Siebel Object Interfaces Reference

Version 7.8, Rev. A

August 2005

Contents

1 What's New in This Release

What's New in Siebel Object Interfaces Reference, Version 7.8 Rev A

Table 2 lists changes in this version of the documentation to support release 7.8 of the software.

Table 1. What's New in Siebel Object Interfaces Reference, Version 7.8 Rev A

Topic	Description
CORBA interface	Content about CORBA support is deleted, including the CORBA Quick Reference Chapter. As of release 7.8, CORBA is no longer supported.
"Connect String" on page 70	The roles of the *host* and *port* parameters are clarified. Implementation of Siebel native load balancing through external interfaces is documented in a new section, "Leveraging Load Balancing with the Connect String" on page 72.
"Application Methods" on page 109	Clarification is provided for: ■ Standard representations of Application object instances in the various scripting languages ■ Conventions for representing the Application object instance in the Syntax sections of Application object methods
"ShowModalDialog Method" on page 154	The topic on this Application object method is added.
"GetFieldValue Method" on page 189	The system Id field is added as a valid argument for this method.
"Pick Method" on page 213	In recent releases of Siebel Business Applications, this method cannot be used to change the record in a read-only picklist field.
"SetSearchSpec Method" on page 227	Recommendations are added for calling this method multiple times to set search specifications on a business component.
"SetViewMode Method" on page 234	Clarification is provided on: ■ Source of Siebel ViewModes ■ Definitions of the Siebel ViewMode constants AllView and OrganizationView

What’s New in Siebel Object Interfaces Reference, Version 7.8

Table 2 lists changes in this version of the documentation to support release 7.8 of the software.

Table 2. What’s New in Siebel Object Interfaces Reference, Version 7.8

Topic	Description
“Components of the Siebel Programming Environment” on page 15	Added an introduction to Script Assist in the Script Editor paragraph.
“Siebel Compiler and Run-Time Engine” on page 20	Added a topic introducing the new eScript engine.
Chapter 2, “Siebel Programming Tools”	Removed the topics describing the Script Editor and Debugger. These topics now appear in *Using Siebel Tools*.
“LoadObjects Method” on page 134	Added more detail to the description of the argument for this method.

Additional Changes

This version of the documentation also contains the following general changes:

- Changed Siebel eBusiness Application to Siebel Business Application throughout the book.
- Removed references to the Dedicated Web Client.

2 Siebel Programming Tools

The Siebel applications include two programming languages. Siebel VB is a Visual Basic-like programming environment that includes an editor, debugger, interpreter and compiler. Siebel VB runs on the Windows operating system only. Siebel eScript is, similarly, a JavaScript-like programming environment, which uses the same tools that Siebel VB uses. Siebel eScript runs on both Windows and UNIX operating systems. With these built-in languages, you can extend and configure your Siebel application beyond the capabilities provided by declarative object property definition. The languages are integrated with other Siebel tools, such as the Applet Designer, Siebel CTI, and Siebel SmartScript. Using this integration you can define object properties both with the designer and by attaching scripts.

You should regard coding as a last resort. Siebel Tools provides many ways to configure your Siebel application without coding, and these methods should be exhausted before you attempt to write your own code, for three reasons:

- Using Siebel Tools is easier than writing code.
- More important, your code may not survive an upgrade. Customizations created directly in Siebel Tools are upgraded automatically when you upgrade your Siebel application, but code is not touched, and it may need to be reviewed following an upgrade.
- Finally, declarative configuration through Siebel Tools results in better performance than implementing the same functionality through code. For more information, read the *Performance Tuning Guide*.

The following topics provide further information about Siebel programming tools:

- "Components of the Siebel Programming Environment" on page 15
- "Supported Uses of Siebel Programming Languages" on page 16
- "Adding New Business Rules to a Business Component" on page 17
- "Script Tracing" on page 18
- "Siebel Compiler and Run-Time Engine" on page 20
- "A Few Notes About Siebel VB" on page 20
- "A Few Notes About Siebel eScript" on page 23

Components of the Siebel Programming Environment

The individual components of the Siebel programming environment include:

- **Server Script:**

  - **Siebel VB language.** A programming language that is syntactically and semantically compatible with Microsoft Visual Basic™. Because the language uses most of the same commands and standards as Microsoft Visual Basic, you can extend your Siebel application and reduce training costs.
  - **Siebel eScript language.** A programming language that is syntactically and semantically compatible with Netscape JavaScript™. In parallel with Siebel VB, the language uses most of the same commands and standards as JavaScript, giving you the same advantages in an alternative language. Moreover, you can use Siebel eScript on all Siebel-supported operating systems. Siebel VB is supported on Windows only.

- **Browser Script.** A type of script (introduced in Siebel 7) that executes in and is interpreted by the Browser. Browser Scripts are written in JavaScript and interact with the Document Object Model (DOM) as well as with the Siebel Object Model available in the Browser through the Browser Interaction Manager. A developer can script the behavior of Siebel events as well as the Browser events that are exposed through the DOM. Be aware that the DOMs for Internet Explorer and Netscape Navigator are different. Browser Script may only be used with applications which run in high interactivity mode, except when scripting Control events supported by the Browser Document Object Model.
- **Siebel Script Editor.** An integrated editor used to create, view, edit, and save custom program routines. The script editor has a code editing feature called Script Assist (introduced in version 7.8). Script Assist provides auto-complete, auto-indentation, method listing, and method signature capabilities to help minimize errors as you develop script. For more information about the Siebel Script Editor, including how to enable Script Assist, see *Using Siebel Tools*.
- **Siebel Debugger.** Assists you in detecting errors contained within Siebel programming language routines. It does not assist in detecting errors outside of the context of custom program routines. The Siebel Debugger can be invoked automatically from Siebel applications when a run-time error occurs if the Siebel application was invoked with the debug option, /H, on the command start-up line. The Debugger can also be invoked from the Debug toolbar and Debug menu. The Debugger is described in more detail in *Using Siebel Tools*.
- **Compiler/Interpreter.** A nonvisual component of the Siebel programming languages that compiles and executes Siebel custom program routines. It is similar to Microsoft's Visual Basic Language Interpreter. Siebel language routines are compiled into p-code and stored with the other object definitions in the SRF file.
- **Object Interfaces.** A collection of selected objects that expose their data and functionality to custom routines. The interface provides access to Siebel business objects with defined methods, events, and associated data. The object interfaces are the subject of this book.

Supported Uses of Siebel Programming Languages

The Siebel programming languages provide the ability to extend the behavior of the Siebel application in specific ways. Supported extensions can be grouped into the following:

- "Business Rule Definition"
- "Custom Behavior for User Interface Components" on page 17

Business Rule Definition

The Siebel programming languages let you extend data validation beyond what is already provided for in the standard Siebel application. The unique validation requirements of a business can be satisfied by custom extension routines that implement the specific business rules prior to performing record manipulation operations, such as record write or record delete.

Data validation routines may incorporate validations based on data from sources within or outside the Siebel application. For example, a validation routine may verify that an opportunity revenue amount is greater than zero if the probability of the opportunity is more than 20 percent using internal Siebel data. Alternatively, an extension routine could verify the availability of a conference room prior to inserting a new activity record by reading the information from another application’s database table.

The Siebel programming languages provide data manipulation capabilities that can be used to modify data, such as updating, inserting, and deleting records. For example, a custom routine can be used to set the value of one field based on the value of another before a new record is created. A custom routine could thus be used to set the value of opportunity probability based on a stage in the sales cycle, simplifying data entry.

The methods used to support data manipulation provide error notification. The Siebel programming language is notified of the error and has access to information so you can handle the error and take appropriate action.

Data manipulation methods in the Siebel programming languages conform to the same visibility rules as the standard Siebel applications user interface. For example, if a business object is readable but not editable because of visibility rules in the Siebel applications user interface, the same is true when you are accessing the object through the Siebel languages. These languages cannot circumvent the visibility rules or the security constraints enforced by the standard Siebel applications.

Custom Behavior for User Interface Components

With Siebel Applet Designer, you can add selected user interface objects to applets. With the Siebel programming languages, you can associate behavior to the objects. An example of this feature is placing a button on an applet which, when clicked, launches another program such as Excel.

With the Siebel programming languages, you can update a particular field based on the values of other fields. An extension routine could enforce the business rule that states, “If the sales cycle is at or past the Quote Submitted stage, do not allow the Revenue field to be modified.” The feature can also be used to support the user-specific data maintenance rule by restricting updates to certain fields based on the current user’s position.

Adding New Business Rules to a Business Component

The following procedure describes the steps required to add new business rules to a business component.

To add business rules to a business component

1. Start Siebel Tools.
2. Choose Repository > Check Out to lock the project from the server repository.
3. Select the business component using the Object Explorer and Object List Editor.
4. Right-click to bring up the menu, and choose Browser or Server script.
5. Select the event from the Event List Tree applet and add your server scripts in the Script Editor.
6. Validate the Siebel script syntax by choosing Debug > Check Syntax.

   NOTE: The Check Syntax menu item is available for server script only.

7. Choose File > Save to save the changes.
8. Compile the modified business component by pressing F7.
9. Press F5 to run the modified application.
10. Choose Repository > Check In to check the modified project into the server repository.

Script Tracing

As part of debugging scripts you can run a trace on allocations, events, and SQL commands. The tracing can be activated for specified user accounts, such as your development team. The Siebel Server sends the tracing information to a log file.

To enable logging

1. Navigate to Server Configuration > Components.
2. Select a component to log. Not all components support logging, but the majority do.
3. Click the Component Event Configuration tab.
4. Select the Object Manager Extension Language Log record. If this record does not exist, then the selected component does not support logging.
5. Set the Log Level to 1. To disable logging when you are done, set the Log Level to 0 (zero).
6. Click the Component Parameters tab.
7. (Optional) To display only the script tracing parameters, query for:
   Parameter Alias = Trace*
   Subsystem = Object Manager

   Changes to the script tracing parameters can take effect immediately. If you want changes to take effect now, then make changes to the values in the Current Value column. If you want the changes to take effect only after a restart, then make changes to the values in the Value on Restart column.

8 Set one or more tracing parameters from the following table.

Information to Trace	Parameter Alias	Settings for Current Value and Value on Restart
Allocations	TraceAlloc	0 (zero) to disable logging, 1 to enable logging
Events	TraceEvents	0 (zero) to disable logging, 1 to enable logging
SQL Commands	TraceSql	0 (zero) to disable logging, 1 to enable logging
Users	TraceUser	Comma-separated list of user names. Do not use spaces (for example: sadmin,mmasters). The length of this parameter is limited to 20 characters. **NOTE:** Server-side tracing can have a significant impact on performance. Use caution when making it available for multiple users simultaneously.

The following is a sample trace:

```
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

ObjMgrSessionInfoObjMgrLogin32003-04-09 15:37:20Login name : SADMIN

ObjMgrSessionInfoObjMgrAuth32003-04-09 15:37:20Authentication name : SADMIN

ObjMgrSessionInfoObjMgrLogin32003-04-09 15:37:20Session Type: Regular Session

GenericLogGenericError12003-04-09 15:37:20Invocation of Applet Menu New Service::NewExpense is not allowed.

GenericLogGenericError12003-04-09 15:37:20Invocation of Applet Menu New Service::NewTimeSheet is not
allowed.

ObjMgrExtLangLogObjMgrExtLangLog02003-04-09 15:38:27[User: SADMIN] EVENT, BEGIN, BusComp [Account],
BusComp_Query.

ObjMgrExtLangLogObjMgrExtLangLog02003-04-09 15:38:27[User: SADMIN] EVENT, END, BusComp [Account],
BusComp_Query.

ObjMgrExtLangLogObjMgrExtLangLog02003-04-09 15:38:58[User: SADMIN] EVENT, BEGIN, BusComp [Account],
BusComp_NewRecord.

ObjMgrExtLangLogObjMgrExtLangLog02003-04-09 15:38:58[User: SADMIN] EVENT, END, BusComp [Account],
BusComp_NewRecord.

ObjMgrExtLangLogObjMgrExtLangLog02003-04-09 15:39:08[User: SADMIN] EVENT, BEGIN, BusComp [Account],
BusComp_PreSetFieldValue.

ObjMgrExtLangLogObjMgrExtLangLog02003-04-09 15:39:08[User: SADMIN] EVENT, END, BusComp [Account],
BusComp_PreSetFieldValue.

ObjMgrSessionInfoObjMgrLogin32003-04-09 16:40:52Username: SADMIN, Login Status: Attempt,  Session Id:
!1.690.b816.3e94a0a0, IP Address: 172.20.94.66
```

Script tracing is not the same as file-based tracing. For more information on file-based tracing, read "Trace Method" on page 157.

Siebel Compiler and Run-Time Engine

To invoke the Siebel compiler and run-time engine, click the Compile button on the Debugger toolbar, or press F7. You can also invoke it when compiling a project containing object definitions with associated Siebel scripts. The Siebel compiler and run-time engine has no user interface of its own. When the compiler is invoked, it compiles the custom routines and returns a message when completed that indicates success or failure.

Compilation Order Considerations

The Siebel Compiler compiles Siebel VB functions and procedures in alphabetical order within an object definition. If a function or procedure calls another function or procedure that has not been defined, the compiler generates an error message in the form:

function_name Is An Unknown Function

To avoid this error, use the Declare statement to declare the function or procedure in the (general) (declarations) section. For more information, read *Siebel VB Language Reference*.

Siebel eScript does not require forward declaration of functions.

eScript Engine

In version 7.8, a new eScript engine is available. The new engine provides support for strongly typed objects (compliant with the ECMAScript edition 4 specification). In addition, the new eScript engine provides other enhancements, such as late and early binding. For more information about the features and limitations of the new eScript engine, see *Siebel eScript Language Reference*. For information on how to enable the engine, see *Using Siebel Tools*.

A Few Notes About Siebel VB

If you have never programmed in Visual Basic before, you may want to start by reading *Siebel VB Language Reference*. It includes information on the internal VB program constructs, statements, and functions. You need to understand how these objects behave before you can program using the Siebel object methods and events.

Declare your variables. As a general rule, using the Option Explicit statement is helpful as it forces you to declare your variables (using the Dim statement) before you use them. Doing so makes it easier for others to understand your code, and for you to debug the code. You can declare a variable without giving it a data type, but if you do not specify a data type, Siebel VB assumes the type Variant, which requires 16 bytes—twice as much memory as the next smallest data type. If you can avoid Variant variables, you reduce the amount of memory required by your code, which may make execution faster. In Siebel VB, you place Option commands in the (general) (declarations) window.

Use standardized naming conventions. Another way to improve the readability of your code is to follow a set of standardized naming conventions. It does not really matter what conventions you follow as long as everyone in the programming group follows the same conventions. One very common convention is to prefix each variable with a letter denoting its type, as shown here.

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

You can also use suffix characters on your variable names.

Use the Me object reference. The special object reference *Me* is a VB shorthand for "the current object." You should use it in place of references to active business objects. For example, in a business component event handler, you should use Me in place of *ActiveBusComp*, as shown in the following example:

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

If Val(Me.GetFieldValue("Rep %")) >75 Then
   TheApplication.RaiseErrorText("You can set the Rep% to greater than 75")
   BusComp_PreSetFieldValue = CancelOperation
End If
BusComp_PreSetFieldValue = ContinueOperation

End Function
```

You can see other examples of Me in "ParentBusComp Method" on page 213, "SetViewMode Method" on page 234, "BusComp_PreQuery Event" on page 249, "BusComp_PreWriteRecord Event" on page 252, and "ActiveMode Method" on page 87.

Trap run-time errors. The standard VB methods return numeric error codes, which are documented in *Siebel VB Language Reference*. Siebel VB methods also may return error codes; however, they must be handled differently from those returned by the standard VB methods. For standard methods, you can use some combination of Err, ErrText, and Error. Siebel methods use numeric error codes in the range from 4000 to 4999. When you access Siebel object interfaces through COM or ActiveX, use a construct of this form to see the text of the error message.

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

```
      Exit Sub
   End If
```

NOTE: The GetLastErrText method is only available using interfaces external to Siebel Tools. Therefore, you can use it in Microsoft VB, but not in Siebel VB.

If you are working within the Siebel applications, especially in a LAN environment, where you cannot be sure that a record has not been changed or deleted by another user, create routines that keep the program from failing when it meets an unexpected condition. For information about error-handling routines, read the Language Overview topics in the Siebel VB Language Reference.

Make effective use of the Select Case construct. The Select Case construct chooses among any number of alternatives you require, based on the value of a single variable. This is greatly preferable to a series of nested If statements, because it simplifies code maintenance and also improves performance because the variable must be evaluated only once.

Use the With shortcut. Use the With statement to apply several methods to a single object. It reduces typing and makes the code easier to read. Instead of a series of statements such as:

```
   Set oBusComp = objBusObject.GetBusComp("Opportunity")
   oBusComp.ClearToQuery
   oBusComp.SetSearchSpec . . .
   oBusComp.ExecuteQuery ForwardBackward
   oBusComp.FirstRecord
   oBusComp.NewRecord NewAfter
   oBusComp.SetFieldValue "QuoteNumber", sQuoteId
   oBusComp.SetFieldValue "Account", sAccount
   . . .
   sSolutionId(cSolution) = oBusComp.GetFieldValue( "Id" )
   . . .
```

use the following:

```
   Set oBusComp = objBusObject.GetBusComp("Opportunity")
   With oBusComp
      .ClearToQuery
      .SetSearchSpec . . .
      .ExecuteQuery ForwardOnly
      .FirstRecord
      .NewRecord NewAfter
      .SetFieldValue "QuoteNumber", sQuoteId
      .SetFieldValue "Account", sAccount
      . . .
      sSolutionId(cSolution) =.GetFieldValue( "Id" )
      . . .
   End With
```

Use extreme care when working with date variables. When working with date variables extreme care has to be taken regarding the date format. GetFieldValue always returns the date in dd/mm/yyyy format (eventually followed by the time). As a result, applying the CVDate() function, which expects the regional setting, to the return value may cause an error. The GetFormattedFieldValue method uses the regional settings of the user's operating system. The regional setting specifies the year with two digits in most cases, thereby creating the possibility of Y2K non-compliance. For these reasons, you should use the following approach for performing date arithmetic.

To perform date arithmetic

1. Retrieve the value of date fields with the GetFieldValue method. For more information, read "GetFieldValue Method" on page 189.
2. Convert it into a date variable using the DateSerial() function.
3. Perform the required date arithmetic.

The following example is in Siebel VB:

```
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]
```

Destroy any objects you have created when you no longer need them. While the interpreter takes care of object cleanup, it is a best practice to write code that explicitly destroys objects when they are no longer used. Explicit destruction of Siebel objects should occur in the procedure in which they are created.

To destroy objects in Siebel VB, set each object to Nothing in the reverse order of creation. Destroy child objects before parent objects. For example:

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

[ Your code here ]

Set oBusComp = Nothing
Set oBusObj = Nothing
```

A Few Notes About Siebel eScript

There are some important differences between Siebel eScript and Siebel VB.

- Siebel eScript is case-sensitive; theApplication is different from TheApplication. Siebel VB is not case-sensitive.
- Siebel eScript does not distinguish between subroutines (which take no arguments) and functions (which take arguments). In Siebel eScript, every method is a function, whether or not it accepts arguments; therefore, it should be followed by a pair of parentheses.

Keep these differences in mind when you read the syntax diagrams. In many instances, the only difference between the VB syntax and the eScript syntax is that the eScript syntax requires the pair of parentheses at the end. In these instances, only the VB syntax is shown; you can derive the eScript syntax by adding the parentheses.

There are also some important differences between Siebel eScript and standard ECMAscript. Most important, Siebel eScript has no user interface functions. It cannot, therefore, be used to animate or control Web pages. Second, it contains two objects that are not part of standard ECMAscript: SELib and Clib. These objects implement a variety of C-like functions for interacting with the operating and file systems, and for file I/O. For details on these and other eScript functions not covered here, read *Siebel eScript Language Reference*.

Declare your variables. Standard ECMAscript does not require that you declare variables. Variables are declared implicitly as soon as they are used. As a general rule, you should declare the variables used in a module before you use them. Doing so makes it easier for others to understand your code, and for you to debug the code.

Use the *this* object reference. The special object reference *this* is eScript shorthand for "the current object." You should use it in place of references to active business objects and components. For example, in a business component event handler, you should use *this* in place of *ActiveBusComp,* as shown in the following example:

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

Use the *with* shortcut. The with shortcut applies several methods to a single object. It reduces typing and makes the code easier to read. Instead of a series of statements such as:

```
var oBusComp = oBusObject.GetBusComp("Opportunity");
oBusComp.ClearToQuery();
oBusComp.SetSearchSpec( . . .);
oBusComp.ExecuteQuery(ForwardBackward)
oBusComp.FirstRecord();
oBusComp.NewRecord(NewAfter);
oBusComp.SetFieldValue("QuoteNumber", sQuoteId);
oBusComp.SetFieldValue("Account", sAccount)
. . .
sSolutionId(cSolution) = oBusComp.GetFieldValue( "Id" );
. . .
```

use the following:

```
var oBusObject = TheApplication().GetBusObject("Opportunity");
var oBusComp = oBusObject.GetBusComp("Opportunity");
with (oBusComp)
{
   ClearToQuery();
   ActivateField("Name");
```

```
      ActivateField("Quote Number");
      ActivateField("Account");
      SetSearchSpec( "Name", varname);
      ExecuteQuery(ForwardOnly)

      if (FirstRecord())
      {
         var sQuoteNum = GetFieldValue( "Quote Number");
         var sAccount = GetFieldValue( "Account");
      }
   } //end with
```

Make effective use of the Switch construct. Use the Switch construct to choose among any number of alternatives you require, based on the value of a single variable. This is greatly preferable to a series of nested If statements because it simplifies code maintenance. It also improves performance because the variable must be evaluated only once.

```
   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;
      }
   }
```

Destroy any objects you have created when you no longer need them. While the interpreter takes care of object cleanup, it is a best practice to write code that explicitly destroys objects when they are no longer used. Explicit destruction of Siebel objects should occur in the procedure in which they are created.

To destroy objects in Siebel eScript, set each object to null in the reverse order of creation. Destroy child objects before parent objects. For example:

```
var oBusObject = TheApplication().GetBusObject(“Contact”)
var oBusComp = oBusObject.GetBusComp(“Contact”)

[ Your code here ]

oBusComp = null;
oBusObject = null;
```

3 Programming

This chapter provides information about installing and using Siebel object interfaces.

About Programming with Siebel Object Interfaces

Siebel object interfaces provide open interfaces into the Siebel applications, supporting integration between Siebel applications and external applications.

Siebel object interface definitions are based on Siebel business objects and declarative object definitions that can be configured and automatically upgraded to successive releases using Siebel Tools.

Siebel object interfaces are available to developers through the following technologies:

- Built-in scripting of Siebel objects using Siebel VB, Siebel eScript, and Browser Script
- Component Object Model (COM) using the Siebel Web Client Automation Server, Siebel COM Data Control, Siebel COM Data Server, and Siebel Mobile Web Client Automation Server
- Java using Siebel Java Data Bean

Siebel developers can integrate client and server applications from a variety of vendors. Application integration typically requires that cooperative software application programs interactively pass data back and forth. In addition, application integration sometimes requires that one application "controls" or "automates" another application.

The Siebel object interfaces are a collection of methods on Siebel objects that expose their data and functions to custom routines written in Server Script, and also to other languages external to the Siebel application. The interfaces provide access to Siebel business objects with defined methods, events, and data.

CAUTION: Your Siebel application is a Web-based or client/server application designed to meet the sales and marketing information requirements of large multinational corporations. Use caution when extending the Siebel applications or accessing them through the interface described here, as this should be done only by trained technical professionals. Improper application configuration or use of these interfaces can cause your configured Siebel application to be less reliable, or to perform poorly. Always test your configured application thoroughly before production rollout.

Siebel Systems does not support the following:

- Functions developed through custom programming
- Custom-developed applications
- Specific performance characteristics of other vendors' software

In addition, Siebel business objects, the Siebel object interfaces, and their associated behavior and properties are defined at the sole discretion of Siebel Systems, Inc. Siebel Systems reserves the right to change the behavior, properties, and events at any time without notice.

This chapter describes the interface environments and object types. Chapter 4, "Interfaces Reference" describes the supported methods of the Siebel object interfaces and provides examples of how you can use them.

About Siebel Object Interfaces

Siebel object interfaces include:

- "Siebel COM Interfaces" on page 28
- "Siebel Java Interfaces" on page 31
- Built-in scripting of Siebel objects using Siebel VB, Siebel eScript, and Browser Script. For more information, read "Built-In Scripting" on page 32.

See Also

"Usage Evaluation Matrix" on page 32

Siebel COM Interfaces

Siebel COM object interfaces can be accessed in four ways: COM Data Control, COM Data Server, Siebel Web Client Automation Server, and Siebel Mobile Web Client Automation Server.

NOTE: The programming environment you use may impose limitations on the functionality of COM servers. For example, code using the Data Server written in VB should not be implemented as a Windows NT service.

COM Data Control

The Siebel COM Data Control interfaces allow external applications to access Siebel business objects remotely.

To develop an application using the Siebel COM Data Control, you must have a Siebel Application Object Manager set up and running on a Siebel Server. Refer to *Siebel System Administration Guide* for information about installing and configuring the Siebel Object Manager.

Any external application or component that uses Siebel COM Data Control connects and communicates with Siebel Application Object Manager. The Siebel Application Object Manager, which could be running on a remote Siebel Server, is a multi-threaded, multiprocess application server that hosts Siebel business objects and supports session-based connections by clients. Figure 1 shows how external applications use *Siebel COM Data Control* to communicate with the Siebel application.

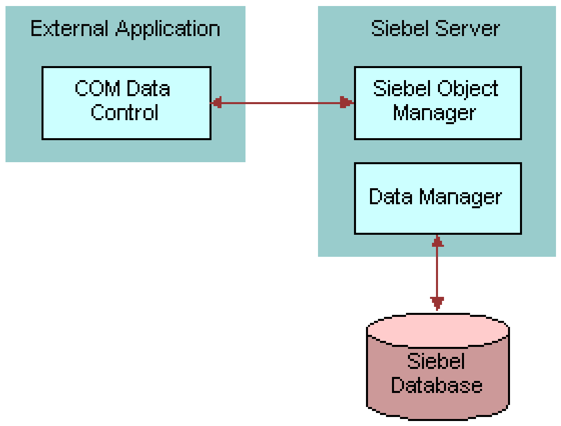


Figure 1. Siebel COM Data Control

COM Data Server

Figure 2 shows how external applications use Siebel COM Data Server without having to access the user interface objects.

