for the GetValue Method and the SetValue Method

Note the following usage for the SetValue method:

- This method does not validate the format of the data. Data validation occurs when the user steps off the field or the record, or explicitly saves the record.
- This method can set the value for a read-only control, but Siebel CRM does not save this information when the user saves the record.



- The user can modify the contents of a control before Siebel CRM saves control information to the business component field.

Note the following usage for the GetValue method and the SetValue method:

- These methods only work on form applets.
- These methods work only for a control that references a business component field.
- You cannot use these methods with a label.

## Used With Browser Script

### Examples for the GetValue Method and the SetValue Method

The following code uses the GetValue method and the SetValue method:

```
function Applet_PreInvokeMethod (name, inputPropSet)
{

switch (name) {

// Example of changing the value of the Abstract control to uppercase
case ("SR Abstract"):
{

var ctlName = "Abstract";
var ctl = this.FindControl(ctlName);
var ctlVal = ctl.GetValue();
ctl.SetValue(ctlVal.toUpperCase());
ctl= null;
return("CancelOperation");

}

// Example of changing the value of a checkbox control
case ("SR Billable"):
{

var ctlName = "Billable Flag";
var ctl = this.FindControl(ctlName);
var ctlVal = ctl.GetValue();
if (ctlVal == "Y")
ctl.SetValue("N"); // clear the box
else
ctl.SetValue("Y"); // check the box
ctl= null;
return("CancelOperation");

}

// Example of changing the value of a date/time control
case ("SR Commit time"):
{

var ctlName = "Agent Committed";
var ctl = this.FindControl(ctlName);
ctl.SetValue("12/1/2001 1:09:31 AM");
// format is not validated until user saves the record
ctl= null;
return("CancelOperation");

}

}
```

```
break;  
  
}  
  
}
```

## Property Set Methods

This topic describes property set methods. It includes the following topics:

- *AddChild Method for a Property Set*
- *Copy Method for a Property Set*
- *GetByteValue Method for a Property Set*
- *GetChild Method for a Property Set*
- *GetChildCount Method for a Property Set*
- *GetFirstProperty Method for a Property Set*
- *GetLastErrCode Method for a Property Set*
- *GetLastErrText Method for a Property Set*
- *GetNextProperty Method for a Property Set*
- *GetProperty Method for a Property Set*
- *GetPropertyCount Method for a Property Set*
- *GetType Method for a Property Set*
- *GetValue Method for a Property Set*
- *InsertChildAt Method for a Property Set*
- *PropertyExists Method for a Property Set*
- *RemoveChild Method for a Property Set*
- *RemoveProperty Method for a Property Set*
- *Reset Method for a Property Set*
- *SetByteValue Method for a Property Set*
- *SetProperty Method for a Property Set*
- *SetType Method for a Property Set*
- *SetValue Method for a Property Set*

In this topic, the oPropSet variable indicates the variable that contains a property set.

### AddChild Method for a Property Set

The AddChild method adds a child property set to a property set. This method returns an integer that indicates the index of the child property set.

#### Format

oPropSet.AddChild(childPropSet)

*AddChild Method for a Property Set* describes the arguments for the AddChild method.

Argument	Description
childObject	A property set that Siebel CRM must make as a child to the property set that the oPropSet variable identifies.

## Usage

You can use a property set to create a tree data structure. You can add any number of arbitrarily structured child properties to a property set. You can use a child property set to structure a property set in a manner that is similar to the structure that the data model uses. For example, a parent account property set can include child property sets for opportunities, contacts, activities, and so forth. In this example, you could create an independent property set named Opportunity, where accounts, contacts, and activities can be children.

If Siebel CRM creates an instance of a property set through script, and then adds it to a parent property set, and if the parent property set is subsequently released, then Siebel CRM does not release this child instance. The reference to the child instance exists independently.

## Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following fragment of Siebel eScript code adds child property sets to a parent property set:

```
var Account = TheApplication().NewPropSet();
var Opportunity = TheApplication().NewPropSet();
var Contact = TheApplication().NewPropSet();
var Activity = TheApplication().NewPropSet();

Account.AddChild(Opportunity);
Account.AddChild(Contact);
Account.AddChild(Activity);
```

## Related Topics

For more information, see the following topics:

- [GetChild Method for a Property Set](#)
- [InsertChildAt Method for a Property Set](#)
- [RemoveChild Method for a Property Set](#)

## Copy Method for a Property Set

The Copy method returns a copy of a property set.

### Format

oPropSet.Copy()

No arguments are available.

## Usage

The Copy method creates a copy of a property set, including any properties and child property sets. Siebel CRM typically passes a property set through a reference, so making a copy allows you to manipulate a property set without affecting the original property set.

## Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following Siebel VB example uses a copy of a property set to store the original values of the properties, and displays the original and Pig-Latin forms of the properties:

```
(general)
(declarations)
Option Explicit

Function PigLatin (Name1 As String) As String
    Dim Name2 As String, FirstLetter As String
    Name2 = Right$(Name1, Len(Name1) - 1)
    FirstLetter = Left$(Name1, 1)
    Name2 = UCase(Mid$(Name1, 2, 1)) & _
    Right$(Name2, Len(Name2) - 1)
    Name2 = Name2 & LCase(FirstLetter) & "ay"
    PigLatin = Name2
End Function

Sub ClickMe_Click()

    Dim Inputs As PropertySet, Outputs As PropertySet
    Dim message As String, propName, propVal, newPropVal
    set Inputs = TheApplication.NewPropertySet

    Inputs.SetProperty "Name", "Harold"
    Inputs.SetProperty "Assistant", "Kathryn"
    Inputs.SetProperty "Driver", "Merton"

    set Outputs = Inputs.Copy()

    propName = Outputs.GetFirstProperty()
    do while propName <> ""
        propVal = Outputs.GetProperty(propName)
        newPropVal = PigLatin(propVal)
        Outputs.SetProperty propName, newPropVal
        message = message & propVal & " has become " & _
        newPropVal & Chr$(13)
        propName = Outputs.GetNextProperty()
    loop
    TheApplication.RaiseErrorText message

    Set message = Nothing
    Set Outputs = Nothing
    Set Inputs = Nothing

End Sub
```

## GetByteValue Method for a Property Set

The GetByteValue method returns the following information:

- If a byte value is set, then this method returns a byte array.
- If a string value is set, then this method returns a null value.

For more information, see *SetByteValue Method for a Property Set*.

### Format

`oPropSet.getByteValue()`

No arguments are available.

### Used With

Siebel Java Data Bean

### Examples

The following example uses a binary value as input and provides a binary output. The angle brackets (< >) indicate a variable:

```
SiebelPropertySet input = new SiebelPropertySet();
SiebelPropertySet output = new SiebelPropertySet();

input.setProperty("ProcessName", "LMS3 Jason");

// XML to send
String str="<?xml version=\"1.0\" encoding=\"UTF8\"
?><GetCommunicationDataInput><MemberID>20048963</MemberID></
GetCommunicationDataInput>";

// convert string to byte array
byte [] bvalue = new String(str).getBytes();

input.setByteValue(bvalue);
businessService.invokeMethod("RunProcess",input,output);

// Use getByteValue to return the value..and pop it in a String..for example
String out2 = new String (output.getByteValue());
System.out.println(out2);
```

## GetChild Method for a Property Set

The GetChild method returns the index number of a child property set.

### Format

`oPropSet.GetChild(index)`

The following table describes the arguments for the GetChild method.

Argument	Description
index	An integer that identifies the index number of the child property set that Siebel CRM must return.

## How Siebel CRM Handles Indexing for Child Property Sets

Note how Siebel CRM handles indexing for a child property set you add, insert, or remove:

- If Siebel CRM creates a child property set, then it creates an index number for this child property set, starting at 0 (zero). It increments this index for each child property set it adds to a given parent property set.
- If you use the `AddChild` Property method, then Siebel CRM uses the next available index number for the child property set it adds.
- If you use the `InsertChildAt` method, then Siebel CRM inserts the new child property set at a specified index. It also increases the index by 1 for the property set that the new child displaces, and for all child property sets that occur after the displaced property set.
- If you use the `RemoveChild` method, then Siebel CRM removes the child property set you specify, and then decreases the index by 1 for all property sets that follow the removed child.

### Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

The following Siebel eScript example sets the Name property of child property sets to the same value:

```
function Test1_Click ()
{
    var Account = TheApplication().NewPropSet();
    var Opportunity = TheApplication().NewPropSet();
    var Contact = TheApplication().NewPropSet();
    var Activity = TheApplication().NewPropSet();
    var j;

    Account.AddChild(Opportunity);
    Account.AddChild(Contact);
    Account.AddChild(Activity);

    for (var i = 0; i < Account.GetChildCount(); i++)
    {
        j = Account.GetChild(i);
        j.SetProperty('Name', 'Allied Handbooks');
    }
}
```

### Related Topics

For more information, see the following topics:

- [AddChild Method for a Property Set](#)
- [InsertChildAt Method for a Property Set](#)

## GetChildCount Method for a Property Set

The `GetChildCount` method returns the number of child property sets that exist for a parent property set.

### Format

`oPropSet.GetChildCount()`

No arguments are available.

## Usage

The `GetChildCount` method returns the number of child property sets for the property set that the `oPropSet` variable identifies. The index number for child property sets start at 0, so a child count of 3 indicates that there are child property sets at indexes 0, 1, and 2.

The `GetChildCount` method returns only the number of direct descendants. If a child property set includes children, then Siebel CRM does not include these grandchildren in the count that it provides in the return value.

## Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

For an example, see [GetChild Method for a Property Set](#).

## GetFirstProperty Method for a Property Set

The `GetFirstProperty` method for a property set returns a string that contains the name of the first property in a property set.

## Format

`oPropSet.GetFirstProperty()`

No arguments are available.

## Usage

The usage for the `GetFirstProperty` method for a property set is similar to the usage for the `GetFirstProperty` method for a business service. For more information, see [Usage for a Method that Gets a Business Service Property](#) in [GetFirstProperty Method for a Business Service](#).

## Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following example uses the `GetFirstProperty` method to get the first property, and then uses the `GetNextProperty` method to return all subsequent properties. If the `GetNextProperty` method returns a null value, then Siebel CRM terminates the loop:

```
function Service_PreInvokeMethod (MethodName, Inputs, Outputs)
{
    var propName = "";
    var propVal = "";

    propName = Inputs.GetFirstProperty();

    // stay in loop if the property name is not an empty string
    while (propName != "") {
        propVal = Inputs.GetProperty(propName);
    }
}
```

```
// if a property with the same name does not exist
// add the name value pair to the output
if (!Outputs.PropertyExists(propName)) {
    Outputs.SetProperty(propName, propVal);
}

propName = Inputs.GetNextProperty();

}
return (CancelOperation);
}
```

## Related Topics

For more information, see the following topics:

- [GetNextProperty Method for a Property Set](#)
- [GetProperty Method for a Property Set](#)

## GetLastErrCode Method for a Property Set

The GetLastErrCode method returns the error code for the error that Siebel CRM logged most recently. This code is a short integer. 0 (zero) indicates no error.

### Format

oPropSet.GetLastErrCode

No arguments are available.

### Usage

For more information, see *Usage for the GetLastErrCode Method* in [GetLastErrCode Method for an Application](#).

### Used With

Mobile Web Client Automation Server

## GetLastErrText Method for a Property Set

The GetLastErrText method returns a string that contains the text message for the error that Siebel CRM logged most recently.

### Format

oPropSet.GetLastErrText

No arguments are available.

### Usage

For more information, see *Usage for the GetLastErrText Metho* in [GetLastErrText Method for an Application](#).

### Used With

Mobile Web Client Automation Server



## GetNextProperty Method for a Property Set

The GetNextProperty method returns a string that contains the name of the next property of a property set. If no more properties exist, then this method returns an empty string.

### Format

`oPropSet.GetNextProperty()`

No arguments are available.

### Usage

Usage for the GetNextProperty method for a property set is similar to the usage for the GetNextProperty method for a business service. For more information, see *Usage for the GetNextProperty Method* in [GetNextProperty Method for a Business Service](#).

### Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

For an example, see [GetFirstProperty Method for a Property Set](#).

### Related Topics

For more information, see the following topics:

- [GetFirstProperty Method for a Property Set](#)
- [GetProperty Method for a Property Set](#)

## GetProperty Method for a Property Set

The GetProperty method returns a string that contains the value of a property. If the property does not exist, then this method returns NULL.

### Format

`oPropSet.GetProperty(propName)`

The arguments you can use with this format are the same as the arguments described in [GetProperty Method for a Business Service](#).

### Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Examples

The following fragment of Siebel eScript code receives a set of input properties used with the Shipping Engine business service described in [Service\\_PreInvokeMethod Event](#):

```
var sShipper = Inputs.GetProperty("Shipping Company");  
var dWeight = Val(Inputs.GetProperty("Weight"));  
var dSize = Val(Inputs.GetProperty("Total Dimensions"));
```

```
var iZone = Val(Inputs.GetProperty("Zone"));
```

## Related Topics

For more information, see the following topics:

- [GetFirstProperty Method for a Property Set](#)
- [GetNextProperty Method for a Property Set](#)
- [SetProperty Method for a Property Set](#)

## GetPropertyCount Method for a Property Set

The GetPropertyCount method returns the number of properties that exist in the current level in the hierarchy. It does not return all properties in the entire property set hierarchy.

### Format

oPropSet.GetPropertyCount

No arguments are available.

### Used With

Browser Script, COM Data Control, COM Data Server, Mobile Web Client Automation Server, Server Script

## GetType Method for a Property Set

The GetType method returns a string that contains the value of the type attribute of a property set.

### Format

oPropSet.GetType

No arguments are available.

### Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Related Topics

For more information, see the following topics:

- [GetValue Method for a Property Set](#)
- [SetType Method for a Property Set](#)

## GetValue Method for a Property Set

The GetValue method returns a string that contains the value of the value attribute of a property set.

### Format

oPropSet.GetValue

No arguments are available.

## Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Related Topics

For more information, see the following topics:

- [GetProperty Method for a Property Set](#)
- [GetType Method for a Property Set](#)
- [SetValue Method for a Property Set](#)

## InsertChildAt Method for a Property Set

The InsertChildAt method inserts a child property set in a parent property set at a specific location. This method does not return any information. For more information, see [AddChild Method for a Property Set](#).

### Format

`oPropSet.InsertChildAt childObject, index`

The following table describes the arguments for the InsertChildAt method.

Argument	Description
childObject	The property set that Siebel CRM must make a child. It makes this property set a child of the property set that the oPropSet variable identifies.
index	An integer that identifies the position where Siebel CRM must insert the property set. The childObject argument identifies this property set.

### Usage

For more information, see *How Siebel CRM Handles Indexing for Child Property Sets* in [GetChild Method for a Property Set](#).

## Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## PropertyExists Method for a Property Set

The description of the PropertyExists method for a property set is the same as the description of the PropertyExists method for a business service. For more information, see [PropertyExists Method for a Business Service](#).

### Format

`oPropSet.PropertyExists(propName)`

The arguments you can use with this format are the same as the arguments described in [PropertyExists Method for a Business Service](#).

## Usage

The `GetProperty` method returns an empty string for every nonexistent property, so you can use the `PropertyExists` method in an `If` statement to determine if a specific property is set.

## Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

For an example, see [GetFirstProperty Method for a Property Set](#).

## RemoveChild Method for a Property Set

The `RemoveChild` method removes a child property set from a parent property set. This method does not return any information.

## Format

`oPropSet.RemoveChild index`

The following table describes the arguments for the `RemoveChild` method.

Argument	Description
<code>index</code>	An integer that identifies the index number of the child property set that Siebel CRM must remove.

## Usage

For information about how Siebel CRM handles indexing for child property sets, see *How Siebel CRM Handles Indexing for Child Property Sets* in [GetChild Method for a Property Set](#).

## Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

The following Siebel VB code fragment removes every child property set of a property set:

```
Dim i As Integer
for i = 0 to outputs.GetChildCount()
    outputs.RemoveChild(i)
Next i
```

## Related Topics

For more information, see the following topics:

- [AddChild Method for a Property Set](#)
- [InsertChildAt Method for a Property Set](#)

## RemoveProperty Method for a Property Set

The RemoveProperty method removes a property from a property set. This method does not return any information.

### Format

`oPropSet.RemoveProperty propName`

The arguments you can use with this format are the same as the arguments described in [RemoveProperty Method for a Business Service](#).

### Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Reset Method for a Property Set

The Reset method removes all properties and children from a property set. This method does not return any information.

### Format

`oPropSet.Reset()`

No arguments are available.

### Usage

The Reset method allows you to reuse a property set.

### Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## SetByteValue Method for a Property Set

The SetByteValue method sets the value of a property set. This method does not return any information.

### Format

`oPropSet.setByteValue(value)`

The following table describes the arguments for the SetByteValue method.

Argument	Description
value	The byte array that contains the value that Siebel CRM must set.

### Used With

Siebel Java Data Bean

## Examples

The following example uses a binary value as input and then provides a binary output. For more information, see [GetByteValue Method for a Property Set](#):

```
SiebelPropertySet input = new SiebelPropertySet();
SiebelPropertySet output = new SiebelPropertySet();

input.setProperty("ProcessName", "LMS3 Jason");

// XML to send
String str="<?xml version=\"1.0\" encoding=\"UTF8\"
?><GetCommunicationDataInput><MemberID>20048963</MemberID></
GetCommunicationDataInput>";

// convert string to byte array
byte [] bvalue = new String(str).getBytes();

input.setByteValue(bvalue);
businessService.invokeMethod("RunProcess",input,output);

// use getByteValue to return the value and put it in a String
String out2 = new String (output.getByteValue());
System.out.println(out2);
```

## SetProperty Method for a Property Set

The SetProperty method sets a value in the property of a property set. This method does not return any information. For more information, see [GetProperty Method for a Property Set](#).

### Format

oPropSet.SetProperty propName, propValue

The arguments you can use with this format are the same as the arguments described in [SetProperty Method for a Business Service](#).

### Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Examples

This Siebel VB fragment uses the Shipping Engine business service:

```
Dim Svc As Service
Dim Inputs As PropertySet, Outputs As PropertySet
Set Svc = TheApplication.GetService("Shipping Engine")
Set Inputs = TheApplication.NewPropertySet()

With Inputs
.SetProperty "Shipping Company", "Airline"
.SetProperty "Weight", "12"
.SetProperty "Total Dimensions", "48"
.SetProperty "Shipping Method", "Second-Day Air"
End With
```

For more information, see [Service\\_PreInvokeMethod Event](#).

## SetType Method for a Property Set

The SetType method sets the value for the type attribute of a property set. This method does not return any information.

### Format

oPropSet.SetType type

The following table describes the arguments for the SetType method.

Argument	Description
type	A string that contains data that Siebel CRM must store in the type attribute.

### Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

### Related Topics

For more information, see the following topics:

- [GetType Method for a Property Set](#)
- [SetValue Method for a Property Set](#)

## SetValue Method for a Property Set

The SetValue method sets the value for the value attribute of a property set. This method does not return any information.

### Format

oPropSet.SetValue value

The following table describes the arguments for the SetValue method.

Argument	Description
value	A string that contains data that Siebel CRM must store in the value attribute.

### Used With

Browser Script, COM Data Control, COM Data Server, Siebel Java Data Bean, Mobile Web Client Automation Server, Server Script

## Related Topics

For more information, see the following topics:

- [GetValue Method for a Property Set](#)
- [SetProperty Method for a Property Set](#)

## Miscellaneous Methods

This topic describes other methods. It includes the following topics:

- [GetErrorCode Method](#)
- [GetErrorMessage Method](#)
- [TheApplication Method](#)

### GetErrorCode Method

The `GetErrorCode` method returns a string that contains a numeric error code. For more information, see [GetErrorMessage Method](#).

#### Format

```
public int getErrorCode()
```

No arguments are available.

#### Used With

Siebel Java Data Bean

#### Examples

The following example for the Siebel Java Data Bean returns the first record in the Account business component. If an error occurs, then the script displays the error code and error message:

```
try
{
    //Instantiate the Siebel Java Data Bean
    Sieb_dataBean = new SiebelDataBean();
    String Cstr = "GatewayServer, EntServer, FINObjMgr";
    Sieb_dataBean.login(Cstr, "SADMIN", "SADMIN");
    SiebelBusObject m_busObject = Sieb_dataBean.getBusObject("Account");
    SiebelBusComp m_busComp = m_busObject.getBusComp("Account");
    m_busComp.activateField("Name");
    m_busComp.executeQuery(true);
    m_busComp.firstRecord();
    Name = m_busComp.getFieldValue("Name");
    System.out.println("Account Name : " + Name);

    m_busComp.release();
    m_busComp = null;

    m_busObject.release();
    m_busObject = null;

    Sieb_dataBean.logoff();
    Sieb_dataBean = null;
}
```



```
}

catch (SiebelException e)
{
    ErrorText = "Code: " + e.getErrorCode() + "\n" + "Description: " +
e.getErrorMessage();
    System.out.println("Error Occurred\n " + ErrorText);
}

...

```

## GetErrorMessage Method

The GetErrorMessage method returns a string that contains an error message. For more information, see [GetErrorCode Method](#).

### Format

public string getErrorMessage()

No arguments are available.

### Used With

Siebel Java Data Bean

## TheApplication Method

The theApplication method is a global method that returns a string that contains the name of an application object. This object is the root of objects in the Siebel Application Object hierarchy.

### Browser Script Format

the Application()

### Siebel VB Format

TheApplication

### Siebel eScript Format

TheApplication()

No arguments are available.

### Usage

You can use the theApplication method to determine the object reference of the Siebel application. You can then use this information to find other objects or to call a method on the application object. For example, if you use Siebel eScript to determine if you are logged in to a server database or local database, then you can use the following code:

```
TheApplication().InvokeMethod("GetDataSource")
```

### Used With

Browser Script, Server Script

## Examples

The following Siebel VB example returns the login name from the application object and creates the Employee business object:

```
Dim oEmpBusObj as BusObject
Dim sLoginName as String

sLoginName = TheApplication.LoginName
Set oEmpBusObj = TheApplication.GetBusObject("Employee")

...

Set oEmpBusObj = Nothing
```

# 6 Browser Script Quick Reference

## Browser Script Quick Reference

This chapter describes summary information for Browser Script. It includes the following topics:

- *Applet Methods for Browser Script*
- *Applet Events For Browser Script*
- *Application Methods for Browser Script*
- *Application Events for Browser Script*
- *Business Component Methods for Browser Script*
- *Business Component Events for Browser Script*
- *Business Object Methods for Browser Script*
- *Business Service Methods for Browser Script*
- *Business Service Events for Browser Script*
- *Property Set Methods for Browser Script*
- *Control Methods for Browser Script*
- *Document Object Model Events You Can Use*

For more information, see *Browser Script*.

## Applet Methods for Browser Script

The following table describes a summary of the applet methods you can use in Browser Script.

Method	Description	Format
<i>ActiveMode Method for an Applet</i>	Returns a string that contains the name of the current Web template mode.	<pre>var oApplet;  var mode = oApplet.ActiveMode();</pre>
<i>BusComp Method for an Applet</i>	Returns the name of the business component that an applet references.	<pre>var oApplet;  var busComp = oApplet.BusComp();</pre>
<i>BusObject Method for an Applet</i>	Returns the name of the business object for the business component that an applet references.	<pre>var oApplet;  var oBusObject = oApplet.BusObject();</pre>
<i>FindControl Method for an Applet</i>	Returns the name of a control.	<pre>var oApplet;  var oControl;</pre>

Method	Description	Format
		<pre>oControl = oApplet.FindControl(controlName as String);</pre>
<i>InvokeMethod Method for an Applet</i>	Calls a method.	<pre>var oApplet;  var outPs;  outPs = oApplet.InvokeMethod(MethodName as String, inputPropSet as PropertySet);</pre>
<i>Name Method for an Applet</i>	Returns the name of an applet.	<pre>var oApplet;  var name = oApplet.Name();</pre>

## Applet Events For Browser Script

The following table describes a summary of the applet events you can use in Browser Script.

Event	Description	Format
<i>Applet_ChangeFieldValue Event</i>	Starts if the user uses an applet to modify data in a field.	<pre>Applet_ChangeFieldValue (field, value)</pre>
<i>Applet_ChangeRecord Event</i>	Starts if the user moves to a different record or view.	<pre>Applet_ChangeRecord()</pre>
<i>Applet_InvokeMethod Event</i>	Starts after a specialized method or after a custom method is called.	<pre>Applet_InvokeMethod (name, inputPropSet)</pre>
<i>Applet_Load Event</i>	Starts after Siebel CRM loads an applet and after it displays data.	<pre>Applet_Load()</pre>
<i>Applet_PreInvokeMethod Event</i>	Siebel CRM calls this event immediately before it calls a specialized method on an applet.	<pre>Applet_PreInvokeMethod (name, inputPropSet)</pre>

## Application Methods for Browser Script

The following table describes a summary of the application methods you can use in Browser Script. It does not include object interface methods that Siebel CRM does not call directly from an application object instance. For information

about methods it calls with the `InvokeMethod` method on the application object, see [LoadObjects Method for an Application](#).

Method	Description	Format
<i>ActiveApplet Method for an Application</i>	Returns the name of the active applet.	<pre>var applet;  applet = theApplication().ActiveApplet();</pre>
<i>ActiveBusComp Method for an Application</i>	Returns the name of the business component that the active applet references.	<pre>var busComp;  busComp = theApplication().ActiveBusComp();</pre>
<i>ActiveBusObject Method for an Application</i>	Returns the name of the business object for the business component that the active applet references.	<pre>var busObject;  busObject = theApplication().ActiveBusObject();</pre>
<i>ActiveViewName Method for an Application</i>	Returns the name of the active view.	<pre>var viewName;  viewName = theApplication().ActiveViewName();</pre>
<i>FindApplet Method for an Application</i>	Returns the name of an applet.	<pre>var applet;  applet = theApplication().FindApplet (appletName);</pre>
<i>GetProfileAttr Method for an Application</i>	Returns the name of an attribute in a user profile.	<pre>var sAttr;  sAttr = theApplication().GetProfileAttr(name);</pre>
<i>GetService Method for an Application</i>	Locates a business service. If this business service is not already running, then Siebel CRM starts it.	<pre>var svc;;  svc = theApplication().GetService (serviceName)</pre>
<i>InvokeMethod Method for an Application</i>	Calls a method.	<pre>var outPs;  outPs = theApplication().InvokeMethod (methodName, methArg1, methArg2, methArgN);</pre>
<i>Name Method for an Application</i>	Returns the name of the Siebel application.	<pre>var appName;  appName = theApplication().Name();</pre>
<i>NewPropertySet Method for an Application</i>	Creates a new property set.	<pre>var PropSet;  PropSet = theApplication().NewPropertySet();</pre>
<i>SetProfileAttr Method for an Application</i>	Personalization uses this method to set a value for an attribute in a user profile.	<pre>theApplication().SetProfileAttr(name, value);</pre>

Method	Description	Format
<i>SWEAlert Method for an Application</i>	Displays a modal dialog box that includes a message.	<code>theApplication().SWEAlert(message);</code>

## Application Events for Browser Script

The following table describes a summary of the application events you can use in Browser Script.

Event	Description	Format
<i>Application_InvokeMethod Event</i>	Called after Siebel CRM calls a specialized method.	<code>Application_InvokeMethod (name, inputPropSet)</code>
<i>Application_PreInvokeMethod Event</i>	Called after Siebel CRM calls a specialized method.	<code>Application_PreInvokeMethod (name, inputPropSet)</code>

## Business Component Methods for Browser Script

The following table describes a summary of the business component methods you can use in Browser Script. It does not include object interface methods that Siebel CRM does not call directly from a Business Component object instance. For information about methods that it calls with InvokeMethod method on the Business Component object, see *Business Component Invoke Methods*.

Method	Description	Format
<i>BusObject Method for a Business Component</i>	Returns the name of the business object that the business component references.	<pre>var busComp;  var busObject;  busObject = busComp.BusObject();</pre>
<i>GetFieldValue Method for a Business Component</i>	Returns the value of a field from the current record of a business component.	<pre>var busComp;  var value;  value = busComp.GetFieldValue(fieldName);</pre>
<i>GetFormattedFieldValue Method for a Business Component</i>	Returns a field value that is in the same format that the Siebel client uses.	<pre>var busComp;  var sValue;</pre>

Method	Description	Format
		<pre>sValue = busComp.GetFormattedFieldValue (fieldName);</pre>
<i>GetSearchExpr Method for a Business Component</i>	Returns the current search expression that is defined for the business component.	<pre>var busComp;  var sExpr;  sExpr = busComp.GetSearchExpr();</pre>
<i>GetSearchSpec Method for a Business Component</i>	Returns the search specification for a field.	<pre>var busComp;  var sSpec;  sSpec = busComp.GetSearchSpec(fieldName);</pre>
<i>InvokeMethod Method for a Business Component</i>	Calls a method.	<pre>var busComp;  var sReturn;  sReturn = busComp.InvokeMethod(methodName, methodArg1, methodArg2, ..., methodArgn);</pre>
<i>Name Method for a Business Component</i>	Returns the name of a business component.	<pre>var busComp;  var sName;  sName = busComp.Name();</pre>
<i>SetFieldValue Method for a Business Component</i>	Sets a new value for a field in the current record of a business component.	<pre>var busComp;  busComp.SetFieldValue(fieldName, fieldValue);</pre>
<i>SetFormattedFieldValue Method for a Business Component</i>	Sets the new value to a field for the current record of a business component.	<pre>var busComp;  busComp.SetFormattedFieldValue (fieldName, fieldValue);</pre>
<i>UndoRecord Method for a Business Component</i>	Reverses any unsaved modifications that Siebel CRM has made on a record.	<pre>var busComp;  busComp.UndoRecord();</pre>
<i>WriteRecord Method for a Business Component</i>	Saves to the Siebel database any modifications made to the current record.	<pre>var busComp;  busComp.WriteRecord();</pre>

## Business Component Events for Browser Script

The following table describes a summary of the business component events you can use in Browser Script.

Event	Description	Format
<i>BusComp_PreSetFieldValue Event</i>	Called if the user modifies a value in the Siebel client.	<b>BusComp_PreSetFieldValue</b> (fieldName, value)

## Business Object Methods for Browser Script

The following table describes a summary of the business object methods you can use in Browser Script.

Method	Description	Format
<i>GetBusComp Method for a Business Object</i>	Returns the name of a business component.	<b>var busObject;</b>  <b>var busComp;</b>  <b>busComp = busObject.GetBusComp (busCompName) ;</b>
<i>Name Method for a Business Object</i>	Returns the name of a business object.	<b>Var sName;</b>  <b>var busObject;</b>  <b>sName = busObject.Name() ;</b>

## Business Service Methods for Browser Script

The following table describes a summary of the business service methods you can use in Browser Script.

Method	Description	Format
<i>GetNextProperty Method for a Business Service</i>	Returns the name of the next property of a business service.	<b>var svc;</b>  <b>var sName = svc.GetNextProperty() ;</b>
<i>GetProperty Method for a Business Service</i>	Returns the value of a property.	<b>var svc;</b>  <b>var value;</b>



Method	Description	Format
		<code>value = svc.GetProperty(name);</code>
<i>InvokeMethod Method for a Business Service</i>	Calls a method on a business service.	<code>var svc = TheApplication().GetService("Business Service");  var inputPropSet = TheApplication().NewPropSet();  svc.InvokeMethod(methodName, inputPropSet);</code>
<i>Name Method for a Business Service</i>	Returns the name of a business service.	<code>var svc;  var name;  name = svc.Name();</code>
<i>PropertyExists Method for a Business Service</i>	Returns a Boolean value that indicates if the property that the argument identifies exists.	<code>var svc;  var bool;  bool = svc.PropertyExists(name);</code>
<i>RemoveProperty Method for a Business Service</i>	Removes a property from a business service.	<code>var svc;  svc.RemoveProperty(name);</code>
<i>SetProperty Method for a Business Service</i>	Sets a value for a property of a business service.	<code>var svc;  svc.SetProperty(name, value);</code>

## Business Service Events for Browser Script

The following table describes a summary of the business service events you can use in Browser Script.

Method	Description	Format
<i>Service_InvokeMethod Event</i>	Called after Siebel CRM calls the InvokeMethod method on a business service.	<code>Service_InvokeMethod (methodName, input)</code>
<i>Service_PreCanInvokeMethod Event</i>	Called before Siebel CRM calls the PreInvokeMethod event. It allows you to determine if the user possesses the authority to call the business service method.	<code>Service_PreCanInvokeMethod (methodName)</code>

Method	Description	Format
<i>Service_PreInvokeMethod Event</i>	Called before Siebel CRM calls a method on a business service.	<code>Service_PreInvokeMethod (methodName, inputPropSet)</code>

## Property Set Methods for Browser Script

The following table describes a summary of the property set methods you can use in Browser Script.

Method	Description	Format
<i>AddChild Method for a Property Set</i>	Adds a child property set to a property set.	<pre>var oPropSet;  var iIndex;  iIndex = oPropSet.AddChild(childObject);</pre>
<i>Copy Method for a Property Set</i>	Returns a copy of a property set.	<pre>var oPropSet1;  var oPropSet2;  oPropSet2 = oPropSet1.Copy();</pre>
<i>GetChild Method for a Property Set</i>	Returns the index number of a child property set.	<pre>var oPropSet;  var oChildPropSet;  oChildPropSet = oPropSet.GetChild(index);</pre>
<i>GetChildCount Method for a Property Set</i>	Returns the number of child property sets that exist for a parent property set	<pre>var oPropSet;  var iCount;  iCount = oPropSet.GetChildCount();</pre>
<i>GetFirstProperty Method for a Property Set</i>	Returns the name of the first property in a property set.	<pre>var oPropSet;  var sPropName;  sPropName = oPropSet.GetFirstProperty();</pre>
<i>GetNextProperty Method for a Property Set</i>	Returns the name of the next property in a property set.	<pre>var oPropSet;  var sPropName;  sPropName = oPropSet.GetNextProperty();</pre>
<i>GetProperty Method for a Property Set</i>	Returns the value of a property.	<pre>var oPropSet;  var sValue;</pre>

Method	Description	Format
		<code>sValue = oPropSet.GetProperty(propName) ;</code>
<i>GetPropertyCount Method for a Property Set</i>	Returns the number of properties that exist in the current level in the hierarchy.	<pre>var oPropSet; var iCount;  iCount = oPropSet.GetPropertyCount() ;</pre>
<i>GetType Method for a Property Set</i>	Returns the value of the type attribute of a property set.	<pre>var oPropSet; var type;  type = oPropSet.GetType() ;</pre>
<i>GetValue Method for a Property Set</i>	Returns the value of the value attribute of a property set.	<pre>var oPropSet; var sValue;  sValue = oPropSet.GetValue() ;</pre>
<i>InsertChildAt Method for a Property Set</i>	Inserts a child property set in a parent property set at a specific location.	<pre>var oPropSet; oPropSet.InsertChildAt(childObject, index) ;</pre>
<i>PropertyExists Method for a Property Set</i>	Returns a Boolean value that indicates if the property that the argument identifies exists.	<pre>var oPropSet; var bool;  bool = oPropSet.PropertyExists(propName) ;</pre>
<i>RemoveChild Method for a Property Set</i>	Removes a child property set from a parent property set.	<pre>var oPropSet; oPropSet.RemoveChild(index) ;</pre>
<i>RemoveProperty Method for a Property Set</i>	Removes a property from a property set.	<pre>var oPropSet; oPropSet.RemoveProperty(propName) ;</pre>
<i>Reset Method for a Property Set</i>	Removes every property and child property set from a property set.	<pre>var oPropSet; oPropSet.Reset() ;</pre>
<i>SetProperty Method for a Property Set</i>	Sets a value in the property of a property set.	<pre>var oPropSet; oPropSet.SetProperty(propName, propValue)</pre>
<i>SetType Method for a Property Set</i>	Sets the value for the type attribute of a property set.	<pre>var oPropSet; oPropSet.SetType(value) ;</pre>

Method	Description	Format
<i>SetValue Method for a Property Set</i>	Sets the value for the value attribute of a property set.	<pre>var oPropSet;  oPropSet.SetValue(value);</pre>

## Control Methods for Browser Script

The following table describes a summary of the control methods you can use in Browser Script.

Method	Description	Format
<i>Applet Method for a Control</i>	Returns the name of the applet where a control resides.	<pre>var oControl;  var oApplet;  oApplet = oControl.Applet();</pre>
<i>BusComp Method for a Control</i>	Returns the name of the business component that an applet references. The control resides in this applet.	<pre>var oControl;  var busComp;  busComp = oControl.BusComp();</pre>
<i>GetProperty Method for a Control</i>	Returns the value of the property of a control.	<pre>var oControl;  var propVal;  propVal = oControl.GetProperty(propName);</pre>
<i>GetValue Method for a Control</i>	Returns the value of a control.	<pre>var oControl;  var sValue;  sValue = oControl.GetValue();</pre>
<i>Name Method for a Control</i>	Returns the name of a control.	<pre>var oControl;  var sName;  sName = oControl.Name();</pre>
<i>SetProperty Method for a Control</i>	Sets the visual properties of a control.	<pre>var oControl;  oControl.SetProperty(propName, propValue);</pre>
<i>SetValue Method for a Control</i>	Sets the contents of a control.	<pre>var oControl;</pre>

Method	Description	Format
		<code>oControl.SetValue(value;</code>

## Document Object Model Events You Can Use

This topic describes Document Object Model events you can use.

### Document Object Model Events

The following information lists the Document Object Model events. For each control, you can use the following events:

- OnFocus
- OnBlur

Note that scriptable events are not available for List Column and Tree controls.

Control	Siebel Control Type	Description
Button	Native	None
CheckBox	Native	Rendered as Input Type is CHECKBOX.
Link	Native	Rendered through paired anchor tags or as INPUT TYPE is TEXT in edit mode.
List Column	Native	None
Mailto	Native	Rendered as anchor tags with HREF is mailto or as INPUT TYPE is TEXT in Edit mode.
MiniButton	Native	None
Password	Native	Rendered as Input Type is password.
Text	Native	Rendered as INPUT TYPE is TEXT or as SELECT if attached to a picklist. If there is a pop-up window, then Siebel CRM renders it as an edit box plus a button.
TextArea	Native	Rendered as TEXTAREA.
Tree	Native	None

Control	Siebel Control Type	Description
URL	Native	Rendered through paired anchor tags with an HREF equal to the underlying field value or as INPUT TYPE is TEXT in edit mode.

You cannot access a Siebel object from a Document Object Model event. Business components and applets are examples of Siebel objects.

You can typically call code in the General section from anywhere in an object. However, you cannot call code written in the General section from a Document Object Model event.

To associate a script with the control\_OnClick event, use the Applet\_PreInvokeMethod event that is associated with the applet. For more information, see *Using a MiniButton Control to Call a Custom Method*.

# 7 Siebel VB Quick Reference

## Siebel VB Quick Reference

This chapter describes summary information for Siebel VB. It includes the following topics:

- *Applet Methods for Siebel VB*
- *Web Applet Events for Siebel VB*
- *Application Methods for Siebel VB*
- *Application Events for Siebel VB*
- *Business Component Methods for Siebel VB*
- *Business Component Events for Siebel VB*
- *Business Object Methods for Siebel VB*
- *Business Service Methods for Siebel VB*
- *Business Service Events for Siebel VB*
- *Property Set Methods for Siebel VB*
- *Miscellaneous Methods for Siebel VB*

## Applet Methods for Siebel VB

The following table describes a summary of the applet methods you can use with Siebel VB.

Method	Description	Format
<i>BusComp Method for an Applet</i>	Returns the name of the business component that an applet references.	<pre>Dim oApplet as Applet  Dim oBusComp as BusComp  Set oBusComp = oApplet.BusComp</pre>
<i>BusObject Method for an Applet</i>	Returns the name of the business object for the business component that the applet references.	<pre>Dim oApplet as Applet  Dim oBusObject as BusObject  Set oBusObject = oApplet.BusObject</pre>
<i>InvokeMethod Method for an Applet</i>	Calls a specialized method.	<pre>Dim oApplet as Applet  oApplet.InvokeMethod methodName as String, methArg1, methArg2, methArgN as String or StringArray</pre>

Method	Description	Format
<i>Name Method for an Applet</i>	Returns the name of an applet.	<pre>Dim oApplet as Applet  Dim sApplet as String  sApplet = oApplet.Name</pre>

## Web Applet Events for Siebel VB

The following table describes a summary of web applet events you can use with Siebel VB.

Event	Description	Format
<i>WebApplet_InvokeMethod Event</i>	Called after Siebel CRM runs a specialized method on the Web applet.	<b>WebApplet_InvokeMethod (MethodName as String)</b>
<i>WebApplet_PreCanInvokeMethod Event</i>	Called before Siebel CRM calls the PreInvokeMethod event, allowing you to determine if the user possesses the authority to call the applet method.	<b>WebApplet_PreCanInvokeMethod (MethodName as String, CanInvoke as String)</b>
<i>WebApplet_PreInvokeMethod Event</i>	Called before Siebel CRM calls a specialized method for the Web applet or before it calls a custom method through oWebApplet.Invoke Method.	<b>WebApplet_PreInvokeMethod (MethodName as String) As Integer</b>
<i>WebApplet_Load Event</i>	Called immediately after Siebel CRM loads an applet.	<b>WebApplet_Load</b>

## Application Methods for Siebel VB

The following table describes a summary of the application methods you can use with Siebel VB. It does not include object interface methods that are not called directly from an application object instance. For information about methods that are called with the InvokeMethod method on the application object, see *LoadObjects Method for an Application*.

Method	Description	Format
<i>ActiveBusObject Method for an Application</i>	Returns the name of the business object of the active view.	<pre>Dim oApplication as Application  Dim oBusObject as BusObject  Set oBusObject = oApplication.ActiveBusObject</pre>



Method	Description	Format
<i>ActiveViewName Method for an Application</i>	Returns the name of the active view.	<pre>Dim oApplication as Application  Dim sView as String  sView = oApplication.ActiveViewName</pre>
<i>CurrencyCode Method for an Application</i>	Returns the currency code that is associated with the division of the user position	<pre>Dim oApplication as Application  Dim sCur as String  sCur = oApplication.CurrencyCode</pre>
<i>GetBusObject Method for an Application</i>	Creates a new instance of a business object.	<pre>Dim oApplication as Application  Dim oBusObject as BusObject  set oBusObject = oApplication.GetBusObject (busobject as String)</pre>
<i>GetProfileAttr Method for an Application</i>	Returns the name of an attribute in a user profile.	<pre>Dim oApplication as Application  Dim sAttr as String  SAttr = oApplication.GetProfileAttr(name as String)</pre>
<i>GetService Method for an Application</i>	Locates a business service. If this business service is not already running, then Siebel CRM starts it.	<pre>Dim oApplication as Application  Dim oService as Service  set oService = oApplication.GetService(serviceName as String)</pre>
<i>GetSharedGlobal Method for an Application</i>	Returns the shared global variables.	<pre>Dim oApplication as Application  Dim sName as String  sName = Application.GetSharedGlobal(varName as String)</pre>
<i>GotoView Method for an Application</i>	<p>Does the following:</p> <ul style="list-style-type: none"> <li>Deactivates any business object, business component, applet, or control that is active.</li> <li>Activates a view.</li> <li>Activates the primary applet of the view and the business component that this applet references.</li> <li>Activates the first tab sequence control of the primary applet</li> </ul>	<pre>Dim oApplication as Application  oApplication.GotoView viewName as String[, BusinessObjectName as BusObject]</pre>

Method	Description	Format
<i>InvokeMethod Method for an Application</i>	Calls a method.	<pre>Dim oApplication as Application  oApplication.InvokeMethod(methodName asString, methArg1, methArg2, methArgN as String or StringArray)</pre>
<i>LoginId Method for an Application</i>	Returns the login ID of the user who started the Siebel application.	<pre>Dim oApplication as Application  Dim sID as String  iID = oApplication.LoginId</pre>
<i>LoginName Method for an Application</i>	Returns the login name of the user who started the Siebel application.	<pre>Dim oApplication as Application  Dim sUser as String  sUser = oApplication.LoginName</pre>
<i>NewPropertySet Method for an Application</i>	Creates a new property set.	<pre>Dim oApplication as Application  Dim oPropSet as PropertySet  oPropSet = oApplication.NewPropertySet</pre>
<i>PositionId Method for an Application</i>	Returns the name of the current user position.	<pre>Dim oApplication as Application  Dim sRow as String  sRow = oApplication.PositionId</pre>
<i>PositionName Method for an Application</i>	Returns the name of the current user position.	<pre>Dim oApplication as Application  Dim sPosition as String  sPosition = oApplication.PositionName</pre>
<i>RaiseError Method for an Application</i>	Sends a scripting error message to the browser. To determine the error text, Siebel CRM uses a key to look up the current language.	<pre>Dim oApplication as Application  oApplication.RaiseErrorkeyValue as String, param1 as String, ...</pre>
<i>RaiseErrorText Method for an Application</i>	Sends a scripting error message to the browser.	<pre>Dim oApplication as Application  oApplication.RaiseErrorText message as String</pre>
<i>SetPositionId Method for an Application</i>	Sets the active position to a Position Id.	<pre>Dim oApplication as Application  oApplication.SetPositionId posId as string</pre>
<i>SetPositionName Method for an Application</i>	Sets the active position to a position name.	<pre>Dim oApplication as Application  oApplication.SetPositionName posName as string</pre>

Method	Description	Format
<i>SetProfileAttr Method for an Application</i>	Sets a value for an attribute in a user profile.	<code>Dim oApplication as Application</code>  <code>oApplication.SetProfileAttr name as String, value as String</code>
<i>SetSharedGlobal Method for an Application</i>	Sets a shared global variable.	<code>Dim oApplication as Application</code>  <code>oApplication.SetSharedGlobal varName as String, value as String</code>
<i>Trace Method for an Application</i>	Appends a message to the trace file.	<code>Dim oApplication as Application</code> <code>oApplication.Trace message as String</code>
<i>TraceOff Method for an Application</i>	Turns off tracing.	<code>Dim oApplication as Application</code>  <code>oApplication.TraceOff</code>
<i>TraceOn Method for an Application</i>	Turns on tracing.	<code>Dim oApplication as Application</code>  <code>oApplication.TraceOn filename as String, type as String, selection as String</code>

## Application Events for Siebel VB

The following table describes a summary of the application events you can use with Siebel VB.