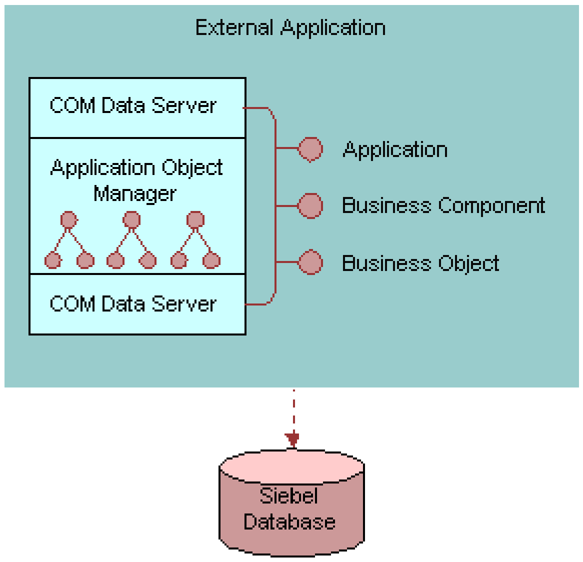


Figure 2. Siebel COM Data Server

You can expect differences in performance between Siebel COM Data Server and Siebel Mobile Web Client Automation Server. This is due in part to the fact that COM Data Server is a DLL running in the same address space as the calling program, while Automation Server is an executable that runs in its own address space. DLLs that are accessed by a server task must be thread safe.

Siebel Web Client Automation Server

The Web Client Automation Server is implemented as a small COM object resident within the Web browser (IE 5.0 or greater). The Web Client Automation Server is supported with the High Interactive client only. When accessing the Web Client Automation Server, Siebel Web Client must be running.

To enable the Web Client Automation Server, make sure that the `EnableWebClientAutomation` parameter is set to TRUE in the [SWE] section of the application's configuration file. With this parameter set to TRUE, a small ActiveX Control downloads to the desktop and the SiebelHTMLApplication process starts. This process terminates when the Siebel Web Client is gracefully terminated. You may need to modify the ActiveX controls and plug-ins security settings in the Browser to use the Web Client Automation Server.

Figure 3 shows how external applications can invoke business services and manipulate property sets in the Siebel Web Client Automation Server.

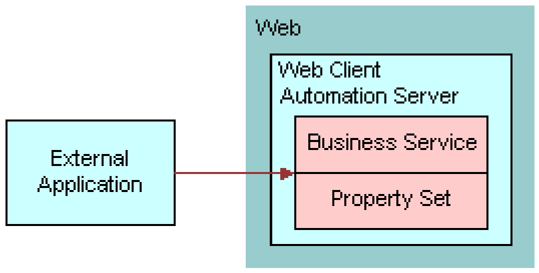


Figure 3. Siebel Web Client Automation Server

Siebel Mobile Web Client Automation Server

When accessing the Mobile Web Client Automation Server, Siebel Mobile Web Client must be running. Figure 4 shows how the Siebel Mobile Web Client Automation Server is used by external applications to control the Siebel application.

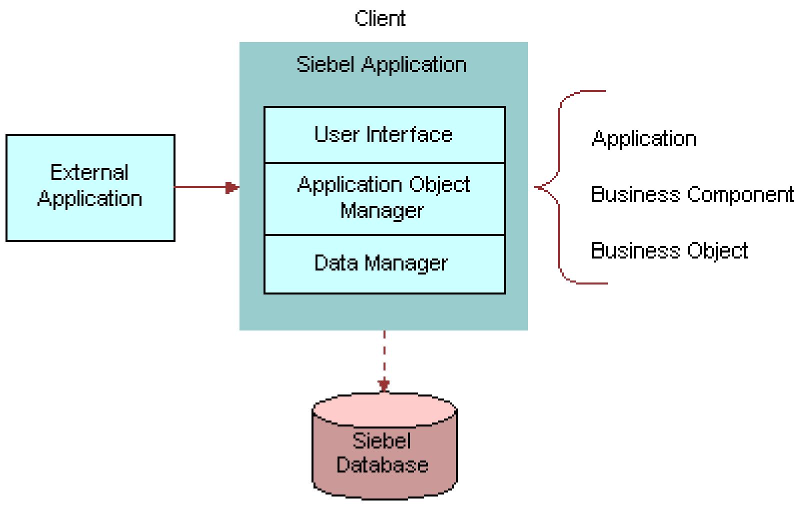


Figure 4. Siebel Mobile Web Client Automation Server

Siebel Java Interfaces

The Siebel Java Data Bean allows external applications to access Siebel objects without having to display the Siebel user interface. These objects are made available through the Siebel Java Data Bean, which can be used by an external application, component, or Java applet. The Java Data Bean provides functional access to the Siebel applications for both reading and writing data. The set of interfaces exposed through this interface is similar to that exposed by the Siebel COM Data Control.

Any external application that uses the Siebel Java Data Bean connects and communicates with a Siebel Application Object Manager. The Siebel Application Object Manager, which could be running on a remote Siebel Server, is a multithreaded, multiprocess application server that hosts Siebel objects and supports session-based connections by clients. The Siebel Application Object Manager specified in the connect string must be running on the specified Siebel Server.

Using the Siebel Java Data Bean with Multiple Threads

Multiple threads of a single process should not access a common instance of the Java Data Bean. If a process with multiple threads wants to use the Data Bean, each thread must create its own instance of it.

For the same reasons, you should not reuse instances of any other objects exposed by the Java Data Bean (SiebelBusObject, SiebelBusComp, SiebelService, and SiebelPropertySet) across multiple threads of the same process.

CAUTION: You should create one instance of the Siebel Java Data Bean for each thread that wishes to use it. Data Bean Objects obtained by one thread should not be shared among multiple threads.

Built-In Scripting

You can access Siebel methods and events from within the Siebel application through Siebel VB or Siebel eScript. Both languages are procedural programming languages for writing custom extensions that access and control Siebel objects through the Siebel object interfaces.

Usage Evaluation Matrix

Use Table 3 to determine which types of Siebel object interfaces to use.

Table 3. Usage Evaluation

Usage	Web Client Automation Server	Mobile Web Client Automation Server	Siebel COM Data Control	Siebel COM Data Server	Siebel Java Data Bean
Control Siebel user interface from your external application	X	X			
Access Siebel business objects without Siebel user interface			X	X	X

Table 3. Usage Evaluation

Usage	Web Client Automation Server	Mobile Web Client Automation Server	Siebel COM Data Control	Siebel COM Data Server	Siebel Java Data Bean
Objects execute on a Siebel Server	X		X		X
Execute on the client side in mobile environments		X		X	

Installing Siebel Object Interfaces

Table 4 lists the installation procedure for each object interface.

Table 4. Interface Installation

Interface	Installation
Java Data Bean	Installed by the Siebel Enterprise Server Installer under a Typical installation, with the "EAI Siebel Connectors" option. For more information, read the *Siebel Installation Guide* for the operating system you are using.
COM Data Control	Installed by the Siebel Enterprise Server Installer under a Typical installation, with the "EAI Siebel Connectors" option. COM Data Control is also installed with the OLE DB Provider and BizTalk Connector. For more information, read the *Siebel Installation Guide* for the operating system you are using.
COM Data Server	Installed by default with the Mobile Web Client.
Siebel Mobile Web Client Automation Server	Installed by default with the Siebel Mobile Web Client.
Siebel Web Client Automation Server	Installed by default with the Siebel Mobile Web Client. Also installed by default with the Siebel Enterprise Server Installer.

Exposed Object Types

Siebel object interfaces provide access to Siebel business objects. See the following sections for a discussion of each exposed object type:

- "Application Object Type" on page 34
- "Business Object Object Type" on page 34
- "Business Component Object Type" on page 34

- "Business Service Object Type" on page 35
- "Applet Object Type" on page 35
- "Property Set Object Type" on page 36
- "User Interface Control Object Type" on page 36

There are additional object types used in Siebel Business Applications, including specialized types derived from the base object types. However, object types not specifically discussed here are not exposed in the Siebel object interfaces and references to them may not be passed to external DLLs, such as a Microsoft Visual Basic COM DLL.

NOTE: Interfaces may be subject to change.

Application Object Type

The application object represents the Siebel application that is currently active and is an instance of the Application object type. An application object is created when a user session starts. This object contains the properties and events that interact with Siebel software as a whole. An instance of a Siebel application always has exactly one application object.

Business Object Object Type

Business objects are customizable, object-oriented building blocks of Siebel applications. Business objects define the relationships between different business component objects (BusComps) and contain semantic information about, for example, sales, marketing, and service-related entities.

A Siebel business object groups one or more business components into a logical unit of information. Examples of Siebel business objects include Opportunity, Quote, Campaign, and Forecast. An opportunity business object may consist of opportunity, contact, and product business components. The opportunity business component dictates the information of the other business components in a parent-child relationship.

Business Component Object Type

A business component defines the structure, the behavior, and the information displayed by a particular subject such as a product, contact, or account. Siebel business components are logical abstractions of one or more database tables. The information stored in a business component is usually specific to a particular subject and is typically not dependent on other business components. Business components can be used in one or more business objects.

Business component objects have associated data structured as records, they have properties, and they contain data units called *fields.* In the object interfaces, fields are accessed through business components. The business component object supports getting and setting field values, moving backward and forward through data in a business component object, and filtering changes to data it manages. This object type is available to every interface.

Business Service Object Type

Business service objects are objects that can be used to implement reusable business logic within the Object Manager. They include:

- Built-in business services, which are defined in Siebel Tools and stored in the repository.
- Run-time business services, which are defined in the run-time client and stored in the application database.

There are two types of built-in business services.

- Standard, which are based on the class CSSService and can be scripted or modified.
- Specialized, which are based on a specialized C++ class. Those specialized services whose behavior has been documented can be scripted.

Using business services, you can configure stand-alone “objects” or “modules” with both properties and scripts (written in VB or eScript). Business Services may be used for generic code libraries that can be called from any other scripts.

Built-in services cannot be modified at run time, and they cannot be overridden by run-time scripts.

User-created services can be created by adding a new record to the Business Service list applet in Siebel Tools. They can also be defined by administrators at run time by using views in the Siebel client. They can have whatever properties are needed to accomplish a particular task. They can be called either from scripts or from object interfaces.

Because they are reusable and can be set to persist throughout a session, business service objects can be used to simulate global procedures.

Applet Object Type

Because applet objects are part of the user interface, they are not accessible when using the Siebel object interfaces through the Siebel COM Data Server, Siebel COM Data Control, Siebel Web Client Automation Server, Siebel Mobile Web Client Automation Server, or Siebel Java Data Bean.

An applet object represents an applet that is rendered by the Siebel Web Engine. It exists only as a scriptable object, and is accessed by using the Edit Server Scripts or Edit Browser Scripts command on the selected applet. Applet objects are accessible through Siebel VB and Siebel eScript in Server Scripts, and through Browser JavaScript in Browser Scripts. Some Applet Events, such as WebApplet_ShowControl and WebApplet_ShowListColumn, do not execute if the client is running in high interactivity mode.

To add a Browser or Server script to an applet in Siebel Tools

1. In the Explorer window, choose the Applet object type.
2. In the right pane, locate the object to which you want to add a script.
3. Make sure that the project containing the applet is locked.
4. Right-click the item and select Edit Server Scripts or Edit Browser Scripts.

Property Set Object Type

Property set objects are collections of properties, which can be used for storing data. They may have child property sets assigned to them to form a hierarchical data structure. Property sets are used primarily for inputs and outputs to business services.

User Interface Control Object Type

A user interface control object, or a *control*, is a visual object with which the user can directly interact, such as a button or text box. Control objects have properties that can be accessed by Siebel Browser Script. Because control objects are part of the user interface, they are not accessible through the Siebel COM Data Server, Siebel COM Data Control, Mobile Web Client Automation Server, Web Client Automation Server, or Siebel Java Data Bean.

Controls are the visible building blocks of applets. Each control is unique and exists only in a single applet. Only controls on the active (currently visible) applet are available to Siebel Browser Script. Each control has a unique name within its containing applet, but control names need not be unique across applets.

The control object supports getting and setting values and customized behavior when used in conjunction with Siebel Browser Script.

Summary of Exposed Object Types

Table 5 summarizes the names and types of objects exposed.

Table 5. Exposed Object Types for Each Siebel Object Interface

Object Type	Server Script	Browser Script	Siebel Web Client Automation Server	Siebel Mobile Web Client Automation Server	Siebel COM Data Control	Siebel COM Data Server	Siebel Java Data Bean
Applet	X	X					
Application	X	X	X	X	X	X	X
Business Component	X	X		X	X	X	X
Business Object	X	X		X	X	X	X
Business Service	X	X	X	X	X	X	X
Property Set	X	X	X	X	X	X	X
Control		X					

Siebel Object Interface Method Syntax

The following conventions are used in this guide to describe methods, arguments, and return values.

Syntax

ObjectType.*MethodName*(*arg1*[, *arg2, …,* *arg*n])

Argument	Description
arg1	Description of *arg1*
arg2	Description of *arg2*
.	.
.	.
*arg*n	Description of *arg*n

Returns

Description of the value returned by the method, if any.

The following conventions are used in the syntax diagram:

- *ObjectType* is the object type, for example BusComp (business component), for which the method is defined.
- *MethodName* is the name of the method that is being invoked. A method can be a subroutine that does not return a value, such as SetViewMode, or a function that returns a value, such as GetFieldValue.
- *arg1, arg2* can be a string, constant, integer, or object. If a method returns a value, the arguments must be enclosed in parentheses in Siebel VB. In Siebel eScript, enclose arguments in parentheses, even if they do not return a value.
- Brackets [ ] indicate an optional argument. In the description of the argument, the default value for the optional argument is indicated.

If a method does not return a value or if you are using it in a manner that does not return a value, then the arguments should not be enclosed in parentheses in Siebel VB.

When using COM Data Server, an additional argument, errCode, is always required as the last argument.

Usage Syntax

The usage syntax for a method may differ between Server Script and COM, as described in the text that follows. The description uses the following terms in addition to the ones defined previously:

- `ObjectReference` is a variable name of type ObjectType that points to the object on which the method is invoked.

  NOTE: You do not need to explicitly specify an ObjectReference when you invoke a method on an object inside its event handler.

- returnValue is the value, if any, that is returned by the method. Some methods, such as GetBusComp, return an object of the type business component. Other methods return strings or integers.

Siebel VB

If there is a return value:

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

If there are no arguments:

```
returnValue = ObjectReference.MethodName
```

If there is no return value:

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

Examples

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

acctBC.SetViewMode AllView
```

Siebel eScript

If there is a return value:

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

If there are no arguments:

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

If there is no return value:

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

Examples

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

acctBC.SetViewMode(AllView);
```

Using parentheses ( ) when none are required, or failing to use them when they are required, generates a Type Mismatch (error code 13) message. Another cause of this error code is using an incorrect quantity of arguments.

COM

The usage depends on the language being used to call the COM Interfaces. For Microsoft Visual Basic and equivalent languages, the usage is similar to that of Siebel VB, except that an error code is passed as the final argument in the case of the COM Data Control.

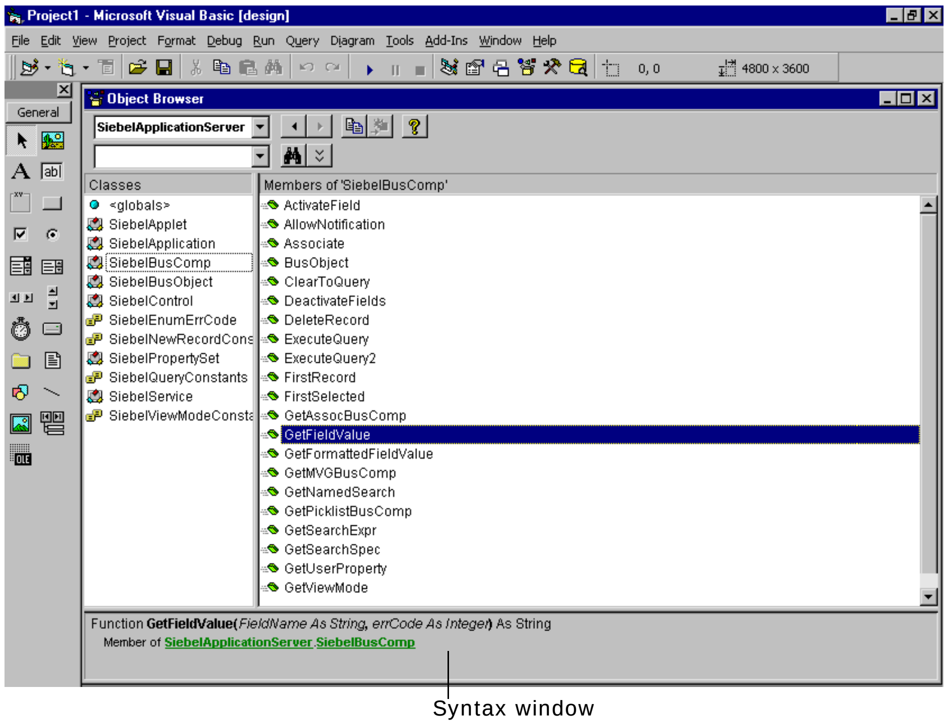
Getting Started with the Siebel Object Interfaces

The following sections contain directions for connecting to the COM Servers or COM Controls:

- "Accessing Siebel COM Interfaces" on page 39
- "Accessing the Siebel Web Client Automation Server" on page 40
- "Accessing the Siebel Mobile Web Client Automation Server" on page 41
- "Instantiating the Siebel COM Data Server" on page 43
- "Instantiating the Siebel COM Data Control" on page 45
- "Java Data Bean" on page 47

Accessing Siebel COM Interfaces

To use the Siebel COM interfaces, you must set the EnableOLEAutomation flag in the CFG file to TRUE. For Siebel Interface methods through COM, use the object browser of your COM programming tool to determine the correct method syntax. Figure 5 displays an example of an object browser in Microsoft Visual Basic 5.0.


Project1 - Microsoft Visual Basic [design]
File Edit View Project Format Debug Run Query Diagram Tools Add-Ins Window Help
0, 0
4800 x 3600
General
Object Browser
SiebelApplicationServer
Classes
Members of 'SiebelBusComp'
Syntax window

Classes:
- <globals>
- SiebelApplet
- SiebelApplication
- SiebelBusComp
- SiebelBusObject
- SiebelControl
- SiebelEnumErrCode
- SiebelNewRecordCons
- SiebelPropertySet
- SiebelQueryConstants
- SiebelService
- SiebelViewModeConsta

Members of 'SiebelBusComp':
- ActivateField
- AllowNotification
- Associate
- BusObject
- ClearToQuery
- DeactivateFields
- DeleteRecord
- ExecuteQuery
- ExecuteQuery2
- FirstRecord
- FirstSelected
- GetAssocBusComp
- GetFieldValue
- GetFormattedFieldValue
- GetMVGBusComp
- GetNamedSearch
- GetPicklistBusComp
- GetSearchExpr
- GetSearchSpec
- GetUserProperty
- GetViewMode

```
Function GetFieldValue(FieldName As String, errCode As Integer) As String
    Member of SiebelApplicationServer.SiebelBusComp
```

Figure 5. Determining Correct COM Syntax in Microsoft Visual Basic

Accessing the Siebel Web Client Automation Server

The Web Client Automation Server allows external applications to invoke business services and manipulate property sets. The Web Client Automation Server is implemented as a small COM object resident within the Web browser (IE 5.0 or greater). The Web Client Automation Server can be used with the Web client and the Mobile Web Client. The Web Client Automation Server is supported with the high interactivity mode only.

To set up Microsoft Visual Basic to access the Siebel Web Client Automation Server

1. Start Microsoft Visual Basic.
2. Select Standard EXE.
3. Choose Project > References.
4. In the list box, highlight and check the SiebelHTML 1.0 Type Library.

The following example shows how to use Microsoft Visual Basic 6.0 with the Siebel Web Client Automation Server:

```
Private Sub Command1_Click()
'Siebel Application Object
Dim siebApp As SiebelHTMLApplication
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
'Create The SiebelHTML Object
Set siebApp = CreateObject("Siebel.Desktop_Integration_Application.1")

If Not siebApp Is Nothing Then

   'Create A New Property Set
   Set siebPropSet = siebApp.NewPropertySet
   If Not siebPropSet Is Nothing Then
      Set siebPropSet = Nothing
   Else
      errCode = siebApp.GetLastErrCode
      errText = siebApp.GetLastErrText
      TheApplication().RaiseErrorText("Property Set Creation failed: " & errCode &
"::" & errText)
   End If


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

Set siebApp = Nothing
End If
End Sub
```

Accessing the Siebel Mobile Web Client Automation Server

The Siebel Mobile Web Client Automation Server accesses the server object instantiated by the Siebel Business Application. Once you have this object, you can obtain other Siebel objects and execute Siebel object interface methods through those objects. Calls made to the Siebel Mobile Web Client Automation Server are out of process. If you create a DLL that is run in process with the Siebel application, the calls made from the DLL to the Siebel Mobile Web Client Automation Server are still out of process.

The mechanism for instantiating COM servers depends on the programming tool or language being used.

If you use Microsoft Visual Basic 5.0 or later, the required support file must be in the same directory as the CFG file you are using for your Siebel application, or the Mobile Web Client Automation Server does not work. Take the following steps to make sure that you are referring to the correct library.

To set up Microsoft Visual Basic to access the Siebel Mobile Web Client Automation Server

1. Start Microsoft Visual Basic.
2. Select Standard EXE.
3. Choose Project > References.
4. In the list box, highlight (check) Siebel Mobile Web Client Automation Server. Near the bottom of the dialog box, note the directory in which the file Siebel.exe resides.

The following examples show how to use Microsoft Visual Basic 6.0 to interface with Siebel Mobile Web Client Automation Server.

The following is sample code for the Siebel Mobile Web Client Automation Server:

```
Private Sub Command1_Click()
'Siebel Application Object
Dim siebApp As SiebelWebApplication
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
'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
   TheApplication().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
      TheApplication().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
   TheApplication().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
```

Instantiating the Siebel COM Data Server

Because the Siebel COM Data Server acts without the regular Siebel Business Application User Interface, you must use the Login method to set up your Data Server object. You cannot use methods that retrieve active Siebel objects, because there are no current active Siebel objects. You must instantiate your own Siebel objects. Calls made to the Siebel COM Data Server are in process.

If you use Microsoft Visual Basic 5.0 or later, the required support file, `sobjsrv.tlb`, must be in the same directory as the CFG file you are using for your Siebel application, or the COM Data Server does not work. Take the following steps to make sure you are referring to the correct library.

NOTE: Do not run in the Microsoft VB Debug environment when communicating with the Siebel COM data server.

When using COM Data Server, the COM client cannot create multiple connections to the COM Server. The COM client must be restarted before another connection attempt can be successful. Use COM Data Control instead.

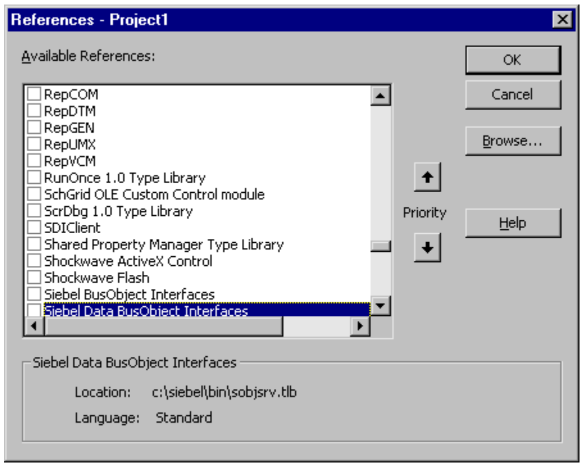
To set up Microsoft Visual Basic to access the Siebel COM Data Server

1 Start Microsoft Visual Basic.

2 Select Standard EXE.

3 Choose Project > References.

4 In the list box, select (but do not check) Siebel Data BusObject Interfaces. Near the bottom of the dialog box, note the directory in which the file sobjsrv.tlb resides, as shown in the following illustration.


References - Project1

Available References:

- RepCOM
- RepDTM
- RepGEN
- RepUMX
- RepVCM
- RunOnce 1.0 Type Library
- SchGrid OLE Custom Control module
- ScrDbg 1.0 Type Library
- SDIClient
- Shared Property Manager Type Library
- Shockwave ActiveX Control
- Shockwave Flash
- Siebel BusObject Interfaces
- Siebel Data BusObject Interfaces

Siebel Data BusObject Interfaces

Location: c:\siebel\bin\sobjsrv.tlb

Language: Standard

5 Check the Siebel Data BusObject Interfaces entry and click OK.

The following is sample code for the Siebel COM Data Server. Make sure that the DataSource parameter in the CFG file is set to the database to which you want to connect.

NOTE: This code must be written and executed 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 "D:"
ChDir "D:\Server\siebsrvr\bin "

'Create The COM Data Server Object
Set siebApp = CreateObject("SiebelDataServer.ApplicationObject")

If Not siebApp Is Nothing Then

'''COM Data Server
cfgLoc = " D:\Server\siebsrvr\bin \ENU\siebel.cfg,ServerDataSrc"
siebApp.LoadObjects cfgLoc, errCode
If errCode = 0 Then
   'Log Into 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.GetLastErrText
      TheApplication().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.GetLastErrText
      TheApplication().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.GetLastErrText
         TheApplication().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.GetLastErrText
        TheApplication().RaiseErrorText("Login Failed: " & errCode & "::" & errText);
      End If
   Else
      errText = siebApp.GetLastErrText
      TheApplication().RaiseErrorText("Load Objects Failed: " & errCode & "::" &
   errText);
   End If

   Set siebApp = Nothing

   End If

   End Sub
```

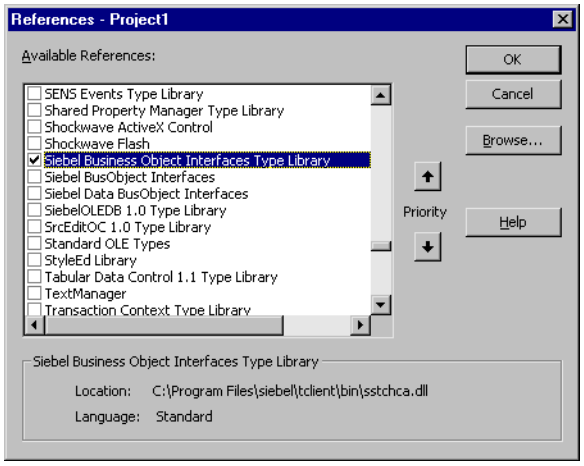
Instantiating the Siebel COM Data Control

To use Siebel Interface methods with the Siebel COM Data Control, use the object browser of your Siebel COM Data Control programming tool to determine the correct method syntax.

To set up Microsoft Visual Basic to access the Siebel COM Data Control Interface

1. Be sure you have installed the Siebel COM Data Control. Read "Installing Siebel Object Interfaces" on page 33.
2. Start Microsoft Visual Basic.
3. Select Standard EXE.
4. Choose Project > References.

5 In the list box, highlight (but do not check) Siebel BusObject Interfaces Type Library. Near the bottom of the dialog box, note the directory in which the file `sstchca.dll` resides, as shown in the following illustration.



- [ ] SENS Events Type Library
- [ ] Shared Property Manager Type Library
- [ ] Shockwave ActiveX Control
- [ ] Shockwave Flash
- [x] Siebel Business Object Interfaces Type Library
- [ ] Siebel BusObject Interfaces
- [ ] Siebel Data BusObject Interfaces
- [ ] SiebelOLEDB 1.0 Type Library
- [ ] SrcEditOC 1.0 Type Library
- [ ] Standard OLE Types
- [ ] StyleEd Library
- [ ] Tabular Data Control 1.1 Type Library
- [ ] TextManager
- [ ] Transaction Context Type Library

Siebel Business Object Interfaces Type Library

Location: C:\Program Files\siebel\tclient\bin\sstchca.dll

Language: Standard

6 Open the Object Browser to verify that you can see the Siebel objects.

To instantiate and use the Siebel COM Data Control, you must use the CreateObject and Login methods. You cannot use methods that retrieve active Siebel objects, because there are no current active Siebel objects. You must instantiate your own Siebel objects. Calls made to the Siebel COM Data Control are also in-process.

The following is sample code for the Siebel 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.GetLastErrCode()
If errCode <> 0 Then
   ErrText = SiebelApplication.GetLastErrText
   TheApplication().RaiseErrorText(ErrText);
   Exit Sub
End If
set OpptyB0 = SiebelApplication.GetBusObject("Opportunity",errCode)
set OpptyBC = OpptyBO.GetBusComp("Opportunity", errCode)
End Sub
```

See Table 19 for values to substitute for the placeholders in the login string.