Event	Description	Format
<i>Application_Close Event</i>	Allows scripts to perform cleanup, before the Siebel application closes.	<code>Application_Close</code>
<i>Application_Navigate Event</i>	Called after the user navigates to a view.	<code>Application_Navigate</code>
<i>Application_InvokeMethod Event</i>	Called after a specialized method is called.	<code>Application_InvokeMethod (MethodName as String)</code>
<i>Application_PreInvokeMethod Event</i>	Called before an applet menu or the InvokeMethod method calls a specialized method.	<code>Application_PreInvokeMethod (MethodName as String) As Integer</code>
<i>Application_PreNavigate Event</i>	Called before the Siebel application displays the view where the user navigates.	<code>Application_PreNavigate (DestViewName As String, DestBusObjName As String)</code>

Event	Description	Format
<i>Application_Start Event</i>	Called when the Siebel client starts and again when it displays the client interface for the first time.	<code>Application_Start(commandLine as String)</code>

## Business Component Methods for Siebel VB

The following table describes a summary of the business component methods you can use with Siebel VB. It does not include object interface methods that are not called directly from a business component. For information about methods that you can call with the `InvokeMethod` method on the business component, see [Business Component Invoke Methods](#).

Method	Description	Format
<i>ActivateField Method for a Business Component</i>	Activates a field.	<code>Dim oBusComp as BusComp</code>  <code>oBusComp.ActivateField fieldName as String</code>
<i>ActivateMultipleFields Method for a Business Component</i>	Activates multiple fields.	<code>Dim oBusComp as BusComp</code>  <code>oBusComp.ActivateMultipleFields</code>  <code>oPropSet as PropertySet</code>
<i>Associate Method for a Business Component</i>	Creates a new many-to-many relationship for the parent object through an association business component.	<code>Dim oBusComp as BusComp</code>  <code>oBusComp.Associate whereIndicator as Integer</code>
<i>BusObject Method for a Business Component</i>	Returns the name of the business object that the business component references.	<code>Dim oBusComp as BusComp</code>  <code>Dim oBusObject as BusObject</code>  <code>Set oBusObject = oBusComp.BusObject</code>
<i>ClearToQuery Method for a Business Component</i>	Clears the current query but does not clear sort specifications on the business component.	<code>Dim oBusComp as BusComp</code>  <code>oBusComp.ClearToQuery</code>
<i>DeactivateFields Method for a Business Component</i>	Deactivates the fields that are currently active from the SQL query statement of a business component.	<code>Dim oBusComp as BusComp</code>  <code>oBusComp.DeactivateFields</code>
<i>DeleteRecord Method for a Business Component</i>	Removes the current record from a business component.	<code>Dim oBusComp as BusComp</code>  <code>oBusComp.DeleteRecord</code>

Method	Description	Format
<i>ExecuteQuery Method for a Business Component</i>	Returns a set of business component records.	<pre>Dim oBusComp as BusComp  oBusComp.ExecuteQuery cursorMode as Integer</pre>
<i>ExecuteQuery2 Method for a Business Component</i>	Returns a set of business component records. Allows you to control the number of records Siebel CRM returns.	<pre>Dim oBusComp as BusComp  oBusComp.ExecuteQuery2 cursorMode as Integer, ignoreMaxCursorSize as Integer</pre>
<i>FirstRecord Method for a Business Component</i>	Moves the record pointer to the first record in a business component, making that record the current record.	<pre>Dim oBusComp as BusComp  Dim iIsRecord as Integer  iIsRecord = oBusComp.FirstRecord</pre>
<i>FirstSelected Method for a Business Component</i>	Makes the first record of the multiple selection in a business component active.	<pre>Dim oBusComp as BusComp  Dim iIsMultipleSection as Integer  iIsMultipleSelection = oBusComp.FirstSelected</pre>
<i>GetAssocBusComp Method for a Business Component</i>	Returns the name of the association business component.	<pre>Dim oBusComp as BusComp  Dim AssocBusComp as BusComp  Set AssocBusComp = oBusComp.GetAssocBusComp</pre>
<i>GetFieldValue Method for a Business Component</i>	Returns the value of a field from the current record of a business component.	<pre>Dim oBusComp as BusComp  Dim sValue as String  sValue = oBusComp.GetFieldValue(Fieldname as String)</pre>
<i>GetFormattedFieldValue Method for a Business Component</i>	A field value that is in the same format that the Siebel client uses.	<pre>Dim oBusComp as BusComp  Dim sValue as String  sValue = oBusComp.GetFormattedFieldValue(Fieldname as String)</pre>
<i>GetMultipleFieldValues Method for a Business Component</i>	Returns values for the fields specified in a property set.	<pre>Dim oBusComp as BusComp  oBusComp.GetMultipleFieldValues oFields as PropertySet, oValues as PropertySet</pre>

Method	Description	Format
<i>GetMVGBusComp Method for a Business Component</i>	Returns the multivalue group business component associated a business component field.	<pre>Dim oBusComp as BusComp  Dim MvgBusComp as BusComp  set MvgBusComp = oBusComp.GetMVGBusComp(FieldName as String)</pre>
<i>GetNamedSearch Method for a Business Component</i>	Returns the name of a search specification.	<pre>Dim oBusComp as BusComp  Dim sValue as String  sValue = oBusComp.GetNamedSearch(SearchName as String)</pre>
<i>GetPicklistBusComp Method for a Business Component</i>	Returns the name of the pick business component that is associated with a field in the current business component.	<pre>Dim oBusComp as BusComp  Dim pickBusComp as BusComp  Set pickBusComp = oBusComp.GetPicklistBusComp(FieldName as String)</pre>
<i>GetSearchExpr Method for a Business Component</i>	Returns the current search expression that is defined for a business component.	<pre>Dim oBusComp as BusComp  Dim sExpr as String  sExpr = oBusComp.GetSearchExpr</pre>
<i>GetSearchSpec Method for a Business Component</i>	Returns the search specification for a field.	<pre>Dim oBusComp as BusComp  Dim sSpec as String  sSpec = oBusComp.GetSearchSpec(FieldName as String)</pre>
<i>GetSortSpec Method for a Business Component</i>	Returns the sort specification for a business component.	<pre>Dim sSortSpec as String  sSortSpec = GetSortSpec</pre>
<i>GetUserProperty Method for a Business Component</i>	Returns the value of a user property.	<pre>Dim oBusComp as BusComp  Dim sValue as String  sValue = oBusComp.GetUserProperty(propertyName as String)</pre>
<i>GetViewMode Method for a Business Component</i>	Returns the current visibility mode for a business component.	<pre>Dim oBusComp as BusComp  Dim iMode as Integer  iMode = oBusComp.GetViewMode</pre>

Method	Description	Format
<i>InvokeMethod Method for a Business Component</i>	Calls a method.	<pre>Dim oBusComp as BusComp  oBusComp.InvokeMethod(methodName as String, methArg1, methArg2, methArgN as String or StringArray)</pre>
<i>LastRecord Method for a Business Component</i>	Moves the record pointer to the last record in a business component.	<pre>Dim oBusComp as BusComp  Dim iReturn as Integer  iReturn = oBusComp.LastRecord</pre>
<i>Name Method for a Business Component</i>	Returns the name of a business component.	<pre>Dim oBusComp as BusComp  Dim sName as String  sName = oBusComp.Name</pre>
<i>NewRecord Method for a Business Component</i>	Adds a new record to a business component.	<pre>Dim oBusComp as BusComp  oBusComp.NewRecord whereIndicator as Integer</pre>
<i>NextRecord Method for a Business Component</i>	Moves the record pointer to the next record in a business component, making that record the current record.	<pre>Dim oBusComp as BusComp  Dim iReturn as Integer  iReturn = oBusComp.NextRecord</pre>
<i>NextSelected Method for a Business Component</i>	Makes the next record of the current multiple selection the active record.	<pre>Dim oBusComp as BusComp  Dim iReturn as Integer  iReturn = oBusComp.NextSelected</pre>
<i>ParentBusComp Method for a Business Component</i>	Returns the name of the parent business component.	<pre>Dim oBusComp as BusComp  Dim parentBusComp as BusComp  Set parentBusComp = oBusComp.ParentBusComp</pre>
<i>Pick Method for a Business Component</i>	Places the currently chosen record in a pick business component into the appropriate fields of the parent business component.	<pre>Dim oBusComp as BusComp  oBusComp.Pick</pre>
<i>PreviousRecord Method for a Business Component</i>	Moves the record pointer to the previous record in a business component.	<pre>Dim oBusComp as BusComp  Dim iReturn as Integer  iReturn = oBusComp.PreviousRecord</pre>

Method	Description	Format
<i>RefineQuery Method for a Business Component</i>	Refines a query.	<pre>Dim oBusComp as BusComp  oBusComp.RefineQuery</pre>
<i>SetFieldValue Method for a Business Component</i>	Sets a new value for a field in the current record of a business component.	<pre>Dim oBusComp as BusComp  oBusComp.SetFieldValue fieldName as String, fieldValue as String</pre>
<i>SetFormattedFieldValue Method for a Business Component</i>	Sets the new value to a field for the current record of a business component.	<pre>Dim oBusComp as BusComp  oBusComp.SetFormattedFieldValue fieldName as String, fieldValue as String</pre>
<i>SetMultipleFieldValues Method for a Business Component</i>	Sets new values in the fields of the current record of a business component.	<pre>Dim oBusComp as BusComp  oBusComp.SetMultipleFieldValues oPropSet as PropertySet</pre>
<i>SetNamedSearch Method for a Business Component</i>	Sets the named search specification on a business component.	<pre>Dim oBusComp as BusComp  oBusComp.SetNamedSearch searchName as String, searchSpec as String</pre>
<i>SetSearchExpr Method for a Business Component</i>	Sets a search expression for a business component rather than for each field.	<pre>Dim oBusComp as BusComp  oBusComp.SetSearchExpr searchSpec as String</pre>
<i>SetSearchSpec Method for a Business Component</i>	Sets the search specification for a field.	<pre>Dim oBusComp as BusComp oBusComp.SetSearchSpec fieldName as String, searchSpec as String</pre>
<i>SetSortSpec Method for a Business Component</i>	Sets the sort specification for a business component.	<pre>Dim oBusComp as BusComp  oBusComp.SetSortSpec sortSpec as String</pre>
<i>SetUserProperty Method for a Business Component</i>	Sets the value of a user property in a business component.	<pre>Dim oBusComp as BusComp  oBusComp.SetUserProperty propertyName as String, newValue as String</pre>
<i>SetViewMode Method for a Business Component</i>	Sets the visibility type for a business component.	<pre>Dim oBusComp as BusComp  oBusComp.SetViewMode viewMode as Integer</pre>
<i>UndoRecord Method for a Business Component</i>	Reverses any unsaved modifications that Siebel CRM has made on a record.	<pre>Dim oBusComp as BusComp</pre>



Method	Description	Format
		<code>oBusComp.UndoRecord</code>
<i>WriteRecord Method for a Business Component</i>	Saves to the Siebel database any modifications made to the current record.	<code>Dim oBusComp as BusComp</code> <code>oBusComp.WriteRecord</code>

## Business Component Events for Siebel VB

The following table describes a summary of the business component events you can use with Siebel VB.

Event	Description	Format
<i>BusComp_Associate Event</i>	Called if the user adds a business component record to create an association.	<code>BusComp_Associate</code>
<i>BusComp_ChangeRecord Event</i>	Called if a business component record becomes the current record.	<code>BusComp_ChangeRecord</code>
<i>BusComp_CopyRecord Event</i>	Called if the user copies a business component record, and if the user makes this record the active record.	<code>BusComp_CopyRecord</code>
<i>BusComp_DeleteRecord Event</i>	Called if the user deletes a business component record.	<code>BusComp_DeleteRecord</code>
<i>BusComp_InvokeMethod Event</i>	Called if Siebel CRM calls the InvokeMethod method on a business component.	<code>BusComp_InvokeMethod(methodName as String)</code>
<i>BusComp_NewRecord Event</i>	Called if the user creates a business component record, and if the user makes this record the active record. You can use this event to set up default values for a field.	<code>BusComp_NewRecord</code>
<i>BusComp_PreAssociate Event</i>	Called if Siebel CRM detects that the user is about to add a business component record to create an association.	<code>BusComp_PreAssociate</code>
<i>BusComp_PreCopyRecord Event</i>	Called if Siebel CRM detects that the user is about to copy a business component record. You can use this event to perform precopy validation.	<code>BusComp_PreCopyRecord</code>

Event	Description	Format
<i>BusComp_PreDeleteRecord Event</i>	Called if Siebel CRM detects that the user is about to delete a business component record. You can use this event to prevent the deletion or to perform any actions before Siebel CRM deletes the record.	<b>BusComp_PreDeleteRecord</b>
<i>BusComp_PreGetFieldValue Event</i>	Called if a user accesses a business component field.	<b>BusComp_PreGetFieldValue (FieldName as String, FieldValue as String)</b>
<i>Bus Comp_PreInvokeMethod Event</i>	Called if Siebel CRM calls a specialized method on a business component. Siebel CRM calls it before it calls this specialized method.	<b>BusComp_PreInvokeMethod (methodName as String)</b>
<i>BusComp_PreNewRecord Event</i>	Called if Siebel CRM detects that the user is about to create a new business component record. You can use this event to perform preinsert validation.	<b>BusComp_PreNewRecord</b>
<i>BusComp_PreQuery Event</i>	Siebel CRM calls the BusComp_PreQuery event before it runs a query. You can use this event to modify the search criteria or to restrict Siebel CRM from running certain queries.	<b>BusComp_PreQuery</b>
<i>BusComp_PreSetFieldValue Event</i>	Siebel CRM calls this event after the user modifies a field value or after a call to the SetFieldValue method occurs. This event allows you to use custom validation before Siebel CRM applies predefined validation.	<b>BusComp_PreSetFieldValue (FieldName as String, FieldValue as String)</b>
<i>BusComp_PreWriteRecord Event</i>	Called before Siebel CRM writes a record to the Siebel database.	<b>BusComp_PreWriteRecord</b>
<i>BusComp_Query Event</i>	Called after Siebel CRM completes a query but before it displays the query results.	<b>BusComp_Query</b>
<i>BusComp_SetFieldValue Event</i>	Called if Siebel CRM sends a value to a business component from the Siebel client or through a call to the SetFieldValue method.	<b>BusComp_SetFieldValue (fieldName as String)</b>
<i>BusComp_WriteRecord Event</i>	Called after Siebel CRM saves the record to the Siebel database.	<b>BusComp_WriteRecord</b>

## Business Object Methods for Siebel VB

The following table describes a summary of business object methods you can use with Siebel VB.

Method	Description	Format
<i>GetBusComp Method for a Business Object</i>	Returns the name of a business component instance.	<pre>Dim oBusObject as BusObject  Dim oBusComp as BusComp  set oBusComp = BusObject.GetBusComp(BusCompName as String)</pre>
<i>Name Method for a Business Object</i>	Returns the name of a business object.	<pre>Dim oBusObject as BusObject  Dim sName as String  sName = oBusObject.Name</pre>

## Business Service Methods for Siebel VB

The following table describes a summary of the business service methods you can use with Siebel VB.

Method	Description	Format
<i>GetFirstProperty Method for a Business Service</i>	Returns the name of the first property that is defined for a business service.	<pre>Dim oService as Service  Dim sName as String  sName = oService.GetFirstProperty</pre>
<i>GetNextProperty Method for a Business Service</i>	Returns the name of the next property of a business service.	<pre>Dim oService as Service  Dim sName as String  sName = oService.GetNextProperty</pre>
<i>GetProperty Method for a Business Service</i>	Returns the value of a property.	<pre>Dim oService as Service  Dim sValue as String  sValue = oService.GetProperty(propName as String)</pre>

Method	Description	Format
<i>InvokeMethod Method for a Business Service</i>	Calls a method on a business service.	<pre>Dim oService as Service  oService.InvokeMethod(methodName as String, InputArguments as PropertySet, OutputArguments as PropertySet)</pre>
<i>Name Method for a Business Service</i>	Returns the name of a business service.	<pre>Dim oService as Service  Dim sName as String  sName = oService.Name</pre>
<i>PropertyExists Method for a Business Service</i>	Returns a Boolean value that indicates if the property that the argument identifies exists.	<pre>Dim oService as Service  Dim iReturn as Boolean  iReturn = oService.PropertyExists(propName as String)</pre>
<i>RemoveProperty Method for a Business Service</i>	Removes a property from a business service.	<pre>Dim oService as Service  oService.RemoveProperty propName as String</pre>
<i>SetProperty Method for a Business Service</i>	Sets a value for a property of a business service.	<pre>Dim oService as Service  oService.SetProperty propName as String, propValue as String</pre>

## Business Service Events for Siebel VB

The following table describes a summary of business service events you can use with Siebel VB.

Method	Description	Format
<i>Service_InvokeMethod Event</i>	Siebel CRM calls this event after it calls the InvokeMethod method.	<code>Service_InvokeMethod(methodName as String)</code>
<i>Service_PreCanInvokeMethod Event</i>	Siebel CRM calls this event before it calls the PreInvokeMethod event. This configuration allows you to determine if the user possesses the authority to call the business service method.	<code>Service_PreCanInvokeMethod(methodName as String, CanInvoke As String)</code>

Method	Description	Format
<i>Service_PreInvokeMethod Event</i>	Siebel CRM calls this event before it calls a specialized method on a business service.	<code>Service_PreInvokeMethod(methodName as String, Inputs as PropertySet, Outputs as PropertySet)</code>

## Property Set Methods for Siebel VB

The following table describes a summary of the property set methods you can use with Siebel VB.

Method	Description	Format
<i>AddChild Method for a Property Set</i>	Adds a child property set to a property set.	<code>Dim oPropSet as PropertySet</code> <code>oPropSet.AddChild childObject as PropertySet</code>
<i>Copy Method for a Property Set</i>	Returns a copy of a property set.	<code>Dim oPropSet1 as PropertySet</code> <code>Dim oPropSet2 as PropertySet</code> <code>set oPropSet2 = oPropSet1.Copy</code>
<i>GetChild Method for a Property Set</i>	Returns a child property set of a property set.	<code>Dim oPropSet as PropertySet</code> <code>Dim childPropSet as SiebelPropertySet</code> <code>set childPropSet = oPropSet.GetChild(index as Long)</code>
<i>GetChildCount Method for a Property Set</i>	Returns the number of child property sets that exist for a parent property set.	<code>Dim oPropSet as PropertySet</code> <code>Dim iCount as Integer</code> <code>iCount = oPropSet.GetChildCount</code>
<i>GetFirstProperty Method for a Property Set</i>	Returns the name of the first property in a property set.	<code>Dim oPropSet as PropertySet</code> <code>Dim sPropName as String</code> <code>sPropName = oPropSet.GetFirstProperty</code>
<i>GetNextProperty Method for a Property Set</i>	Returns the name of the next property in a property set.	<code>Dim oPropSet as PropertySet</code> <code>Dim sPropName as String</code> <code>sPropName = oPropSet.GetNextProperty</code>
<i>GetProperty Method for a Property Set</i>	Returns the value of a property.	<code>Dim oPropSet as PropertySet</code>

Method	Description	Format
		<pre>Dim sPropVal as String  sPropVal = oPropSet.GetProperty(propName as String)</pre>
<i>GetPropertyCount Method for a Property Set</i>	Returns the number of properties that exist in the current level in the hierarchy.	<pre>Dim oPropSet as PropertySet  Dim count as Long  count = oPropSet.GetPropertyCount</pre>
<i>GetType Method for a Property Set</i>	Returns the value of the type attribute of a property set.	<pre>Dim oPropSet as PropertySet  Dim sTypeVal as String  sTypeVal = oPropSet.GetType</pre>
<i>GetValue Method for a Property Set</i>	Returns the value stored in the value attribute of a property set.	<pre>Dim oPropSet as PropertySet  Dim sValVal as String  sValVal = oPropSet.GetValue</pre>
<i>InsertChildAt Method for a Property Set</i>	Inserts a child property set in a parent property set at a specific location.	<pre>Dim oPropSet as PropertySet  oPropSet.InsertChildAt childObject as SiebelPropertySet, index as Integer</pre>
<i>PropertyExists Method for a Property Set</i>	Returns a Boolean value that indicates if the property that the argument identifies exists.	<pre>Dim oPropSet as PropertySet  oPropSet.PropertyExists(propName as String)</pre>
<i>RemoveChild Method for a Property Set</i>	Removes a child property set from a parent property set.	<pre>Dim oPropSet as PropertySet  oPropSet.RemoveChild index as Integer</pre>
<i>RemoveProperty Method for a Property Set</i>	Removes a property from a property set.	<pre>Dim oPropSet as PropertySet  oPropSet.RemoveProperty propName as String</pre>
<i>Reset Method for a Property Set</i>	Removes every property and child property set from a property set.	<pre>Dim oPropSet as PropertySet  oPropSet.Reset</pre>
<i>SetProperty Method for a Property Set</i>	Sets a value in the property of a property set.	<pre>Dim oPropSet as PropertySet  oPropSet.SetProperty propName as String, propValue as String</pre>
<i>SetType Method for a Property Set</i>	Sets a data value for the type attribute of a property set.	<pre>Dim oPropSet as PropertySet  oPropSet.SetType value as String</pre>

Method	Description	Format
<i>SetValue Method for a Property Set</i>	Sets a data value for the value attribute of a property set.	<pre>Dim oPropSet as PropertySet oPropSet.SetValue value as String</pre>

## Miscellaneous Methods for Siebel VB

The following table describes a summary of miscellaneous methods you can use with Siebel VB.

Method	Description	Format
<i>TheApplication Method</i>	Returns the name of an application object.	<b>TheApplication</b>





# 8 Siebel eScript Quick Reference

## Siebel eScript Quick Reference

This chapter describes summary information for Siebel eScript. It includes the following topics:

- *Applet Methods for Siebel eScript*
- *Web Applet Events for Siebel eScript*
- *Application Methods for Siebel eScript*
- *Application Events for Siebel eScript*
- *Business Component Methods for Siebel eScript*
- *Business Component Events for Siebel eScript*
- *Business Object Methods for Siebel eScript*
- *Business Service Methods for Siebel eScript*
- *Business Service Events for Siebel eScript*
- *Property Set Methods for Siebel eScript*
- *Miscellaneous Methods for Siebel eScript*

The ST eScript engine is the default Siebel eScript scripting engine in Siebel CRM version 8.0 and later. For information about format differences between it and the traditional (T) engine, see *Siebel eScript Language Reference*.

## Applet Methods for Siebel eScript

The following table describes a summary of the applet methods you can use with Siebel eScript.

Method	Description	Format
<i>BusComp Method for an Applet</i>	Returns the name of the business component that an applet references.	<pre>var applet;  var myBusComp;  myBusComp = applet.BusComp();</pre>
<i>BusObject Method for an Applet</i>	Returns the name of the business object for the business component that an applet references.	<pre>var applet;  var busObject;  busObject = applet.BusObject();</pre>
<i>InvokeMethod Method for an Applet</i>	Calls a specialized method.	<pre>var applet;  applet.InvokeMethod(methodName, methodArg1, methodArg2, ..., methodArgn );</pre>

Method	Description	Format
<i>Name Method for an Applet</i>	Returns the name of an applet.	<pre>var applet;  var sApplet;  sApplet = applet.Name();</pre>

## Web Applet Events for Siebel eScript

The following table describes a summary of web applet events you can use with Siebel eScript.

Event	Description	Format
<i>WebApplet_InvokeMethod Event</i>	Siebel CRM calls this event after a specialized method on the Web applet runs.	<b>WebApplet_InvokeMethod</b> ( <i>MethodName</i> )
<i>WebApplet_Load Event</i>	Siebel CRM calls this event immediately after it loads an applet.	<b>WebApplet_Load</b>
<i>WebApplet_PreCanInvokeMethod Event</i>	Called before Siebel CRM calls the PreInvokeMethod event, allowing you to determine if the user possesses the authority to call the applet method.	<b>WebApplet_PreCanInvokeMethod</b> ( <i>MethodName</i> , <i>&amp;CanInvoke</i> )
<i>WebApplet_PreInvokeMethod Event</i>	Siebel CRM calls this event before it calls a specialized method for the Web applet or a custom method that it calls through the oWebApplet object of the InvokeMethod method.	<b>WebApplet_PreInvokeMethod</b> ( <i>MethodName</i> )

## Application Methods for Siebel eScript

The following table describes a summary of application methods you can use with Siebel eScript. It does not include object interface methods that Siebel CRM does not call directly from an application instance. For information about methods that Siebel CRM calls with the InvokeMethod method on the application, see *LoadObjects Method for an Application*.

Method	Description	Format
<i>ActiveBusObject Method for an Application</i>	Returns the name of the business object that the active view references.	<pre>var busObject;</pre>

Method	Description	Format
		<code>busObject = TheApplication().ActiveBusObject();</code>
<i>ActiveViewName Method for an Application</i>	Returns the name of the active view.	<code>var sView;  sView = TheApplication().ActiveViewName();</code>
<i>CurrencyCode Method for an Application</i>	Returns the currency code that is associated with the division of the user position.	<code>var sCur;  sCur = TheApplication().CurrencyCode();</code>
<i>GetBusObject Method for an Application</i>	Creates a new instance of a business object.	<code>var myBusObject;  myBusObject = TheApplication().GetBusObject (BusObjectName);</code>
<i>Name Method for an Application</i>	Returns the name of the Siebel application.	<code>var name;  name = TheApplication().Name();</code>
<i>GetService Method for an Application</i>	Locates a business service. If this business service is not already running, then Siebel CRM starts it.	<code>var Service;  Service = TheApplication().GetService (serviceName);</code>
<i>GetSharedGlobal Method for an Application</i>	Returns the shared global variables.	<code>var sName;  sName = TheApplication().GetSharedGlobal (varName);</code>
<i>GotoView Method for an Application</i>	Activates a view.	<code>TheApplication().GotoView(viewName[, BusinessObject]);</code>
<i>InvokeMethod Method for an Application</i>	Calls a method.	<code>TheApplication().InvokeMethod (methodName, methodArg1, methodArg2,..., methodArgn);</code>
<i>LoginId Method for an Application</i>	Returns the login ID of the user who started the Siebel application.	<code>var sID;  sID = TheApplication().LoginId();</code>
<i>LoginName Method for an Application</i>	Returns the login name of the user who started Oracle's Siebel application.	<code>var sUser;  sUser = TheApplication().LoginName();</code>
<i>NewPropertySet Method for an Application</i>	Creates a new property set.	<code>var oPropSet;  oPropSet = TheApplication().NewPropertySet();</code>

Method	Description	Format
<i>PositionId Method for an Application</i>	Returns the position ID of the user position.	<pre>var sRow; sRow = TheApplication().PositionId();</pre>
<i>PositionName Method for an Application</i>	Returns the name of the current user position.	<pre>var sPosition;  sPosition = TheApplication().PositionName();</pre>
<i>RaiseError Method for an Application</i>	Sends a scripting error message to the browser. To determine the error text, Siebel CRM uses a key to look up the current language.	<pre>var keyVal;  var arg1 ...;  TheApplication().RaiseError(keyVal, arg1, ...);</pre>
<i>RaiseErrorText Method for an Application</i>	Sends a scripting error message to the browser.	<pre>var message;  TheApplication().RaiseErrorText (message);</pre>
<i>SetPositionId Method for an Application</i>	Sets the active position to a position ID.	<pre>var success;  success = TheApplication().SetPositionId (posId);</pre>
<i>SetPositionName Method for an Application</i>	Sets the active position to a position name.	<pre>var success;  success = TheApplication().SetPositionName (posName);</pre>
<i>SetProfileAttr Method for an Application</i>	Personalization uses this method to set a value for an attribute in a user profile.	<pre>TheApplication().SetProfileAttr (name, value);</pre>
<i>SetSharedGlobal Method for an Application</i>	Sets a shared global variable.	<pre>TheApplication().SetSharedGlobal (varName, value);</pre>
<i>Trace Method for an Application</i>	Appends a message to the trace file.	<pre>TheApplication().Trace(message);</pre>
<i>TraceOff Method for an Application</i>	Turns off tracing.	<pre>TheApplication().TraceOff();</pre>
<i>TraceOn Method for an Application</i>	Turns on tracing.	<pre>TheApplication().TraceOn(filename, type, selection);</pre>

## Application Events for Siebel eScript

The following table describes a summary of application events you can use with Siebel eScript.

Event	Description	Format
<i>Application_Close Event</i>	Called before the Siebel application exits.	<code>Application_Close()</code>
<i>Application_InvokeMethod Event</i>	Called after a specialized method is called.	<code>Application_InvokeMethod(methodName)</code>
<i>Application_Navigate Event</i>	Called after the user navigates to a view.	<code>Application_Navigate()</code>
<i>Application_PreInvokeMethod Event</i>	Called before Siebel CRM calls a specialized method.	<code>Application_PreInvokeMethod(methodName)</code>
<i>Application_PreNavigate Event</i>	Called before the Siebel application displays the view where the user navigates.	<code>Application_PreNavigate (DestViewName, DestBusObjName)</code>
<i>Application_Start Event</i>	Called when the Siebel client starts.	<code>Application_Start(commandLine)</code>

## Business Component Methods for Siebel eScript

The following table describes a summary of business component methods you can use with Siebel eScript. It does not include object interface methods that Siebel CRM does not call directly from a business component. For information about methods that Siebel CRM calls with the InvokeMethod method on a business component, see [Business Component Invoke Methods](#).

Method	Description	Format
<i>ActivateField Method for a Business Component</i>	Activates a field.	<pre>var myBusComp;  myBusComp.ActivateField(fieldName);</pre>
<i>ActivateMultipleFields Method for a Business Component</i>	Activates multiple fields.	<pre>var myBusComp;  myBusComp.ActivateMultipleFields(oPropSet);</pre>

Method	Description	Format
<i>Associate Method for a Business Component</i>	Creates a new many-to-many relationship for the parent object through an association business component.	<pre>var myBusComp;  myBusComp.Associate(whereIndicator);</pre>
<i>BusObject Method for a Business Component</i>	Returns the name of the business object that the business component references.	<pre>var myBusComp;  var busObject;  busObject = myBusComp.BusObject();</pre>
<i>ClearToQuery Method for a Business Component</i>	Clears the current query but does not clear sort specifications on a business component.	<pre>var myBusComp;  myBusComp.ClearToQuery();</pre>
<i>DeactivateFields Method for a Business Component</i>	Deactivates the fields that are currently active from the SQL query statement of a business component.	<pre>var myBusComp;  myBusComp.DeactivateFields();</pre>
<i>DeleteRecord Method for a Business Component</i>	Removes the current record from a business component.	<pre>var myBusComp;  myBusComp.DeleteRecord();</pre>
<i>ExecuteQuery Method for a Business Component</i>	Returns a set of business component records.	<pre>var myBusComp;  myBusComp.ExecuteQuery(cursorMode);</pre>
<i>ExecuteQuery2 Method for a Business Component</i>	Returns a set of business component records. Allows you to control the number of records Siebel CRM returns.	<pre>var myBusComp;  myBusComp.ExecuteQuery2(cursorMode, ignoreMaxCursorSize);</pre>
<i>FirstRecord Method for a Business Component</i>	Moves the record pointer to the first record in a business component, making that record the current record.	<pre>var myBusComp;  var bIsRecord;  bIsRecord = myBusComp.FirstRecord();</pre>
<i>FirstSelected Method for a Business Component</i>	Makes the first record of the multiple selection in a business component active.	<pre>var myBusComp;  var bIsMultipleSelection;  bIsMultipleSelection = myBusComp.FirstSelected();</pre>
<i>GetAssocBusComp Method for a Business Component</i>	Returns the name of the association business component.	<pre>var myBusComp;  var AssocBusComp;  AssocBusComp = myBusComp.GetAssocBusComp();</pre>

Method	Description	Format
<i>GetFieldValue Method for a Business Component</i>	Returns the value of a field from the current record of a business component.	<pre>var myBusComp;  var sValue;  sValue = myBusComp.GetFieldValue (FieldName) ;</pre>
<i>GetFormattedFieldValue Method for a Business Component</i>	Returns a field value that is in the same format that the Siebel client uses.	<pre>var myBusComp;  var sValue;  sValue = myBusComp.GetFormattedFieldValue (FieldName) ;</pre>
<i>GetMultipleFieldValues Method for a Business Component</i>	Returns a value for each field specified in a property set.	<pre>var myBusComp;  myBusComp.GetMultipleFieldValues (oFields, oValues ) ;</pre>
<i>GetMVGBusComp Method for a Business Component</i>	Returns the multivalue group business component that is associated a business component field.	<pre>var myBusComp;  var MvgBusComp;  MvgBusComp= myBusComp.GetMVGBusComp (FieldName) ;</pre>
<i>GetNamedSearch Method for a Business Component</i>	Returns the name of a search specification.	<pre>var myBusComp;  var sValue;  sValue = myBusComp.GetNamedSearch (SearchName) ;</pre>
<i>GetPicklistBusComp Method for a Business Component</i>	Returns the name of the pick business component that is associated with a field in the current business component.	<pre>var myBusComp;  var pickBusComp;  pickBusComp = myBusComp.GetPicklistBusComp (FieldName) ;</pre>
<i>GetSearchExpr Method for a Business Component</i>	Returns the current search expression that is defined for a business component.	<pre>var myBusComp;  var sExpr;  sExpr = myBusComp.GetSearchExpr () ;</pre>
<i>GetSearchSpec Method for a Business Component</i>	Returns the search specification that is defined for a business component.	<pre>var myBusComp;  var sSpec;  sSpec = myBusComp.GetSearchSpec (FieldName) ;</pre>
<i>GetSortSpec Method for a Business Component</i>	Returns the sort specification for a business component.	<pre>var sSortSpec = this.GetSortSpec () ;</pre>

Method	Description	Format
<i>GetUserProperty Method for a Business Component</i>	Returns the value of a user property.	<pre>var myBusComp;  var sValue;  sValue = myBusComp.GetUserProperty (propertyName);</pre>
<i>GetViewMode Method for a Business Component</i>	Returns the visibility mode for a business component.	<pre>var myBusComp;  var iMode;  iMode = myBusComp.GetViewMode();</pre>
<i>InvokeMethod Method for a Business Component</i>	Calls a method.	<pre>var myBusComp;  var sReturn;  sReturn = myBusComp.InvokeMethod(methodName, methodArg1, methodArg2,..., methodArgn);</pre>
<i>LastRecord Method for a Business Component</i>	Moves the record pointer to the last record in a business component.	<pre>var myBusComp;  var iReturn;  iReturn = myBusComp.LastRecord();</pre>
<i>Name Method for a Business Component</i>	Returns the name of a business component.	<pre>var myBusComp;  var sName;  sName = myBusComp.Name();</pre>
<i>NewRecord Method for a Business Component</i>	Adds a new record to a business component.	<pre>var myBusComp;  myBusComp.NewRecord(whereIndicator);</pre>
<i>NextRecord Method for a Business Component</i>	Moves the record pointer to the next record in a business component, making that record the current record.	<pre>var myBusComp;  var bFound;  bFound = myBusComp.NextRecord();</pre>
<i>NextSelected Method for a Business Component</i>	Makes the next record of the current multiple selection the active record.	<pre>var myBusComp;  var iReturn;  iReturn = myBusComp.NextSelected();</pre>
<i>ParentBusComp Method for a Business Component</i>	Returns the name of a parent business component.	<pre>var myBusComp;  var parentBusComp;</pre>



Method	Description	Format
		<code>parentBusComp = myBusComp.ParentBusComp();</code>
<i>Pick Method for a Business Component</i>	Places the currently chosen record in a pick business component into the appropriate fields of the parent business component.	<pre>var myBusComp; myBusComp.Pick();</pre>
<i>PreviousRecord Method for a Business Component</i>	Moves the record pointer to the previous record in a business component, making that record the current record.	<pre>var myBusComp; var iReturn; iReturn = myBusComp.PreviousRecord();</pre>
<i>RefineQuery Method for a Business Component</i>	Refines a query.	<pre>var myBusComp; myBusComp.RefineQuery();</pre>
<i>SetFieldValue Method for a Business Component</i>	Sets a new value in a field for the current record of a business component.	<pre>var myBusComp; myBusComp.SetFieldValue(FieldName,     FieldValue);</pre>
<i>SetFormattedFieldValue Method for a Business Component</i>	Sets a new value in a field in the current record of a business component. It accepts the field value in the current local format.	<pre>var myBusComp; myBusComp.SetFormattedFieldValue(     FieldName, FieldValue);</pre>
<i>SetMultipleFieldValues Method for a Business Component</i>	Sets new values in the fields of the current record of a business component.	<pre>var myBusComp; myBusComp.SetMultipleFieldValues(     oPropSet);</pre>
<i>SetNamedSearch Method for a Business Component</i>	Sets a named search specification on a business component.	<pre>var myBusComp; myBusComp.SetNamedSearch(searchName,     searchSpec);</pre>
<i>SetSearchExpr Method for a Business Component</i>	Sets a search expression for a business component.	<pre>var myBusComp; myBusComp.SetSearchExpr(searchSpec);</pre>
<i>SetSearchSpec Method for a Business Component</i>	Sets the search specification for a business component.	<pre>var myBusComp; myBusComp.SetSearchSpec(FieldName,     searchSpec);</pre>
<i>SetSortSpec Method for a Business Component</i>	Sets the sort specification for a business component.	<pre>var myBusComp; myBusComp.SetSortSpec(sortSpec);</pre>
<i>SetUserProperty Method for a Business Component</i>	Sets the value of a user property in a business component.	<pre>var myBusComp;</pre>

Method	Description	Format
		<code>myBusComp.SetUserProperty (propertyName, newValue) ;</code>
<i>SetViewMode Method for a Business Component</i>	Sets the visibility type for a business component.	<code>var myBusComp ;</code> <code>myBusComp.SetViewMode (viewMode) ;</code>
<i>UndoRecord Method for a Business Component</i>	Reverses any unsaved modifications made to the record.	<code>var myBusComp ;</code> <code>myBusComp.UndoRecord () ;</code>
<i>WriteRecord Method for a Business Component</i>	Saves to the Siebel database any modifications made to the current record.	<code>var myBusComp ;</code> <code>myBusComp.WriteRecord () ;</code>

## Business Component Events for Siebel eScript

The following table describes a summary of business component events you can use with Siebel eScript.

Event	Description	Format
<i>BusComp_Associate Event</i>	Called if the user adds a business component record to create an association.	<code>BusComp_Associate ()</code>
<i>BusComp_ChangeRecord Event</i>	Called if a business component record becomes the current record.	<code>BusComp_ChangeRecord ()</code>
<i>BusComp_CopyRecord Event</i>	Called if the user copies a business component record, and if the user makes this record the active record.	<code>BusComp_CopyRecord ()</code>
<i>BusComp_DeleteRecord Event</i>	Called if the user deletes a business component record.	<code>BusComp_DeleteRecord ()</code>
<i>BusComp_InvokeMethod Event</i>	Called if Siebel CRM calls the InvokeMethod method on a business component.	<code>BusComp_InvokeMethod (methodName)</code>
<i>BusComp_NewRecord Event</i>	Called if the user creates a business component record, and if the user makes this record the active record. You can use this event to set up default values for a field.	<code>BusComp_NewRecord ()</code>

Event	Description	Format
<i>BusComp_PreAssociate Event</i>	Called if Siebel CRM detects that the user is about to add a business component record to create an association.	<b>BusComp_PreAssociate()</b>
<i>BusComp_PreCopyRecord Event</i>	Called if Siebel CRM detects that the user is about to copy a business component record. You can use this event to perform precopy validation.	<b>BusComp_PreCopyRecord()</b>
<i>BusComp_PreDeleteRecord Event</i>	Called if Siebel CRM detects that the user is about to delete a business component record. You can use this event to prevent the deletion or to perform any actions before Siebel CRM deletes the record.	<b>BusComp_PreDeleteRecord()</b>
<i>BusComp_PreGetFieldValue Event</i>	Called if a user accesses a business component field.	<b>BusComp_PreGetFieldValue(Fieldname, &amp;FieldValue)</b>
<i>Bus Comp_PreInvokeMethod Event</i>	Called if Siebel CRM calls a specialized method on a business component. Siebel CRM calls it before it calls this specialized method.	<b>BusComp_PreInvokeMethod(methodName )</b>
<i>BusComp_PreNewRecord Event</i>	Called if Siebel CRM detects that the user is about to create a new business component record. You can use this event to perform preinsert validation.	<b>BusComp_PreNewRecord()</b>
<i>BusComp_PreQuery Event</i>	Siebel CRM calls the BusComp_PreQuery event before it runs a query. You can use this event to modify the search criteria or to restrict Siebel CRM from running certain queries.	<b>BusComp_PreQuery()</b>
<i>BusComp_PreSetFieldValue Event</i>	Siebel CRM calls this event after the user modifies a field value or after a call to the SetFieldValue method occurs. This event allows you to use custom validation before Siebel CRM applies predefined validation.	<b>BusComp_PreSetFieldValue(Fieldname, FieldValue)</b>
<i>BusComp_PreWriteRecord Event</i>	Called before Siebel CRM writes a record to the Siebel database.	<b>BusComp_PreWriteRecord()</b>

Event	Description	Format
<i>BusComp_Query Event</i>	Called after Siebel CRM completes a query but before it displays the query results.	<code>BusComp_Query()</code>
<i>BusComp_SetFieldValue Event</i>	Called if Siebel CRM sends a value to a business component from the Siebel client or through a call to the SetFieldValue method.	<code>BusComp_SetFieldValue(FieldName)</code>
<i>BusComp_WriteRecord Event</i>	Called after Siebel CRM saves the record to the Siebel database.	<code>BusComp_WriteRecord()</code>

## Business Object Methods for Siebel eScript

The following table describes a summary of business object methods you can use with Siebel eScript.

Method	Description	Format
<i>GetBusComp Method for a Business Object</i>	Returns the name of a business component instance.	<pre>var myBusObject;  var myBusComp;  myBusComp = myBusObject.GetBusComp(BusCompName);</pre>
<i>Name Method for a Business Object</i>	Returns the name of a business object.	<pre>var myBusObject as BusObject;  var sName;  sName = myBusObject.Name();</pre>

## Business Service Methods for Siebel eScript

The following table describes a summary of business service methods you can use with Siebel eScript.

Method	Description	Format
<i>GetFirstProperty Method for a Business Service</i>	Returns the name of the first property of a business service.	<pre>var oService;  var sName;  sName = oService.GetFirstProperty();</pre>

Method	Description	Format
<i>GetNextProperty Method for a Business Service</i>	Returns the name of the next property of a business service.	<pre>var oService;  var sName;  sName = oService.GetNextProperty();</pre>
<i>GetProperty Method for a Business Service</i>	Returns the value of a property.	<pre>var oService;  var sValue;  sValue = oService.GetProperty(propName);</pre>
<i>Name Method for a Business Service</i>	Returns the name of a business service.	<pre>var oService;  var sName;  sName = oService.Name();</pre>
<i>InvokeMethod Method for a Business Service</i>	Calls a method.	<pre>var oService;  oService.InvokeMethod(methodName,     InputArguments, OutputArguments);</pre>
<i>PropertyExists Method for a Business Service</i>	Returns a Boolean value that indicates if the property that the argument identifies exists.	<pre>var oService;  var propExists;  propExists =     oService.PropertyExists(propName);</pre>
<i>RemoveProperty Method for a Business Service</i>	Removes a property from a business service.	<pre>var oService;  oService.RemoveProperty(propName);</pre>
<i>SetProperty Method for a Business Service</i>	Sets a value for a property of a business service.	<pre>var oService;  oService.SetProperty(propName,     propValue);</pre>

## Business Service Events for Siebel eScript

The following table describes a summary of business service events you can use with Siebel eScript.