The following sample code instantiates the COM Data Control from a server-side ASP script.

NOTE: The symbols <% and %> are used within HTML script to set off an 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

%>
```

For more information on instantiating the Siebel COM Data Control, read “Connect String” on page 70.

Java Data Bean

Siebel Java Data Bean provides users with a native Java interface to access Siebel Object Manager. It provides functional access to the Siebel applications for both reading and writing data. Siebel Data Bean is a set of Java libraries built using JDK 1.3.1_03. Users can incorporate these libraries to build Java Applications, Applets, Servlets, JSPs, or Enterprise Java Beans into their Java-based applications.

NOTE: Prior to compilation or execution, add the Siebel JAR files (`Siebel.jar` and `SiebelJI_<lang>.jar`) to the CLASSPATH .

Supported Platforms and JDKs

Siebel Systems supports the use of the platforms and JDK versions specified in the system requirements and supported platforms documentation for your Siebel application.

Instantiating the Java Data Bean

To instantiate and use the Siebel Java Data Bean, you must instantiate a new SiebelDataBean Java object and call its login method. You cannot use methods that retrieve active Siebel objects, because there are no current active Siebel objects. You must instantiate your own Siebel objects.

The following is sample code for the Siebel Java Data Bean:

```
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 Data Bean
            m_dataBean = new SiebelDataBean();

            // login to the server
            m_dataBean.login("Siebel://gatewayserver:2321/enterpriseServer/ObjMgr",
   CCONWAY, CCONWAY,"enu");

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

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

            // logoff
            m_dataBean.logoff();
         }

         catch (SiebelException e)
         {
            System.out.println(e.getErrorMessage());
         }
      }
   }
```

Java Data Bean and the siebel.properties File

The siebel.properties file, which is located in your classpath, can be used to provide default parameters for client applications connecting to Siebel applications using the Java Data Bean.

Table 6 shows the properties in the siebel.properties file.

Table 6. Properties in the siebel.properties File

Property Type	Property	Description
Siebel Connection Manager Connection properties	siebel.conmgr.txtimeout	Indicates the transaction timeout (in seconds). Defaulted to 2700 = 45m.
	siebel.conmgr.poolsize	Indicates the connection pool size. Connection pool maintains a set of connections to a specific server process. Defaulted to 2. Max connection pool size is 500.
	siebel.conmgr.sesstimeout	Indicates the transaction timeout (in seconds) on the client side. Defaulted to 600 = 10m.
	siebel.conmgr.retry	Indicates the number of open session retries. Defaulted to 3.
	siebel.conmgr.jce	Indicates the usage of Java Cryptography Extension. 1 for jce usage and 0 for no usage.
Siebel Generated code for JCA/JDB properties	siebel.connection.string	Specifies the Siebel connection string.
	siebel.user.name	Specifies the user name to be used for logging in to Object Manager.
	siebel.user.password	Specifies the password to be used for logging in to Object Manager.
	siebel.user.language	Specifies the user's preferred language.
	siebel.user.encrypted	Specifies whether the username and password is encrypted.
	siebel.jdb.classname	Specifies the default JDB classname
Java System Properties	file.encoding	Indicates the code page on the client side. For example, cp1252, utf8, unicodeBig, cp942.

NOTE: Java System Properties are System Properties, not Siebel Properties.

The following is a sample 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.txtimeout   = 3600
siebel.conmgr.poolsize    = 5
siebel.conmgr.sesstimeout = 300000
siebel.conmgr.retry       = 5
siebel.conmgr.jce         = 1
```

Java Data Bean and Codepage Support

For the client and server to communicate correctly, the codepage of the Siebel server and client must be the same. If the client and server default codepages cannot be the same, you can alter the client codepage by setting the system property `file.encoding` to the proper codepage. You can set the system property for the entire JVM (for example, java -Dfile.encoding=ascii <java_application> on the command line or with the use of the environment variable; reference your particular JVM for details) or for the given Java component by adding the following line to your Java component. `System.setProperty("file.encoding", CodePageValue);`.

Table 7 lists codepage mappings for JDB.

Table 7. Codepage Mappings for Java Data Bean

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

Table 7. Codepage Mappings for Java Data Bean

Java Value	Siebel Value
cp950	950
cp1250	1250
cp1251	1251
cp1253	1253
cp1254	1254
cp1255	1255
cp1256	1256
cp1257	1257
cp1258	1258
gbk	936
ms874	874
ms932	932
ms936	936
ms949	949
ms950	950
sjis	932
tis620	874

Encrypting Communication Between JDB and Siebel Server

Siebel Business Applications supports the encryption of communication between the Java Data Bean (JDB) and the Siebel Server. Preconfigured, it is possible to encrypt communication between the JDB and the Siebel Server using RSA's encryption libraries. For more information on supported platforms, see the system requirements and supported platforms documentation for your Siebel Business Applications software.

To enable encryption support between the Siebel Server and a component built using the Java Data Bean

1. Enable encryption in the corresponding Object Manager Server Component. Please refer to *Siebel System Administration Guide* for details on how to enable encryption within an Object Manager Server Component.

2. Set the encryption parameter of the connect string in the Java Data Bean to `rsa`, which enables encryption support. For example, `siebel.tcpip.rsa.none://<gateway>/<enterprise>/<ObjMgr>`

   After completing the two previous steps, communications between the Java Data Bean and the Siebel Server is encrypted.

To support encryption on platforms not supported by the RSA libraries, Siebel Systems supports the Java Cryptography Extension (JCE) v1.2.1 specification. JCE is designed so that other qualified cryptography libraries can be used as service providers.

To enable JCE support

1. Download and install the JCE v1.2.1 software, policy files and documentation. Please refer to `http://java.sun.com/products/jce/index-121.html` for additional information on obtaining, installing and configuring your JVM for use with JCE. Please note that the Java Data Bean only supports static specification of JCE providers.
2. Modify the `java.security` file to specify your provider of choice and make sure that the necessary provider JAR files are included in the CLASSPATH.
3. Set the `siebel.conmgr.jce` property in the `siebel.properties` file to 1.

   After completing the three previous steps, communications between the Java Data Bean and the Siebel Server is encrypted.

Login Errors

The Siebel Data Bean may return a login error including the following text.

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

The root cause of this error may be one of the following:

- OM or OM process down
- Hardware reset (OM hardware, router, switch, and so on)
- OS settings or OS networking issue
- Network failure
- NAT timeout

Siebel Object Interface Methods

Several groups of methods are available to Siebel object interface programmers. They are organized according to functional capabilities.

- **Locating objects.** These are methods that allow the user to locate instances of objects so that they can be manipulated by other methods.
- **Accessing business components.** These are methods that provide the ability to access and modify data within Siebel applications.

- **Navigation.** These are methods that provide a way to control the flow of the application as it is presented to the user by explicitly setting the focus of the application to the desired view, applet, or control. These methods are useful only when accessing the Siebel object interfaces from Siebel VB and when accessing Siebel as a Mobile Web Client Automation Server. When Siebel is accessed through the COM Data Control, COM Data Server, or Java Data Bean, no Siebel user interface is present.
- **Manipulating controls.** These are the methods that get or set the value of a control. These methods are useful only when accessing controls from Browser Script.
- **Global state properties and functions.** These are methods that get information on the current state.
- **User interaction.** These are methods that provide user interface elements similar to those in standard Windows programs.

See Also

"Locating Objects"
"Accessing Business Components" on page 54
"Navigation Methods" on page 58
"User Interaction Methods" on page 59
"Global State Properties and Functions" on page 59

Locating Objects

This set of methods allows the user to locate instances of objects within Siebel applications so they can be used by other methods. Active objects are instances of objects that currently have focus. The active control is the control that currently has the user interface focus. The active applet is the applet that contains the active control. The active business component is the business component associated with the active applet. When located, an object can be used or manipulated by Siebel object interfaces.

For locating objects, use the following methods:

- "ActiveBusObject Method" on page 112
- "ActiveMode Method" on page 87
- "ActiveViewName Method" on page 114
- "BusComp Method" on page 278
- "BusObject Method" on page 88
- "GetBusObject Method" on page 121
- "GetValue Method" on page 294
- "Name Method" on page 280
- "TheApplication Method" on page 302

Accessing Business Components

The Siebel business component object (BusComp) presents a two-dimensional grid of data values much like a table in a relational database. The named fields are analogous to columns in the database table, and the records are analogous to rows. Developers use business components to read data, manipulate it, and write it back into the Siebel database. Business components manage the complexities of multiple-table access to the database and access different types of databases.

Many methods are available to use on business components for getting and setting the values of their fields. Record operations can be performed programmatically by using business component access methods.

These operations invoke Siebel VB or Siebel eScript extension routines. For example, if you have created a Siebel VB or Siebel eScript script that is tied to the NewRecord event on a business component, the script is processed whenever NewRecord in that business component is processed, even if the NewRecord method was called by another Siebel VB or Siebel eScript script or was called from the Siebel object interfaces. Note that events are available only with Siebel VB or Siebel eScript.

Adding and Inserting Records

In the context of a many-to-many relationship, you can use Siebel VB or Siebel eScript to mimic either the Add New Record command, which associates a new child record, or the Insert Record command, which creates a new record in the child business component. To associate a new child record, use GetAssocBusComp and the Associate method. To create a new record in the child, use the NewRecord method in a child business component, or use GetMVGBusComp and the NewRecord method.

Committing Records to the Database

A commit is performed under the following circumstances:

- Explicitly by issuing BusComp.WriteRecord
- Navigating away from the current record by any of the following methods.
  - BusComp.Associate
  - BusComp.DeleteRecord (DeleteRecord commits automatically, because it moves the cursor to another record.)
  - BusComp.FirstRecord
  - BusComp.LastRecord
  - BusComp.NextRecord
  - BusComp.PreviousRecord
- Closing a BusComp (Set BusComp = Nothing)

Scenarios for Business Components

The two scenarios that follow involve the use of Siebel scripts to work with business components.

The first example shows how to invoke methods on an existing business component when an event is triggered. In this example, the VB script is in the SetFieldValue event of a 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 which 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
```

The next example shows how to instantiate your own BusObject and BusComp. This example uses the PreSetFieldValue event of the Opportunity BusComp. If the Sales Stage is updated to “07 - Verbal Agreement,” a decision maker must be associated with the opportunity. Otherwise, it is reset to the previous value. The Contacts for the selected opportunity are searched to see if any vice president or president is associated with the opportunity.

The logical flow of instantiating your own BusComp object is as follows

1. GetBusComp
2. SetViewMode (optional, because if you are using Me or the current object, then the BusComp may already be in the correct mode)
3. ActivateField
4. ClearToQuery
5. SetSearchSpec or SetSearchExpr
6. ExecuteQuery

The following example shows how to instantiate objects in eScript:

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

The following example shows how to instantiate objects in Siebel VB:

```
   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

            ' Because parent-child relationship is established when
            ' 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
               .ActivateField "Job Title"
               .ClearToQuery
               .SetSearchSpec "Job Title", "*VP*"
               .ExecuteQuery ForwardOnly
               If (.FirstRecord = 0) Then
               TheApplication.RaiseErrorText "Found a decision maker"
               RetValue = CancelOperation
               Else
                  RetVal = ContinueOperation
               End If
            End With
         End If
   End Select
   BusComp_PreSetFieldValue = RetValue
   End Function
```

Methods for Accessing Business Components

To access business components, use the following methods:

- "ActivateMultipleFields Method" on page 172
- "Associate Method" on page 174
- "ClearToQuery Method" on page 177
- "CountRecords Method" on page 178
- "DeactivateFields Method" on page 179
- "DeleteRecord Method" on page 180
- "ExecuteQuery Method" on page 181
- "ExecuteQuery2 Method" on page 183
- "FirstRecord Method" on page 184
- "FirstSelected Method" on page 186
- "GetFieldValue Method" on page 189
- "GetFormattedFieldValue Method" on page 191
- "GetMultipleFieldValues Method" on page 194
- "GetMVGBusComp Method" on page 195
- "GetNamedSearch Method" on page 196
- "GetPicklistBusComp Method" on page 197
- "GetSearchExpr Method" on page 199
- "GetSearchSpec Method" on page 200
- "GetViewMode Method" on page 201

- “InvokeMethod Method” on page 202
- “LastRecord Method” on page 208
- “NewRecord Method” on page 210
- “NextRecord Method” on page 211
- “ParentBusComp Method” on page 213
- “Pick Method” on page 213
- “PreviousRecord Method” on page 215
- “RefineQuery Method” on page 216
- “SetFieldValue Method” on page 219
- “SetFormattedFieldValue Method” on page 221
- “SetMultipleFieldValues Method” on page 222
- “SetNamedSearch Method” on page 224
- “SetSearchExpr Method” on page 226
- “SetSearchSpec Method” on page 227
- “SetSortSpec Method” on page 231
- “SetViewMode Method” on page 234
- “UndoRecord Method” on page 237
- “WriteRecord Method” on page 238

Navigation Methods

The navigation methods set the focus for user interaction to the named view. Table 8 identifies the navigation methods. Cannot be invoked from Browser Script.

NOTE: Properties for Siebel objects such as business component applets and business components are stored in the repository and cannot be changed at run time using Siebel VB methods.

Table 8. Navigation Methods

Method
“InvokeMethod Method” on page 91
“GotoView Method” on page 130

User Interaction Methods

The following methods allow the Siebel extension routines to interact directly with the user through traditional user interface techniques. These methods are similar to the standard procedures available to Windows programs. User interaction methods are listed in Table 9.

Table 9. User Interaction Methods

Method
“RaiseError Method” on page 146
“RaiseErrorText Method” on page 148

Global State Properties and Functions

The application object provides a set of properties and functions that return information about the current state. This information is useful when you are processing rows of data or generating query criteria. Global state methods are listed in Table 10.

Table 10. Global State Methods

Method
“CurrencyCode Method” on page 117
“EnableExceptions Method” on page 119
“GetLastErrCode Method” on page 124
“GetLastErrText Method” on page 125
“LoginId Method” on page 138
“LoginName Method” on page 139
“LookupMessage Method” on page 140
“PositionName Method” on page 145
“SetPositionId Method” on page 149
“SetPositionName Method” on page 150

Variable Scoping for Siebel Script Variables

Three levels of scope exist for Siebel variables.

- “Local Variables”
- “Module Variables”

- "Global Variables" on page 61

See Also

"Inter-Application Variable Methods" on page 62

"Tracing" on page 62

Local Variables

Local variables defined within a Siebel script are the lowest level of variable scoping. These variables are declared using the Dim statement in Siebel VB or the var statement in Siebel eScript, and their values are accessible only within the script in which they were defined.

The following example is in Siebel eScript:

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

The following example is in Siebel VB:

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

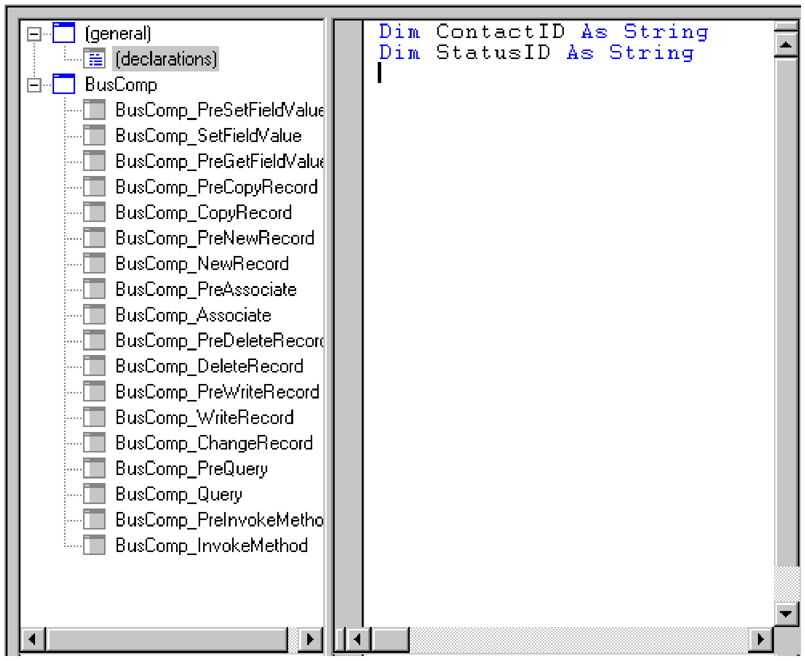
Module Variables

Module variables defined in the (general) (declarations) section of a Siebel object (such as an applet or business component) are the next level of variable scoping. These variables are available as long as the object is instantiated and the values are accessible to scripts in the same object or module. Use Dim statements (for VB) or var statements (for eScript) in the (general) (declarations) section to declare module variables.

The following example is in Siebel VB:

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

Code in the VB Editor in the (general) (declarations) section is illustrated in Figure 6.



```
Dim ContactID As String
Dim StatusID As String
```

Figure 6. Declarations in the (general) (declarations) Section

Global Variables

The global variables exist at the highest level. You must declare these variables in every module that needs to access their values. Use the Global statement to declare these variables. Avoid using global variables to store Siebel objects such as BusComp and BusObject. If you need to store Siebel objects such as BusComp and BusObject, always set these variables to Nothing whenever the objects are no longer required, or at least in the Application_Close event. Failure to do so may cause memory problems because the objects being referenced cannot be freed from memory while they are still being referenced. If you must create a global variable for a business component, make sure there is a global variable for the business object. Otherwise, the business component is out of scope.

The following example is in Siebel eScript:

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

Inter-Application Variable Methods

Siebel provides two sets of methods to send values for variables back and forth between the Siebel application and external applications. Table 11 lists inter-application communication methods.

Table 11. Inter-Application Communication Methods

Method
"GetUserProperty Method" on page 200
"SetUserProperty Method" on page 233
"GetLastErrCode Method" on page 124
"SetSharedGlobal Method" on page 152
"GetProfileAttr Method" on page 125
"SetProfileAttr Method" on page 151

Tracing

Table 12 lists Application event methods for controlling debug tracing.

Table 12. Debug Tracing Methods

Method
"Trace Method" on page 157
"TraceOff Method" on page 158
"TraceOn Method" on page 159

Siebel Object Interface Events and Siebel Extension Events

Selected events within the Siebel applications allow the association of extension routines that extend the base behavior of the application. These routines are available in Browser and Server Script. When the Siebel application fires or activates the event, the user-specified procedures are invoked along with the standard Siebel procedures. The event names listed under "Siebel Business Component Events" on page 67 refer to the tag or entry point used to tie the extension routine to a particular action or event.

The following topics cover the object interface events and extension events:

- "Event Method Syntax" on page 63
- "How Your Script Affects Program Flow" on page 63

- "When Events Occur" on page 67
- "Siebel Business Component Events" on page 67
- "Applet Events" on page 69
- "Application Events" on page 70
- "Connect String" on page 70
- "Error Handling" on page 73

Each topic provides the following information:

- The syntax for using the event.
- A brief description of the event.
- A checklist that indicates which interface environments support the event.

Event Method Syntax

The method's syntax uses the following form:

- *ObjectReference_EventName* (*arguments*) As *RetValue*.
- *ObjectReference* is the variable name of the object on which the event is invoked.
- *EventName* is the event that is being invoked.

The events exposed can be classified into preoperation events or postoperation events. The preoperation events occur before the standard Siebel operation. An example of a preoperation event is PreDeleteRecord. This event occurs before a DeleteRecord event occurs.

The corresponding postoperation event is DeleteRecord. This event is fired *after* the PreDeleteRecord operation has been executed.

You can use preoperation events to alter standard Siebel behavior. For example, the PreDeleteRecord event can be used to perform additional, customer-specific validation on the record about to be deleted, and if the validations fail, the DeleteRecord operation can be canceled.

Postoperation events are useful when the event relies on data that may have been updated in the course of executing the standard Siebel event.

How Your Script Affects Program Flow

For every Siebel operation event handler, there is also a preoperation event handler. Generally, scripts are placed in the preoperation event. You can alter the effect of an event by attaching a script to the preoperation event handler. The events with the most important effects are the PreInvokeMethod events. In a PreInvokeMethod event, you can call a method that substitutes for the internal Siebel code.

As Figure 7 illustrates, you can change the outcome of an event by specifying the return value on the preoperation events. The standard return value for preoperation events is ContinueOperation, which tells the calling Siebel object to continue processing the remaining operations associated with the event, as shown in Step 2 in Figure 7.

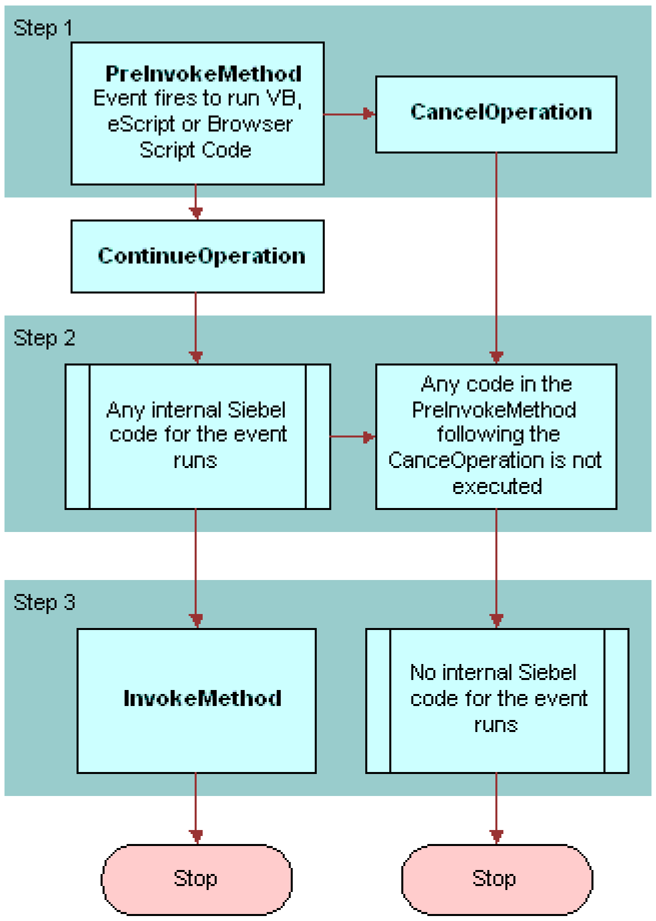

Step 1
PreInvokeMethod Event fires to run VB, eScript or Browser Script Code
CancelOperation
ContinueOperation
Step 2
Any internal Siebel code for the event runs
Any code in the PreInvokeMethod following the CanceOperation is not executed
Step 3
InvokeMethod
No internal Siebel code for the event runs
Stop
Stop

Figure 7. The Effects of CancelOperation and ContinueOperation

If you wish to create an alternative to an existing routine, change the return value in your custom event handler to CancelOperation. This tells the Siebel application to cancel the remaining operations associated with the event. If, for example, the validation in the PreDeleteRecord event fails, set the return value for the event to CancelOperation. If you want to preprocess before the default event method executes, use the return value ContinueOperation.

The post-event handler is rarely scripted, but you may use it for such post-operation events as posting a notice to a log when the event completes successfully.

The following eScript example sets up a validation routine in which a specific field is queried to determine whether the event should fire:

```
function BusComp_PreSetFieldValue (FieldName, FieldValue)
{
   var iReturn = ContinueOperation;
   //Routine 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);
         iReturn = CancelOperation;
      }
      else
      {
         iReturn = ContinueOperation;
      }
   }
}
```

The following Siebel VB example sets up a validation routine in which a specific field is queried to determine whether the event should fire:

```
Function BusComp_PreSetFieldValue (FieldName As String,
               FieldValue As String) As Integer
' Routine 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
         BusComp_PreSetFieldValue = CancelOperation
      Else
         BusComp_PreSetFieldValue = ContinueOperation
       End if
End If
End Function
```

Notice the logical structure of this routine:

```
If (condition is true)
   [perform custom routine]
   returnValue = CancelOperation
Else
   returnValue = ContinueOperation
End If
```

Within this structure, the custom routine is executed only if the condition is true. If the condition is true, the custom routine substitutes for the built-in routine. If it is not true, the built-in routine is executed because the event handler returns ContinueOperation.

The following alternative structure is also acceptable:

```
returnValue = ContinueOperation
If (condition is true)
   [perform custom routine]
   returnValue = CancelOperation
End If
```

Note that in PreInvokeMethod events, the condition should always be a test for the method name; for example:

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

If more than one method may be invoked, you may find it more efficient to use a Select structure (in VB) or a switch structure (in eScript). The following example is in Siebel VB:

```
Dim iReturn As Integer
iReturn = ContinueOperation
Select Case methodName
   Case "PushOpportunity"
      [custom routine]
      iReturn = CancelOperation
   Case "Stage3"
      [custom routine]
      iReturn = CancelOperation
End Select
object_PreInvokeMethod = iReturn
```

The following example is in Siebel eScript:

```
var iReturn;
switch (methodName)
{
   case "PushOpportunity":
      //[custom routine]
      iReturn = CancelOperation;
      break;
   case "Stage3":
      //[custom routine]
      iReturn = CancelOperation;
      break;

   default:
      iReturn = ContinueOperation;
}
return (iReturn);
```

To make your code easier to read and maintain, you can create the custom routines as subprograms or functions in the (general) (declarations) section.

Unique Names

Make sure that every function you create has a unique name. If two functions on the same view have the same name, results are unpredictable. Good coding practice is to make sure all such names are unique. Consider using a naming convention, such as using the view name as a function name prefix.

When Events Occur

There is no simple way to determine when various events occur, as many different events can occur when a view becomes current or when an object is invoked. To find out the exact order of events, enable tracing when the application starts (Application_Start event). For Siebel eScript the syntax resembles the following:

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

For Siebel VB the syntax resembles the following:

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

When the preceding code has been placed on the Application_Start event, place a line of code of the following form in each event handler (including the Pre-event handlers) for the object, including insert, delete, write, business component, and any others that may apply.

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

Then perform some simple inserts, updates, and deletes, and make a note of each message as it appears. You then have a list of the order in which events fire on that view or for that object.

Siebel Business Component Events

Events can be invoked from data operations on business components. These are defined on a per-business component basis. Events can be invoked before or after the specified standard behavior.

The only means of trapping modifications to a multi-value field is through the underlying MVG business component. If the multi-value field is modified without popping up the MVG applet, then the PreSetFieldValue and SetFieldValue events for those fields are not triggered. The only way in which the PreSetFieldValue and SetFieldValue events are fired for a multi-value field is if the field is updated within the MVG applet. If the user makes a change to the multi-value field through the MVG applet, then only the events on the MVG business component are called. No events on the parent business component are called.

Table 13 and Table 14 list BusComp events.

Table 13. Server Side BusComp Events

Method
"BusComp_Associate Event" on page 240
"BusComp_ChangeRecord Event" on page 241
"BusComp_PreCopyRecord Event" on page 245
"BusComp_CopyRecord Event" on page 242
"BusComp_InvokeMethod Event" on page 243
"BusComp_NewRecord Event" on page 244
"BusComp_PreAssociate Event" on page 245
"BusComp_PreDeleteRecord Event" on page 246
"BusComp_PreGetFieldValue Event" on page 247
"BusComp_PreInvokeMethod Event" on page 248
"BusComp_PreNewRecord Event" on page 249
"BusComp_PreQuery Event" on page 249
"BusComp_PreSetFieldValue Event" on page 250
"BusComp_PreWriteRecord Event" on page 252
"BusComp_Query Event" on page 253
"BusComp_SetFieldValue Event" on page 254
"BusComp_WriteRecord Event" on page 255

Table 14. Browser Side BusComp Events

Method
"BusComp_PreSetFieldValue Event" on page 250

Applet Events

Events are invoked in response to user interactions. These can be managed on a per-applet basis. Applet events are only supported in high interactivity mode. Table 15 and Table 16 list the User interface events.

Table 15. Server Side Applet Events

Method
"WebApplet_InvokeMethod Event" on page 100
"WebApplet_Load Event" on page 101
"WebApplet_PreCanInvokeMethod Event" on page 102
"WebApplet_PreInvokeMethod Event" on page 103

Table 16. Browser Side Applet Events

Method
"Applet_ChangeFieldValue Event" on page 94
"Applet_ChangeRecord Event" on page 95
"Applet_InvokeMethod Event" on page 96
"Applet_PreInvokeMethod Event" on page 99

Application Events

Application events are listed in Table 17 and Table 18.

Table 17. Server Side Application Events

Method
"Application_InvokeMethod Event" on page 164
"Application_Navigate Event" on page 165
"Application_PreInvokeMethod Event" on page 165
"Application_PreNavigate Event" on page 167
"Application_Start Event" on page 168

Table 18. Browser Side Application Events

Method
"Application_InvokeMethod Event" on page 164
"Application_PreInvokeMethod Event" on page 165

Connect String

The connect string is a URL containing the information needed to connect to any Siebel Server component. It specifies both the protocol and the details of the Client Application Manager service in the Siebel Servers to which the client connects. The generic form of the syntax for the connect string follows:

```
siebel[[.transport][.[encryption][.[compression]]]]://host[:port]/
EnterpriseServer/AppObjMgr
```

The following is an example of a connect string. `SiebelApplication` is an Application instance.