Method	Description	Format
<i>Service_InvokeMethod Event</i>	Siebel CRM calls this event after it calls the InvokeMethod method.	<code>Service_InvokeMethod(methodName)</code>

Method	Description	Format
<i>Service_PreCanInvokeMethod Event</i>	Siebel CRM calls this event before it calls the PreInvokeMethod event. This configuration allows you to determine if the user possesses the authority to call the business service method.	<b>Service_</b> <b>PreCanInvokeMethod (MethodName, &amp;CanInvoke)</b>
<i>Service_PreInvokeMethod Event</i>	Siebel CRM calls this event before it calls a specialized method on a business service.	<b>Service_PreInvokeMethod (methodName, Inputs, Outputs)</b>

## Property Set Methods for Siebel eScript

The following table describes a summary of property set methods you can use with Siebel eScript.

Method	Description	Format
<i>AddChild Method for a Property Set</i>	Adds a child property set to a property set.	<b>var oPropSet;</b>  <b>var iIndex;</b>  <b>iIndex = oPropSet.AddChild(childObject) ;</b>
<i>Copy Method for a Property Set</i>	Returns a copy of a property set.	<b>var oPropSet1;</b>  <b>var oPropSet2;</b>  <b>oPropSet2 = oPropSet1.Copy() ;</b>
<i>GetChild Method for a Property Set</i>	Returns the index number of a child property set.	<b>var oPropSet;</b>  <b>var sPropVal;</b>  <b>sPropVal = oPropSet.GetChild(index) ;</b>
<i>GetChildCount Method for a Property Set</i>	Returns the number of child property sets that exist for a parent property set.	<b>var oPropSet;</b>  <b>var iCount;</b>  <b>iCount = oPropSet.GetChildCount() ;</b>
<i>GetFirstProperty Method for a Property Set</i>	Returns the name of the first property in a property set.	<b>var oPropSet;</b>  <b>var sPropName;</b>  <b>sPropName = oPropSet.GetFirstProperty() ;</b>

Method	Description	Format
<i>GetNextProperty Method for a Property Set</i>	Returns the name of the next property in a property set.	<pre>var oPropSet;  var sPropName  sPropName = oPropSet.GetNextProperty();</pre>
<i>GetProperty Method for a Property Set</i>	Returns the value of a property.	<pre>var oPropSet;  var sPropVal  sPropVal = oPropSet.GetProperty(propName);</pre>
<i>GetPropertyCount Method for a Property Set</i>	Returns the number of properties that exist in the current level in the hierarchy.	<pre>var count;  count = oPropSet.GetPropertyCount();</pre>
<i>GetType Method for a Property Set</i>	Returns the value of the type attribute of a property set.	<pre>var oPropSet;  var sTypeVal  sTypeVal = oPropSet.GetType(value);</pre>
<i>GetValue Method for a Property Set</i>	Returns the value of the value attribute of a property set.	<pre>var oPropSet;  var sValVal;  sValVal = oPropSet.GetValue(value);</pre>
<i>InsertChildAt Method for a Property Set</i>	Inserts a child property set in a parent property set at a specific location.	<pre>var oPropSet;  oPropSet.InsertChildAt(childObject, index);</pre>
<i>PropertyExists Method for a Property Set</i>	Returns a Boolean value that indicates if the property that the argument identifies exists.	<pre>Dim oService as SiebelService  Dim propExists as Boolean  propExists = oService.PropertyExists(propName)</pre>
<i>RemoveChild Method for a Property Set</i>	Removes a child property set from a parent property set.	<pre>var oPropSet;  oPropSet.RemoveChild(index);</pre>
<i>RemoveProperty Method for a Property Set</i>	Removes a property from a property set.	<pre>var oPropSet;  oPropSet.RemoveProperty(propName);</pre>
<i>Reset Method for a Property Set</i>	Removes every property and child property set from a property set.	<pre>var oPropSet;  oPropSet.Reset();</pre>

Method	Description	Format
<i>SetProperty Method for a Property Set</i>	Sets a value in the property of a property set.	<pre>var oPropSet;  oPropSet.SetProperty(propName, propValue);</pre>
<i>SetType Method for a Property Set</i>	Sets the value for the type attribute of a property set.	<pre>var oPropSet;  oPropSet.SetType(value);</pre>
<i>SetValue Method for a Property Set</i>	Sets the value for the value attribute of a property set.	<pre>var oPropSet;  oPropSet.SetValue(value);</pre>

## Miscellaneous Methods for Siebel eScript

The following table describes a summary of miscellaneous methods you can use with Siebel eScript.

Method	Description	Format
<i>TheApplication Method</i>	Returns the name of the application object.	<code>TheApplication().Application_method;</code>



# 9 COM Data Server Quick Reference

## COM Data Server Quick Reference

This chapter describes summary information for COM Data Server. It includes the following topics:

- *Application Methods for COM Data Server*
- *Business Component Methods for COM Data Server*
- *Business Object Methods for COM Data Server*
- *Business Service Methods for COM Data Server*
- *Property Set Methods for COM Data Server*

## Application Methods for COM Data Server

The following table describes a summary of application methods you can use with COM Data Server. It does not include object interface methods that Siebel CRM does not call directly from an application object. For information about methods that Siebel CRM calls with the `InvokeMethod` method on an application object, see *LoadObjects Method for an Application*.

Method	Description	Format
<i>CurrencyCode Method for an Application</i>	Returns the currency code that is associated with the division of the user position.	<pre>Dim application as SiebelApplication  Dim sCur as String  sCur = Application.CurrencyCode(ErrCode as Integer)</pre>
<i>GetBusObject Method for an Application</i>	Creates a new instance of a business object.	<pre>Dim application as SiebelApplication  Dim busObject as SiebelBusObject  set busObject = application.GetBusObject(busobjName as String, ErrCode as Integer)</pre>
<i>GetLastErrText Method for an Application</i>	Returns the text message for the error that Siebel CRM logged most recently.	<pre>Dim application as SiebelApplication  Dim sText as String  sText = application.GetLastErrText(ErrCode as Integer)</pre>
<i>GetProfileAttr Method for an Application</i>	Returns the name of an attribute in a user profile.	<pre>Dim application as SiebelApplication  Dim sText as String</pre>

Method	Description	Format
		<code>sText = application.GetProfileAttr(Name as String)</code>
<i>GetService Method for an Application</i>	Locates a business service. If this business service is not already running, then Siebel CRM starts it.	<pre>Dim Application as SiebelApplication  Dim Service as SiebelService  set Service = Application.GetService(serviceName as String,   ErrCode as Integer)</pre>
<i>GetSharedGlobal Method for an Application</i>	Returns the shared global variables.	<pre>Dim application as SiebelApplication  Dim sName as String  sName = application.GetSharedGlobal(varName as String, ErrCode as Integer)</pre>
<i>InvokeMethod Method for an Application</i>	Calls a method.	<pre>Dim application as SiebelApplication  application.InvokeMethod(methodName as String, methArg1, methArg2, methArgN as String or StringArray)</pre>
<i>LoadObjects Method for an Application</i>	Starts the COM Data Server.	<pre>Dim application as SiebelApplication  application.LoadObjects(pathName\cfgFileName as String, ErrCode as Integer)</pre>
<i>Login Method for an Application</i>	Allows an external application to log in to the COM Data Server, COM Data Control, or Siebel Java Data Bean, and to access Siebel objects.	<pre>Dim application as SiebelApplication  application.Login(userName as String,   password as String, ErrCode as Integer)</pre>
<i>LoginId Method for an Application</i>	Returns the login ID of the user who started the Siebel application.	<pre>Dim application as SiebelApplication  Dim sID as String  sID = application.LoginId(ErrCode as Integer)</pre>
<i>LoginName Method for an Application</i>	Returns the login name of the user who started the Siebel application.	<pre>Dim application as SiebelApplication  Dim sUser as String  sUser = application.LoginName(ErrCode as Integer)</pre>
<i>NewPropertySet Method for an Application</i>	Creates a new property set.	<pre>Dim oApplication as SiebelApplication  Dim oPropSet as SiebelPropertySet  oPropSet = oApplication.NewPropertySet()</pre>

Method	Description	Format
<i>PositionId Method for an Application</i>	Returns the position ID of the user position.	<pre>Dim application as SiebelApplication  Dim sRow as String  sRow = application.PositionId(ErrCode as Integer)</pre>
<i>PositionName Method for an Application</i>	Returns the name of the current user position.	<pre>Dim application as SiebelApplication  Dim sPosition as String  sPosition = application.PositionName(ErrCode as Integer)</pre>
<i>SetPositionId Method for an Application</i>	Sets the active position to a position ID.	<pre>Dim application as SiebelApplication  Dim posId as String  Dim status as Boolean  status = application.SetPositionId(posId as String, ErrCode as Integer)</pre>
<i>SetPositionName Method for an Application</i>	Sets the active position to a position name.	<pre>Dim application as SiebelApplication  Dim posName as String  Dim status as Boolean  status = application.SetPositionName(posName as String, ErrCode as Integer)</pre>
<i>SetProfileAttr Method for an Application</i>	Personalization uses this method to set a value for an attribute in a user profile.	<pre>Dim application as SiebelApplication  application.SetProfileAttr(name as String, value as String, ErrCode as Integer)</pre>
<i>SetSharedGlobal Method for an Application</i>	Sets a shared global variable.	<pre>Dim application as SiebelApplication  application.SetSharedGlobal(varName as String, value as String, ErrCode as Integer)</pre>
<i>Trace Method for an Application</i>	Appends a message to the trace file.	<pre>Dim application as SiebelApplication  application.Trace(message as String, ErrCode as Integer)</pre>
<i>TraceOff Method for an Application</i>	Turns off tracing.	<pre>Dim application as SiebelApplication  application.TraceOff(ErrCode as Integer)</pre>
<i>TraceOn Method for an Application</i>	Turns on tracing.	<pre>Dim application as SiebelApplication</pre>

Method	Description	Format
		<code>application.TraceOn(filename as String, type as Integer, Selection as String, ErrCode as Integer)</code>

## Business Component Methods for COM Data Server

The following table describes a summary of the business component methods you can use with the COM Data Server. It does not include object interface methods that Siebel CRM calls with the `InvokeMethod` method. For information about methods that Siebel CRM calls with the `InvokeMethod` method on a business component, see *Business Component Invoke Methods*.

Method	Description	Format
<i>ActivateField Method for a Business Component</i>	Activates a field.	<code>Dim busComp as SiebelBusComp</code> <code>busComp.ActivateField(fieldName as String, ErrCode as Integer)</code>
<i>ActivateMultipleFields Method for a Business Component</i>	Activates multiple fields.	<code>Dim buscomp as SiebelBusComp</code> <code>buscomp.ActivateMultipleFields(oPropSet as SiebelPropertySet, ErrCode as Integer)</code>
<i>Associate Method for a Business Component</i>	Creates a new many-to-many relationship for the parent object through an association business component.	<code>Dim busComp as SiebelBusComp</code> <code>busComp.Associate(whereIndicator as Integer, ErrCode as Integer)</code>
<i>BusObject Method for a Business Component</i>	Returns the name of the business object that the business component references.	<code>Dim busComp as SiebelBusComp</code> <code>Dim busObject as BusObject</code> <code>Set busObject = busComp.BusObject(ErrCode as Integer)</code>
<i>ClearToQuery Method for a Business Component</i>	Clears the current query but does not clear sort specifications on a business component.	<code>Dim busComp as SiebelBusComp</code> <code>busComp.ClearToQuery(ErrCode as Integer)</code>
<i>DeactivateFields Method for a Business Component</i>	Deactivates the fields that are currently active from the SQL query statement of a business component.	<code>Dim busComp as SiebelBusComp</code> <code>busComp.DeactivateFields(ErrCode as Integer)</code>
<i>DeleteRecord Method for a Business Component</i>	Removes the current record from a business component.	<code>Dim busComp as SiebelBusComp</code> <code>busComp.DeleteRecord(ErrCode as Integer)</code>

Method	Description	Format
<i>ExecuteQuery Method for a Business Component</i>	Returns a set of business component records.	<pre>Dim busComp as SiebelBusComp  busComp.ExecuteQuery(cursorMode as Boolean, ErrCode as Integer)</pre>
<i>ExecuteQuery2 Method for a Business Component</i>	Returns a set of business component records. Allows you to control the number of records Siebel CRM returns.	<pre>Dim busComp as SiebelBusComp  busComp.ExecuteQuery2(cursorMode as Boolean, ignoreMaxCursorSize as Boolean, ErrCode as Integer)</pre>
<i>FirstRecord Method for a Business Component</i>	Moves the record pointer to the first record in a business component, making that record the current record.	<pre>Dim busComp as SiebelBusComp  Dim bIsRecord as Boolean  bIsRecord = busComp.FirstRecord(ErrCode as Integer)</pre>
<i>FirstSelected Method for a Business Component</i>	Makes the first record of the multiple selection in a business component active.	<pre>Dim busComp as SiebelBusComp  Dim iRecord as Integer  iRecord = busComp.FirstSelected</pre>
<i>GetAssocBusComp Method for a Business Component</i>	Returns the name of the association business component.	<pre>Dim busComp as SiebelBusComp  Dim AssocBusComp as BusComp  Set AssocBusComp = busComp.GetAssocBusComp(ErrCode as Integer)</pre>
<i>GetFieldValue Method for a Business Component</i>	Returns the value of a field from the current record of a business component.	<pre>Dim busComp as SiebelBusComp  Dim sValue as String  sValue = busComp.GetFieldValue(Fieldname as String, ErrCode as Integer)</pre>
<i>GetFormattedFieldValue Method for a Business Component</i>	Returns a field value that is in the same format that the Siebel client uses.	<pre>Dim busComp as SiebelBusComp  Dim sValue as String  sValue = busComp.GetFormattedFieldValue(Fieldname as String, ErrCode as Integer)</pre>
<i>GetMultipleFieldValues Method for a Business Component</i>	Returns a value for each field specified in a property set.	<pre>Dim buscomp as SiebelBusComp  Dim retValue as Boolean  retValue = buscomp.GetMultipleFieldValues(oPropSetName as SiebelPropertySet, oPropSetValue as SiebelPropertySet, ErrCode as Integer)</pre>

Method	Description	Format
<i>GetMVGBusComp Method for a Business Component</i>	Returns the multivalue group business component that is associated a business component field.	<pre>Dim busComp as SiebelBusComp  Dim mVGBusComp as SiebelBusComp  set mVGBusComp = busComp.GetMVGBusComp(Fieldname as String, ErrCode as Integer)</pre>
<i>GetNamedSearch Method for a Business Component</i>	Returns the name of a search specification.	<pre>Dim busComp as SiebelBusComp  Dim sValue as String  sValue = busComp.GetNamedSearch(SearchName as String, ErrCode as Integer)</pre>
<i>GetPicklistBusComp Method for a Business Component</i>	Returns the name of the pick business component that is associated with a field in the current business component.	<pre>Dim busComp as SiebelBusComp  Dim pickBusComp as SiebelBusComp  Set pickBusComp = busComp.GetPicklistBusComp(Fieldname as String, ErrCode as Integer)</pre>
<i>GetSearchExpr Method for a Business Component</i>	Returns the current search expression that is defined for a business component.	<pre>Dim busComp as SiebelBusComp  Dim sExpr as String  sExpr = busComp.GetSearchExpr(ErrCode as Integer)</pre>
<i>GetSearchSpec Method for a Business Component</i>	Returns the search specification that is defined for a business component.	<pre>Dim busComp as BusComp  Dim sSpec as String  sSpec = busComp.GetSearchSpec(Fieldname as String, ErrCode as Integer)</pre>
<i>GetProperty Method for a Business Component</i>	Returns the value of a user property.	<pre>Dim busComp as SiebelBusComp  Dim sValue as String  sValue = busComp.GetProperty(propertyName as String, ErrCode as Integer)</pre>
<i>GetViewMode Method for a Business Component</i>	Returns the visibility mode for a business component.	<pre>Dim busComp as SiebelBusComp  Dim iMode as Integer  iMode = busComp.GetViewMode(ErrCode as Integer)</pre>
<i>LastRecord Method for a Business Component</i>	Moves the record pointer to the last record in a business component.	<pre>Dim busComp as SiebelBusComp</pre>

Method	Description	Format
		<pre>Dim bReturn as Boolean  bReturn = busComp.LastRecord(ErrCode as Integer)</pre>
<i>Name Method for a Business Component</i>	Returns the name of a business component.	<pre>Dim busComp as SiebelBusComp  Dim sName as String  sName = busComp.Name(ErrCode as Integer)</pre>
<i>NewRecord Method for a Business Component</i>	Adds a new record to a business component.	<pre>Dim busComp as SiebelBusComp  busComp.NewRecord(whereIndicator as Integer, ErrCode as Integer)</pre>
<i>NextRecord Method for a Business Component</i>	Moves the record pointer to the next record in a business component, making that record the current record.	<pre>Dim busComp as SiebelBusComp  Dim bReturn as Boolean  bReturn = busComp.NextRecord(ErrCode as Integer)</pre>
<i>ParentBusComp Method for a Business Component</i>	Returns the name of a parent business component.	<pre>Dim busComp as SiebelBusComp  Dim parentBusComp as SiebelBusComp  Set parentBusComp = busComp.ParentBusComp(ErrCode as Integer)</pre>
<i>Pick Method for a Business Component</i>	Places the currently chosen record in a pick business component into the appropriate fields of the parent business component.	<pre>Dim busComp as SiebelBusComp  busComp.Pick(ErrCode as Integer)</pre>
<i>PreviousRecord Method for a Business Component</i>	Moves the record pointer to the previous record in a business component, making that record the current record.	<pre>Dim busComp as SiebelBusComp  Dim bReturn as Boolean  bReturn = busComp.PreviousRecord(ErrCode as Integer)</pre>
<i>RefineQuery Method for a Business Component</i>	Refines a query.	<pre>Dim busComp as SiebelBusComp  busComp.RefineQuery(ErrCode as Integer)</pre>
<i>SetFieldValue Method for a Business Component</i>	Sets a new value in a field for the current record of a business component.	<pre>Dim busComp as SiebelBusComp  SetFieldValue(fieldname As String, fieldValue As string, errCode as Integer)</pre>
<i>SetFormattedFieldValue Method for a Business Component</i>	Sets a new value in a field in the current record of a business	<pre>Dim busComp as SiebelBusComp</pre>

Method	Description	Format
	component. It accepts the field value in the current local format.	<code>busComp.SetFormattedFieldValue(FieldName as String, FieldValue as String, ErrCode as Integer)</code>
<i>SetMultipleFieldValues Method for a Business Component</i>	Sets new values in the fields of the current record of a business component.	<code>Dim buscomp as SiebelBusComp</code> <code>buscomp.SetMultipleFieldValues(oPropSet as SiebelPropertySet, ErrCode as Integer)</code>
<i>SetNamedSearch Method for a Business Component</i>	Sets a named search specification on a business component.	<code>Dim busComp as SiebelBusComp</code> <code>busComp.SetNamedSearch(searchName as String, searchSpec as String, ErrCode as Integer)</code>
<i>SetSearchExpr Method for a Business Component</i>	Sets a search expression for a business component.	<code>Dim busComp as SiebelBusComp</code> <code>busComp.SetSearchExpr(searchSpec as String, ErrCode as Integer)</code>
<i>SetSearchSpec Method for a Business Component</i>	Sets the search specification for a business component.	<code>Dim busComp as SiebelBusComp</code> <code>busComp.SetSearchSpec(FieldName as String, searchSpec as String, ErrCode as Integer)</code>
<i>SetSortSpec Method for a Business Component</i>	Sets the sort specification for a business component.	<code>Dim busComp as SiebelBusComp</code> <code>busComp.SetSortSpec(sortSpec as String, ErrCode as Integer)</code>
<i>SetUserProperty Method for a Business Component</i>	Sets the value of a user property in a business component.	<code>Dim busComp as SiebelBusComp</code> <code>busComp.SetUserProperty(propertyName as String, newValue as String, ErrCode as Integer)</code>
<i>SetViewMode Method for a Business Component</i>	Sets the visibility type for a business component.	<code>Dim buscomp as SiebelBusComp</code> <code>buscomp.SetViewMode(mode As Integer, errCode As Integer)</code>
<i>UndoRecord Method for a Business Component</i>	Reverses any unsaved modifications made to the record.	<code>Dim busComp as SiebelBusComp</code> <code>busComp.UndoRecord(ErrCode as Integer)</code>
<i>WriteRecord Method for a Business Component</i>	Saves to the Siebel database any modifications made to the current record.	<code>Dim busComp as SiebelBusComp</code> <code>busComp.WriteRecord(ErrCode as Integer)</code>



## Business Object Methods for COM Data Server

The following table describes a summary of business object methods you can use with the COM Data Server.

Method	Description	Format
<i>GetBusComp Method for a Business Object</i>	Returns the name of a business component.	<pre>Dim busObject as SiebelBusObject  Dim busComp as SiebelBusComp  set busComp = busObject.GetBusComp (BusCompName as String, ErrCode as Integer)</pre>
<i>Name Method for a Business Object</i>	Returns the name of a control.	<pre>Dim busObject as SiebelBusObject  Dim sName as String  sName = busObject.Name (ErrCode as Integer)</pre>

## Business Service Methods for COM Data Server

The following table describes a summary of business service methods you can use with the COM Data Server.

Method	Description	Format
<i>GetFirstProperty Method for a Business Service</i>	Returns the name of the first property of a business service.	<pre>Dim oService as SiebelService  Dim sName as String  sName = oService.GetFirstProperty (ErrCode as Integer)</pre>
<i>GetNextProperty Method for a Business Service</i>	Returns the name of the next property of a business service.	<pre>Dim oService as SiebelService  Dim sName as String  sName = oService.GetNextProperty (ErrCode as Integer)</pre>
<i>GetProperty Method for a Business Service</i>	Returns the value of a property.	<pre>Dim oService as SiebelService  Dim sValue as String  sValue = oService.GetProperty (propName as String, ErrCode as Integer)</pre>

Method	Description	Format
<i>Name Method for a Business Service</i>	Returns the name of a business service.	<pre>Dim oService as SiebelService  Dim sName as String  sName = oService.Name</pre>
<i>InvokeMethod Method for a Business Service</i>	Calls a method.	<pre>Dim oService as SiebelService  oService.InvokeMethod(methodName as String,   InputArguments as SiebelPropertySet,   OutputArguments as SiebelPropertySet, ErrCode as Integer)</pre>
<i>PropertyExists Method for a Business Service</i>	Returns a Boolean value that indicates if the property that the argument identifies exists.	<pre>Dim oService as SiebelService  Dim propExists as Boolean  propExists = oService.PropertyExists(propName as String)</pre>
<i>RemoveProperty Method for a Business Service</i>	Removes a property from a business service.	<pre>Dim oService as SiebelService  oService.RemoveProperty(propName as String,   ErrCode as Integer)</pre>
<i>SetProperty Method for a Business Service</i>	Sets a value for a property of a business service.	<pre>Dim oService as SiebelService  oService.SetProperty(propName as String,   propValue as String, ErrCode as Integer)</pre>

## Property Set Methods for COM Data Server

The following table describes a summary of property set methods you can use with the COM Data Server.

Method	Description	Format
<i>AddChild Method for a Property Set</i>	Adds child property sets to a property set.	<pre>Dim oPropSet as SiebelPropertySet  Dim iIndex as Integer  iIndex = oPropSet.AddChild( childObject as Property Set, errCode as Integer)</pre>
<i>Copy Method for a Property Set</i>	Returns a copy of a property set.	<pre>Dim oPropSet1 as SiebelPropertySet  Dim oPropSet2 as SiebelPropertySet</pre>

Method	Description	Format
		<code>oPropSet2 = oPropSet1.Copy(ErrCode as Integer)</code>
<i>GetChild Method for a Property Set</i>	Returns a child property set of a property set.	<pre>Dim oPropSet as SiebelPropertySet Dim oChildPropSet as SiebelPropertySet oChildPropSet = oPropSet.GetChild( index as Integer, ErrCode as Integer)</pre>
<i>GetChildCount Method for a Property Set</i>	Returns the number of child property sets that exist for a parent property set.	<pre>Dim oPropSet as SiebelPropertySet Dim iCount as Integer iCount = oPropSet.GetChildCount(ErrCode as Integer)</pre>
<i>GetFirstProperty Method for a Property Set</i>	Returns the name of the first property in a property set.	<pre>Dim oPropSet as SiebelPropertySet Dim sPropName as String sPropName = oPropSet.GetFirstProperty(ErrCode as Integer)</pre>
<i>GetNextProperty Method for a Property Set</i>	Returns the name of the next property in a property set.	<pre>Dim oPropSet as SiebelPropertySet Dim sPropName as String sPropName = oPropSet.GetNextProperty(ErrCode as Integer)</pre>
<i>GetProperty Method for a Property Set</i>	Returns the value of a property.	<pre>Dim oPropSet as SiebelPropertySet Dim sPropVal as String sPropVal = oPropSet.GetProperty(propName as String, ErrCode as Integer)</pre>
<i>GetPropertyCount Method for a Property Set</i>	Returns the number of properties that exist in the current level in the hierarchy.	<pre>Dim oPropSet as SiebelPropertySet Dim propCount as Integer propCount = oPropSet.GetPropertyCount(ErrCode as Integer)</pre>
<i>GetType Method for a Property Set</i>	Returns the value of the type attribute of a property set.	<pre>Dim oPropSet as SiebelPropertySet Dim sTypeVal as String sTypeVal = oPropSet.GetType(value as String)</pre>
<i>GetValue Method for a Property Set</i>	Returns the value of the value attribute of a property set.	<pre>Dim oPropSet as SiebelPropertySet Dim sValVal as String</pre>

Method	Description	Format
		<code>sValVal = oPropSet.GetValue(ErrCode as Integer)</code>
<i>InsertChildAt Method for a Property Set</i>	Inserts a child property set in a parent property set at a specific location.	<pre>Dim oPropSet as SiebelPropertySet  oPropSet.InsertChildAt(childObject as String, index as Integer, ErrCode as Integer)</pre>
<i>PropertyExists Method for a Property Set</i>	Returns a Boolean value that indicates if the property that the argument identifies exists.	<pre>Dim oPropSet as SiebelPropertySet  Dim propExists as Boolean  propExists = oPropSet.PropertyExists(propName as String, ErrCode as Integer)</pre>
<i>RemoveChild Method for a Property Set</i>	Removes a child property set from a parent property set.	<pre>Dim oPropSet as SiebelPropertySet  oPropSet.RemoveChild(index as Integer, errCode as Integer)</pre>
<i>RemoveProperty Method for a Property Set</i>	Removes a property from a property set.	<pre>Dim oPropSet as SiebelPropertySet  oPropSet.RemoveProperty(propName as String, ErrCode as Integer)</pre>
<i>Reset Method for a Property Set</i>	Removes every property and child property set from a property set.	<pre>Dim oPropSet as SiebelPropertySet  oPropSet.Reset(ErrCode as Integer)</pre>
<i>SetProperty Method for a Property Set</i>	Sets a value in the property of a property set.	<pre>Dim oPropSet as SiebelPropertySet  oPropSet.SetProperty(propName as String, propValue as String, ErrCode as Integer)</pre>
<i>SetType Method for a Property Set</i>	Sets the value for the type attribute of a property set.	<pre>Dim oPropSet as SiebelPropertySet  oPropSet.SetType(value as String, ErrCode as Integer)</pre>
<i>SetValue Method for a Property Set</i>	Sets the value for the value attribute of a property set.	<pre>Dim oPropSet as SiebelPropertySet  oPropSet.SetValue(value as String, errCode as Integer)</pre>

# 10 COM Data Control Quick Reference

## COM Data Control Quick Reference

This chapter describes summary information for COM Data Control. It includes the following topics:

- *Application Methods for COM Data Control*
- *Business Component Methods for COM Data Control*
- *Business Object Methods for COM Data Control*
- *Business Service Methods for COM Data Control*
- *Property Set Methods for COM Data Control*

## Application Methods for COM Data Control

The following table describes a summary of application methods you can use with COM Data Control. It does not include object interface methods that Siebel CRM does not call directly from an application instance. For information about methods that Siebel CRM calls with the InvokeMethod method on the application object, see *LoadObjects Method for an Application*.

Method	Description	Format
<i>Attach Method for an Application</i>	Allows an external application to reconnect to an existing Siebel session.	<pre>Dim application as SiebelDataControl  Dim status as Boolean  status = application.Attach(sessionID As String)</pre>
<i>CurrencyCode Method for an Application</i>	Returns the currency code that is associated with the division of the user position.	<pre>Dim application as SiebelDataControl  Dim sCur as String  sCur = Application.CurrencyCode</pre>
<i>Detach Method for an Application</i>	Returns a string that contains the Siebel session ID.	<pre>Dim application as SiebelDataControl  Dim sessionId as String  sessionId = application.Detach()</pre>
<i>EnableExceptions Method for an Application</i>	Enables or disables native Component Object Model (COM) error handling.	<pre>Dim application as SiebelDataControl  Dim bEnable as Boolean  bEnable = true application.EnableExceptions(bEnable)</pre>

Method	Description	Format
<i>GetBusObject Method for an Application</i>	Creates a new instance of a business object.	<pre>Dim application as SiebelDataControl  Dim busObject as SiebelBusObject  set busObject = application.GetBusObject(busobjName as String)</pre>
<i>GetLastErrCode Method for an Application</i>	Returns the error code for the error that Siebel CRM logged most recently.	<pre>Dim application as SiebelDataControl  Dim iErr as Integer  iErr = application.GetLastErrCode</pre>
<i>GetLastErrText Method for an Application</i>	Returns the text message for the error that Siebel CRM logged most recently.	<pre>Dim application as SiebelDataControl  Dim sText as String  sText = application.GetLastErrText</pre>
<i>GetProfileAttr Method for an Application</i>	Returns the name of an attribute in a user profile.	<pre>Dim application as SiebelDataControl  Dim sText as String  sText = application.GetProfileAttr(profileAttributeName as string)</pre>
<i>GetService Method for an Application</i>	Locates a business service. If this business service is not already running, then Siebel CRM starts it.	<pre>Dim application as SiebelDataControl  Dim service as SiebelService  set service = application.GetService(serviceName as String)</pre>
<i>GetSharedGlobal Method for an Application</i>	Returns the shared global variables.	<pre>Dim application as SiebelDataControl  Dim sText as string  sText = application.GetSharedGlobal(globalVariableName as string)</pre>
<i>InvokeMethod Method for an Application</i>	Calls a method.	<pre>Dim application as SiebelDataControl  Dim sReturn as String  sReturn = application.InvokeMethod(methodName as String, methArg1, methArg2, methArgN as String or StringArray)</pre>

Method	Description	Format
<i>Login Method for an Application</i>	Allows an external application to log in to the COM Data Server, COM Data Control, or Siebel Java Data Bean, and to access Siebel objects.	<pre>Dim application as SiebelDataControl Dim sErr as String  sErr = application.Login(connectString as String, userName as String, password as String)</pre>
<i>LoginId Method for an Application</i>	Returns the login ID of the user who started the Siebel application.	<pre>Dim application as SiebelDataControl Dim sID as String  sID = application.LoginId</pre>
<i>LoginName Method for an Application</i>	Returns the login name of the user who started the Siebel application.	<pre>Dim application as SiebelDataControl Dim sUser as String  sUser = application.LoginName</pre>
<i>Logoff Method for an Application</i>	Disconnects the Siebel client from the Siebel Server.	<pre>Dim SiebApp as SiebelDataControl Dim boolVal as Boolean  boolVal = siebApp.LogOff</pre>
<i>NewPropertySet Method for an Application</i>	Creates a new property set.	<pre>Dim application as SiebelDataControl Dim PropSet as SiebelPropertySet  PropSet = oApplication.NewPropertySet</pre>
<i>PositionId Method for an Application</i>	Returns the position ID of the user position.	<pre>Dim application as SiebelDataControl Dim sRow as String  sRow = application.PositionId</pre>
<i>PositionName Method for an Application</i>	Returns the name of the current user position.	<pre>Dim application as SiebelDataControl Dim sPosition as String  sPosition = application.PositionName</pre>
<i>SetPositionId Method for an Application</i>	Sets the active position to a Position ID.	<pre>Dim application as SiebelDataControl Dim status as Boolean  status = application.SetPositionId(sPosId)</pre>
<i>SetPositionName Method for an Application</i>	Sets the active position to a position name.	<pre>Dim application as SiebelDataControl Dim status as Boolean</pre>

Method	Description	Format
		<code>status = application.SetPositionName(sPosName)</code>
<i>SetProfileAttr Method for an Application</i>	Personalization uses this method to set a value for an attribute in a user profile.	<code>Dim application as SiebelDataControl  application.SetProfileAttr(name as String, value as String)</code>
<i>SetSharedGlobal Method for an Application</i>	Sets a shared global variable.	<code>Dim SiebApp as SiebelDataControl  Dim boolVal as Boolean  boolVal = SiebApp.SetSharedGlobal(varName As String, value As String)</code>
<i>Trace Method for an Application</i>	Appends a message to the trace file.	<code>Dim SiebApp as SiebelDataControl  Dim boolVal as Boolean  boolVal = siebApp.TraceOn(msg As String)</code>
<i>TraceOff Method for an Application</i>	Turns off tracing.	<code>Dim SiebApp as SiebelDataControl  Dim boolVal as Boolean  boolVal=siebApp.TraceOff</code>
<i>TraceOn Method for an Application</i>	Turns on tracing.	<code>Dim SiebApp as SiebelDataControl  Dim boolVal as Boolean  boolVal = siebApp.TraceOn(fileName As String, category As String, src As String)</code>

## Business Component Methods for COM Data Control

The following table describes a summary of business component methods you can use with COM Data Control. It does not include object interface methods that Siebel CRM does not call directly from a business component instance. For information about methods that Siebel CRM calls with the `InvokeMethod` method on a business component, see *Business Component Invoke Methods*.

Method	Description	Format
<i>ActivateField Method for a Business Component</i>	Activates a field.	<code>Dim busComp as SiebelBusComp  BusComp.ActivateField(fieldName as String)</code>



Method	Description	Format
<i>ActivateMultipleFields Method for a Business Component</i>	Activates multiple fields.	<pre>Dim busComp as SiebelBusComp  busComp.ActivateMultipleFields(oPropSet as SiebelPropertySet)</pre>
<i>Associate Method for a Business Component</i>	Creates a new many-to-many relationship for the parent object through an association business component.	<pre>Dim busComp as SiebelBusComp  busComp.Associate(whereIndicator as Integer)</pre>
<i>BusObject Method for a Business Component</i>	Returns the name of the business object that the business component references.	<pre>Dim busComp as SiebelBusComp  Dim busObject as SiebelBusObject  Set busObject = busComp.BusObject</pre>
<i>ClearToQuery Method for a Business Component</i>	Clears the current query but does not clear sort specifications on a business component.	<pre>Dim busComp as SiebelBusComp  busComp.ClearToQuery</pre>
<i>DeactivateFields Method for a Business Component</i>	Deactivates the fields that are currently active from the SQL query statement of a business component.	<pre>Dim busComp as SiebelBusComp  busComp.DeactivateFields</pre>
<i>DeleteRecord Method for a Business Component</i>	Removes the current record from a business component.	<pre>Dim busComp as SiebelBusComp  busComp.DeleteRecord</pre>
<i>ExecuteQuery Method for a Business Component</i>	Returns a set of business component records.	<pre>Dim buscomp as SiebelBusComp  buscomp.ExecuteQuery(cursorMode As Integer) As Boolean</pre>
<i>ExecuteQuery2 Method for a Business Component</i>	Returns a set of business component records. Allows you to control the number of records Siebel CRM returns.	<pre>Dim buscomp as SiebelBusComp  buscomp.ExecuteQuery2(cursorMode As Integer, ignoreMaxCursorSize As Integer) As Boolean</pre>
<i>FirstRecord Method for a Business Component</i>	Moves the record pointer to the first record in a business component, making that record the current record.	<pre>Dim busComp as SiebelBusComp  Dim bIsRecord as Boolean  bIsRecord = busComp.FirstRecord</pre>
<i>GetFieldValue Method for a Business Component</i>	Returns the value of a field from the current record of a business component.	<pre>Dim busComp as SiebelBusComp  Dim sValue as String  sValue = busComp.GetFieldValue(FieldName as String)</pre>

Method	Description	Format
<i>GetFormattedFieldValue Method for a Business Component</i>	Returns a field value that is in the same format that the Siebel client uses.	<pre>Dim busComp as SiebelBusComp  Dim sValue as String  sValue = busComp.GetFormattedFieldValue  (FieldNames as String)</pre>
<i>GetLastErrCode Method for a Business Component</i>	Returns the error code for the error that Siebel CRM logged most recently.	<pre>Dim errCode As Integer  Dim SiebApp as SiebelDataControl  errCode=siebApp.GetLastErrCode</pre>
<i>GetLastErrText Method for an Application</i>	Returns the text message for the error that Siebel CRM logged most recently.	<pre>Dim busComp as SiebelBusComp  Dim sErr as String  sErr = busComp.GetLastErrText</pre>
<i>GetMultipleFieldValues Method for a Business Component</i>	Returns a value for each field specified in a property set.	<pre>Dim busComp as SiebelBusComp  busComp.GetMultipleFieldValues (oFieldNames as SiebelPropertySet, oFieldValues as SiebelPropertySet)</pre>
<i>GetMVGBusComp Method for a Business Component</i>	Returns the multivalue group business component that is associated a business component field.	<pre>Dim busComp as SiebelBusComp  Dim mVGBusComp as SiebelBusComp  set mVGBusComp = busComp.GetMVGBusComp (FieldName as String)</pre>
<i>GetNamedSearch Method for a Business Component</i>	Returns the name of a search specification.	<pre>Dim busComp as SiebelBusComp  Dim sValue as String  sValue = busComp.GetNamedSearch (SearchName as String)</pre>
<i>GetPicklistBusComp Method for a Business Component</i>	Returns the name of the pick business component that is associated with a field in the current business component.	<pre>Dim busComp as SiebelBusComp  Dim pickBusComp as SiebelBusComp  Set pickBusComp = busComp.GetPicklistBusComp (Field-Name as String)</pre>
<i>GetSearchExpr Method for a Business Component</i>	Returns the current search expression that is defined for a business component.	<pre>Dim busComp as SiebelBusComp  Dim sExpr as String  sExpr = busComp.GetSearchExpr</pre>

Method	Description	Format
<i>GetSearchSpec Method for a Business Component</i>	Returns the search specification that is defined for a business component.	<pre>Dim busComp as SiebelBusComp  Dim sSpec as String  sSpec = busComp.GetSearchSpec(FieldNames as String)</pre>
<i>GetProperty Method for a Business Component</i>	Returns the value of a user property.	<pre>Dim buscomp as SiebelBusComp  Dim retStr as String  retStr = buscomp.GetProperty(prop As String) As String</pre>
<i>GetViewMode Method for a Business Component</i>	Returns the visibility mode for a business component.	<pre>Dim busComp as SiebelBusComp  Dim iMode as Integer  iMode = busComp.GetViewMode</pre>
<i>InvokeMethod Method for a Business Component</i>	Calls a method.	<pre>Dim busComp as SiebelBusComp  Dim sReturn as String  sReturn = busComp.InvokeMethod(methodName as String, methArg1, methArg2, methArgN as String or StringArray)</pre>
<i>LastRecord Method for a Business Component</i>	Moves the record pointer to the last record in a business component.	<pre>Dim busComp as SiebelBusComp  Dim bReturn as Boolean  bReturn = busComp.LastRecord</pre>
<i>Name Method for a Business Component</i>	Returns the name of a business component.	<pre>Dim busComp as SiebelBusComp  Dim sName as String  sName = busComp.Name</pre>
<i>NewRecord Method for a Business Component</i>	Adds a new record to a business component.	<pre>Dim busComp as SiebelBusComp  busComp.NewRecord(whereIndicator as Integer)</pre>
<i>NextRecord Method for a Business Component</i>	Moves the record pointer to the next record in a business component, making that record the current record.	<pre>Dim busComp as SiebelBusComp  Dim bReturn as Boolean  bReturn = busComp.NextRecord</pre>

Method	Description	Format
<i>ParentBusComp Method for a Business Component</i>	Returns the name of a parent business component.	<pre>Dim busComp as SiebelBusComp  Dim parentBusComp as SiebelBusComp  Set parentBusComp = busComp.ParentBusComp</pre>
<i>Pick Method for a Business Component</i>	Places the currently chosen record in a pick business component into the appropriate fields of the parent business component.	<pre>Dim busComp as SiebelBusComp  busComp.Pick</pre>
<i>PreviousRecord Method for a Business Component</i>	Moves the record pointer to the previous record in a business component, making that record the current record.	<pre>Dim busComp as SiebelBusComp  Dim bReturn as Boolean  bReturn = busComp.PreviousRecord</pre>
<i>RefineQuery Method for a Business Component</i>	Refines a query.	<pre>Dim busComp as SiebelBusComp  busComp.RefineQuery</pre>
<i>SetFieldValue Method for a Business Component</i>	Sets a new value in a field in the current record of a business component.	<pre>Dim busComp as SiebelBusComp  busComp.SetFieldValue(Fieldname as String, FieldValue as String)</pre>
<i>SetFormattedFieldValue Method for a Business Component</i>	Sets a new value in a field in the current record of a business component. It accepts the field value in the current local format.	<pre>Dim busComp as SiebelBusComp  busComp.SetFormattedFieldValue(Fieldname as String, FieldValue as String)</pre>
<i>SetMultipleFieldValues Method for a Business Component</i>	Sets new values in the fields of the current record of a business component.	<pre>Dim busComp as SiebelBusComp  busComp.SetMultipleFieldValues(oPropSet as SiebelPropertySet)</pre>
<i>SetNameSearch Method for a Business Component</i>	Sets a named search specification on a business component.	<pre>Dim busComp as SiebelBusComp  busComp.SetNameSearch(searchName as String, searchSpec as String)</pre>
<i>SetSearchExpr Method for a Business Component</i>	Sets a search expression for a business component.	<pre>Dim busComp as SiebelBusComp  busComp.SetSearchExpr(searchSpec as String)</pre>
<i>SetSearchSpec Method for a Business Component</i>	Sets the search specification for a business component.	<pre>Dim busComp as SiebelBusComp  busComp.SetSearchSpec(Fieldname as String, searchSpec as String)</pre>

Method	Description	Format
<i>SetSortSpec Method for a Business Component</i>	Sets the sort specification for a business component.	<pre>Dim busComp as SiebelBusComp  busComp.SetSortSpec(sortSpec as String)</pre>
<i>SetUserProperty Method for a Business Component</i>	Sets the value of a named user property.	<pre>Dim buscomp as SiebelBusComp  buscomp.SetUserProperty(property-Name as String, newValue as String)</pre>
<i>SetViewMode Method for a Business Component</i>	Sets the visibility type for a business component.	<pre>Dim buscomp as SiebelBusComp  Dim boolVal as Boolean  boolVal = buscomp.SetViewMode(mode As Integer)</pre>
<i>UndoRecord Method for a Business Component</i>	Reverses any unsaved modifications made to the record.	<pre>Dim busComp as SiebelBusComp  busComp.UndoRecord</pre>
<i>WriteRecord Method for a Business Component</i>	Saves to the Siebel database any modifications made to the current record.	<pre>Dim busComp as SiebelBusComp  busComp.WriteRecord</pre>

## Business Object Methods for COM Data Control

The following table describes a summary of business object methods you can use with COM Data Control.

Method	Description	Format
<i>GetBusComp Method for a Business Object</i>	Returns the name of a business component.	<pre>Dim busObject as SiebelBusObject  Dim busComp as SiebelBusComp  set busComp = BusObject.GetBusComp(BusCompName as String)</pre>
<i>GetLastErrCode Method for a Business Object</i>	Returns the error code for the error that Siebel CRM logged most recently.	<pre>Dim busObject as SiebelBusObject  Dim iErr as Integer  iErr = busObject.GetLastErrCode</pre>
<i>GetLastErrText Method for a Business Object</i>	Returns the text message for the error that Siebel CRM logged most recently.	<pre>Dim busObject as SiebelBusObject  Dim sErr as String</pre>

Method	Description	Format
		<code>sErr = busObject.GetLastErrText</code>
<i>Name Method for a Business Object</i>	Returns the name of a control.	<code>Dim busObject as SiebelBusObject</code> <code>Dim sName as String</code> <code>sName = busObject.Name</code>

## Business Service Methods for COM Data Control

The following table describes a summary of business service methods you can use with COM Data Control.