```
SiebelApplication.Login "host=""siebel://host/EnterpriseServer/AppObjMgr""",
"CCONWAY", "CCONWAY"
```

Note that the entire protocol string is optional. You may specify the transport protocol alone and separate it from siebel with a single period:

```
siebel.TCPIP.None.None://host/siebel/AppObjMgr
```

However, if you specify any of the other protocols, you must use a period as a placeholder for each protocol not specified. The following is an example:

```
siebel...zlib://hhost/siebel/AppObjMgr
```

Protocols that are not specified receive their default values, as shown in Table 19.

Make the following substitutions for the placeholders in the example:

Table 19. Placeholder Substitutions When Logging into a Siebel Server

In Place Of	Insert
transport	One of the following values: ■ tcpip (the default) ■ http
encryption	One of the following values: ■ none (default) ■ mscrypto (not supported by Java Data Bean) ■ rsa (supported by Java Data Bean)
compression	One of the following values: ■ none ■ zlib (the default)
host	The name of the computer on which the Siebel Server is installed
port	The SCBroker port; by default 2321. This changes only if the Siebel administrator changes the default during installation. For information about load-balancing with SCBroker, see *Deployment Planning Guide*, *Applications Administration Guide*, and *Siebel Installation Guide* for the operating system you are using.
EnterpriseServer	The name of the Siebel Enterprise Server
AppObjMgr	■ The name of the defined Application Object Manager that you want the Web client to access; this can be a user-defined component or one of these predefined components: ■ ISSObjMgr_<lang> ■ SCCObjMgr_<lang> ■ SSEObjMgr_<lang> ■ SSVObjMgr_<lang> (For more information, read *Siebel System Administration Guide*.)

For more information about this method, read "Login Method" on page 136.

The following is a sample connect string for the COM Data Control operating in Server Mode:

```
'COM Data Control : SERVER Mode
lstr = "host=" + """siebel://frashid/Siebel/SSEObjMgr"""
'Format of the connect string is
```

```
'"host=" + """siebel://<host>/<Enterprise>/<App. Object Mgr>"""
lng = "lang=" + """ENU"""
retval = siebDataCtl.Login(lng + lstr, "username", "password")
```

The following is a sample connect string for the COM Data Control operating in Local Mode. When running in Local Mode, the COM Data Control must reside on the same machine as the Mobile Web Client.

```
'COM Data Control : LOCAL Mode
lstr = "cfg=" + """D:\Client\mwebc\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")
```

The following is a sample connect string for the COM Data Control for PowerBuilder (Char(34) denotes a double quote):

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

Leveraging Load Balancing with the Connect String

Siebel COM Data Control operating in server mode and Java Data Beans support Siebel native load balancing across Siebel Servers. The standard connect string is modified to direct requests to an appropriate virtual host that includes specific Siebel Servers with the desired object manager, and to provide the path to the file that defines the virtual host.

The connect strings used to leverage Siebel native load balancing have the following requirements:

- **COM Data Control.** The connect string has the folllowing structure:

  host="siebel://*VirtualHost*/*EnterpriseServer*/*AppObjMgr*"vhosts="<*path to* lbconfig.txt>"

  where lbconfig.txt is the file that defines virtual hosts.

  For information on lbconfig.txt definition of virtual hosts, see *Siebel System Administration Guide*.

- **Java Data Beans.** The connect string has the folllowing structure:

  host="siebel://*VirtualHost*/*EnterpriseServer*/*AppObjMgr*"

  When using generated code, by default, virtual host definitions are read from the siebel.conmgr.virtualhosts property in the siebel.properties file. The siebel.properties file must be in the classpath of the Java Virtual Machine.

  For information on definition of virtual hosts in siebel.properties, see *Transports and Interfaces: Siebel Enterprise Application Integration*.

The following is a sample connect string for the COM Data Control operating in server mode in an environment that implements Siebel round-robin load-balancing across Siebel Servers:

```
'COM Data Control : Load Balancing
lstr = "host=" + """siebel://VirtualServer1/Siebel/SSEObjMgr""" + "vhosts=" +
"""m:\siebel\admin\lbconfig.txt"""
lng = "lang=" + """ENU"""
retval = siebDataCtl.Login(lng + lstr, "username", "password")
```

Error Handling

This section explains the Siebel COM Interfaces error handling differences.

COM Error Handling

The errCode parameter is the standard last parameter for every COM Data Server interface method. It is not available in the COM Data Control, Mobile Web Client Automation Server, Web Client Automation Server, or Java Data Bean. The following examples illustrate the difference between calling a COM Data Server interface method and calling the version of the method that is compatible with COM Data Control and Mobile Web Client Automation Server.

Error Handling Example—COMData Server only

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

Error Handling Example—COM Data Control and Mobile Web Client Automation Server

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

Java Error Handling

The Siebel Java interfaces error-handling differences are explained in this section.

Errors in the Siebel Java Data Bean are handled by the SiebelException object. It supports the getErrorCode() and getErrorMessage() methods. The SiebelException object is defined in com.siebel.data.SiebelException. It is used as follows:

```
...

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
```

```
    }

    ...
```

For additional methods on the SiebelException object, refer to the Siebel Java Data Bean JavaDoc installed with Siebel Tools. Note that the JavaDoc is installed only if the "Siebel Java Integration" option is installed. If so, then a zipped file containing the JavaDoc is in the `<tools install>\CLASSES` folder.

Error Message Tracking

For error message tracking in ActiveX, you can use either exceptions or methods. The following methods are available:

- EnableExceptions
- GetLastErrCode
- GetLastErrText

EnableExceptions Method

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

The EnableExceptions method allows applications to use the native COM error-handling technique. If the method is about to fail due to error, then a COM exception is generated and the method does not return. The COM host receives the control instead. However, it *may* display the error message (this is default for Microsoft Internet Explorer or VB), but it can be changed by scripting.

GetLastErrCode, GetLastErrText Method

After execution of a method, the GetLastErrCode can be invoked to check if any error was returned from the previous operation. The GetLastErrText method can be invoked to retrieve the text of the error message, for example:

```
GetLastErrCode() ' retrieves errCode As Integer

GetLastErrText() ' retrieves text As String
```

4 Interfaces Reference

This chapter lists the methods and events available to Siebel Object Interfaces.

Object Interface Methods Tables

This section lists the Siebel interface methods, grouped by object interface type.

Applet Methods

Method	Server Script	Browser Script	Web Client Automation Server	Mobile Web Client Automation Server	Siebel COM Data Control	COM Data Server	Java Data Bean
ActiveMode Method		X					
BusComp Method	X	X					
BusObject Method	X	X					
FindActiveXControl Method		X					
FindControl Method		X					
InvokeMethod Method	X	X					
Name Method	X	X					

Application Methods

Method	Server Script	Browser Script	Web Client Automation Server	Mobile Web Client Automation Server	Siebel COM Data Control	COM Data Server	Java Data Bean
ActiveApplet Method		X					
ActiveBusComp Method		X					
ActiveBusObject Method	X	X		X			
ActiveViewName Method	X	X		X			
Attach Method					X		X
CurrencyCode Method	X	X		X	X	X	X
Detach Method					X		X
EnableExceptions Method				X	X		

Method	Server Script	Browser Script	Web Client Automation Server	Mobile Web Client Automation Server	Siebel COM Data Control	COM Data Server	Java Data Bean
FindApplet Method		X					
GetBusObject Method	X			X	X	X	X
GetDataSource Method	X			X	X		X
GetLastErrCode Method			X	X	X		
GetLastErrText Method			X	X	X	X	
GetProfileAttr Method	X	X		X	X	X	X
GetService Method	X	X	X	X	X	X	X
GetSharedGlobal Method	X			X	X	X	X
GotoView Method	X						
InvokeMethod Method	X	X		X	X	X	X
LoadObjects Method						X	
LoadUserAttributes Method	X						
Login Method					X	X	X
LoginId Method	X			X	X	X	X
LoginName Method	X			X	X	X	X
Logoff Method				X	X		X
LookupMessage Method	X						
LookupValue Method	X			X	X		X
Name Method		X	X				
NewPropertySet Method	X	X	X	X	X	X	X

Method	Server Script	Browser Script	Web Client Automation Server	Mobile Web Client Automation Server	Siebel COM Data Control	COM Data Server	Java Data Bean
PositionId Method	X			X	X	X	X
PositionName Method	X			X	X	X	X
RaiseError Method	X						
RaiseErrorText Method	X						
SetPositionId Method	X			X	X	X	X
SetPositionName Method	X			X	X	X	X
SetProfileAttr Method	X	X		X	X	X	X
SetSharedGlobal Method	X			X	X	X	X
"ShowModalDialog Method"		X					
SWEAlert Method		X					
Trace Method	X			X	X	X	X
TraceOff Method	X			X	X	X	X
TraceOn Method	X			X	X	X	X

Business Component Methods

Method	Server Script	Browser Script	Web Client Automation Server	Mobile Web Client Automation Server	Siebel COM Data Control	COM Data Server	Java Data Bean
ActivateField Method	X			X	X	X	X
ActivateMultipleFields Method	X			X	X	X	X
Associate Method	X			X	X	X	X
BusObject Method	X	X		X	X	X	X

Method	Server Script	Browser Script	Web Client Automation Server	Mobile Web Client Automation Server	Siebel COM Data Control	COM Data Server	Java Data Bean
ClearToQuery Method	X			X	X	X	X
DeactivateFields Method	X			X	X	X	X
DeleteRecord Method	X			X	X	X	X
ExecuteQuery Method	X			X	X	X	X
ExecuteQuery2 Method	X			X	X	X	X
FirstRecord Method	X			X	X	X	X
FirstSelected Method	X						
GetAssocBusComp Method	X			X	X	X	X
GetFieldValue Method	X	X		X	X	X	X
GetFormattedField Value Method	X	X		X	X	X	X
GetLastErrCode Method				X	X		
GetLastErrText Method				X	X		
GetMultipleFieldVal ues Method	X			X	X	X	X
GetMVGBusComp Method	X			X	X	X	X
GetNamedSearch Method	X			X	X	X	X
GetPicklistBusCom p Method	X			X	X	X	X
GetSearchExpr Method	X	X		X	X	X	X
GetSearchSpec Method	X	X		X	X	X	X

Method	Server Script	Browser Script	Web Client Automation Server	Mobile Web Client Automation Server	Siebel COM Data Control	COM Data Server	Java Data Bean
GetUserProperty Method	X			X	X	X	X
GetViewMode Method	X			X	X	X	X
InvokeMethod Method	X			X	X	X	X
LastRecord Method	X			X	X	X	X
Name Method	X	X		X	X	X	X
NewRecord Method	X			X	X	X	X
NextRecord Method	X			X	X	X	X
NextSelected Method	X						
ParentBusComp Method	X			X	X	X	X
Pick Method	X			X	X	X	X
PreviousRecord Method	X			X	X	X	X
RefineQuery Method	X			X	X	X	X
Release Method							X
SetFieldValue Method	X	X		X	X	X	X
SetFormattedFieldValue Method	X	X		X	X	X	X
SetMultipleFieldValues Method	X			X	X	X	X
SetNamedSearch Method	X			X	X	X	X
SetSearchExpr Method	X			X	X	X	X
SetSearchSpec Method	X			X	X	X	X
SetSortSpec Method	X			X	X	X	X

Method	Server Script	Browser Script	Web Client Automation Server	Mobile Web Client Automation Server	Siebel COM Data Control	COM Data Server	Java Data Bean
SetUserProperty Method	X			X	X	X	X
SetViewMode Method	X			X	X	X	X
UndoRecord Method	X			X	X	X	X
WriteRecord Method	X	X		X	X	X	X

Business Object Methods

Method	Server Script	Browser Script	Web Client Automation Server	Mobile Web Client Automation Server	Siebel COM Data Control	COM Data Server	Java Data Bean
GetBusComp Method	X	X		X	X	X	X
GetLastErrCode Method				X	X		
GetLastErrText Method				X	X		
Name Method	X	X		X	X	X	X
Release Method							X

Business Service Methods

Method	Server Script	Browser Script	Web Client Automation Server	Mobile Web Client Automation Server	Siebel COM Data Control	COM Data Server	Java Data Bean
GetFirstProperty Method	X	X		X	X	X	X
GetLastErrCode Method				X			

Method	Server Script	Browser Script	Web Client Automation Server	Mobile Web Client Automation Server	Siebel COM Data Control	COM Data Server	Java Data Bean
GetLastErrText Method				X			
GetNextProperty Method	X	X		X	X	X	X
GetProperty Method	X	X		X	X	X	X
InvokeMethod Method	X	X	X	X	X	X	X
Name Method	X	X	X	X	X	X	X
PropertyExists Method	X	X		X	X	X	X
Release Method							X
RemoveProperty Method	X	X		X	X	X	X
SetProperty Method	X	X		X	X	X	X

Control Methods

Method	Server Script	Browser Script	Web Client Automation Server	Mobile Web Client Automation Server	Siebel COM Data Control	COM Data Server	Java Data Bean
Applet Method		X					
BusComp Method		X					
GetProperty Method		X					
GetValue Method		X					
Name Method		X					
SetLabelProperty Method		X					
SetProperty Method		X					
SetValue Method		X					

Property Set Methods

Method	Server Script	Browser Script	Web Client Automation Server	Mobile Web Client Automation Server	Siebel COM Data Control	COM Data Server	Java Data Bean
AddChild Method	X	X	X	X	X	X	X
Copy Method	X	X	X	X	X	X	X
GetChild Method	X	X	X	X	X	X	X
GetChildCount Method	X	X	X	X	X	X	X
GetFirstProperty Method	X	X	X	X	X	X	X
GetNextProperty Method	X	X	X	X	X	X	X
GetProperty Method	X	X	X	X	X	X	X
GetPropertyCount Method	X	X	X	X	X	X	X
GetType Method	X	X	X	X	X	X	X
GetValue Method	X	X	X	X	X	X	X
InsertChildAt Method	X	X	X	X	X	X	X
PropertyExists Method	X	X	X	X	X	X	X
RemoveChild Method	X	X	X	X	X	X	X
RemoveProperty Method	X	X	X	X	X	X	X
Reset Method	X	X	X	X	X	X	X
SetProperty Method	X	X	X	X	X	X	X
SetType Method	X	X	X	X	X	X	X
SetValue Method	X	X	X	X	X	X	X

Miscellaneous Methods

Method	Server Script	Browser Script	Web Client Automation Server	Mobile Web Client Automation Server	Siebel COM Data Control	COM Data Server	Java Data Bean
GetErrorCode Method							X
GetErrorMessage Method							X
TheApplication Method	X	X					

Object Interface Events

The object interface events are available in Server Script or Browser Script within Siebel Tools. This section lists the Siebel interface events, grouped by object interface type.

- "Applet Events"
- "Application Events" on page 85
- "Business Component Events" on page 85
- "Business Service Events" on page 86

Applet Events

Event	Server Script	Browser Script	Comments
Applet_ChangeFieldValue Event		X	
Applet_ChangeRecord Event		X	
Applet_InvokeMethod Event		X	
Applet_Load Event		X	
Applet_PreInvokeMethod Event		X	
WebApplet_InvokeMethod Event	X		
WebApplet_Load Event	X		
WebApplet_PreCanInvokeMethod Event	X		
WebApplet_PreInvokeMethod Event	X		

Event	Server Script	Browser Script	Comments
WebApplet_ShowControl Event	X		Not available in high interactivity mode
WebApplet_ShowListColumn Event	X		Not available in high interactivity mode

Application Events

Event	Server Script	Browser Script	Comments
Application_Close Event	X		
Application_InvokeMethod Event	X	X	
Application_Navigate Event	X		
Application_PreInvokeMethod Event	X	X	
Application_PreNavigate Event	X		
Application_Start Event	X		

Business Component Events

Event	Server Script	Browser Script	Comments
BusComp_Associate Event	X		
BusComp_ChangeRecord Event	X		
BusComp_CopyRecord Event	X		
BusComp_DeleteRecord Event	X		
BusComp_InvokeMethod Event	X		
BusComp_NewRecord Event	X		
BusComp_PreAssociate Event	X		
BusComp_PreCopyRecord Event	X		
BusComp_PreDeleteRecord Event	X		
BusComp_PreGetFieldValue Event	X		
BusComp_PreInvokeMethod Event	X		
BusComp_PreNewRecord Event	X		
BusComp_PreQuery Event	X		

Event	Server Script	Browser Script	Comments
BusComp_PreSetFieldValue Event	X	X	Available only in high interactivity mode. Requires a field property to be set for the event to be immediately executed on the server.
BusComp_PreWriteRecord Event	X		
BusComp_Query Event	X		
BusComp_SetFieldValue Event	X		
BusComp_WriteRecord Event	X		

Business Service Events

Event	Server Script	Browser Script	Comments
Service_InvokeMethod Event	X	X	
Service_PreCanInvokeMethod Event	X	X	
Service_PreInvokeMethod Event	X	X	

Siebel Constants

The Siebel programming languages provide constants for the convenience of programmers. These constants appear in the table that follows. Use the constant names, rather than their integer values in your code. Use of these constant names makes your code more readable by others, because it clarifies your intentions. However, the integer values are included to aid in debugging, as the integer values are what appear in the Debugger.

Used With	Constant Name	Integer Value
Pre Event Handler Methods	ContinueOperation	1
	CancelOperation	2
Search Methods	ForwardBackward	0
	ForwardOnly	1

Used With	Constant Name	Integer Value
NewRecord Method	NewBefore	0
	NewAfter	1
	NewBeforeCopy (Not available with Java Data Bean)	2
	NewAfterCopy (Not available with Java Data Bean)	3
Siebel ViewMode Methods	SalesRepView	0
	ManagerView	1
	PersonalView	2
	AllView	3
	OrganizationView	5
	GroupView	7
	CatalogView	8
	SubOrganizationView	9

Applet Methods

In the following methods, the placeholder *oApplet* in the syntax refers to a variable representing a specific applet:

- "ActiveMode Method"
- "BusComp Method" on page 88
- "BusObject Method" on page 88
- "FindActiveXControl Method" on page 89
- "FindControl Method" on page 90
- "InvokeMethod Method" on page 91
- "Name Method" on page 92

ActiveMode Method

ActiveMode returns a string containing the name of the current Web Template mode.

Syntax

oApplet.ActiveMode

Argument	Description
Not applicable	

Returns

A string containing the name of the current Web Template mode.

Used With

Browser Script

Example

The following example is in Browser Script:

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

BusComp Method

BusComp returns the business component that is associated with the applet.

Syntax

oApplet.BusComp();

Argument	Description
Not applicable	

Returns

The business component associated with the applet.

Used With

Browser Script, Server Script

BusObject Method

BusObject returns the business object for the business component of the applet.

Syntax

oApplet.BusObject()

Argument	Description
Not applicable	

Returns

The business object for the applet's business component.

Used With

Browser Script, Server Script

Example

The following example is in Browser Script:

```
function Applet_Load ()
{
   var appletname = this.Name();
   var currBO = this.BusObject();
   var currBOName = currBO.Name();
   alert("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
```

FindActiveXControl Method

FindActiveXControl returns a reference to a DOM element based upon the name specified in the name argument.

Syntax

oApplet.FindActiveXControl(*controlName*)

Argument	Description
controlName	Literal string or string variable containing the name of the desired control

Returns

The control object identified in *controlName*.

Used With

Browser Script

Example

The following Browser Script example interacts with a Microsoft slide ActiveX control that has been placed on a Siebel applet.

```
// Get a reference to the control
var SlideCtrl = FindActiveXControl("SliderControl");

// Display some of the ActiveX Control's properties
theApplication().SWEAlert ("element id = " + SlideCtrl.id);
theApplication().SWEAlert ("Max ticks = " + SlideCtrl.Max);

SlideCtrl.SelStart = 2;  // Set a control property
SlideCtrl.Refresh();   // Call the control's Refresh method

var myCustomCtrl = FindActiveXControl("TestControl");
myCustomCtrl.TestProperty01 = "abc";
myCustomCtrl.Style.visible = "hidden"; // Use a Style sheet property
```

FindControl Method

FindControl returns the control whose name is specified in the argument. This applet must be part of the displayed view.

Syntax

oApplet.FindControl(*controlName*)

Argument	Description
controlName	Literal string or string variable containing the name of the desired control

Returns

The control object identified in *controlName*.

Usage

FindControl does not find controls for MVG applets, Pick applets, Associate applets, or detail applets that are not on the view's applet list.

Used With

Browser Script

Example

To use this example, read the notes for the "SetLabelProperty Method" on page 280.

```
function Applet_PreInvokeMethod (name, inputPropSet)
   {
   // Code to change 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");
   }
}
```

InvokeMethod Method

The InvokeMethod method invokes the specialized or custom method specified by its argument.

Browser Script Syntax

oApplet.InvokeMethod(*methodName, methodArgs_PropSet);*

Argument	Description
methodName	The name of the method
methodArgs	Property set containing the method arguments

Server Script Syntax

Applet.InvokeMethod(*methodName*, *methodArgs*);

Argument	Description
*methArg1, methArg2, …, methArg*N	One or more strings containing arguments to *methodName*

Returns

In Server Script, returns a string containing the result of the method.

In Browser Script, returns a property set.

Usage

Available to Browser and Server scripting. If the method to be invoked exists in the Browser, it executes in the browser. Otherwise, the request is sent to the server for execution.

NOTE: The InvokeMethod method should only be used with documented methods. Siebel Systems does not support calling methods with InvokeMethod, unless they are listed in this book. Calling InvokeMethod with an undocumented method is not supported. Undocumented methods may be modified or obsoleted without notice. Use of undocumented methods is entirely at your own risk.

Used With

Browser Script, Server Script

Example

The following example is in Siebel eScript:

```
function WebApplet_PreInvokeMethod (MethodName)
{
   //Invoke 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

The Name method returns the name of the applet.

Syntax

oApplet.Name()

Argument	Description
Not applicable	

Returns

A string containing the applet object name.

Used With

Browser Script, Server Script

Example

The following example is in Browser Script:

```
function WebApplet_Load ()
   {
   //Display the name of the applet when the applet loads using the
   //applet.Name() method to obtain the name of the applet
   var appletName;
   appletName = this.Name();
   alert("The name of the applet is: " + appletName);
}
```

The following example is in Siebel eScript:

```
function WebApplet_Load ()
{
   //Display the name of the applet when the applet loads using the
   //applet.Name() method to obtain 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 when the applet loads using the
' applet.Name() method to obtain 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

The following topics describe applet events:

Applet_ChangeFieldValue Event

The ChangeFieldValue event fires after the data in a field changes through the applet in the user interface.

Syntax

Applet_ChangefieldValue(fieldname, fieldValue)

Argument	Description
FieldName	A string representing the name of the field whose value changed
FieldValue	A string representing the new value assigned to FieldName

Returns

Not applicable

Usage

ChangeFieldValue fires after the data in a field changes, but not when a user moves to a different record without changing a value in the previous record. If a user changes the value in a field, and other dependent fields, such as calculated fields, change as a result, the event fires once for each field whose value changed.

NOTE: This event does not trigger for changes made in pick applets or popup applets.

Used With

Browser Script

Example

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");
               alert("Changing the Committed Flag to NO as $500,000 in Revenue +
Upside amount is required");
            }
         }
         break;
      }
   }
   catch(e)
   {
      alert("Error in ChangeFieldValue and error is " + e.toString() + " " +
e.errText());
   }
}
```

See Also

"Applet_ChangeRecord Event"

Applet_ChangeRecord Event

The ChangeRecord event is called when the user moves to a different row or view.

Syntax

Applet_ChangeRecord()

Argument	Description
Not applicable	

Returns

Not applicable

Used With

Browser Script

Example

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")
      {
         alert("This record cannot be update as its been Committed");
      }
   }
   catch(e)
   {
      alert("Error in ChangeFieldValue and error is " + e.toString() + " " +
e.errText());
   }
}
```

See Also

"Applet_ChangeFieldValue Event" on page 94

Applet_InvokeMethod Event

The InvokeMethod event is triggered by a call to applet.InvokeMethod or a specialized method, or by a user-defined menu.

Syntax

Applet_InvokeMethod(*name*, *inputPropSet*)

Argument	Description
Name	The name of the method that is triggered.
inputPropSet	A property set containing arguments to be passed to the InvokeMethod event.

Returns

Not applicable

Usage

Typical uses include showing or hiding controls, or setting a search specification. When accessing a business component from this event handler, use this.BusComp(), rather than TheApplication.ActiveBusComp.

Used With

Browser Script

Example

Some special methods create, modify, or delete records. In some cases, events at the applet or business component level are triggered by these actions. If there is a requirement to perform a specific action before and after the method has been executed, these events can be used. In this example, code has been added to the PreInvokeMethod and InvokeMethod applet events to set and reset the flag and to the NewRecord server event to set the fields.