Method	Description	Format
<i>GetFirstProperty Method for a Business Service</i>	Returns the name of the first property of a business service.	<code>Dim oService as SiebelService</code> <code>Dim sName as String</code> <code>sName = oService.GetFirstProperty()</code>
<i>GetNextProperty Method for a Business Service</i>	Returns the name of the next property of a business service.	<code>Dim oService as SiebelService</code> <code>Dim sName as String</code> <code>sName = oService.GetNextProperty()</code>
<i>GetProperty Method for a Business Service</i>	Returns the value of a property.	<code>Dim oService as SiebelService</code> <code>Dim sValue as String</code> <code>sValue = oService.GetProperty(propName as String)</code>
<i>Name Method for a Business Service</i>	Returns the name of a business service.	<code>Dim oService as SiebelService</code> <code>Dim sName as String</code> <code>sName = oService.Name</code>
<i>InvokeMethod Method for a Business Service</i>	Calls a method.	<code>Dim oService as SiebelService</code> <code>oService.InvokeMethod(methodName as String, InputArguments as SiebelPropertySet, OutputArguments as SiebelPropertySet)</code>

Method	Description	Format
<i>PropertyExists Method for a Business Service</i>	Returns a Boolean value that indicates if the property that the argument identifies exists.	<pre>Dim oService as SiebelService  Dim propExists as Boolean  propExists = oService.PropertyExists(propName as String)</pre>
<i>RemoveProperty Method for a Business Service</i>	Removes a property from a business service.	<pre>Dim oService as SiebelService  oService.RemoveProperty(propName as String)</pre>
<i>SetProperty Method for a Business Service</i>	Sets a value for a property of a business service.	<pre>Dim oService as SiebelService  oService.SetProperty(propName as String, propValue as String)</pre>

## Property Set Methods for COM Data Control

The following table describes a summary of property set methods you can use with COM Data Control.

Method	Description	Format
<i>AddChild Method for a Property Set</i>	Adds child property sets to a property set.	<pre>Dim oPropSet as SiebelPropertySet  Dim iIndex as Integer  iIndex = oPropSet.AddChild(childObject as Property Set)</pre>
<i>Copy Method for a Property Set</i>	Returns a copy of a property set.	<pre>Dim oPropSet1 as SiebelPropertySet  Dim oPropSet2 as SiebelPropertySet  oPropSet2 = oPropSet1.Copy()</pre>
<i>GetChild Method for a Property Set</i>	Returns a child property set of a property set.	<pre>Dim oPropSet as SiebelPropertySet  Dim oPropSet1 as SiebelPropertySet  oPropSet1 = oPropSet.GetChild(index as Integer)</pre>
<i>GetChildCount Method for a Property Set</i>	Returns the number of child property sets that exist for a parent property set.	<pre>Dim oPropSet as SiebelPropertySet  Dim iCount as Integer  iCount = oPropSet.GetChildCount()</pre>

Method	Description	Format
<i>GetFirstProperty Method for a Property Set</i>	Returns the name of the first property in a property set.	<pre>Dim oPropSet as SiebelPropertySet Dim sPropName as String sPropName = oPropSet.GetFirstProperty()</pre>
<i>GetNextProperty Method for a Property Set</i>	Returns the name of the next property in a property set.	<pre>Dim oPropSet as SiebelPropertySet Dim sPropName as String sPropName = oPropSet.GetNextProperty()</pre>
<i>GetProperty Method for a Property Set</i>	Returns the value of a property.	<pre>Dim oPropSet as SiebelPropertySet Dim sPropVal as String sPropVal = oPropSet.GetProperty(propName as String)</pre>
<i>GetPropertyCount Method for a Property Set</i>	Returns the number of properties that exist in the current level in the hierarchy.	<pre>Dim oPropSet as SiebelPropertySet Dim count as Long count = oPropSet.GetPropertyCount</pre>
<i>GetType Method for a Property Set</i>	Returns the value of the type attribute of a property set.	<pre>Dim oPropSet as SiebelPropertySet Dim sTypeVal as String sTypeVal = oPropSet.GetType()</pre>
<i>GetValue Method for a Property Set</i>	Returns the value of the value attribute of a property set.	<pre>Dim oPropSet as SiebelPropertySet Dim sValVal as String sValVal = oPropSet.GetValue()</pre>
<i>InsertChildAt Method for a Property Set</i>	Inserts a child property set in a parent property set at a specific location.	<pre>Dim oPropSet as SiebelPropertySet oPropSet.InsertChildAt(childObject as SiebelPropertySet, index as Long)</pre>
<i>PropertyExists Method for a Property Set</i>	Returns a Boolean value that indicates if the property that the argument identifies exists.	<pre>Dim oPropSet as Property Set Dim propExists as Boolean propExists = oPropSet.PropertyExists(propName as String)</pre>
<i>RemoveChild Method for a Property Set</i>	Removes a child property set from a parent property set.	<pre>Dim oPropSet as SiebelPropertySet oPropSet.RemoveChild(index as Long)</pre>



Method	Description	Format
<i>RemoveProperty Method for a Property Set</i>	Removes a property from a property set.	<pre>Dim oPropSet as SiebelPropertySet oPropSet.RemoveProperty(propName as String)</pre>
<i>Reset Method for a Property Set</i>	Removes every property and child property set from a property set.	<pre>Dim oPropSet as SiebelPropertySet oPropSet.Reset()</pre>
<i>SetProperty Method for a Property Set</i>	Sets a value in the property of a property set.	<pre>Dim oPropSet as SiebelPropertySet oPropSet.SetProperty(propName as String, propValue as String)</pre>
<i>SetType Method for a Property Set</i>	Sets the value for the type attribute of a property set.	<pre>Dim oPropSet as SiebelPropertySet oPropSet.SetType(value as String)</pre>
<i>SetValue Method for a Property Set</i>	Sets the value for the value attribute of a property set.	<pre>Dim oPropSet as SiebelPropertySet oPropSet.SetValue(value as String)</pre>



# 11 Mobile Web Client Automation Server Quick Reference

## Mobile Web Client Automation Server Quick Reference

This chapter describes summary information for the Mobile Web Client Automation Server. It includes the following topics:

- *Application Methods for the Mobile Web Client Automation Server*
- *Business Component Methods for the Mobile Web Client Automation Server*
- *Business Object Methods for the Mobile Web Client Automation Server*
- *Business Service Methods for the Mobile Web Client Automation Server*
- *Property Set Methods for the Mobile Web Client Automation Server*

## Application Methods for the Mobile Web Client Automation Server

The following table describes a summary of application methods you can use with the Mobile Web Client Automation Server. It does not include object interface methods that Siebel CRM does not call directly from an application instance. For information about methods that Siebel CRM calls with the `InvokeMethod` method on an application, see *LoadObjects Method for an Application*.

Method	Description	Format
<i>ActiveBusObject Method for an Application</i>	Returns the name of the business object that the active view references.	<pre>Dim application as SiebelWebApplication Dim busObject as SiebelBusObject Set busObject = application.ActiveBusObject</pre>
<i>ActiveViewName Method for an Application</i>	Returns the name of the active view.	<pre>Dim application as SiebelWebApplication Dim sView as String sView = application.ActiveViewName</pre>
<i>CurrencyCode Method for an Application</i>	Returns the currency code that is associated with the division of the user position.	<pre>Dim application as SiebelWebApplication Dim sCur as String sCur = Application.CurrencyCode</pre>

Method	Description	Format
<i>EnableExceptions Method for an Application</i>	Enables or disables native COM error handling.	<pre>Dim application as SiebelWebApplication application.EnableExceptions(bEnable as Boolean)</pre>
<i>GetBusObject Method for an Application</i>	Creates a new instance of a business object.	<pre>Dim application as SiebelWebApplication Dim busObject as SiebelBusObject set busObject = application.GetBusObject(busobjName as String)</pre>
<i>GetLastErrCode Method for an Application</i>	Returns the error code for the error that Siebel CRM logged most recently.	<pre>Dim application as SiebelWebApplication Dim iErr as Integer iErr = application.GetLastErrCode</pre>
<i>GetLastErrText Method for an Application</i>	Returns the text message for the error that Siebel CRM logged most recently.	<pre>Dim application as SiebelWebApplication Dim sText as String sText = application.GetLastErrText</pre>
<i>GetProfileAttr Method for an Application</i>	Returns the name of an attribute in a user profile.	<pre>Dim application as SiebelWebApplication Dim profValue as String profValue = application.GetProfileAttr(profName as String)</pre>
<i>GetService Method for an Application</i>	Locates a business service. If this business service is not already running, then Siebel CRM starts it.	<pre>Dim application as SiebelWebApplication Dim oService as SiebelService set oService = Application.GetService(serviceName as String)</pre>
<i>GetSharedGlobal Method for an Application</i>	Returns the shared global variables.	<pre>Dim application as SiebelWebApplication Dim name as String name = application.GetSharedGlobal (sName as String)</pre>
<i>InvokeMethod Method for an Application</i>	Calls a method.	<pre>Dim application as SiebelWebApplication application.InvokeMethod(methodName as String, methArg1, methArg2, methArgN as String or StringArray)</pre>
<i>Login Method for an Application</i>	Allows external applications to log in to the Mobile Web Client Automation Server.	<pre>Dim application as SiebelWebApplication Dim sErr as String</pre>

Method	Description	Format
		<code>sErr = application.Login(connectString as String, userName as String, password as String)</code>
<i>LoginId Method for an Application</i>	Returns the login ID of the user who started the Siebel application.	<pre>Dim application as SiebelWebApplication Dim sID as string sID = application.LoginId</pre>
<i>LoginName Method for an Application</i>	Returns the login name of the user who started the Siebel application.	<pre>Dim application as SiebelWebApplication Dim sUser as String sUser = application.LoginName</pre>
<i>Logoff Method for an Application</i>	Disconnects the Siebel client from the Siebel Server.	<pre>Dim application as SiebelWebApplication Dim status as Boolean Status = application.Logoff</pre>
<i>NewPropertySet Method for an Application</i>	Creates a new property set.	<pre>Dim application as SiebelWebApplication Dim propset As SiebelPropertySet set propset = application.NewPropertySet</pre>
<i>PositionId Method for an Application</i>	Returns the position ID of the user position.	<pre>Dim application as SiebelWebApplication Dim sRow as String sRow = application.PositionId</pre>
<i>PositionName Method for an Application</i>	Returns the name of the current user position.	<pre>Dim application as SiebelWebApplication Dim sPosition as String sPosition = application.PositionName</pre>
<i>SetPositionId Method for an Application</i>	Sets the active position to a Position ID.	<pre>Dim application as SiebelWebApplication Dim posId as String Dim status as Boolean status = application.SetPositionId(posId)</pre>
<i>SetPositionName Method for an Application</i>	Sets the active position to a position name.	<pre>Dim application as SiebelWebApplication Dim posName as String Dim status as Boolean status = application.SetPositionName(posName)</pre>

Method	Description	Format
<i>SetProfileAttr Method for an Application</i>	Personalization uses this method to set a value for an attribute in a user profile.	<pre>Dim oApplication as SiebelWebApplication  Dim bool as Boolean  bool = oApplication.SetProfileAttr(name as String, value as String)</pre>
<i>SetSharedGlobal Method for an Application</i>	Sets a shared global variable.	<pre>Dim application as SiebelWebApplication  Dim bool as Boolean  bool = application.SetSharedGlobal(varName as String, value as String)</pre>
<i>Trace Method for an Application</i>	Appends a message to the trace file.	<pre>Dim application as SiebelWebApplication  application.Trace(message as String)</pre>
<i>TraceOff Method for an Application</i>	Turns off tracing.	<pre>Dim application as SiebelWebApplication  Dim bool as Boolean  bool = application.TraceOff</pre>
<i>TraceOn Method for an Application</i>	Turns on tracing.	<pre>Dim application as SiebelWebApplication  Dim bool as Boolean  bool = application.TraceOn(filename as String, type as String, Selection as String)</pre>

## Business Component Methods for the Mobile Web Client Automation Server

The following table describes a summary of business component methods you can use with the Mobile Web Client Automation Server. It does not include object interface methods that Siebel CRM does not call directly from a business component instance. For information about methods that Siebel CRM calls with the `InvokeMethod` method on a business component, see [Business Component Invoke Methods](#).

Method	Description	Format
<i>ActivateField Method for a Business Component</i>	Activates a field.	<pre>Dim busComp as SiebelBusComp  BusComp.ActivateField(fieldName as String)</pre>

Method	Description	Format
<i>ActivateMultipleFields Method for a Business Component</i>	Activates multiple fields.	<pre>Dim buscomp as SiebelBusComp buscomp.ActivateMultipleFields (oPropSet as SiebelPropertySet)</pre>
<i>Associate Method for a Business Component</i>	Creates a new many-to-many relationship for the parent object through an association business component.	<pre>Dim busComp as SiebelBusComp busComp.Associate(whereIndiSiebel cator as Integer)</pre>
<i>BusObject Method for a Business Component</i>	Returns the name of the business object that the business component references.	<pre>Dim busComp as SiebelBusComp Dim busObject as SiebelBusObject Set BusObject = busComp.BusObject</pre>
<i>ClearToQuery Method for a Business Component</i>	Clears the current query but does not clear sort specifications on a business component.	<pre>Dim busComp as SiebelBusComp Dim bool as Boolean bool = busComp.ClearToQuery</pre>
<i>DeactivateFields Method for a Business Component</i>	Deactivates the fields that are currently active from the SQL query statement of a business component.	<pre>Dim busComp as SiebelBusComp Dim bool as Boolean bool = busComp.DeactivateFields</pre>
<i>DeleteRecord Method for a Business Component</i>	Removes the current record from a business component.	<pre>Dim busComp as SiebelBusComp Dim bool as Boolean bool = busComp.DeleteRecord</pre>
<i>ExecuteQuery Method for a Business Component</i>	Returns a set of business component records.	<pre>Dim busComp as SiebelBusComp Dim bool as Boolean bool = busComp.ExecuteQuery(cursorMode as Integer)</pre>
<i>ExecuteQuery2 Method for a Business Component</i>	Returns a set of business component records. Allows you to control the number of records Siebel CRM returns.	<pre>Dim busComp as SiebelBusComp Dim bool as Boolean bool = busComp.ExecuteQuery2(cursorMode as Integer, ignoreMaxCursorSize as Boolean)</pre>
<i>FirstRecord Method for a Business Component</i>	Moves the record pointer to the first record in a business component, making that record the current record.	<pre>Dim busComp as SiebelBusComp Dim bIsRecord as Boolean</pre>

Method	Description	Format
		<code>bIsRecord = busComp.FirstRecord</code>
<i>GetAssocBusComp Method for a Business Component</i>	Returns the name of the association business component.	<pre>Dim busComp as SiebelBusComp  Dim AssocBusComp as SiebelBusComp  Set AssocBusComp = busComp.GetAssocBusComp</pre>
<i>GetFieldValue Method for a Business Component</i>	Returns the value of a field from the current record of a business component.	<pre>Dim busComp as SiebelBusComp  Dim sValue as String  sValue = busComp.GetFieldValue(Fieldname as String)</pre>
<i>GetFormattedFieldValue Method for a Business Component</i>	Returns a field value that is in the same format that the Siebel client uses.	<pre>Dim busComp as SiebelBusComp  Dim sValue as String  sValue = busComp.GetFormattedFieldValue(Fieldname as String)</pre>
<i>GetLastErrCode Method for a Business Component</i>	Returns the error code for the error that Siebel CRM logged most recently.	<pre>Dim buscomp as SiebelBusComp  Dim iErr as Integer  iErr = buscomp.GetLastErrCode</pre>
<i>GetLastErrText Method for a Business Component</i>	Returns the text message for the error that Siebel CRM logged most recently.	<pre>Dim busComp as SiebelBusComp  Dim sErr as String  sErr = busComp.GetLastErrText</pre>
<i>GetMultipleFieldValues Method for a Business Component</i>	Returns a value for each field specified in a property set.	<pre>Dim buscomp as SiebelBusComp  buscomp.GetMultipleFieldValues(oPropSet as SiebelPropertySet, PValues as SiebelPropertySet)</pre>
<i>GetMVGBusComp Method for a Business Component</i>	Returns the multivalue group business component that is associated a business component field.	<pre>Dim busComp as SiebelBusComp  Dim mVGBusComp as SiebelBusComp  set mVGBusComp = busComp.GetMVGBusComp(Fieldname as String)</pre>
<i>GetNamedSearch Method for a Business Component</i>	Returns the name of a search specification.	<pre>Dim busComp as SiebelBusComp  Dim sValue as String</pre>



Method	Description	Format
		<pre>sValue = busComp.GetNamedSearch(SearchName as String)</pre>
<i>GetPicklistBusComp Method for a Business Component</i>	Returns the name of the pick business component that is associated with a field in the current business component.	<pre>Dim busComp as SiebelBusComp  Dim pickBusComp as SiebelBusComp  Set pickBusComp = busComp.GetPicklistBusComp(FieldName as String)</pre>
<i>GetSearchExpr Method for a Business Component</i>	Returns the current search expression that is defined for a business component.	<pre>Dim busComp as SiebelBusComp  Dim sExpr as String  sExpr = busComp.GetSearchExpr</pre>
<i>GetSearchSpec Method for a Business Component</i>	Returns the search specification that is defined for a business component.	<pre>Dim busComp as SiebelBusComp  Dim sSpec as String  sSpec = busComp.GetSearchSpec(FieldName as String)</pre>
<i>GetProperty Method for a Business Component</i>	Returns the value of a user property.	<pre>Dim busComp as SiebelBusComp  Dim sValue as String  sValue = busComp.GetProperty(propertyName as String)</pre>
<i>GetViewMode Method for a Business Component</i>	Returns the visibility mode for a business component.	<pre>Dim busComp as SiebelBusComp  Dim iMode as Integer  iMode = busComp.GetViewMode</pre>
<i>InvokeMethod Method for a Business Component</i>	Calls a method.	<pre>Dim busComp as SiebelBusComp  Dim sReturn as String  sReturn = busComp.InvokeMethod(methodName as String, methArg1, methArg2, methArgN as String or StringArray)</pre>
<i>LastRecord Method for a Business Component</i>	Moves the record pointer to the last record in a business component.	<pre>Dim busComp as SiebelBusComp  Dim bReturn as Boolean  bReturn = busComp.LastRecord</pre>

Method	Description	Format
<i>Name Method for a Business Component</i>	Returns the name of a business component.	<pre>Dim busComp as SiebelBusComp  Dim sName as String  sName = busComp.Name</pre>
<i>NewRecord Method for a Business Component</i>	Adds a new record to a business component.	<pre>Dim busComp as SiebelBusComp  Dim bool as Boolean  bool = busComp.NewRecord(whereIndicator as Integer)</pre>
<i>NextRecord Method for a Business Component</i>	Moves the record pointer to the next record in a business component, making that record the current record.	<pre>Dim busComp as SiebelBusComp  Dim bReturn as Boolean  bReturn = busComp.NextRecord</pre>
<i>ParentBusComp Method for a Business Component</i>	Returns the name of a parent business component.	<pre>Dim busComp as SiebelBusComp  Dim parentBusComp as SiebelBusComp  Set parentBusComp = busComp.ParentBusComp</pre>
<i>Pick Method for a Business Component</i>	Places the currently chosen record in a pick business component into the appropriate fields of the parent business component.	<pre>Dim busComp as SiebelBusComp  busComp.Pick</pre>
<i>PreviousRecord Method for a Business Component</i>	Moves the record pointer to the previous record in a business component, making that record the current record.	<pre>Dim busComp as SiebelBusComp  Dim bReturn as Boolean  bReturn = busComp.PreviousRecord</pre>
<i>RefineQuery Method for a Business Component</i>	Refines a query.	<pre>Dim busComp as SiebelBusComp  busComp.RefineQuery</pre>
<i>SetFieldValue Method for a Business Component</i>	Sets a new value in a field for the current record of a business component.	<pre>Dim busComp as SiebelBusComp  busComp.SetFieldValue(FieldName as String, FieldValue as String)</pre>
<i>SetFormattedFieldValue Method for a Business Component</i>	Sets a new value in a field in the current record of a business component. It accepts the field value in the current local format.	<pre>Dim busComp as SiebelBusComp  busComp.SetFormattedFieldValue(FieldName as String, FieldValue as String)</pre>

Method	Description	Format
<i>SetMultipleFieldValues Method for a Business Component</i>	Sets new values in the fields of the current record of a business component.	<pre>Dim buscomp as SiebelBusComp  buscomp.SetMultipleFieldValues(oPropSet as SiebelPropertySet)</pre>
<i>SetNamedSearch Method for a Business Component</i>	Sets a named search specification on a business component.	<pre>Dim busComp as SiebelBusComp  busComp.SetNamedSearch(searchName as String, searchSpec as String)</pre>
<i>SetSearchExpr Method for a Business Component</i>	Sets the search expression for a business component.	<pre>Dim busComp as SiebelBusComp  busComp.SetSearchExpr(searchSpec as String)</pre>
<i>SetSearchSpec Method for a Business Component</i>	Sets the search specification for a business component.	<pre>Dim busComp as SiebelBusComp  busComp.SetSearchSpec(FieldName as String, searchSpec as String)</pre>
<i>SetSortSpec Method for a Business Component</i>	Sets the sort specification for a business component.	<pre>Dim busComp as SiebelBusComp  busComp.SetSortSpec(sortSpec as String)</pre>
<i>SetUserProperty Method for a Business Component</i>	Sets the value of a user property in a business component.	<pre>Dim busComp as SiebelBusComp  busComp.SetUserProperty(propertyName as String, newValue as String)</pre>
<i>SetViewMode Method for a Business Component</i>	Sets the visibility type for a business component.	<pre>Dim buscomp as SiebelBusComp  buscomp.SetViewMode(mode As Integer)</pre>
<i>UndoRecord Method for a Business Component</i>	Reverses any unsaved modifications made to the record.	<pre>Dim busComp as SiebelBusComp  busComp.UndoRecord</pre>
<i>WriteRecord Method for a Business Component</i>	Saves to the Siebel database any modifications made to the current record.	<pre>Dim busComp as SiebelBusComp  busComp.WriteRecord</pre>

## Business Object Methods for the Mobile Web Client Automation Server

The following table describes a summary of business object methods you can use with the Mobile Web Client Automation Server.

Method	Description	Format
<i>GetBusComp Method for a Business Object</i>	Returns the name of a business component.	<pre>Dim busObject as SiebelBusObject  Dim busComp as SiebelBusComp  set busComp = busObject.GetBusComp (BusCompName as String)</pre>
<i>GetLastErrCode Method for a Business Object</i>	Returns the error code for the error that Siebel CRM logged most recently.	<pre>Dim busobject as SiebelBusObject  Dim iErr as Integer  iErr = busobject.GetLastErrCode</pre>
<i>GetLastErrText Method for a Business Object</i>	Returns the text message for the error that Siebel CRM logged most recently.	<pre>Dim busobject as SiebelBusObject  Dim sValue as String  sValue= busobject.GetLastErrText</pre>
<i>Name Method for a Business Object</i>	Returns the name of the business object.	<pre>Dim busObject as SiebelBusObject  Dim sName as String  sName = busObject.Name</pre>

## Business Service Methods for the Mobile Web Client Automation Server

The following table describes a summary of business service methods you can use with the Mobile Web Client Automation Server.

Method	Description	Format
<i>GetFirstProperty Method for a Business Service</i>	Returns the name of the first property of a business service.	<pre>Dim oService as SiebelService  Dim sName as String</pre>

Method	Description	Format
		<code>sName = oService.GetFirstProperty</code>
<i>GetNextProperty Method for a Business Service</i>	Returns the name of the next property of a business service.	<pre>Dim oService as SiebelService Dim sName as String sName = oService.GetNextProperty</pre>
<i>GetProperty Method for a Business Service</i>	Returns the value of a property.	<pre>Dim oService as SiebelService Dim sValue as String sValue = oService.GetProperty(propName as String)</pre>
<i>InvokeMethod Method for a Business Service</i>	Calls a method.	<pre>Dim oService as SiebelService oService.InvokeMethod(methodName as String,     InputArguments as SiebelPropertySet,     OutputArguments as SiebelPropertySet)</pre>
<i>Name Method for a Business Service</i>	Returns the name of a business service.	<pre>Dim oService as SiebelService Dim sName as String sName = oService.Name</pre>
<i>PropertyExists Method for a Business Service</i>	Returns a Boolean value that indicates if the property that the argument identifies exists.	<pre>Dim oService as SiebelService Dim bool as Boolean bool = oService.PropertyExists(propName as String)</pre>
<i>RemoveProperty Method for a Business Service</i>	Removes a property from a business service.	<pre>Dim oService as SiebelService oService.RemoveProperty propName as String</pre>
<i>SetProperty Method for a Business Service</i>	Sets a value for a property of a business service.	<pre>Dim oService as SiebelService oService.SetProperty(propName as String,     propValue as String)</pre>

# Property Set Methods for the Mobile Web Client Automation Server

The following table describes a summary of the property set methods you can use with the Mobile Web Client Automation Server.

Method	Description	Format
<i>AddChild Method for a Property Set</i>	Adds child property sets to a property set.	<pre>Dim oPropSet as SiebelPropertyset  oPropSet.AddChild(childObject as SiebelPropertySet)</pre>
<i>Copy Method for a Property Set</i>	Returns a copy of a property set.	<pre>Dim oPropSet1 as SiebelPropertyset  Dim oPropSet2 as SiebelPropertyset  set oPropSet2 = oPropSet1.Copy</pre>
<i>GetChild Method for a Property Set</i>	Returns a child property set of a property set.	<pre>Dim oPropSet as SiebelPropertySet  Dim childPropSet as SiebelPropertySet  set childPropSet = oPropSet.GetChild(index as Long)</pre>
<i>GetChildCount Method for a Property Set</i>	Returns the number of child property sets that exist for a parent property set.	<pre>Dim oPropSet as SiebelPropertySet  Dim iCount as Long  iCount = oPropSet.GetChildCount</pre>
<i>GetFirstProperty Method for a Property Set</i>	Returns the name of the first property in a property set.	<pre>Dim oPropSet as SiebelPropertySet  Dim sPropName as String  sPropName = oPropSet.GetFirstProperty</pre>
<i>GetLastErrCode Method for a Property Set</i>	Returns the error code for the error that Siebel CRM logged most recently.	<pre>Dim oPropSet as SiebelPropertySet  Dim iErr as Integer  iErr = oPropSet.GetLastErrCode</pre>
<i>GetLastErrText Method for a Property Set</i>	Returns the text message for the error that Siebel CRM logged most recently.	<pre>Dim oPropSet as SiebelPropertySet  Dim sValue as String  sValue = oPropSet.GetLastErrText</pre>

Method	Description	Format
<i>GetNextProperty Method for a Property Set</i>	Returns the name of the next property in a property set.	<pre>Dim oPropSet as SiebelPropertySet  Dim sPropName as String  sPropName = oPropSet.GetNextProperty</pre>
<i>GetProperty Method for a Property Set</i>	Returns the value of a property.	<pre>Dim oPropSet as SiebelPropertySet  Dim sPropVal as String  sPropVal = oPropSet.GetProperty(propName as String)</pre>
<i>GetPropertyCount Method for a Property Set</i>	Returns the number of properties that exist in the current level in the hierarchy.	<pre>Dim oPropSet as SiebelPropertySet  Dim lCount as Long  lCount = oPropSet.GetPropertyCount</pre>
<i>GetType Method for a Property Set</i>	Returns the value of the type attribute of a property set.	<pre>Dim oPropSet as SiebelPropertySet  Dim sTypeVal as String  sTypeVal = oPropSet.GetType</pre>
<i>GetValue Method for a Property Set</i>	Returns the value of the value attribute of a property set.	<pre>Dim oPropSet as SiebelPropertySet  Dim sValVal as String  sValVal = oPropSet.GetValue</pre>
<i>InsertChildAt Method for a Property Set</i>	Inserts a child property set in a parent property set at a specific location.	<pre>Dim oPropSet as SiebelPropertySet  oPropSet.InsertChildAt(childObject as SiebelPropertySet, index as Long)</pre>
<i>PropertyExists Method for a Property Set</i>	Returns a Boolean value that indicates if the property that the argument identifies exists.	<pre>Dim oPropSet as SiebelPropertySet  Dim bool as Boolean  bool = oPropSet.PropertyExists(propName as String)</pre>
<i>RemoveChild Method for a Property Set</i>	Removes a child property set from a parent property set.	<pre>Dim oPropSet as SiebelPropertySet  oPropSet.RemoveChild(index as Long)</pre>
<i>RemoveProperty Method for a Property Set</i>	Removes a property from a property set.	<pre>Dim oPropSet as SiebelPropertySet  oPropSet.RemoveProperty(propName as String)</pre>
<i>Reset Method for a Property Set</i>	Removes every property and child property set from a property set.	<pre>Dim oPropSet as SiebelPropertySet</pre>

Method	Description	Format
		<code>oPropSet.Reset</code>
<i>SetProperty Method for a Property Set</i>	Sets a value in the property of a property set.	<pre>Dim oPropSet as SiebelPropertySet oPropSet.SetProperty(propName as String, propValue as String)</pre>
<i>SetType Method for a Property Set</i>	Sets the value for the type attribute of a property set.	<pre>Dim oPropSet as SiebelPropertySet oPropSet.SetType(value as String)</pre>
<i>SetValue Method for a Property Set</i>	Sets the value for the value attribute of a property set.	<pre>Dim oPropSet as SiebelPropertySet oPropSet.SetValue(value as String)</pre>



# 12 Siebel Java Data Bean Quick Reference

## Siebel Java Data Bean Quick Reference

This chapter describes summary information for the Siebel Java Data Bean. It includes the following topics:

- *Data Bean Methods for Siebel Java Data Bean*
- *Business Component Methods for Siebel Java Data Bean*
- *Business Object Methods for Siebel Java Data Bean*
- *Business Service Methods for Siebel Java Data Bean*
- *Property Set Methods for Siebel Java Data Bean*
- *Siebel Exception Methods for Siebel Java Data Bean*

For more information about Siebel Java Data Bean, see the Javadoc files that reside in the Siebel\_JavaDoc.jar file. This file is typically located in the \siebsrvr\CLASSES folder.

## Data Bean Methods for Siebel Java Data Bean

The following table describes a summary of Data Bean methods you can use with Siebel Java Data Bean.

Method	Description	Format
<i>Attach Method for an Application</i>	Allows an external application to reconnect to an existing Siebel session.	<code>boolean attach(String sessionID) throws SiebelException</code>
<i>CurrencyCode Method for an Application</i>	Returns the currency code that is associated with the division of the user position.	<code>String currencyCode()</code>
<i>Detach Method for an Application</i>	Returns a string that contains the Siebel session ID.	<code>String detach() throws SiebelException</code>
<i>GetBusObject Method for an Application</i>	Creates a new instance of a business object.	<code>SiebelBusObject getBusObject(String boName) throws SiebelException</code>
<i>GetProfileAttr Method for an Application</i>	Returns the name of an attribute in a user profile.	<code>String getProfileAttr(String attrName) throws SiebelException</code>
<i>GetService Method for an Application</i>	Locates a business service. If this business service is not already running, then Siebel CRM starts it.	<code>SiebelService getService(string serviceName) throws SiebelException</code>

Method	Description	Format
<i>InvokeMethod Method for an Application</i>	Calls a method.	<code>String invokeMethod(String name, String[] args) throws SiebelException</code>
<i>Login Method for an Application</i>	Allows an external application to log in to the COM Data Server, COM Data Control, or Siebel Java Data Bean, and to access Siebel objects.	<code>boolean login(String connString, String userName, String passWord) throws SiebelException</code>
<i>LoginId Method for an Application</i>	Returns the login ID of the user who started the Siebel application.	<code>String loginId()</code>
<i>LoginName Method for an Application</i>	Returns the login name of the user who started the Siebel application.	<code>String loginName()</code>
<i>Logoff Method for an Application</i>	Disconnects the Siebel client from the Siebel Server.	<code>boolean logoff() throws SiebelException</code>
<i>NewPropertySet Method for an Application</i>	Creates a new property set.	<code>SiebelPropertySet newPropertySet()</code>
<i>PositionId Method for an Application</i>	Returns the position ID of the user position.	<code>String positionId()</code>
<i>PositionName Method for an Application</i>	Returns the name of the current user position.	<code>String positionName()</code>
<i>SetPositionId Method for an Application</i>	Sets the active position to a Position ID.	<code>boolean setPositionId(String posId) throws SiebelException</code>
<i>SetPositionName Method for an Application</i>	Sets the active position to a position name.	<code>boolean setPositionName(String posName) throws SiebelException</code>
<i>SetProfileAttr Method for an Application</i>	Personalization uses this method to set a value for an attribute in a user profile.	<code>boolean setProfileAttr(String attrName, String attrValue) throws SiebelException</code>
<i>Trace Method for an Application</i>	Appends a message to the trace file.	<code>boolean trace(String message) throws SiebelException</code>
<i>TraceOff Method for an Application</i>	Turns off tracing.	<code>boolean traceOff() throws SiebelException</code>
<i>TraceOn Method for an Application</i>	Turns on tracing.	<code>boolean traceOn(String filename, String Category, String selection) throws SiebelException</code>

# Business Component Methods for Siebel Java Data Bean

The following table describes a summary of business component methods you can use with Siebel Java Data Bean. It does not include object interface methods that Siebel CRM does not call directly from a business component instance. For information about methods that Siebel CRM calls with the `InvokeMethod` method on a business component, see [Business Component Invoke Methods](#).

Method	Description	Format
<i>ActivateField Method for a Business Component</i>	Activates a field.	<code>boolean activateField(String fieldName) throws SiebelException</code>
<i>ActivateMultipleFields Method for a Business Component</i>	Activates multiple fields.	<code>boolean activateMultipleFields(SiebelPropertySet psFields) throws SiebelException</code>
<i>Associate Method for a Business Component</i>	Creates a new many-to-many relationship for the parent object through an association business component.	<code>boolean associate(boolean isInsertBefore) throws SiebelException</code>
<i>BusObject Method for a Business Component</i>	Returns the name of the business object that the business component references.	<code>SiebelBusObject busObject() throws SiebelException</code>
<i>ClearToQuery Method for a Business Component</i>	Clears the current query but does not clear sort specifications on a business component.	<code>boolean clearToQuery() throws SiebelException</code>
<i>DeactivateFields Method for a Business Component</i>	Deactivates the fields that are currently active from the SQL query statement of a business component.	<code>boolean deactivateFields()</code>
<i>DeleteRecord Method for a Business Component</i>	Removes the current record from a business component.	<code>boolean deleteRecord() throws SiebelException</code>
<i>ExecuteQuery Method for a Business Component</i>	Returns a set of business component records.	<code>boolean executeQuery(boolean cursorMode) throws SiebelException</code>  If using the <code>ExecuteQuery</code> method with Siebel Java Data Bean, use <code>True</code> for <code>ForwardOnly</code> and <code>False</code> for <code>ForwardBackward</code> .
<i>ExecuteQuery2 Method for a Business Component</i>	Returns a set of business component records. Allows you to control the number of records Siebel CRM returns.	<code>boolean executeQuery2(boolean cursorMode, boolean ignoreMaxCursorSize) throws SiebelException</code>

Method	Description	Format
<i>FirstRecord Method for a Business Component</i>	Moves the record pointer to the first record in a business component, making that record the current record.	<code>boolean firstRecord() throws SiebelException</code>
<i>GetFieldValue Method for a Business Component</i>	Returns the value of a field from the current record of a business component.	<code>String getFieldValue(String fieldName) throws SiebelException</code>
<i>GetFormattedFieldValue Method for a Business Component</i>	Returns a field value that is in the same format that the Siebel client uses.	<code>String getFormattedFieldValue(String fieldName) throws SiebelException</code>
<i>GetMultipleFieldValues Method for a Business Component</i>	Returns values for the fields specified in a property set.	<code>boolean getMultipleFieldValues(SiebelPropertySet Src, SiebelPropertySet result) throws SiebelException</code>
<i>GetMVGBusComp Method for a Business Component</i>	Returns the multivalue group business component that is associated a business component field.	<code>SiebelBusComp getMVGBusComp(String fieldName) throws SiebelException</code>
<i>GetNamedSearch Method for a Business Component</i>	Returns the name of a search specification.	<code>String getNamedSearch(String searchName) throws SiebelException</code>
<i>GetPicklistBusComp Method for a Business Component</i>	Returns the name of the pick business component that is associated with a field in the current business component.	<code>SiebelBusComp getPicklistBusComp(String fieldName) throws SiebelException</code>
<i>GetSearchExpr Method for a Business Component</i>	Returns the current search expression that is defined for a business component.	<code>String getSearchExpr() throws SiebelException</code>
<i>GetSearchSpec Method for a Business Component</i>	Returns the search specification that is defined for a business component.	<code>String getSearchSpec(String fieldName) throws SiebelException</code>
<i>GetProperty Method for a Business Component</i>	Returns the value for the specified property.	<code>String getUserProperty(String property) throws SiebelException</code>
<i>GetViewMode Method for a Business Component</i>	Returns the visibility mode for a business component.	<code>int getViewMode()</code>
<i>InvokeMethod Method for a Business Component</i>	Calls a method.	<code>String invokeMethod(String methodName, String[] methArg1, methArg2, methArgN) throws SiebelException</code>
<i>LastRecord Method for a Business Component</i>	Moves the record pointer to the last record in a business component.	<code>boolean lastRecord() throws SiebelException</code>

Method	Description	Format
<i>Name Method for a Business Component</i>	Returns the name of a business component.	<code>String name()</code>
<i>NewRecord Method for a Business Component</i>	Adds a new record to a business component.	<code>boolean newRecord(boolean isInsertBefore) throws SiebelException</code>
<i>NextRecord Method for a Business Component</i>	Moves the record pointer to the next record in a business component, making that record the current record.	<code>boolean nextRecord() throws SiebelException</code>
<i>ParentBusComp Method for a Business Component</i>	Returns the name of a parent business component.	<code>SiebelBusComp parentBusComp() throws SiebelException</code>
<i>Pick Method for a Business Component</i>	Places the currently chosen record in a pick business component into the appropriate fields of the parent business component.	<code>boolean pick() throws SiebelException</code>
<i>PreviousRecord Method for a Business Component</i>	Moves the record pointer to the previous record in a business component, making that record the current record.	<code>boolean previousRecord() throws SiebelException</code>
<i>RefineQuery Method for a Business Component</i>	Refines a query.	<code>boolean refineQuery() throws SiebelException</code>
<i>Release Method for a Business Component</i>	Releases a business component and the resources for this business component that exist on the Siebel Server.	<code>void release()</code>
<i>SetFieldValue Method for a Business Component</i>	Sets a new value in a field for the current record of a business component.	<code>boolean setFieldValue(String fieldName, String fieldValue) throws SiebelException</code>
<i>SetFormattedFieldValue Method for a Business Component</i>	Sets a new value in a field in the current record of a business component. It accepts the field value in the current local format.	<code>boolean setFormattedFieldValue(String fieldName, String fieldValue) throws SiebelException</code>
<i>SetMultipleFieldValues Method for a Business Component</i>	Sets new values to the multiple fields specified in the property set for the current record of a business component.	<code>boolean setMultipleFieldValues(SiebelPropertySet psFields) throws SiebelException</code>
<i>SetNamedSearch Method for a Business Component</i>	Sets a named search specification on a business component.	<code>boolean setNamedSearch(String searchName, String searchText) throws SiebelException</code>

Method	Description	Format
<i>SetSearchExpr Method for a Business Component</i>	Sets the search expression for a business component.	<code>boolean setSearchExpr(String searchExpr) throws SiebelException</code>
<i>SetSearchSpec Method for a Business Component</i>	Sets the search specification for a business component.	<code>boolean setSearchSpec(String fieldName, String searchSpec) throws SiebelException</code>
<i>SetSortSpec Method for a Business Component</i>	Sets the sort specification for a business component.	<code>boolean setSortSpec(String sortSpec) throws SiebelException</code>
<i>SetUserProperty Method for a Business Component</i>	Sets the value of a user property in a business component.	<code>boolean setUserProperty(String propName, String propVal)</code>
<i>SetViewMode Method for a Business Component</i>	Sets the visibility type for a business component.	<code>boolean setViewMode(int mode) throws SiebelException</code>
<i>UndoRecord Method for a Business Component</i>	Reverses any unsaved modifications made to the record.	<code>boolean undoRecord() throws SiebelException</code>
<i>WriteRecord Method for a Business Component</i>	Saves to the Siebel database any modifications made to the current record.	<code>boolean writeRecord() throws SiebelException</code>

## Business Object Methods for Siebel Java Data Bean

The following table describes a summary of business object methods you can use with Siebel Java Data Bean.

Method	Description	Format
<i>GetBusComp Method for a Business Object</i>	Returns the name of a business component.	<code>SiebelBusComp getBusComp(String busCompName) throws SiebelException</code>
<i>Name Method for a Business Object</i>	Returns the name of the business object.	<code>String name()</code>
<i>Release Method for a Business Object</i>	Releases a business object and the resources for this business object on the Siebel Server.	<code>void release()</code>

## Business Service Methods for Siebel Java Data Bean

The following table describes a summary of business service methods you can use with Siebel Java Data Bean.

Method	Description	Format
<i>Business Service Methods</i>	Returns the name of the first property of a business service.	<code>String getFirstProperty()</code>
<i>GetNextProperty Method for a Business Service</i>	Returns the name of the next property of a business service.	<code>String getNextProperty()</code>
<i>GetProperty Method for a Business Service</i>	Returns the value of a property.	<code>String getProperty(String propName)</code> throws <code>SiebelException</code>
<i>InvokeMethod Method for a Business Service</i>	Calls a method.	<code>boolean invokeMethod(String methodName, SiebelPropertySet inputPropertySet, SiebelPropertySet outputPropertySet)</code> throws <code>SiebelException</code>
<i>Name Method for a Business Service</i>	Returns the name of a business service.	<code>String Name()</code>
<i>PropertyExists Method for a Business Service</i>	Returns a Boolean value that indicates if the property that the argument identifies exists.	<code>boolean propertyExists(String propName)</code> throws <code>SiebelException</code>
<i>Release Method for a Business Service</i>	Releases a business service and the resources that this business service uses on the Siebel Server.	<code>void release()</code>
<i>RemoveProperty Method for a Business Service</i>	Removes a property from a business service.	<code>void removeProperty(String propName)</code> throws <code>SiebelException</code>
<i>SetProperty Method for a Business Service</i>	Sets a value for a property of a business service.	<code>void setProperty(String propName, String propValue)</code> throws <code>SiebelException</code>

## Property Set Methods for Siebel Java Data Bean

*Property Set Methods for Siebel Java Data Bean* describes a summary of property set methods you can use with Siebel Java Data Bean.

Method	Description	Format
<i>AddChild Method for a Property Set</i>	Adds child property sets to a property set.	<code>int addChild(SiebelPropertySet propertySet)</code>
<i>Copy Method for a Property Set</i>	Returns a copy of a property set.	<code>SiebelPropertySet copy(SiebelPropertySet propertySet)</code>
<i>GetByteValue Method for a Property Set</i>	Returns a byte array if a byte value is set.	<code>public byte[] getByteValue()</code>
<i>GetChild Method for a Property Set</i>	Returns a child property set of a property set.	<code>SiebelPropertySet getChild(int index)</code>
<i>GetChildCount Method for a Property Set</i>	Returns the number of child property sets that exist for a parent property set.	<code>int getChildCount()</code>
<i>GetFirstProperty Method for a Property Set</i>	Returns the name of the first property in a property set.	<code>String getFirstProperty()</code>
<i>GetNextProperty Method for a Property Set</i>	Returns the name of the next property in a property set.	<code>String getNextProperty()</code>
<i>GetProperty Method for a Property Set</i>	Returns the value of a property.	<code>String getProperty(String propertyName)</code>
<i>GetPropertyCount Method for a Property Set</i>	Returns the number of properties that exist in the current level in the hierarchy.	<code>int GetPropertyCount()</code>
<i>GetType Method for a Property Set</i>	Returns the value of the type attribute of a property set.	<code>String getType()</code>
<i>GetValue Method for a Property Set</i>	Returns the value of the value attribute of a property set.	<code>String getValue()</code>
<i>InsertChildAt Method for a Property Set</i>	Inserts a child property set in a parent property set at a specific location.	<code>boolean insertChildAt(SiebelPropertySet propertySet, int index)</code>
<i>PropertyExists Method for a Property Set</i>	Returns a Boolean value that indicates if the property that the argument identifies exists.	<code>boolean propertyExists(String propertyName)</code>
<i>RemoveChild Method for a Property Set</i>	Removes a child property set from a parent property set.	<code>boolean removeChild(int index)</code>
<i>RemoveProperty Method for a Property Set</i>	Removes a property from a property set.	<code>boolean removeProperty(String propertyName)</code>



Method	Description	Format
<i>Reset Method for a Property Set</i>	Removes every property and child property set from a property set.	<code>boolean reset()</code>
<i>SetByteValue Method for a Property Set</i>	Sets the value portion of a property set.	<code>public void setByteValue(byte[] value)</code>
<i>SetProperty Method for a Property Set</i>	Sets a value in the property of a property set.	<code>boolean setProperty(String propertyName, String propertyValue)</code>
<i>SetType Method for a Property Set</i>	Sets the value for the type attribute of a property set.	<code>boolean setType(String type)</code>
<i>SetValue Method for a Property Set</i>	Sets the value for the value attribute of a property set.	<code>boolean setValue(String value)</code>

## Siebel Exception Methods for Siebel Java Data Bean

The following table describes a summary of Siebel exception methods that you can use with Siebel Java Data Bean. The Siebel Java Data Bean is one of Oracle's Siebel Object Interfaces.

Method	Description	Format
<i>GetErrorCode Method</i>	Returns a numeric error code.	<code>int getErrorCode()</code>
<i>GetErrorMessage Method</i>	Returns an error message.	<code>String getErrorMessage()</code>