```
function Applet_PreInvokeMethod (name, inputPropSet)
{
   if (name == "Quote")
   {
      //  Add code that needs to be executed BEFORE the special method
      //  Set flag to "1"
      TheApplication().SetProfileAttr("flag","1");
   }

   return ("ContinueOperation");
}


function Applet_InvokeMethod (name, inputPropSet)
{
   if (name == "Quote")
   {
      //  Add code that needs to be executed AFTER the special method
      //  Reset the flag to "0"
      TheApplication().SetProfileAttr("flag","0");
   }

}


function BusComp_NewRecord ()
{
   if (TheApplication().GetProfileAttr("flag")== "1" )
   {
      this.SetFieldValue ("Field1", "Value1");
```

```
         this.SetFieldValue ("Field2", "Value2");
         . . . . .
      }
   }
```

See Also

"Applet_PreInvokeMethod Event" on page 99
"Application_InvokeMethod Event" on page 164

Applet_Load Event

The Applet_Load event is triggered after an applet has loaded and after data is displayed.

Syntax

Applet_Load()

Argument	Description
Not applicable	

Returns

Not applicable

Usage

You can use this event with form applets to dynamically hide or manipulate controls or set properties on an ActiveX Control. The following controls can be dynamically modified: CheckBox, ComboBox, TextBox, TextArea, Label.

NOTE: Do not use the SWEAlert or RaiseErrorText methods in this event to display a popup. This can cause the browser to crash if the application has not yet been fully rendered in the browser.

Used With

Browser Script

Examples

Use this event to dynamically hide or manipulate controls or set properties on a control. The following controls can be dynamically modified: CheckBox, ComboBox, Label, TextArea, and TextBox.

NOTE: These examples are only applicable to code on form applets.

```
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");
   }
```

This event can also be used to filter records.

```
   Function Applet_Load()
   {
      var bc = this.BusComp();
      bc.SetSearchExpr("<new expression>");
      bc.ExecuteQuery();
   }
```

Applet_PreInvokeMethod Event

The PreInvokeMethod event is called before a specialized method is invoked, by a user-defined applet menu, or by calling InvokeMethod on an applet.

Syntax

Applet_PreInvokeMethod(*Name, inputPropSet*)

Argument	Description
inputPropSet	A property set containing arguments to be passed to the PreInvokeMethod event

Returns

ContinueOperation or CancelOperation

Usage

The PreInvokeMethod event is called just before a specialized method is invoked on the applet. If implementing a new method (not defined by the built-in functions), the Basic script should return CancelOperation to avoid invoking an “Unknown Method Name” error. Specialized methods are methods based on applet or business component classes other than CSSFrame and CSSBusComp, respectively—that is, specialized classes.

CancelOperation does not stop the execution of the code following it, but it does prevent the execution of any built-in code associated with this event. Applet_PreInvokeMethod should return CancelOperation when you are handling the event entirely through scripting and do not want the built-in code to execute. However, if there is code in the same script following CancelOperation, that code runs regardless of the CancelOperation.

Used With

Browser Script

Example

```
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");
   }
}
```

See Also

"How Your Script Affects Program Flow" on page 63

WebApplet_InvokeMethod Event

The InvokeMethod event is called after a specialized method on the Web applet has been executed. WebApplet_InvokeMethod triggers for Siebel-defined methods only, it does not trigger for user-defined methods.

Syntax

WebApplet_InvokeMethod(*methodName)*

Argument	Description
methodName	String variable or literal containing the name of the method invoked.

Returns

Not applicable

Used With

Server Script

Example

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"
   break
Case "ExecuteQuery"
   TheApplication.SetSharedGlobal "EnableButton", ""
   break
Case "UndoQuery"
   TheApplication.SetSharedGlobal "EnableButton", ""
   break
End Select
```

See Also

"Applet_InvokeMethod Event" on page 96
"Application_InvokeMethod Event" on page 164
"WebApplet_PreCanInvokeMethod Event" on page 102

WebApplet_Load Event

The Load event is triggered just after an applet is loaded.

Syntax

WebApplet_Load()

Argument	Description
Not applicable	

Returns

Not applicable

Usage

Do not call TheApplication().ActiveBusObject from WebApplet_Load because it returns a null. Instead use this.BusObject() to obtain a reference to the current business object.

Used With

Server Script

Example

The following example is in Siebel eScript:

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

See Also

"Applet_InvokeMethod Event" on page 96
"Application_InvokeMethod Event" on page 164
"WebApplet_PreCanInvokeMethod Event" on page 102

WebApplet_PreCanInvokeMethod Event

The PreCanInvokeMethod event is called before the PreInvokeMethod and also when an applet is loaded, allowing the script to determine whether or not the user has the authority to invoke the Applet method.

Syntax

WebApplet_PreCanInvokeMethod(*MethodName*, *&CanInvoke*)

Argument	Description
MethodName	A string representing the name of the method to be executed.
&CanInvoke	A string representing whether or not the Applet method can be invoked. Valid values are TRUE or FALSE.

Returns

CancelOperation or ContinueOperation

Used With

Server Script

Example

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

The PreInvokeMethod event is called before a specialized method for the Web applet is invoked or a user-defined method is invoked through *oWebApplet.*InvokeMethod.

Syntax

WebApplet_PreInvokeMethod(*methodName*)

Argument	Description
methodName	String variable or literal containing the name of the method invoked

Returns

"ContinueOperation" or "CancelOperation"

Usage

The PreInvokeMethod event is called just before a specialized method is invoked on the Web applet. If implementing a new method (not defined by the built-in functions), the script should return CancelOperation to avoid invoking an "Unknown Method Name" error.

CancelOperation does not stop the execution of the code following it, but it does prevent the execution of any built-in code associated with this event. WebApplet_PreInvokeMethod should return CancelOperation when you are handling the event entirely through scripting and you do not want the built-in code to execute. However, if there is code in the same script following CancelOperation, that code runs regardless of the CancelOperation.

Used With

Server Script

Example

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
```

WebApplet_ShowControl Event

This event allows scripts to modify the HTML generated by the Siebel Web Engine to render a control on a Web page in an application running in standard interactivity mode.

Syntax

WebApplet_ShowControl (*controlName*, *property*, *mode*, *HTML*)

Argument	Description
controlName	A string indicating the name of the control to be rendered.
property	A string indicating the value of the property attribute of the `swe:control` or `swe:this` tag that triggers this event; it can also be an empty string if this attribute is not specified for the tag.
mode	The mode of the applet that is being shown; possible modes are: ■ Base ■ Edit ■ New ■ Query ■ Sort
HTML	The HTML generated by the Siebel Web Engine for the `swe:control` or `swe:this` tag that triggers this event.

Returns

Not applicable

Usage

The generated HTML depends on the control, the property being shown, and the mode of the applet. The script can modify the value of the HTML argument, and the Siebel Web Engine sends the modified value back to the Web browser.

Customer applications render the layout of applets using template files (.swt files). These are HTML files that contain special placeholder tags that indicate where a control is to be rendered. These control placeholder tags (<swe:control>) can be included in the following two ways:

- The <swe:control> tag by itself is used to show a control:

  ```
  <swe:control id="1" property="DisplayName"/>
  ```

- The <swe:control> tag and <swe:this> tag are used to show a control.

  ```
  <swe:control id="1">
  .
  .
  .
  <swe:this property="DisplayName"/>
  .
  .
  .
  </swe:control>
  ```

In the first instance, if the control ID is mapped to an actual control in the applet using Siebel Tools, Siebel Web Engine renders the DisplayName property of the control at the point where this tag is placed in the template file.

In the second instance, the Siebel Web Engine renders the DisplayName property of the control at the point where the <swe:this> tag is placed in the template file. The outer <swe:control> tag in this case is used only to check if the control ID is mapped to an actual control in the applet.

The Siebel Web Engine converts these tags into HTML to render the controls on the Web page. The WebApplet_ShowControl event is triggered for each of these tags after the Siebel Web Engine has generated the HTML for rendering the control, but before the generated HTML is sent back to the browser. This gives the scripts a chance to modify the generated HTML before it is shown.

In the first example, the event fires only once, after the Siebel Web Engine generates the HTML for the <swe:control> tag. In the second example, this event gets fired twice. The event is first fired when the Siebel Web Engine has generated the HTML for the <swe:this> tag. The event is fired again when the Siebel Web Engine has generated the HTML for the outer <swe:control> tag; that is, after everything between the <swe:control> and </swe:control> tags, including the <swe:this> tag, is converted into HTML. The script can distinguish between these two event calls by the value of the property attribute of the tag that is passed as an argument to the event.

The WebApplet_ShowControl event is supported in Standard Activity applications only.

Used With

Server Script

Example

This Siebel eScript script displays negative amounts in red in a read-only form.

```
function WebApplet_ShowControl (ControlName, Property, Mode, &HTML)
{
   var BC = this.BusComp();
   if( ControlName == "Amount" && Mode == "Base" && Property == "FormattedHTML")
```

```
      {
         var amount = ToNumber(BC.GetFieldValue ("Transaction Amount"));
         if (amount < 0)
            HTML = "<FONT Color=Red> " + HTML + " </FONT>";
       }
   }
```

WebApplet_ShowListColumn Event

This event allows scripts to modify the HTML generated by the Siebel Web Engine to render a list column on a Web page in an application running in standard interactivity mode.

Syntax

WebApplet_ShowListColumn (*columnName*, *property*, *mode*, *HTML*)

Argument	Description
columnName	A string indicating the name of the list column to be rendered
property	A string indicating the value of the property attribute of the swe:control or swe:this tag that triggers this event; it can also be a empty string if this attribute is not specified for the tag.
mode	The mode of the applet that is being shown; possible modes are: ■ Base ■ Edit ■ New ■ Query ■ Sort
HTML	The HTML generated by the Siebel Web Engine for the swe:control or swe:this tag that triggers this event

Returns

Not applicable

Usage

The generated HTML depends on the list column, the property being shown, and the mode of the applet. The script can modify the value of the HTML argument, and the Siebel Web Engine sends the modified value back to the Web browser.

Customer applications render the layout of applets using template files (.swt files). These are HTML files that contain special placeholder tags that indicate where a control is to be rendered. These control placeholder tags (<swe:control>) can be included in the following two ways:

- The <swe:control> tag by itself is used to show a list column.

  ```
  <swe:control id="1" property="DisplayName"/>
  ```

- The <swe:control> tag and <swe:this> tag are used to show a list column.

  ```
  <swe:control id="1">
  .
  .
  .
  <swe:this property="DisplayName"/>
  .
  .
  .
  </swe:control>
  ```

In the first instance, if the list column ID is mapped to a list column in the applet using Siebel Tools, Siebel Web Engine renders the DisplayName property of the list column at the point where this tag is placed in the template file.

In the second instance, the Siebel Web Engine renders the DisplayName property of the list column at the point where the <swe:this> tag is placed in the template file. The outer <swe:control> tag in this case is used only to check if the list column ID is mapped to an actual list column in the applet.

The Siebel Web Engine converts these tags into HTML to render the list columns on the Web page. The WebApplet_ShowListColumn event is triggered for each of these tags after the Siebel Web Engine has generated the HTML for rendering the list column, but before the generated HTML is sent back to the browser. This gives the scripts a chance to modify the generated HTML before it is shown.

In the first example, the event fires only once, after the HTML for the <swe:control> tag is generated by the Siebel Web Engine. In the second example, this event is triggered twice. The event is first triggered when the Siebel Web Engine has generated the HTML for the <swe:this> tag. The event is fired again when the Siebel Web Engine has generated the HTML for the outer <swe:control> tag; that is, after everything between the <swe:control> and </swe:control> tags, including the <swe:this> tag, is converted into HTML. The script can distinguish between these two event calls by the value of the property attribute of the tag that is passed as an argument to the event.

The WebApplet_ShowListColumn event is supported in Standard Activity applications only.

Used With

Server Script

Example

This Siebel VB script displays negative amounts in a list in red.

```
Sub WebApplet_ShowListColumn (ColumnName As String, Property As String, Mode As
String, HTML As String)

Dim amount as Double

If ColumnName = "Amount" and Mode = "Base" and Property = "FormattedHTML" Then
   If HTML < 0 Then
      HTML = "<FONT Color=Red> " + HTML + " </FONT>"
```

```
      End If
   End If
   End Sub
```

The following example is in Siebel eScript:

```
function WebApplet_ShowListColumn (ColumnName, Property, Mode, &HTML)
{
   if ((ColumnName == 'Amount') && (Mode == "Base") && (Property == "FormattedHTML"))
{
         var val - HTML.valueOf();
         if (val < 0)
            HTML = "<FONT Color=Red> " + HTML + " </FONT>";
         }
}
```

Application Methods

The following methods are built-in methods that return the current Siebel Application object instance:

- TheApplication when called from Siebel VB within Siebel Tools,
- TheApplication() (case-sensitive) when called from Siebel eScript within Siebel Tools
- theApplication() (case-sensitive) when called from Browser Script within Siebel Tools

If an Application method applies to one scripting language, then the Syntax definition in the method's section includes TheApplication, TheApplication(), or theApplication() specifically.

If a method applies to external interfaces or to more than one scripting language, and thus to more than one syntax, then the Syntax definition includes *Application*, which denotes that:

- The applicable construct should be substituted for *Application* in Siebel VB, Siebel eScript, or Browser Script
- The name of an Application instance should be substituted for *Application* when you use external interfaces.

Examples of Application methods used by external interfaces frequently include SiebelApplication as the Application instance. You should understand that the examples assume that SiebelApplication is instantiated in the script, whether the instantiation statement is included in the example or not.

This section includes documentation for the following Application methods:

- "ActiveApplet Method" on page 111
- "ActiveBusComp Method" on page 111
- "ActiveBusObject Method" on page 112
- "ActiveViewName Method" on page 114
- "Attach Method" on page 115

- "TraceOff Method" on page 158
- "TraceOn Method" on page 159

ActiveApplet Method

ActiveApplet returns a reference to the applet that currently has focus.

Syntax

theApplication().ActiveApplet();

Argument	Description
Not applicable	

Returns

The name of the applet instance that has focus

Usage

Use this method to determine which applet currently has focus. The applet typically has a blue border to show that it is active.

Used With

Browser Script

Example

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

ActiveBusComp Method

ActiveBusComp returns the business component associated with the active applet.

Syntax

theApplication().ActiveBusComp();

Argument	Description
Not applicable	

Returns

The business component associated with the active applet

Used With

Browser Script

Example

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

ActiveBusObject Method

ActiveBusObject returns the business object for the business component of the active applet.

Syntax

Application.ActiveBusObject

Argument	Description
Not applicable	

Returns

The business object that contains the business component associated with the active applet

Usage

Do not use ActiveBusObject in any event handler that may be initiated by the COM Data Server, COM Data Control, or Java Data Bean. If you use ActiveBusObj() you get the business object that exists already (if there is one). If you use GetBusObject() instead, any child Business components are ALWAYS new ones, even if you have some already.

Used With

Browser Script, Mobile Web Client Automation Server, Server Script

Example

The following example is in Browser Script:

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

The following samples show an example of server side script that could be invoked from a custom button on a child applet within a view. The script first checks to see if the Contact business object is active, and if so, retrieves the email address of the currently active parent Contact record. The custom 'SendEmail()' function is then invoked using the Contact's email address. Note that the objects are not destroyed at the end of the script, as they are the ones that are currently active in the user interface.

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

ActiveViewName returns the name of the active view.

Syntax

Application.ActiveViewName

Argument	Description
Not applicable	

Returns

A string containing the active view name

Usage

Do not use the ActiveViewName method in any event handler that may be initiated by the COM Data Server, COM Data Control, or Java Data Bean.

Used With

Browser Script, Mobile Web Client Automation Server, Server Script

Example

The following example is in Siebel eScript:

```
function BusComp_PreSetFieldValue (FieldName, FieldValue)
{
   var iReturn = ContinueOperation;
   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");
      iReturn = CancelOperation;
   }
   break;
   }
   return (iReturn);
}
```

Attach Method

The Attach method allows an external application to reconnect to an existing Siebel session.

Syntax

Application.Attach(*sessionString*)

Argument	Description
sessionString	A string containing the Siebel Session Id. The sessionString is typically the output of the Detach method or a value returned from the Siebel cookie.

Returns

Boolean indicating whether or not the method was successfully executed

Used With

COM Data Control, Java Data Bean

Examples

Each of these examples instantiates the first COM Data Control instance, logs in to a Siebel Server, detaches this instance, and then gains the session string. It then instantiates the second COM Data Control instance. It does not need to log in again, as it attaches to the existing session by using the session string. This reuses the connection created by the first instance.

The following example is for 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.GetLastErrCode
If errCode <> 0 Then
   errText = SiebelApplication_first.GetLastErrText
   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 is for 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 Data Bean
         m_dataBean_first = new SiebelDataBean();

         // Login to the 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 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

CurrencyCode returns the operating currency code associated with the division to which the user's position has been assigned.

Syntax

Application.CurrencyCode

Argument	Description
Not applicable	

Returns

A string containing the currency code; for example, USD for U.S. dollars, EUR for the euro, JPY for the Japanese yen.

Used With

Browser Script, COM Data Control, COM Data Server, Web Client Automation Server, Server Script

Example

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

The Detach method returns a string containing the Siebel session Id.

Syntax

Application.Detach

Argument	Description
Not applicable	

Returns

String containing the Siebel session Id.

Usage

The string returned by the Detach method should only be used with the Attach method.

Used With

COM Data Control, Java Data Bean

Examples

For a Java Data Bean sample and a native VB sample using COM Data Control, read "Attach Method" on page 115.

EnableExceptions Method

The EnableExceptions method enables or disables native COM error handling.

Syntax

Application.EnableExceptions(*bEnable*)

Argument	Description
bEnable	A Boolean: TRUE or FALSE

Returns

Not applicable

Usage

Setting the argument to TRUE enables native error handling. This allows applications 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

Examples

This native Visual Basic script uses the Siebel ActiveX Data Control to connect to the Siebel Application and instantiate a business object. The script prompts the user to select whether the native error handling is to be enabled or not. If yes, the script throws the error immediately when it gets an error. If not, the script suppresses Siebel errors and errors are only detected by using GetLastErrCode method.

```
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 non-existing Business Object

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

This Visual Basic sample code uses the Siebel Mobile Automation Server to connect to the Siebel Application and instantiate a business object. The program prompts the user to select whether the native error handling is to be enabled or not. If yes, the script throws the error immediately when it gets an error. If not, the script suppresses Siebel errors and errors are only detected by using GetLastErrCode method.

```
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 non-existing 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

FindApplet returns the applet that is identified by the *appletName* argument.

Syntax

theApplication().FindApplet(*appletName*)

Argument	Description
appletName	String variable or literal containing the name of the desired applet.

Returns

The applet identified in *appletName*

Usage

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

Used With

Browser Script

Example

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();
      alert(entryappletvalue);
   }
}
```

GetBusObject Method

GetBusObject method instantiates and returns a new instance of the business object specified in its argument.

Syntax

Application.GetBusObject(*busObjectName*)

Argument	Description
busObjectName	String variable or literal containing the name of the business object to instantiate.

Returns

The business object instance specified in the argument

Usage

Set the business object to Nothing to destroy the instantiated business object after it is no longer needed. If you use ActiveBusObj() you get the business object that exists already (if there is one). If you use GetBusObject() instead, any child business components are ALWAYS new ones, even if you have some already.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Examples

The following examples always instantiate and return a new instance of the business object specified in the argument, which is the Account business object.

The following example is in Siebel eScript:

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

[ Your code here ]

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 code here]

Set AccntBO = Nothing
Set AccntBC = Nothing
```

The following examples instantiate and return a new instance of the business object as did the previous example. However, the difference is that the business object returned could vary depending on the location from which the code is invoked, such as a Web applet event. This is useful when you want to refer to the currently active business object.

The following example is for 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

Returns the name of the data source, as defined in the CFG file, that is being used for the session.

Syntax

dataSrc = *Application*.InvokeMethod("GetDataSource")

Argument	Description
none	

Returns

A string containing the value of the data source currently used by the application.

Used With

COM Data Control, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following eScript example detects the data source and displays its name in a dialog box.

```
var dataSrc = TheApplication().InvokeMethod("GetDataSource");
TheApplication().RaiseErrorText(dataSrc);
```

The following is the same example in Siebel VB.

```
Dim dataSrc As String
dataSrc = TheApplication.InvokeMethod("GetDataSource")
TheApplication.RaiseErrorText(dataSrc)
```

GetLastErrCode Method

The GetLastErrCode method returns the last error execution status.

Syntax

Application.GetLastErrCode

Argument	Description
Not applicable	

Returns

A short integer containing the last error execution status: 0 indicates no error.

Usage

After execution of a method, the GetLastErrCode can be invoked to check if any error was returned from the previous operation. GetLastErrText method can be invoked to retrieve the text of the error message. Each method invocation resets the execution status.

Used With

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

Example

The following example is for COM Data Control. SiebelApplication is an Application instance.

```
errcode = SiebelApplication.GetLastErrCode
If errcode <> 0 Then
   ErrText = SiebelApplication.GetLastErrText
   MsgBox ErrText
   Exit Sub
End If
```

See Also

"GetLastErrText Method" on page 125

GetLastErrText Method

The GetLastErrText method returns the last error text message.

Syntax

Application.GetLastErrText

Argument	Description
Not applicable	

Returns

The last error text message as a string

Used With

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

Example

The following example is for COM Data Control. SiebelApplication is an Application instance.

```
errcode = SiebelApplication.GetLastErrCode
If errcode <> 0 Then
   ErrText = SiebelApplication.GetLastErrText
   MsgBox ErrText
   Exit Sub
End If
```

See Also

"GetLastErrCode Method" on page 124

GetProfileAttr Method

GetProfileAttr returns the value of an attribute in a user profile.

Syntax

Application.GetProfileAttr(*name*)

Argument	Description
name	A string indicating the name of the attribute

Returns

The value of the attribute *name*

Usage

GetProfileAttr is used in personalization to retrieve values of attributes in a user profile.

Used With

Browser Script, COM Data Control, COM Data Server, 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")
```

See Also

"SetProfileAttr Method" on page 151

GetService Method

The GetService method returns a specified service. If the service is not already running, it is constructed.

Syntax

Application.GetService(*serviceName*)

Argument	Description
serviceName	The name of the service to start

Returns

A reference to the requested business service

Usage

This method finds the business service indicated by *serviceName*; it constructs the service if it is not already running. It first searches through the built-in services that are stored in the repository. If the service is not found, GetService searches through services defined in the run-time Business Services table.

A business service is normally deleted from memory as soon as every reference to it, such as local or global variables, are cleared by setting them to another value. However, if the Cache flag on the business service is set, the service remains in memory as long as the Siebel application is running.

To invoke a business service using the Web Client Automation Server and Browser Script, the business service must first be registered in the application configuration file (such as uagent.cfg, sfs.cfg, and so on). This prevents Service Not Found errors. To register a business service in the application configuration file, navigate to the [SWE] section, and add entries like the following examples:

```
ClientBusinessService0 = "XML Converter"
ClientBusinessService1 = "Siebel Account"
```

ClientBusinessService entries must be sequential, starting at 0 and incrementing by 1.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

Examples

The following examples instantiate 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

Shared global variables are unique to the user and the user’s associated session. One user's global variables are not visible to other users. The variables are global to the current user and session only. The GetSharedGlobal method gets the shared user-defined global variables.

Syntax

Application.GetSharedGlobal(*varName*)

Argument	Description
varName	String literal or variable containing the name of the global variable

Returns

A string containing the user-defined global variables.

Usage

```
GetSharedGlobal("varName")
```

retrieves the string set by:

```
SetSharedGlobal "varName", "stringValue".
```

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Examples

In the following examples, the GetSharedGlobal method is called to get a global variable called myGlobalVar. The global variable was originally set using the SetSharedGlobal in Application_Start event. The global variable can be accessed from any event. For these examples, in the BusComp_WriteRecord event, the GetSharedGlobal method is called to retrieve myGlobalVar.

The following example is for COM. SiebelApplication is an Application instance.

```
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
```

See Also

"SetSharedGlobal Method" on page 152

GotoView Method

GotoView activates the named view and its BusObject. As a side effect, this method activates the view's primary applet and its BusComp and activates the primary applet's first tab sequence control. Further, this method deactivates any BusObject, BusComp, applet, or control objects that were active prior to this method call.

Syntax

Application.GotoView(*ViewName*[, *BusinessObjectName*])

Argument	Description
ViewName	The name of the view for the Siebel application to display
BusinessObjectName	An optional argument to specify the business object to use for displaying the view. You cannot specify the current active business object as an argument to GotoView. If this argument is not supplied, or is specified as Nothing, a new business object is loaded in the normal fashion.

Returns

Not applicable

Usage

If a business object has not been instantiated, *BusinessObjectName* should have the value Nothing.

NOTE: The GotoView method is not supported in the following events: Application_Navigate, Application_PreNavigate, Navigate, PreNavigate, and WebApplet_Load

The following Siebel VB script uses GotoView to programmatically navigate to the Opportunity List view.

```
TheApplication.GotoView "Opportunity List View", Nothing
```

Alternatively, if your application has already instantiated an Opportunity object with the object reference of objOppty, the appropriate usage in Siebel VB is:

```
TheApplication.GotoView "Opportunity List View", objOppty
```

NOTE: When this method is used in a Siebel VB or eScript script, regardless of where it appears in the script, it is executed last.

The Control property “Show Popup” should not be set to TRUE on a button if there is underlying script that uses GotoView. If Show Popup is set to TRUE and GotoView is used, the view is opened in a new browser window. The Siebel client UI does not support a Multiple Document Interface (MDI) architecture, so this combined configuration and scripted call to GotoView is not supported.

Used With

Server Script

Example

The following examples show how to use GoToView 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();
      }

      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 a 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

InvokeMethod calls a specialized method or user-defined method specified by its argument.

Browser Script Syntax

theApplication().InvokeMethod(*methodName, methodArgs_PropSet*);

Argument	Description
methodName	The name of the method.
methodArgs	One or more strings containing arguments to *methodName.*

Server Script Syntax

Application.InvokeMethod(*methodName, methodArgs*);

Argument	Description
methodName	The name of the method.
*methArg1, methArg2, …, methArg*N	One or more strings containing arguments to *methodName.*

Returns

In Server Script, returns a string containing the result of the method

In Browser Script, returns a Boolean

Usage

InvokeMethod allows you to call methods on an Application object that is exposed directly through the Application interface.

NOTE: The InvokeMethod method should be used only with documented specialized methods. Siebel Systems does not support calling specialized methods with InvokeMethod unless they are listed in this book.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

For an example, read "InvokeMethod Method" on page 91.

LoadObjects Method

The LoadObjects method is used to start the COM Data Server object, and returns a reference to the Application object. This method must be the first call to the COM Data Server.

Syntax

Application.LoadObjects(*absoluteCFGfileName*)

Argument	Description
absoluteCFGfileName	The complete path and name of the CFG file to open. For example: `“C:\siebel\bin\uagent.cfg”` You can optionally identify the data source in the argument to the LoadObjects method by appending to the CFG file string, separated by a commma. For example: `"D:\Server\siebsrvr\bin\ENU\siebel.cfg,ServerDataSrc"` When the data source is not specified, the LoadObjects method assumes “Local” as the data source.

Returns

The Application object opened on start-up

Usage

Prior to calling LoadObjects, you must change the current directory to the Siebel\bin directory.

When using COM Data Server, the COM client cannot create multiple connections to the COM Server. For example, a second attempt at calling LoadObjects() causes the error message: “The object definition manager has already been initialized.” The COM client must be restarted before another connection attempt can be successful. Use COM Data Control instead.

Used With

COM Data Server

Example

The following example is for COM Data Server. `SiebelApplication` is an Application instance.

```
Private Sub LoadConfig_Click()
   Dim errCode As Integer
   LoadConfig.Enabled = False
   SiebelApplication.LoadObjects "C:\siebel\bin\uagent.cfg", _
      errCode

   If errCode = 0 Then
      ConfigOK = 1
   End If
```

```
      Status.Text = SiebelApplication.GetLastErrText
   End Sub
```

LoadUserAttributes Method

The LoadUserAttributes method loads a user profile into the session.

Syntax

LoadUserAttributes(*row-id*)

Argument	Description
row-id	The row-id of the person whose profile needs to be loaded.

Returns

Not applicable

Usage

If this function is called with no argument, it unloads the loaded user profile. This loaded profile can be accessed as the "You" profile from personalization rules. For more information, read *Siebel Personalization Administration Guide*.

Used With

Server Script

Example

The following VB example shows a method that loads a user profile into the session. The function is exposed on the Siebel Application Object.

```
Function LoadUserProfile As Integer
TheApplication.InvokeMethod ("LoadUserAttributes",”0-10N07”)
End Function
```

This function has only one argument: the row-id of the person whose profile needs to be loaded. If this function is called with empty arguments, it unloads the loaded user profile.

```
Function LoadUserProfile As Integer
TheApplication.InvokeMethod ("LoadUserAttributes", ““)
End Function
```

Login Method

The Login method allows external applications to log in to the COM Data Server, COM Data Control, or Java Data Bean, and to access the Siebel objects. The Login method allows the end user to invoke 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.

Syntax

Application.Login([*connectString*,] *userName*, *password*)

Argument	Description
connectString	Token-based connect string
userName	Username for login
password	User password for login

Returns

A string containing the error code

Usage

Verify that the Siebel\bin directory is the current directory. To access the Data Control, make sure the default Data Source points to the database that you wish to access and set EnableOLEAutomation to TRUE in your CFG file (this is the default value for the argument).

For information on formatting the connect string, read "Connect String" on page 70.

Used With

COM Data Control, COM Data Server, Java Data Bean

Example

The Connect string for the COM Data Control is token-based; for example:

```
host = "Siebel://my_computer/SIEBEL/objsrvr/my_computer" lang = "ENU"
```

Because most languages use quotes to enclose text strings, you must use quotes inside parentheses; for example:

To use the COM Data Control in Visual Basic:

```
m_dataBean.login("siebel.tcpip.none.none://gateway:gatewayport/enterpriseserver/
SCCObjMgr", "username", "password");
```

To use the COM Data Control in C++:

```
Login("host=\"siebel//:my_computer/SIEBEL/objsvr/my_computer\" lang =
\"ENU\"","user","password");
```

The following code sample illustrates how to log in to the server and check for errors:

```
   Call SiebelAppControl.Login("host=""siebel://gtwy/enterprise/ObjMgr""",
"SADMIN", "SADMIN")

   //Check for errors
      If SiebelAppControl.GetLastErrCode <> 0 Then
         frmMain.txtStatus.Text = SiebelAppControl.GetLasErrText
      Else
         frmMain.txtStatus.Text = "Connected successfully..."
      End If
```

The following is a Java Data Bean example that logs into 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 Data Bean
         m_dataBean = new SiebelDataBean();

         // login to the 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.getErrorMessage());
      }
   }
}
```

LoginId Method

The LoginId method returns the login ID of the user who started the Siebel application.

Syntax

Application.LoginId

Argument	Description
Not applicable	

Returns

A string containing the login ID

Usage

The login ID is the row ID of the user's login in the Employee table. Once obtained, the login ID can be conveniently used as a search specification.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

In this Siebel VB example of the BusComp_PreSetFieldValue event, the LoginId method is used to determine whether the user has the right to modify a record.

```
Function BusComp_PreSetFieldValue (FieldName As String,
         FieldValue As String) As Integer
   Dim iReturn as integer
   iReturn = ContinueOperation
   Select Case FieldName
      Case "Account Status"
         if Me.GetFieldValue("Created By") <> _
            TheApplication.LoginId then
            TheApplication.RaiseErrorText("*** You cannot change Account Status _
               because you did not create the record***")
            iReturn = CancelOperation
         end if
   End Select
   BusComp_PreSetFieldValue = iReturn
End Function
```

LoginName Method

The LoginName method returns the login name of the user who started the Siebel application (the name typed in the login dialog box).

Syntax

Application.LoginName

Argument	Description
Not applicable	

Returns

A string containing the user's login name

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

For examples, read "ExecuteQuery Method" on page 181 and "TheApplication Method" on page 302.

See Also

"Login Method" on page 136

Logoff Method

The Logoff method disconnects the client from the server.

Syntax

Application.Logoff

Argument	Description
Not applicable	

Returns

Not applicable

Usage

For clients with user interfaces, Logoff destroys every window except for the topmost window. Logoff also deletes every object, except for the topmost object, on both client and server.

Logoff is called automatically if you destroy the main object.

Used With

COM Data Control, Java Data Bean, Mobile Web Client Automation Server

LookupMessage Method

The LookupMessage method returns the translated string for the specified key, in the current language, from the specified category. The optional arguments are used to format the string if it contains any substitution arguments (%1,%2).

Syntax

Application.LookupMessage (*category, key, [arg1], [arg2],...., [argN]*)

Argument	Description
Category	Name of the Message Category object, as defined in Siebel Tools, that is the parent of Key value.
Key	Name of the Message object, as defined in Siebel Tools, whose text contains the value to be investigated.
arg1, arg2, …, argN	Optional arguments used to format the error message if it contains any substitution arguments (%1, %2).

Returns

A string containing the localized message text.

Usage

Useful for retrieving locale specific custom error messages.

Used With

Server Script

Example

The following eScript example returns the text “Account Title should be entered before Stepping off.” To test this under the “User Defined Errors” message category, create a new record with the following text: “%1 should be entered before Stepping Off.” The parameter that is substituted in place of %1 is “Account Title”, which is present in the message test.

```
var sVal = TheApplication().LookupMessage("User Defined Errors", "Test", "Account
Title");
```

LookupValue Method

Finds a row in S_LST_OF_VAL where the TYPE column matches the type argument, the CODE column matches the lang_ind_code argument, and the LANG_ID column matches the language code of the currently active language. This function is used to obtain the translation of the specified untranslated value in the specified LOV into the currently active language.

Syntax

val = *Application*.InvokeMethod("LookupValue", *type*, *lang_ind_cd*)

Argument	Description
type	Type as specified in the List of Values administration view.
lang_ind_cd	Language independent code value as specified in the List of Values administration view.

Returns

Returns a string containing the display value (the VAL column) for the row. LookupValue tries to find the display value for a given language independent code. If the display value is not found, LookupValue returns the language independent code itself as the value.

Used With

COM Data Control, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following eScript example finds a row in S_LST_OF_VAL where the TYPE column matches the type argument, the CODE column matches the lang_ind_code argument, and the LANG_ID column matches the language code of the currently active language. This function is used to obtain the translation of the specified untranslated value in the specified LOV into the currently active language.

```
var LOVText=TheApplication().InvokeMethod("LookupValue","SR_AREA","Network");
```

Name Method

The Name method returns name of the application.

Syntax

Application.Name

Argument	Description
Not applicable	

Returns

A string containing the name of the application

Used With

Browser Script, Web Client Automation Server

NewPropertySet Method

The NewPropertySet method constructs a new property set object.

Syntax

Application.NewPropertySet

Argument	Description
Not applicable	

Returns

A property set

Usage

NewPropertySet is used primarily to construct input and output arguments for business services.

NOTE: When using NewPropertySet on an existing PropertySet object, old references to this PropertySet are lost. When reusing a PropertySet, use the Reset method on the PropertySet itself.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

Example

This method constructs a new property set object.

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("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 COM. SiebelApplication is an Application instance.

```
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

The PositionId property returns the position ID (ROW_ID from S_POSTN) of the user's current position. This is set by default when the Siebel application is started and may be changed (through Edit > Change Position) if the user belongs to more than one position.

Syntax

Application.PositionId

Argument	Description
Not applicable	

Returns

A string row ID

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

PositionName Method

The PositionName property returns the position name of the user's current position. This is set by default when the Siebel application is started.

Syntax

Application.PositionName

Argument	Description
Not applicable	

Returns

A string containing the user's position

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

This Siebel VB example checks for the position of a user changing the sales stage, and prevents changes if the user is not of the appropriate position.

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

Dim sPosName As String sMsgText As String
Dim iReturn As Integer
iReturn = ContinueOperation

Select Case FieldName
   Case "Sales Stage"
      If FieldValue = "Approved" Then
         ' Do not allow the sales cycle to be changed 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.")
         iReturn = CancelOperation
```

```
            End If
      BusComp_PreSetFieldValue = iReturn
   End Select

   End Function
```

RaiseError Method

The RaiseError method raises a scripting error message to the browser. The error code is a canonical number. The error text is based on the specified key, looked up for the current language from the User-Defined Errors category. You can define these errors in Tools using the Message Category object. The optional arguments are used to format the string if it contains any substitution arguments (%1, %2).

Syntax

Application.RaiseError(*key*, [*arg1*], [*arg2*],...., [*argN*])

Argument	Description
key	Name of the Message object, as defined in Siebel Tools, whose text contains the value to be used.
arg1, *arg2*, ..., *argN*	Optional arguments used to format the error message if it contains any substitution arguments (%1, %2).

Returns

Not applicable

Usage

When invoked, the RaiseError method causes execution of the script to terminate, and sends a notification to the browser.

Internally, the RaiseError/RaiseErrorText methods raise a Server Script exception. Therefore, if you have implemented error handling in your scripts, please note that the error handling can suppress RaiseError/RaiseErrorText functionality.

If you have implemented error handling in Siebel VB, remember that when using “On Error Goto ...”, the RaiseError and RaiseErrorText methods result in the script transferring execution to the error handler. “On Error Resume Next” suppresses the RaiseError and RaiseErrorText methods.

Used With

Server Script

Example

In the following eScript example, the RaiseError results in a scripting exception being raised, transferring control to the catch statement. To display the error message, the error must be thrown using the throw statement.

```
function BusComp_PreDeleteRecord ()
{
   try {
      var status = this.GetFieldValue("Account Status");

      if (status == "Gold") {
         TheApplication().RaiseError(<user defined error name>);
         return (CancelOperation);

      }
      else {
         return (ContinueOperation);
      }
   }
   catch (e) {
      throw e;
   }

}
```

The following eScript example raises the error message “This user-defined test error is used in PreDelete, as an example for RaiseError Method” when deleting an opportunity with the “Pipeline” revenue class. Note that the key "user-defined test error1" is predefined as "This user-defined test error is used in %1, as an example for %2". When the script runs, 'PreDelete' is substituted for %1 and 'Raise Error Method' is substituted for %2.

```
function BusComp_PreDeleteRecord ()
{
   try
   {
      var revClass = this.GetFieldValue("Primary Revenue Class");
      if (revClass == "1-Pipeline")
      {
         TheApplication().RaiseError("user-defined test error1", "PreDelete",
"RaiseError Method" );
         return (CancelOperation);
      }

      else
      {
      return (ContinueOperation);
      }

   }
   catch (e)
   {
      throw e;
   }

}
```

RaiseErrorText Method

The RaiseErrorText method raises a scripting error message to the browser. The error text is the specified literal string. The optional arguments are used to format the string if it contains any substitution arguments (%1, %2).

Syntax

Application.RaiseErrorText(*value*, [*arg1*], [*arg2*],...., [*argN*])

Argument	Description
value	
arg1, arg2, ..., argN	Optional arguments used to format the error message if it contains any substitution arguments (%1, %2).

Returns

Not applicable

Usage

When invoked, the RaiseErrorText method stops execution of the script.

Internally, the RaiseError and RaiseErrorText methods raise a Server Script exception. Therefore, if you have implemented error handling in your scripts, the error handling can suppress RaiseError and RaiseErrorText functionality.

If you have implemented error handling in Siebel VB and are using “On Error Goto ...”, the RaiseError and RaiseErrorText methods result in the script transferring execution to the error handler. “On Error Resume Next” suppresses the RaiseError and RaiseErrorText methods.

NOTE: Do not use the %s and %n formatting literals with the RaiseErrorText method. This causes unpredictable results.

Used With

Server Script

Example

In the following eScript example, the RaiseErrorText results in a scripting exception being raised, transferring control to the catch statement. For the error message to be displayed, the error must be thrown, using the throw statement.

```
function BusComp_PreDeleteRecord ()
{
   try {
      var status = this.GetFieldValue("Account Status");
```

```
         if (status == "Gold") {
            TheApplication().RaiseErrorText("Unable to delete Gold Account");
            return (CancelOperation);

         }
         else {
            return (ContinueOperation);
         }
      }
      catch (e) {
         throw e;
      }

   }
```

The following eScript example raises an error when deleting an opportunity with the “Pipeline” revenue class.

```
   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);
            return (CancelOperation);
         }

         else
         {
            return (ContinueOperation);
         }

      }
      catch (e)
      {
         throw e;
      }
   }
```

SetPositionId Method

SetPositionID sets the active position to the Position Id specified in the argument.

Syntax

Application.SetPositionId(*positionId*)

Argument	Description
positionId	A string containing the Position Id you would like to change to

Returns

A Boolean denoting whether or not the operation was successfully completed

Usage

When invoking the SetPositionId method, the positionId argument must contain a Position Id that has already been associated with the current, logged-in user.

Used With

COM Data Server, COM Data Control, Java Data Bean, Mobile Web Client Automation Server, Server Script

SetPositionName Method

SetPositionName sets the active position to the position name specified in the argument. Returns a Boolean indicating whether or not method succeeded.

Syntax

*Application.*SetPositionName*(positionName)*

Argument	Description
positionName	A string containing the name of the position.

Returns

A Boolean denoting whether or not the operation was successfully completed

Usage

When invoking the SetPositionName method, the “positionName” argument must contain a Position name that has already been associated with the current, logged-in user.

Used With

COM Data Server, COM Data Control, Java Data Bean, Mobile Web Client Automation Server, Server Script

SetProfileAttr Method

SetProfileAttr is used in personalization to assign values to attributes in a user profile.

Syntax

Application.SetProfileAttr(*name*, *value*)

Argument	Description
name	A string indicating the name of the attribute
value	The value of *name*

Returns

Not applicable

Usage

SetProfileAttr assigns the value *value* to the attribute in a user profile indicated by *name*. If the profile attribute specified in the argument string already exists, the corresponding persistent profile attribute in the application is updated with the new value. If the profile attribute specified in the argument string does not exist in the list of persistent profile attributes, it is created as a dynamic profile attribute, without quotation marks encompassing the name.

In Browser Script, using SetProfileAttr() triggers a round trip to the server and back, creating a performance overhead each time it is used.

Used With

Browser Script, COM Data Control, COM Data Server, Server Script, Java Data Bean, Mobile Web Client Automation Server

Example

The following example is in Browser Script:

```
function Applet_PreInvokeMethod (name, inputPropSet)

{
   if (name == "hobbyReq") {
      var hobby = theApplication().GetProfileAttr("Hobby");


      if (hobby == "") {
         hobby = prompt("Please enter your favorite hobby");
         theApplication().SetProfileAttr("Hobby", hobby);
      }
      return ("CancelOperation");
   }
```

```
      else
         return ("ContinueOperation");
   }
```

This following examples show how to exchange information between applet server scripts and applet browser scripts. In an applet server script, a customer profile attribute called MyProAttr is set to “Hello World” using the SetProfileAttr method. In applet browser scripts, you can retrieve the profile attribute using GetProfileAttr method.

The following example is in Siebel eScript:

```
function WebApplet_PreInvokeMethod (MethodName)
{

   if (MethodName == "MyCustomMethod") {

      TheApplication().SetProfileAttr("MyProAttr", "Hello World 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
```

See Also

“Name Method” on page 141. For more information on user profile attributes, read *Applications Administration Guide*.

SetSharedGlobal Method

Shared global variables are unique to the user and the user’s associated session. One user's global variables are not visible to other users. The variables are global to the current user and session only. The SetSharedGlobal property sets a shared user-defined global variable, which may be accessed using GetSharedGlobal.

Syntax

Application.SetSharedGlobal(*varName*, *value*)

Argument	Description
varName	String variable or literal containing the name of the shared global variable to set
value	String variable or literal containing the value to set the variable to set

Returns

Not applicable

Used With

COM Data Control, COM Data Server, Mobile Web Client Automation Server, Server Script

Example

The following example is for COM. SiebelApplication is an Application instance.

```
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")
```

In this example, the SetSharedGlobal method is called to set a global variable called myGlobalVar in Application_Start event. The global variable can be accessed from any event. For this example, in the BusComp_WriteRecord event, the GetSharedGlobal method is called to retrieve the global variable.

The following example is for COM. SiebelApplication is an Application instance.

```
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
```

See Also

"GetLastErrCode Method" on page 124

ShowModalDialog Method

ShowModalDialog allows you to show a modal dialog box with the cursor maintained in its default state. This Application object method invokes Microsoft's equivalent Window object method.

Syntax

theApplication().ShowModalDialog (*url[*, *argin][*, *options]*)

Argument	Description
url	The URL of the document to load and display.

Argument	Description
argin	This parameter is used to pass arguments to use when displaying the document. This argument can be a value of any type, including an array of values.
options	String that specifies the attributes of the window that displays the dialog box. This parameter may include one or more of the following semicolon-delimited values: ■ dialogHeight:*sHeight* sets the height of the dialog window, where *sHeight* can be an integer or floating-point number, followed by an absolute units designator (cm, mm, in, pt, pc, or px) or a relative units designator (em or ex). For consistent results, specify the dialogHeight and dialogWidth in pixels when designing modal dialog boxes. Default unit of measure is em. Minimum height is 100 pixels. ■ dialogLeft:*sXPos* sets the left position of the dialog window relative to the upper-left corner of the desktop. ■ dialogTop:*sYPos* sets the top position of the dialog window relative to the upper-left corner of the desktop. ■ dialogWidth:*sWidth* sets the width of the dialog window. ■ center:{ yes | no | 1 | 0 | on | off } specifies whether to center the dialog window within the desktop. The default is yes. ■ dialogHide:{ yes | no | 1 | 0 | on | off } specifies whether the dialog window is hidden when printing or using print preview. This feature is only available when a dialog box is opened from a trusted application. The default is no. ■ edge:{ sunken | raised } specifies the edge style of the dialog window. The default is raised. ■ help:{ yes | no | 1 | 0 | on | off } specifies whether the dialog window displays the context-sensitive Help icon. The default is yes. ■ resizable:{ yes | no | 1 | 0 | on | off } specifies whether the dialog window has fixed dimensions. The default is no. ■ scroll:{ yes | no | 1 | 0 | on | off } specifies whether the dialog window displays scrollbars. The default is yes. ■ status:{ yes | no | 1 | 0 | on | off } specifies whether the dialog window displays a status bar. The default is yes for untrusted dialog windows and no for trusted dialog windows. ■ unadorned:{ yes | no | 1 | 0 | on | off } specifies whether the dialog window displays the border window chrome. This feature is only available when a dialog box is opened from a trusted application. The default is no.

Returns

The value of the returnValue property, as set by the window of the document specified by the *url* parameter

Used With

Browser Script

Example

This example shows how this method can be used in browser script to bring up a modal dialog box with a specified URL.

```
function Applet_Load ()
{
  var sOptions="dialogHeight: 1000px;edge:sunken;resizable;yes";
  theApplication().ShowModalDialog("http://www.yahoo.com", "", sOptions)
}
```

SWEAlert Method

SWEAlert displays a modal dialog box containing a message to the user.

Syntax

theApplication().SWEAlert(message)

Returns

Undefined (similar to returning nothing)

Usage

Use SWEAlert instead of Alert. With Alert, popup applets such as Mvg and Pick applets are hidden (sent to the background) when a JavaScript Alert() is raised by a Browser side event. With SWEAlert, the dialog's parent applet is not sent to the foreground.

Used With

Browser Script

Example

The following browser script example displays a status message to the user.

```
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

The Trace method appends a message to the trace file. Trace is useful for debugging SQL query execution and the allocation of the objects. This tracing is not the same as the tracing that can be activated is the application's CFG file. For more information, read "Script Tracing" on page 18.

Syntax

Application.Trace(*message*)

Argument	Description
message	String variable or literal containing message text to append to the trace file

Returns

Not applicable

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following example is for COM Data Server. SiebelApplication is an Application instance.

```
   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
```

The following is sample 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 sample 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
```

See Also

"TraceOff Method"

"TraceOn Method" on page 159

TraceOff Method

TraceOff turns off the tracing started by the TraceOn method.

Syntax

Application.TraceOff

Argument	Description
Not applicable	

Returns

Not applicable

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

This Siebel VB example sets the value in the Sales Stage field to the default, that is, to the first value in the field's picklist, and 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
      .ClearToQuery
      .ActivateField "Sales Stage Order"
      .SetSortSpec "Sales Stage Order"
      .ExecuteQuery ForwardOnly
      if .FirstRecord then
         .Pick
      end if
   End With

   set oBC = Nothing

   TheApplication.TraceOff

End Sub
```

TraceOn Method

TraceOn turns on the tracking of allocations and deallocations of Siebel objects and SQL statements generated by the Siebel application.

Syntax

Application.TraceOn(*filename*, *type*, *selection*)

Argument	Description

filename	Output filename for the trace messages. If this argument is not specified, tracing information is logged to the Object Manager log file for that user session.
	
	The filename argument can take two additional inline arguments: $p and $t. The $p argument substitutes the process id to the filename, and $t substitutes the thread id to the file name. For example:
	
	`TheApplication().TraceOn("d:\\temp\\trace_$p_$t.txt", "Allocation", "All");`
	
	would log trace files to `d:\temp\trace\trace_1496_1412.txt`. Place a separator between the $p and $t arguments to make sure that the filename argument is unique. For example, if user A had a process id of 1 and a thread of 12 without using a separator, the tracing file would be
	
	`d:\temp\trace_112.txt`
	
	If user B had a process id of 11, and a thread id of 2, their tracing file would be
	
	`d:\temp\trace_112.txt`
	
	As a result, both users would attempt to log to the same file. Adding a separator between the process and thread id keeps the filenames unique.
	
	`d:\temp\trace_1_12.txt`
	
	`d:\temp\trace_11_2.txt`

type	Specifies the type of tracing to start. This can have the following values: ■ **Allocation.** Traces allocations and deallocations of Siebel objects. This option is useful if you suspect memory leaks in your code. ■ **SQL.** Traces SQL statements generated by the Siebel application.
selection	Indicates which Siebel objects should be traced for the Allocation trace type. This argument should be "" if the trace type is SQL. ■ **Script.** Traces VB and eScript objects. ■ **OLE.** Traces allocations for data server or automation server programs. ■ **All.** Traces all objects. The All value does not trace the Siebel objects managed implicitly by Siebel's declarative configuration use. *All* traces the Siebel objects constructed by scripting.

Returns

Not applicable

Usage

Always issue TraceOff to turn off tracing. If you attempt to call TraceOn with a different filename without calling TraceOff first, trace information is written to the new trace filename. You can issue multiple TraceOn statements to the same trace file.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following example is for COM Data Server. SiebelApplication is an Application instance.

```
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("d:\\temp\\trace.txt", "Allocation", "All");
TheApplication().TraceOn("d:\\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
```

The following is sample 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 sample 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
```

The following examples show the use of Trace, Traceoff, and TraceOn methods to generate 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(3);
      ClearToQuery();
      ActivateField("Sales Stage Order");
      SetSortSpec("Sales Stage Order(ASCENDING)");
      ExecuteQuery(1);
      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(ASCENDING)")

      With oBC
         .SetViewMode AllView
         .ClearToQuery
         .ActivateField "Sales Stage Order"
         .SetSortSpec "Sales Stage Order"
         .ExecuteQuery ForwardOnly
         If .FirstRecord Then
            .Pick
         End If
      End With

      Set oBC = Nothing
      TheApplication.Trace "End of tracing!"
      TheApplication.TraceOff
   End Sub
```

See Also

"Trace Method" on page 157
"TraceOff Method" on page 158

Application Events

The following topics describe application events:

- "Application_Close Event"
- "Application_InvokeMethod Event" on page 164
- "Application_Navigate Event" on page 165
- "Application_PreInvokeMethod Event" on page 165
- "Application_PreNavigate Event" on page 167
- "Application_Start Event" on page 168

Application_Close Event

The Close event is called before the application exits. This allows scripts to perform last-minute cleanup (such as cleaning up a connection to a COM server). It is called when Windows notifies the application that it should close, but not if the process is terminated directly.

Syntax

Application_Close

Argument	Description
Not applicable	

Returns

Not applicable

Used With

Server Script

NOTE: Siebel Business Processes invokes this event. For more information, read *Siebel Business Process Designer Administration Guide*.

Application_InvokeMethod Event

The Application_InvokeMethod event is called after a specialized method is invoked.

Server Script Syntax

Application_InvokeMethod(*methodName*)

Argument	Description
methodName	Name of the method invoked

Browser Script Syntax

Application_InvokeMethod(*name, inputPropSet*)

Argument	Description
inputPropSet	A property set containing arguments to be passed to the InvokeMethod event.

Returns

Returns TRUE if the call succeeds or FALSE if it does not succeed.

Usage

The InvokeMethod event is called just after a specialized or user-defined method is invoked on the application.

The Browser script implementation does not return a property set.

Used With

Browser Script, Server Script

See Also

"How Your Script Affects Program Flow" on page 63
"Application_PreInvokeMethod Event"

Application_Navigate Event

The Application_Navigate event is called after the client has navigated to a view.

Syntax

Application_Navigate

Argument	Description
Not applicable	

Returns

Not applicable

Used With

Server Script

Application_PreInvokeMethod Event

The PreInvokeMethod event is called before a specialized method is invoked by a user-defined applet menu or by calling InvokeMethod on the application.

Server Script Syntax

Application_PreInvokeMethod(*methodName*)

Argument	Description
methodName	String variable or literal containing the name of the method invoked

Browser Script Syntax

Application_PreInvokeMethod (*methodName*, *inputPropSet*)

Argument	Description
methodName	String variable or literal containing the name of the method invoked.
inputPropSet	A property set containing arguments to be passed to the event.

Returns

“ContinueOperation” or “CancelOperation”

Usage

The PreInvokeMethod event is called just before a specialized method is invoked on the application. If implementing a user-defined method, the script should return CancelOperation if you wish to handle the event entirely through your own scripting.

Specialized methods are methods based on applet or business component classes other than CSSFrame and CSSBusComp, respectively, that is, specialized classes.

When the method to be invoked is part of an If statement, this function’s return value must be assigned before the End If statement, as in the following code fragment.

```
If MethodName = “ResetQuery” then
   Application_PreInvokeMethod = CancelOperation
End If
```

CancelOperation stops the execution of the underlying Siebel code associated with the event. However, if there is code in the same script following CancelOperation, that code runs regardless of the CancelOperation.

Used With

Browser Script, Server Script

Example

The following example is in Siebel VB and shows an implementation of the PreInvokeMethod:

```
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 sample in Siebel eScript. Note that for this script to run, the entire Clib.system statement must appear 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)
}
```

See Also

"How Your Script Affects Program Flow" on page 63

Application_PreNavigate Event

The Application_PreNavigate event is called before the client navigates to a view.

Syntax

Application_PreNavigate(*DestViewName*, *DestBusObjName* As String) As Integer

Argument	Description
DestViewName	Name of the view to which the user is navigating
DestBusObjName	Business object of the destination view

Returns

CancelOperation or ContinueOperation

Used With

Server Script

Example

In the following eScript code sample the script checks for the current business object (contact) and sets the current contact id as global variable (can be used for keeping 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

The Start event is called when the client starts and again when the user interface is first displayed.

Syntax

Application_Start(*commandline*)

Argument	Description
commandline	Text of the command line with which the Siebel application was started.

NOTE: Siebel Business Processes invokes this event. For more information, read *Siebel Business Process Designer Administration Guide*.

Returns

Not applicable

Used With

Server Script

Example

This Siebel VB code should be placed in the Application_Start procedure for the application of your choice. This example retrieves the first and last name of the user logging into 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("Login Name")
   .ActivateField("First Name")
   .ActivateField("Last Name")
   .ClearToQuery
   .SetSearchSpec "Login Name", sLoginName
   .ExecuteQuery
   If .FirstRecord 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

In the methods described in this section, the placeholder *oBusComp* refers to a BusComp variable.

ActivateField Method

ActivateField allows queries to retrieve data for the argument-specified field.

Syntax

BusComp.ActivateField(*FieldName*)

Argument	Description
FieldName	String variable or literal containing the name of the field to activate

Returns

Not applicable

Usage

FieldName must be enclosed in double quotes and must be spelled exactly as the field name appears in Siebel Tools, using the same case. You must activate fields using ActivateField prior to executing a query for the business component.

NOTE: If you are writing an event handler on a business component, you must make sure that the field has already been activated by specifying the ForceActive user property on the control.

By default, fields are inactive except when:

- They are displayed on the applet and the business component is the instance on which the applet is based.
- They are System fields (which include Id, Created, Created By, Updated, and Updated By).
- Their ForceActive property is set to TRUE.
- The method ActivateField has been invoked with the *FieldName*.
- They have the Link Specification property set to TRUE.

After a business component has been executed, if additional fields are activated, the business component must be requeried before field values can be accessed. Failure to requery the business component results in a value of 0 being returned. The ActivateField method destroys the context of a query when it is used after the ExecuteQuery method.

The ActivateField method forces the specified field to be included in the SQL statement that is initiated by an ExecuteQuery method that follows. ActivateField should always be followed by ExecuteQuery. If a field is activated and then referenced by a GetFieldValue or SetFieldValue statement prior to an ExecuteQuery statement, the activation has no effect. The activated field is not retrieved through a query, so it contains an empty value.

If a field is not activated prior to a WriteRecord, the data is written to the database, but corruption issues may arise when mobile users synchronize. An ActivateField call prior to an ExecuteQuery call, followed by a WriteRecord, makes sure that the field is written correctly to the transaction log so that changes made by mobile users are saved back to the server database correctly at synchronization time.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following example is in Siebel VB. For an equivalent Siebel eScript example, read "ClearToQuery Method" on page 177.

```
Dim oEmpBusObj As BusObject
Dim oEmpBusComp As BusComp
Dim sLoginName As String

Set oEmpBusObj = TheApplication.ActiveBusObject
Set oEmpBusComp = oEmpBusObj.GetBusComp("Employee")
oEmpBusComp.ActivateField("Login Name")
oEmpBusComp.SetViewMode AllView
oEmpBusComp.ClearToQuery
oEmpBusComp.SetSearchSpec "Login Name", sLoginName
oEmpBusComp.ExecuteQuery
Set oEmpBusComp = Nothing
```

See Also

"DeactivateFields Method" on page 179

ActivateMultipleFields Method

Use ActivateMultipleFields to activate data for the fields specified in the property set.

Syntax

BusComp.ActivateMultipleFields(SiebelPropertySet sps)

Argument	Description
SiebelPropertySet	Property set containing a collection of properties representing the fields that are to be activated

Returns

TRUE if success; FALSE if failure

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following example is for Java Data Bean:

```
import com.siebel.data.*;
...
//Create Siebel Data Bean.
//login into Siebel 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 retrieves the First Name and Last Name of the first contact found:

```
var ContactBO = TheApplication().GetBusObject("Contact");
var ContactBC = ContactBO.GetBusComp("Contact");
with (ContactBC)
{
   ClearToQuery();
   SetViewMode(AllView);
   var fieldsPS = TheApplication().NewPropertySet();
   var valuesPS = TheApplication().NewPropertySet();
   fieldsPS. SetProperty("Last Name", "");
```

```
      fieldsPS.SetProperty("First Name", "");
      ActivateMultipleFields(fieldsPS);
      ExecuteQuery();
      if (FirstRecord())
      {
         GetMultipleFieldValues(fieldsPS, valuesPS);
         var slName = valuesPS.GetProperty("Last Name");
         var sfName = valuesPS.GetProperty("First Name");
      }
   }
```

See Also

"SetMultipleFieldValues Method" on page 222
"GetMultipleFieldValues Method" on page 194

Associate Method

The Associate method creates a new many-to-many relationship for the parent object through an association business component (see GetAssocBusComp).

Syntax

BusComp.Associate(*whereIndicator*)

Argument	Description
whereIndicator	This argument should be one of the following predefined constants or the corresponding integer: NewBefore (0) or NewAfter (1), as in NewRecord.

Returns

Not applicable

Usage

To set field values on a child record that has been associated to a parent record, use the context of the MVGBusComp.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following VB example updates the Opportunity Assignment Type field. The parent business component can be any business component that includes the Sales Rep multi-value 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 with the Last Name = “Abanilla”, and adds a new organization named “CKS Software” to its Organization MVG.

```
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();
   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

   } // With ContactBC
```

See Also

"NewRecord Method" on page 210
"FirstSelected Method" on page 186
"GetMVGBusComp Method" on page 195

BusObject Method

The BusObject method returns the business object that contains the business component.

Syntax

BusComp.BusObject

Argument	Description
Not applicable	

Returns

The business object that contains the business component

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

For an example, read "GetViewMode Method" on page 201.

See Also

"ActiveBusObject Method" on page 112

ClearToQuery Method

The ClearToQuery method clears the current query but does not clear sort specifications on the BusComp.

Syntax

BusComp.ClearToQuery

Argument	Description
Not applicable	

Returns

Not applicable

Usage

Any fields to be queried must be activated before ClearToQuery. For more information, read "ActivateField Method" on page 171.

Search and sort specifications sent to the business component are cumulative; the business component retains and logically ANDs query qualifications since the last ClearToQuery, except for new search specifications on a field for which a search specification has previously been set. In that circumstance, the new specification replaces the old.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following example is in Siebel eScript. For Siebel VB examples, read "Applet_PreInvokeMethod Event" on page 99, "ActivateField Method" on page 171, and "ExecuteQuery Method" on page 181. For another eScript example, read "GotoView Method" on page 130.

```
var oEmpBusObj = TheApplication().ActiveBusObject();
var oEmpBusComp = oEmpBusObj ().GetBusComp("Employee");
var sLoginName;

oEmpBusComp.ActivateField("Login Name");
oEmpBusComp.ClearToQuery();
oEmpBusComp.SetSearchSpec("Login Name", sLoginName);
oEmpBusComp.ExecuteQuery();

oEmpBusComp = null;
oEmpBusObj = null;
```

See Also

“RefineQuery Method” on page 216

CountRecords Method

CountRecords uses database aggregation to count the records returned by the last ExecuteQuery() call.

Syntax

BusComp.CountRecords()

Argument	Description
Not applicable	

Returns

An integer indicating the number of records returned by the last ExecuteQuery() call.

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();
         ActivateField("Name");
         SetSearchSpec ("Name", "A*");
         ExecuteQuery ();
         var count = CountRecords();
      }

      // other code..

      return (CancelOperation);
   }

   return (ContinueOperation);
}
```

DeactivateFields Method

DeactivateFields deactivates the fields that are currently active from a business component SQL query statement, except those that are not ForceActive, required for a link, or required by the BusComp class.

Syntax

BusComp.DeactivateFields

Argument	Description
Not applicable	

Returns

Not applicable

Usage

You must activate fields using ActivateField prior to executing a query for the business component.

By default, fields are inactive except when:

- They are displayed on the applet and the business component is the instance on which the applet is based.
- They are System fields (which include Id, Created, Created By, Updated, and Updated By).
- Their ForceActive property is set to TRUE.
- The method ActivateField has been invoked with the *FieldName*.
- They have the Link Specification property set to TRUE.

After fields have been deactivated, the business component must be reexecuted or the application crashes.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Examples

The following example is for COM. `SiebelApplication` is an Application instance.

```
Dim oBO As BusObject
Dim OBC As BusComp
Dim errCode

Set oBO = SiebelApplication.GetBusObject("Account", errCode)
Set oBC = oBO.GetBusComp("Account", errCode)
oBC.DeactivateFields errCode
oBC.ActivateField "Name", errCode
oBC.ActivateField "Location", errCode
oBC.ClearToQuery errCode
oBC.ExecuteQuery ForwardOnly, 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.DeactivateFields();
oBC.ActivateField("Name");
oBC.ActivateField("Location");
oBC.ClearToQuery();
oBC.ExecuteQuery(ForwardOnly);
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.DeactivateFields
oBC.ActivateField "Name"
oBC.ActivateField "Location"
oBC.ClearToQuery
oBC.ExecuteQuery ForwardOnly
Set oBC = Nothing
Set oBO = Nothing
```

See Also

"ActivateField Method" on page 171

DeleteRecord Method

DeleteRecord removes the current record from the business component.

Syntax

BusComp.DeleteRecord

Argument	Description
Not applicable	

Returns

Not applicable

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

This Siebel VB example illustrates how to delete 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
```

NOTE: The cursor is moved to the next record after DeleteRecord is executed. Therefore, it is not necessary to execute NextRecord after DeleteRecord. Do not use NextRecord after DeleteRecord in a loop because this causes the deletion of the last record in the loop to be skipped. If you use DeleteRecord on the last record, the cursor points to nothing.

ExecuteQuery Method

ExecuteQuery returns a set of BusComp records using the criteria established with methods such as SetSearchSpec.

Syntax

BusComp.ExecuteQuery ([*cursorMode*])

Argument	Description
cursorMode	An integer. An optional argument that must be one of the following constants (provided in Siebel VB as well as COM Servers): ■ **ForwardBackward.** Selected records can be processed from first to last or from last to first. This is the default if no value is specified. ■ **ForwardOnly.** Selected records can be processed only from the first record to the last record. Focus cannot return to a record.

Returns

Not applicable

Usage

Use a cursorMode of ForwardOnly wherever possible to achieve maximum performance. If you use ForwardOnly, make sure that your application code does not attempt to navigate backward using PreviousRecord or FirstRecord without a requery. Do not use ForwardOnly when operating on UI business components unless the application code requeries using a cursorMode of ForwardBackward.

When using the ForwardBackward cursor mode, and the query matches over 10,000 records, the object manager returns this error message: “There were more rows than could be returned. Please refine your query to bring back fewer rows.”

To reduce the number of queries needed, you can use the parent-child relationships for business components that are set up in business objects. For example, an Opportunity business object sets up a parent-child relationship between the Opportunity business component and the Contact business component. If you query on the Opportunity business component you can read values from the corresponding records in the Contact business component without any additional queries. Before querying a child business component, you must query its parent, otherwise the query returns no records.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

This Siebel VB example sets up and executes a query to find the primary on the account team. Only the primary can change the primary address. For other examples, read “Applet_PreInvokeMethod Event” on page 99, “GotoView Method” on page 130, and “ClearToQuery Method” on page 177.

```
(general) (declarations)
Option Explicit
Function BusComp_PreSetFieldValue (FieldName As String,
FieldValue As String) As Integer
```

```
Dim iReturn As Integer, i As Integer
Dim iFoundP As Integer ' 1 = found (TRUE), 0 = not found (FALSE)
Dim oMVGBC as BusComp

iReturn = ContinueOperation
iFoundP = FALSE
Select Case FieldName
Case "SSA Primary Field"
   set oMVGBC = me.ParentBusComp.GetMVGBusComp("Sales Rep")
   With oMVGBC ' this is the position BC
      .ActivateField "Active Login Name"
      .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 change the Primary address
               because you are not the Primary on the Account Team")
            iReturn = CancelOperation
         end if
      Exit Do
      else
         i = .NextRecord
      end if
      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 = iReturn

End Function
```

See Also

"ClearToQuery Method" on page 177
"SetSearchSpec Method" on page 227

ExecuteQuery2 Method

ExecuteQuery2 returns a set of BusComp records using the criteria established with methods such as SetSearchSpec.

Syntax

BusComp.ExecuteQuery2 ([*cursorMode]*, *ignoreMaxCursorSize*)

Argument	Description
cursorMode	An integer. An optional argument that can be one of the following two constants (provided in Siebel VB as well as COM Servers): ■ **ForwardBackward.** Selected records may be processed from first to last or from last to first. This is the default if no value is specified. ■ **ForwardOnly.** Selected records can be processed only from the first record to the last record. Focus cannot return to a record.
ignoreMaxCursorSize	■ **TRUE.** Retrieves every row from a business component. This option may result in lower performance. ■ **FALSE.** Retrieves the number of rows specified by the MaxCursorSize argument in the CFG file.

Returns

Not applicable

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

FirstRecord Method

FirstRecord moves the record pointer to the first record in a business component, making that record current and invoking any associated script events.

Syntax

BusComp.FirstRecord

Argument	Description
Not applicable	

Returns

An integer in Siebel VB: 1 or nonzero if there was a first record (the query returned results) and 0 if there are no records; a Boolean in Siebel eScript, COM, and ActiveX.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Examples

The following examples show how the FirstRecord method could be used to check whether an Account displayed in a child applet (for example, the Account List Applet - child applet in the Contact Detail - Accounts View) has any service requests associated to it. The outcome of this could then determine whether other code should be run against the Account record.

The following example is in Siebel eScript:

```
function BusComp_PreInvokeMethod (MethodName)
{
   // 'CheckSR' method invoked from a custom button on 'Account List Applet - child'
applet.
   if (MethodName == "CheckSR")
   {
      var oBO = TheApplication().ActiveBusObject();
      var oBC = oBO.GetBusComp("Service Request");
      var strAccntId = this.GetFieldValue("Id");

      with (oBC)
      {
         SetViewMode(AllView);
         ActivateField("Account Id");
         ClearToQuery();
         SetSearchSpec("Account Id", strAccntId);
         ExecuteQuery(ForwardOnly);
         if (FirstRecord())
         {

            // [additional 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 invoked from a custom button On 'Account List Applet - child'
Applet.
   If MethodName = "CheckSR" Then
      Dim oBO As BusObject
      Dim oBC As BusComp
      Dim strAccntId As String

      Set oBO = TheApplication.ActiveBusObject
      Set oBC = oBO.GetBusComp("Service Request")
      strAccntId = me.GetFieldValue("Id")

      With oBC
         .ActivateField("Account Id")
         .SetViewMode AllView
         .ClearToQuery
         .SetSearchSpec "Account Id", strAccntId
         .ExecuteQuery ForwardOnly
         If .FirstRecord Then
            '[additional code placed here]
         Else
            TheApplication.RaiseErrorText("No Service Requests Associated To This
Account.")
         End If

      End With

      iRtn = CancelOperation
   End If

   BusComp_PreInvokeMethod = iRtn
End Function
```

See Also

"NextRecord Method" on page 211

FirstSelected Method

FirstSelected moves the focus to the first record of the multiple selection in the business component, invoking any associated Basic events.

Syntax

BusComp.FirstSelected

Argument	Description
Not applicable	

Returns

An integer in Siebel VB: 1 or nonzero if there was a first record (the query returned results) and 0 if there are no records; a Boolean in ActiveX, COM, and Siebel eScript.

Used With

COM Data Server, Server Script

Examples

The following examples show how the FirstSelected method could be used in conjunction with the NextSelected method to provide custom multirecord deletion functionality. This code could be triggered in respect to the user invoking the Delete Selected custom method, when pressing a custom button on an applet.

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

GetAssocBusComp returns the association business component. The association business component can be used to operate on the association using the normal business component mechanisms.

Syntax

BusComp.GetAssocBusComp

Argument	Description
Not applicable	

Returns

The association business component for a business component

Usage

This method and the Associate method make sense only for many-to-many relationships, which are based on intersection tables, for example Account and Industry. In the context of a many-to-many relationship, you can use Siebel VB to either a*dd* a new record (that is, associate a new child record), or *insert* a record (that is, create a new record) in the child business component. To *add* a record, use GetAssocBusComp and the Associate method. To *insert* a record, use GetMVGBusComp and the NewRecord method. The GetAssocBusComp should be set to Nothing after use.

GetAssocBusComp can also be applied to the Child Business Component of a Master Detail View (rather than upon the MVG BusComp) when a N:M Link is used and the Child Applet has an Association Applet defined.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following example is in Siebel VB and uses GetAssocBusComp to add a new industry to an account record:

```
Dim oAssocBC As BusComp

Set oAssocBC = oMainBc.GetMVGBusComp("Industry").GetAssocBusComp
With oAssocBC
   .ActivateField "SIC Code"
   .SetSearchExpr "[SIC Code] = ""5734"" "
   .ExecuteQuery ForwardOnly

   If .FirstRecord Then .Associate NewBefore
End With
Set oAssocBC = Nothing
```

The following is the equivalent Siebel eScript code:

```
//get the business Object and the business component
var oAssocBC = oMainBc.GetMVGBusComp("Industry").GetAssocBusComp();
with (oAssocBC)
{
   ActivateField("SIC Code");
   SetSearchExpr("[SIC Code] = ""5734"" ");
   ExecuteQuery(ForwardOnly)
   If (FirstRecord())
      Associate(NewBefore);
}
oAssocBC = null;
```

See Also

"GetMVGBusComp Method" on page 195
"GetPicklistBusComp Method" on page 197

GetFieldValue Method

GetFieldValue returns the value for the field specified in its argument for the current record of the business component. Use this method to access a field value.

Syntax

BusComp.GetFieldValue(*FieldName*)

Argument	Description
FieldName	String variable or literal containing the name of the field

Returns

A string containing the field value of the field identified in *FieldName*, an error message if the field is inactive, or an empty string if the field is empty.

NOTE: Date fields retrieved by GetFieldValue() are always returned using the format MM/DD/YYYY, no matter what your local date format is set to. Use GetFormattedFieldValue() to get the same date format you use in the client interface.

Usage

Only fields that were active at the time of the BusComp query contain values. For more information, read "ActivateField Method" on page 171. If this method is used on fields that are not active, an error message is returned. If this method is used on fields that are empty, an empty string is returned.

CAUTION: If a value from a business component that is a child of the current business component is desired, the Link Specification property for that field must be set to TRUE in Siebel Tools. Otherwise, the parent business component cannot access the value in the child business component. For more information, read *Object Types Reference*.

The *FieldName* must be enclosed in double quotes and must be spelled exactly as the field name appears in Siebel Tools, with the correct case; for example,

```
GetFieldValue("ActivityCreatedByName")
```

The name "Person who created the activity", as shown in the status bar, does not work; nor does the column head "Created By".

NOTE: In Browser Script, GetFieldValue can be used only for the fields exposed in the applet and for the system Id field.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following example is in Siebel VB. It shows an implementation of the PreSetFieldValue event to illustrate the use of GetFieldValue:

```
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 is the equivalent example 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;
   }
```

See Also

"ActivateField Method" on page 171
"GetFormattedFieldValue Method"

GetFormattedFieldValue Method

GetFormattedFieldValue returns the field value in the current local format; it returns values in the same format as the Siebel UI.

Syntax

BusComp.GetFormattedFieldValue(*FieldName*)

Argument	Description
FieldName	String variable or literal containing the name of the field to obtain the value from

Returns

A string containing the value of the requested field, in the same format as displayed in the user interface, or an empty string ("") if the field is inactive or empty.

Usage

GetFormattedFieldValue is useful for code that is used in multiple countries with different formats for currency, date, and number. This method can be used only on fields that have been activated using ActivateField.

Some special behavior is associated with particular data types.

DTYPE_PHONE. When used on fields of DTYPE_PHONE, these methods return formatted phone numbers.

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. When used on fields of DTYPE_DATE, these methods are the same as GetFieldValue and SetFieldValue, except that the result is in the format of the Regional Setting.

Table 20 shows the standard formats used by GetFieldValue and SetFieldValue to return data.

Table 20. Date and Time Formats

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 SetFieldValue and your Regional Setting format is different, you receive an error like this:

```
Error: The value '31-Dec-99' can not be converted to a date time value.
```

This error can be avoided by using the GetFormattedFieldValue and SetFormattedFieldValue methods.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following Siebel VB example demonstrates how to use the GetFormattedFieldValue function and how to calculate 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
```

See Also

"ActivateField Method" on page 171
"GetFieldValue Method" on page 189
"SetFieldValue Method" on page 219
"SetFormattedFieldValue Method" on page 221

GetLastErrCode Method

The GetLastErrCode method returns the most recent error code on the business component level.

Syntax

BusComp.GetLastErrCode

Argument	Description
Not applicable	

Returns

The last error code as a short integer. 0 indicates no error.

Usage

After execution of a method, the GetLastErrCode can be invoked to check if any error was returned from the previous operation. The GetLastErrText method can be invoked to retrieve the text of the error message. The text retrieved using GetLastErrText also includes a Siebel error number that can be used to search Siebel SupportWeb for additional information about the error.

Used With

COM Data Control, Mobile Web Client Automation Server

GetLastErrText Method

The GetLastErrText method returns the last error text message on the business component level.

Syntax

BusComp.GetLastErrText

Argument	Description
Not applicable	

Returns

The most recent error text message as a String

Usage

After execution of a method, the GetLastErrCode can be invoked to check if any error was returned from the previous operation. The GetLastErrText method can be invoked to retrieve the text of the error message.

Used With

COM Data Control, Mobile Web Client Automation Server

See Also

"GetLastErrCode Method"

GetMultipleFieldValues Method

GetMultipleFieldValues returns values for the fields specified in the property set.

Syntax

BusComp.GetMultipleFieldValues(SiebelPropertySet *fieldNames*, SiebelPropertySet *fieldValues*)

Argument	Description
fieldNames	A property set containing a collection of properties representing the fields
fieldValues	A property set containing a collection of properties representing the values for the fields specified in the *fieldNames* argument

Returns

TRUE if success; FALSE if failure

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

See Also

"SetMultipleFieldValues Method" on page 222

GetMVGBusComp Method

The GetMVGBusComp method returns the MVG business component associated with the business component field specified by *FieldName*. This business component can be used to operate on the multi-value group using the normal business component mechanisms.

Syntax

BusComp.GetMVGBusComp(*FieldName*)

Argument	Description
FieldName	Name of the field with a multi-value group attached, used to obtain the multi-value group business component

Returns

The multi-value group business component of the current business component and identified field

Usage

A multi-value group is a set of detail records attached to the current record in the business component that holds the corresponding multi-value field.

The GetMVGBusComp should be set to Nothing after use.

NOTE: In the context of a many-to-many relationship, you can use Siebel VB to either add a new record, that is, associate a new child record, or insert a record, that is, create a new record in the child business component. To *add* a record, use GetAssocBusComp and the Associate method. To *insert* a record, use GetMVGBusComp and the NewRecord method.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following sample VB code using GetMVGBusComp inserts a new address to the "Hong Kong Flower Shop account record. For other examples, read "ExecuteQuery Method" on page 181 and "FirstSelected Method" on page 186.

```
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
   .ActivateField "Name"
   .ClearToQuery
   .SetSearchSpec "Name", "Hong Kong Flower Shop"
   .ExecuteQuery
   Set AddrBC = .GetMVGBusComp "Street Address"
End With

With AddrBC
   .NewRecord NewAfter
   .SetFieldValue "City", "Denver"
   .WriteRecord
End With

Set AccntBO = Nothing
Set AccntBC = Nothing
Set AddrBC = Nothing
```

See Also

“FirstSelected Method” on page 186
“GetPicklistBusComp Method”

GetNamedSearch Method

GetNamedSearch returns the named search specification specified by *searchName*.

Syntax

BusComp.GetNamedSearch(*searchName*)

Argument	Description
searchName	Name of the search specification that references the search string.

Returns

A string containing the value specified in the search specification identified in *searchName*

Usage

The search specification uses the same syntax as used in predefined queries.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

See Also

"GetSearchExpr Method" on page 199
"GetSearchSpec Method" on page 200
"SetNamedSearch Method" on page 224

GetPicklistBusComp Method

GetPicklistBusComp returns the pick business component associated with the specified field in the current business component.

Syntax

BusComp.GetPicklistBusComp(*FieldName*)

Argument	Description
FieldName	Name of the field with a picklist specified; used to obtain the pick business component

Returns

The pick business component of the current business component and identified field

Usage

The returned pick business component can be used to operate on the picklist. The GetPickListBusComp should be destroyed after use by using the Nothing function.

NOTE: When a record is picked on a constrained picklist using the GetPickListBusComp and Pick methods, the constraint is active. Therefore, the retrieved picklist business component contains only those records that fulfill the constraint.

To pick a value from a picklist in Siebel VB

1. Use GetPicklistBusComp to create an instance of the pick list business component.
2. Navigate in the picklist business component to the record you want to pick.
3. Use Pick to pick the value.
4. Use `Set objBCPickList = Nothing` to explicitly destroy the picklist business component instance.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

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 Java Data Bean. It selects 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.activateField("Name");
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
```

See Also

"FirstSelected Method" on page 186
"GetMVGBusComp Method" on page 195

GetSearchExpr Method

GetSearchExpr returns the current search expression for the business component.

Syntax

BusComp.GetSearchExpr

Argument	Description
Not applicable	

Returns

A string containing the current search expression. An example of a returned search expression string is "Revenue > 10000 AND Probability > .5".

Usage

GetSearchSpec retrieves the business component state, not the values. The business component state does not change until the query is executed. Note that it may never change to the original value if the user input is invalid.

When using GetSearchExpr in a browser script and the Applet_PreInvokeMethod, GetSearchExpr returns a null value even if a query filter has been added.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

See Also

"GetNamedSearch Method" on page 196
"GetSearchSpec Method"
"SetSearchExpr Method" on page 226

GetSearchSpec Method

GetSearchSpec returns the search specification for the field specified by the *FieldName* argument.

Syntax

BusComp.GetSearchSpec(*FieldName*)

Argument	Description
FieldName	Contains the name of the field from which to obtain the associated search specification.

Returns

A string containing the search specification for the field identified in *FieldName*. An example of a returned search specification string is "> 10000".

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

See Also

"GetNamedSearch Method" on page 196
"GetSearchExpr Method" on page 199
"SetSearchSpec Method" on page 227

GetUserProperty Method

GetUserProperty returns the value of a named user property.

Syntax

BusComp.GetUserProperty(*propertyName*)

Argument	Description
propertyName	Contains the name of the user property to obtain.

Returns

The user property

Usage

The value of a user property is set using SetUserProperty. The user properties act like instance variables of a business component. The advantage of user properties is that they can be accessed from anywhere in the code (even from other applications through COM) using GetUserProperty. An instance variable, on the other hand, can be accessed only from within Siebel VB from the same object on which the variable is declared.

The value of the property is reset every time you instantiate a new business component.

NOTE: GetUserProperty does not interact directly with user properties defined in Siebel Tools.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

See Also

"SetUserProperty Method" on page 233

GetViewMode Method

Getdcc returns the current visibility mode for the business component. This effects which records are returned by queries according to the visibility rules. For more information, read "SetViewMode Method" on page 234.

Syntax

BusComp.GetViewMode

Argument	Description
Not applicable	

Returns

An integer constant that identifies a visibility mode

mode	Where *mode* is a SiebelView Mode constant or its corresponding integer value. The constants shown are defined in three environments. For details on each Siebel ViewMode constant, read "SetViewMode Method" on page 234. ■ SalesRepView (0) ■ ManagerView (1) ■ PersonalView (2) ■ AllView (3) ■ OrganizationView (5) ■ GroupView (7) ■ CatalogView (8) ■ SubOrganizationView (9)

Usage

GetViewMode() returns NoneSetView mode until a business component is executed or has its view mode set through SetViewMode(). The NoneSetViewMode value indicates that the business component has not yet had any visibility rules applied to it. A business component that has just been created through a call to GetBusComp() is in this state, so if a specific view mode is desired, it must be explicitly set through SetViewMode(). Otherwise, the first time the business component is executed, its view mode is set according to some internal rules.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

See Also

"SetViewMode Method" on page 234

InvokeMethod Method

InvokeMethod calls the specialized method or user-created method named in the argument.

VB Syntax

BusComp.InvokeMethod *methodName*, *methodArgs*

Argument	Description
methodName	The name of the method. For more information on the available methods, read "InvokeMethod Methods" on page 204.
methodArgs	A single string or a string array (object interfaces) containing arguments to *methodName.*

eScript Syntax

BusComp.InvokeMethod(*methodName, methArg1, methArg2, …, methArgn*);

Argument	Description
methodName	The name of the method
methArg1, methArg2, …, methArgn	One or more strings containing arguments *to methodName*

Returns

In Server Script, returns a string containing the result of the method.

In Browser Script, returns a property set.

Usage

Use InvokeMethod to call methods on a business component object that are not exposed directly through the object interface.

Specialized methods are typically methods implemented in applet or business component classes other than CSSFrame and CSSBusComp, respectively, that is, specialized classes.

NOTE: The InvokeMethod method should be used only with documented specialized methods. Siebel Systems does not support calling specialized methods with InvokeMethod, unless they are listed in this book.

Used With

COM Data Control, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following example is in Siebel VB:

```
(general) (declarations)
Option Explicit
```

```
Sub Button1_Click
Me.BusComp.InvokeMethod "Select All"
End Sub

Function BusComp_PreInvokeMethod (MethodName As String) As Integer
BusComp_PreInvokeMethod = ContinueOperation
On Error GoTo Leave
If MethodName = "Select All" Then
   Dim oCurBC as BusComp
   Set oCurBC = Me
   If oCurBC is not nothing Then
      oCurBC.ClearToQuery
      oCurBC.ExecuteQuery
      BusComp_PreInvokeMethod = CancelOperation
   End If
End If

Leave:
End Function
```

The following is the equivalent example in Siebel eScript.

```
function BusComp_PreInvokeMethod (MethodName)
{
   var iReturn = ContinueOperation;
   If (Clib.errno() != 0)
      return(CancelOperation);
   if (MethodName = "Select All")
   {
      var oCurBC = this;
      if (oCurBC != null)
      {
         oCurBC.ClearToQuery();
         oCurBC.ExecuteQuery();
         return(CancelOperation);
      }
   }
return (iReturn);
}
```

InvokeMethod Methods

Siebel applications provide multiple methods for manipulating files stored in the Siebel File System. These methods may be invoked using server script (Siebel VB, eScript) or using one of our programmatic interfaces (Mobile Web Client Automation Server – connected mode only, COM Data Control, Java Data Bean). The methods available for manipulating the file system always store or retrieve the file to and from the local file system. For example, if you construct a Java client using the Java Data Bean to manipulate the file system, all files must be accessible from the Siebel Server. You can use UNC naming conventions (for example: \\server\dir\file.txt) or standard DOS directories (for example: D:\dir\file.txt) for file access, but the UNC path or mounted file system must be accessible to the Siebel Server. These methods do not serialize the files from a remote client and place them in the Siebel file system.

Methods that manipulate files are available for business components whose Class is 'CSSBCFile'. The methods can be accessed using COM Data Control, Java Data Bean, Mobile Web Client Automation Server, and Server Script.

The following methods are available for use with InvokeMethod:

- "CreateFile"
- "GenerateProposal" on page 205
- "GetFile" on page 206
- "PutFile" on page 207
- "RefreshRecord" on page 207
- "SetAdminMode" on page 208

CreateFile

To create a file in the Siebel file system from an external source, use the business component CreateFile method. Before calling CreateFile, make sure that a new business component record has been created using the NewRecord method for the business component.

Syntax

BusComp.InvokeMethod("CreateFile", SrcFilePath, KeyField, keepLink)

Argument	Description
SrcFilePath	The fully qualified path of the file on the Siebel Server or Mobile Web Client.
KeyFieldName	The name of the field in the business component that contains the File Name. For example: AccntFileName field in the Account Attachment business component.
KeepLink	Applies to URLs. Either Y or N depending on whether a link to the file is stored as an attachment instead of the actual file.

Returns

A string containing the values of "Success" or "Error" depending on whether or not the operation succeeded.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

GenerateProposal

GenerateProposal creates a new proposal record. The DocServer handles the work of generating the actual proposal.

Syntax

To specify a template:
BusComp.InvokeMethod("GenerateProposal", RecordExists, Replace, TemplateFile);

To use the default proposal template:
BusComp.InvokeMethod("GenerateProposal", RecordExists, Replace);

Argument	Description
RecordExists	If FALSE, then a new record is created and used to create a new proposal. If TRUE, the current selected proposal is used.
Replace	If TRUE, the template file is copied from the template into the proposal (as a draft file). You should typically call this method with this argument set to FALSE.
TemplateFile	(Optional) The default value of this argument is NULL. A string that specifies the name of the template to use. When a string is passed into this argument, the proposal searches for the first template record whose name contains the string passed rather than using the default template.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

GetFile

Obtains a file from the Siebel file system and places that file on the local file system of the Siebel Server or Mobile Client. Note that you must be properly positioned on the desired file attachment record to get the file and have it placed on the local file system’s temporary directory.

Syntax

BusComp.InvokeMethod(“GetFile”, KeyField)

Argument	Description
KeyFieldName	The name of the field in the business component that contains the File Name. For example: AccntFileName field in the Account Attachment business component.

Returns

A string containing “Success, <outFilePath>” if the operation succeeded. OutFilePath is the fully qualified path of the file on the Client/Server machine in the user’s temp directory. The return value is “Error” if the operation failed.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

PutFile

Updates a file in the Siebel file system with a newer file. Note that you must be properly positioned on the desired file attachment record to update the file in the file system.

Syntax

BusComp.InvokeMethod(“PutFile”, SrcFilePath, KeyField)

Argument	Description
SrcFilePath	This is the fully qualified path of the file on the Siebel Server or Mobile Web Client.
KeyFieldName	This is the name of the field in the business component that contains the File Name. For example: AcctFileName field in the Account Attachment business component.

Returns

A string containing the values of “Success” or “Error” depending on whether or not the operation succeeded.

Usage

After using PutFile to save a file attachment the updated attachment is not visible in the user interface until you call the WriteRecord method. For more information about WriteRecord, read “WriteRecord Method” on page 238.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

RefreshRecord

This method refreshes the business component, which triggers an update of the business component fields in the client display and positions the cursor on the context record.

Syntax

retVal = BusComp.InvokeMethod(“RefreshRecord”)

Argument	Description
none	

Returns

Not Applicable

Used With

Browser Script, COM Data Control, Java Data Bean, Mobile Web Client Automation Server, Server Script

SetAdminMode

This method is particularly useful if you need to replicate the behavior enforced by the ‘Admin’ property of the View object by disabling all visibility rules for the business component.

Syntax

BusComp.InvokeMethod(“SetAdminMode”, flag)

Argument	Description
flag	“TRUE” or “FALSE”. Flag to specify whether the business component should be executed in Admin mode.

Returns

Not Applicable

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

LastRecord Method

LastRecord moves the record pointer to the last record in the business component.

Syntax

BusComp.LastRecord

Argument	Description
Not applicable	

Returns

An integer in Siebel VB; a Boolean in ActiveX, COM, Java Data Bean, Siebel eScript.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following example is for Mobile Web Client Automation Server. SiebelApplication is an Application instance.

```
Private Sub LastRecord_Click()

   Dim errCode As Integer
   Dim oBusComp as SiebelBusComp
   FieldValue.Text = ""
   HourGlassStart
   oBusComp.LastRecord errCode

   If errCode = 0 Then
      FieldValue.Text = oBusComp.GetFieldValue(FieldName.Text, _
         errCode)
   End If

   HourGlassStop

   Status.Text = SiebelApplication.GetLastErrText
End Sub
```

See Also

"FirstRecord Method" on page 184
"NextRecord Method" on page 211

Name Method

The Name property contains the name of the business component.

Syntax

BusComp.Name

Argument	Description
Not applicable	

Returns

A string containing the business component name

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following example is in Browser Script:

```
function BusComp_PreSetFieldValue (fieldName, value)
{
   theApplication().SWEAlert(this.Name());
}
```

NewRecord Method

NewRecord adds a new record (row) to the business component.

Syntax

BusComp.NewRecord(*whereIndicator*)

Argument	Description
whereIndicator	Predefined constant or corresponding integer indicating where the new row is added. This value should be one of the following: ■ 0 (or NewBefore) ■ 1 (or NewAfter) ■ 2 (or NewBeforeCopy) ■ 3 (or NewAfterCopy) With Java Data Bean the values are: ■ FALSE (equivalent to NewBefore) ■ TRUE (equivalent to NewAfter)

Returns

Not applicable

Usage

This new row becomes the current row, either before or after the previously current record, depending on the value you selected for WhereIndicator.

You can use NewRecord to copy a record. To place the copy before the original record use the following command.

```
Object.NewRecord NewBeforeCopy
```

To place the copy after the original record, use the following command.

```
Object.NewRecord NewAfterCopy
```

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

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

NextRecord moves the record pointer to the next record in the business component, making that the current record and invoking any associated script events.

Syntax

BusComp.NextRecord

Argument	Description
Not applicable	

Returns

An integer in Siebel VB; a Boolean in Siebel eScript and COM: 1 if the record pointer was moved to the next record, 0 if the current record was already the last record.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following example is in Siebel eScript. For the equivalent Siebel VB example, read "FirstRecord Method" on page 184.

```
var i = 0;
var isRecord;

with (this)
{
   ClearToQuery();
   SetSearchSpec("Name", "*");
   ExecuteQuery(ForwardBackward);
   isRecord = FirstRecord();
}
while (isRecord)
{
   i++;
   isRecord = BusComp.NextRecord();
}
```

See Also

"FirstRecord Method" on page 184

NextSelected Method

NextSelected moves the focus to the next record of the current multiple selection.

Syntax

BusComp.NextSelected

Argument	Description
Not applicable	

Returns

An integer: 1 if there is another record in the multiple selection, 0 otherwise.

Used With

Server Script

Example

For examples, read "FirstSelected Method" on page 186.

ParentBusComp Method

ParentBusComp returns the parent (master) business component when given the child (detail) business component of a Link.

Syntax

BusComp.ParentBusComp

Argument	Description
Not applicable	

Returns

The parent business component of the Link

Usage

ParentBusComp allows you to write code in the child business component that accesses field values and performs actions on the parent business component using the normal business component mechanisms.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following example is in Siebel VB. For another example, read "ExecuteQuery Method" on page 181.

```
Dim strParentName as String
...
strParentName = Me.ParentBusComp.GetFieldValue("Name")
```

Pick Method

The Pick method places the currently selected record in a picklist business component into the appropriate fields of the parent business component.

NOTE: In Siebel Business Applications v.7.5.3 and later releases, Pick cannot be used to change the record in a read-only picklist field.

Syntax

BusComp.Pick

Argument	Description
Not applicable	

Returns

Not applicable

Usage

Pick must be invoked on the picklist's business component. When a record is picked on a constrained picklist using the GetPickListBusComp and Pick methods, the constraint is active. Therefore, only records that fulfill the constraint can be retrieved.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

This 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
      .ActivateField "Sales Stage Order"
      .SetSortSpec "Sales Stage Order"
      .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();
       ActivateField("Sales Stage Order");
      SetSortSpec("Sales Stage Order");
      ExecuteQuery(ForwardOnly);
      if (FirstRecord())
```

```
            Pick();
      }
      oBC = null;
   }
```

See Also

"GetPicklistBusComp Method" on page 197

PreviousRecord Method

PreviousRecord moves to the previous record in the business component, invoking any associated Basic events.

Syntax

BusComp.PreviousRecord

Argument	Description
Not applicable	

Returns

An integer in Siebel VB; a Boolean in Siebel eScript, COM, and ActiveX.

Usage

PreviousRecord may be used only on a business component that has been queried using the FowardBackward CursorMode.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following example is for Mobile Web Client Automation Server. SiebelApplication is an Application instance.

```
   (general) (declarations)
   Option Explicit

   Private Sub PreviousRecord_Click()
      Dim errCode As Integer
      Dim oBusComp as BusComp
      FieldValue.Text = ""
      HourClassStart
      SBusComp.PreviousRecord errCode
```

```
    If errCode = 0 Then
       FieldValue.Text = SBusComp.GetFieldValue(FieldName.Text, _
          errCode)
    End If

    HourClassStop
    Status.Text = SiebelApplication.GetLastErrText

End Sub
```

See Also

"ExecuteQuery Method" on page 181

RefineQuery Method

This method refines a query after the query has been executed.

Syntax

BusComp.RefineQuery

Argument	Description
Not applicable	

Returns

Not applicable

Usage

Unlike ClearToQuery, RefineQuery retains the existing query specification and allows you to add search conditions based only on those fields that have not been set by previous search expressions. RefineQuery may be most useful when used in conjunction with GetNamedSearch.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following Siebel VB code fragment shows how RefineQuery might be used.

```
me.ActivateField "Status"
me.SetSearchSpec "Status", "Open"
me.ClearToQuery
me.ExecuteQuery
me.RefineQuery
me.SetSearchSpec "Substatus", "Assigned"
me.ExecuteQuery
```

See Also

"ClearToQuery Method" on page 177
"GetNamedSearch Method" on page 196

Release Method

The Release() method enables the release of the business component and its resources on the Siebel Server.

Syntax

BusComp.release()

Argument	Description
not applicable	

Returns

Not applicable

Used With

Java Data Bean

Example

The following example is for Java Data Bean:

```
import com.siebel.data.*;
{
   …
// create Siebel Data Bean
   // login into Siebel 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
…
// Be sure to release the business component and its resources on the server
side   siebBusComp.release();
// release the resources occupied by Siebel Bus Object and Siebel Data Bean after
their use.
}
```

The following example logs in to a Siebel Server. It then instantiates a business object, a business component, and a business service. Then, 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 Data Bean
         m_dataBean = new SiebelDataBean();

         // login to the servers
         m_dataBean.login("siebel.TCPIP.None.None://<gateway>:<port>/<enterprise>/
<object manager>","<user id>","<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());
         }

      }

   }
```

See Also

"Logoff Method" on page 139

SetFieldValue Method

SetFieldValue assigns the new value to the named field for the current row of the business component.

Syntax

BusComp.SetFieldValue *FieldName, FieldValue*

Argument	Description
FieldName	String containing the name of the field to assign the value to
FieldValue	String containing the value to assign

Returns

Not applicable

Usage

This method can be used only on fields that are active. For details, read "ActivateField Method" on page 171. For applications in standard interactivity mode, write the record immediately after using SetFieldValue by calling WriteRecord.

FieldName must be enclosed in double quotes, and must be spelled exactly as the field name appears in Siebel Tools (*not* in the status line of the application or the column head), with the correct case; for example,

```
SetFieldValue "Name", "Acme"
```

FieldValue must not have a length that exceeds the defined length of the field. For example, passing a 20 character string into a field that is defined as being 16 characters long results in the runtime error “Value too long for field 'xxxxx' (maximum size nnn).” A good practice is to check the length of the string against the length of the destination field before using SetFieldValue.

To set a field to null, follow this example.

```
SetFieldValue "Name", ""
```

Do not use the SetFieldValue method on a field that has a pick list. Instead, use the following procedure.

1. Use GetPicklistBusComp(...) to get a reference to the picklist business component for the Last Name field.
2. Set the required SearchSpec on the pick list business component so that a single unique record is returned.
3. Execute the query on the pick list business component.
4. Call picklistbuscomp.Pick to emulate the user picking the record.

NOTE: SetFieldValue cannot be used with calculated fields and cannot be used recursively.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following example is in Siebel VB:

```
Dim CurrOppty as BusComp
Set CurrOppty = Me
If Val(CurrOppty.GetFieldValue("Rep %")) < 75 Then
   CurrOppty.SetFieldValue "Rep %", "75"
End If
```

The following is the equivalent example in Siebel eScript.

```
var CurrOppty = this;
if (ToInteger(CurrOppty.GetFieldValue("Rep %")) < 75)
   CurrOppty.SetFieldValue("Rep %", "75");
```

See Also

“ActivateField Method” on page 171
“SetFormattedFieldValue Method”
“Pick Method” on page 213
“GetPicklistBusComp Method” on page 197

SetFormattedFieldValue Method

SetFormattedFieldValue assigns the new value to the named field for the current row of the business component. SetFormattedFieldValue accepts the field value in the current local format.

Syntax

*BusComp.*SetFormattedFieldValue *FieldName, FieldValue*

Argument	Description
FieldName	String containing the name of the field to assign the value to.
FieldValue	String containing the value to assign.

Returns

Not applicable

Usage

This method is useful when you write code for a Siebel configuration that is used in multiple countries with different currency, date, and number formats. This method can be used only on fields that have been activated using ActivateField.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

This Siebel VB example is a fragment from a program designed to track the velocity of an opportunity through its sales stages.

```
(general) (declarations)
Option Explicit

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 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
```

```
      .FirstRecord
      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 1
               '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
```

See Also

"ActivateField Method" on page 171
"SetFieldValue Method" on page 219

SetMultipleFieldValues Method

SetMultipleFieldValues assigns a new value to the fields specified in the property set for the current row of the business component.

Syntax

BusComp.SetMultipleFieldValues oPropertySet

Argument	Description
oPropertySet	Property set containing a collection of properties representing the fields to be set, and their values

Returns

Not applicable

Usage

This method can be used only on fields that are active. The FieldName argument in the property must be set exactly as the field name appears in Siebel Tools, with the correct case. For example, in

```
oPropertySet.SetProperty "Name","Acme"
```

the FieldName is “Name” and the FieldValue is “Acme”.

NOTE: Do not use the SetMultipleFieldValues method on a field that has a pick list.

Used With

COM Data Control, COM Data Server, 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;
```

The following Java example sets multiple fields using SetMultipleFieldValues

```
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());
}
```

See Also

"ActivateMultipleFields Method" on page 172
"GetMultipleFieldValues Method" on page 194

SetNamedSearch Method

SetNamedSearch sets a named search specification on the business component. A named search specification is identified by the *searchName* argument.

Syntax

BusComp.SetNamedSearch *searchName*, *searchSpec*

Argument	Description
searchName	String containing the name of the named search specification
searchSpec	String containing the search specification string corresponding to the name

Returns

Not applicable

Usage

A named search specification is a search criterion that is not cleared by the ClearToQuery; for example, a predefined query or business component search specification.

A named search specification can be modified only programmatically; it cannot be modified through the UI. This specification is applied in conjunction with the existing search specification. Once set, the named search specification is applied every time ExecuteQuery is called. ClearToQuery does not clear the named search specification. To clear it, explicitly set the searchSpec argument to "". Note that when a new instance of the BusComp is created, the named search specification is cleared.

The *searchSpec* argument assigned to SetNamedSearch is the same argument that is used after the equal sign in a predefined query. The maximum length of a predefined query is 2000 characters. For details on how to set up the search specification, read "SetSearchExpr Method" and "SetSearchSpec Method" on page 227.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Examples

This example shows how to set a named search to 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
```

Note that defining searches using the SetNamedSearch method does not create a PDQ entry, this is a search specified in script only. To retrieve this search specification, use GetNamedSearch method. GetProfileAttr is used in personalization to retrieve values of an attribute in a user profile.

See Also

"GetNamedSearch Method" on page 196
"SetSearchSpec Method" on page 227

SetSearchExpr Method

SetSearchExpr sets an entire search expression on the business component, rather than setting one search specification per field. Syntax is similar to that on the Predefined Queries screen.

Syntax

BusComp.SetSearchExpr *searchSpec*

Argument	Description
searchSpec	Search specification string field

Returns

Not applicable

Usage

Call this method after ClearToQuery and before ExecuteQuery.

The maximum length of a predefined query is 2000 characters. The argument assigned to SetSearchExpr is the same as that used after the equal sign in a predefined query. For example, the first line following is a search specification in a predefined query; the second is the equivalent search specification used with the various interface methods. Note that Name is a field on the business component and therefore must be enclosed in brackets, [ ].

```
'Account'.Search = "[Name] ~ LIKE ""A. C. Parker"" "
```

```
BC.SetSearchExpr "[Name] ~ LIKE ""A. C. Parker"" "
```

If field values have search keywords such as NOT, AND, and OR, use two pairs of double quotes around the field value. For example, if a field Sub-Status can have the string "Not an Issue" as a field value, then use the following syntax to avoid an SQL error:

```
substatus = GetFieldValue("Sub-Status")
searchst = "[Value] = """ & substatus & """""
BC.SetSearchExpr searchst
```

The following syntax generates an SQL error.

```
substatus = GetFieldValue("Sub-Status")
searchst = "[Value] = " & substatus
BC.SetSearchExpr searchst
```

Use both SetSearchExpr and SetSortSpec to build a query that includes both a search specification and a sort specification. You cannot set a sort specification with SetSearchExpr by itself. Do not use SetSearchExpr and SetSearchSpec together; they are mutually exclusive.

Any dates used with SetSearchExpr must use the format MM/DD/YYYY, regardless of the Regional control panel settings of the server or client computer.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

The following example is in Siebel eScript:

```
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();
```

See Also

"ClearToQuery Method" on page 177
"ExecuteQuery Method" on page 181
"SetSearchSpec Method" on page 227
"SetSortSpec Method" on page 231

SetSearchSpec Method

SetSearchSpec sets the search specification for a particular field. This method must be called before ExecuteQuery.

Syntax

BusComp.SetSearchSpec *FieldName*, *searchSpec*

Argument	Description
FieldName	String containing the name of the field on which to set the search specification.
searchSpec	String containing the search specification.

Returns

Not applicable

Usage

To avoid an unpredicted compound search specification on a business component, it is recommended to call ClearToQuery before calling SetSearchSpec. If multiple calls are made to SetSearchSpec for a business component, then the multiple search specifications are handled as follows:

- If the existing search specification is on the same field as the new search specification, then the new search specification replaces the existing search specification. For example:

  ```
  myBusComp.SetSearchSpec("Status", "<> 'Renewal'");
  myBusComp.SetSearchSpec("Status", "<> 'Dropped'");
  ```

  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 the resultant search specification 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'");
  ```

  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 the new search specification on those common fields only replaces the existing search specification on the common fields. For example, if

  ```
  myBusComp.SetSearchSpec("Status", "<>  'In Progress'")
  ```

  is subsequently applied to the result of the previous example, then the following WHERE clause results:

  ```
  WHERE Type <> 'Renewal' AND Status <> 'In Progress'
  ```

  Only the search specification on Status is replaced in the compound WHERE clause.

- If a search specification is set declaratively in Siebel Tools, and another search specification is set with script using SetSearchSpec(), then the resultant search specification is a logical AND of the existing Tools-created specification and the scripted specification. For example:

  ```
  myBusComp.SetSearchSpec("Status", "<>  'Cancelled'")
  ```

  is applied to the following existing search specification created declaratively in Tools

  ```
  [Type] <> 'Renewal' AND [Status] <> 'Sold'
  ```

  Then the following WHERE clause results:

```
WHERE Type <> 'Renewal' AND (Status <> 'Sold' AND Status <> 'Cancelled')
```

> **NOTE:** When an existing Tools-created search specification includes the same field as a subsequent search specification set with SetSearchSpec(), the behavior is not like the replacement behavior that results when both specifications are set by using SetSearchSpec().

The maximum length of a predefined query is 2000 characters.

CAUTION: Do not use SetSearchExpr and SetSearchSpec together because they are mutually exclusive.

Using logical and comparison operators. Any search specification that can be created in the user interface can be duplicated in Siebel VB or eScript. Both logical operators and comparison operators may be used, provided that they are handled correctly. For example:

```
BC.SetSearchSpec "Status", "<> 'Closed' AND ([Owner] = LoginName () OR [Refer To] =
LoginName ()) OR ([Owner] IS NULL AND [Support Group] = 'TS-AE')"
```

Using special characters. If the search specification contains any of the following characters.

```
= > < ( ) , ~ " ' [
```

it must be enclosed in quotes. This rule applies to operators that are part of the search expression as well as text to search for. If the search expression contains quotes, those quotes must be doubled. For example, in the preceding line of code, notice that the entire search specification is enclosed in double quotes, whereas fields and values referred to within the specification each have single quotes.

If the search object includes a *single* double quote, that quote must be doubled; for example, if you wanted to search for text containing:

```
"We must
```

the search specification would take this form:

```
SetSearchSpec "Comments", "'""We must'"
```

so that the initial quote is doubled, and the string containing it is placed within single quotes, and the entire expression, including the single quotes, is placed within double quotes.

If the search specification includes single quotes (including apostrophes), the expression must be placed within single quotes, apostrophes must be doubled, and double quotes must be placed around the entire string. Thus, for example, if you wanted to search for “Phillie’s Cheese Steaks” in the Name field, you would have to enter the specification as follows:

```
SetSearchSpec "Name", "'Phillie''s Cheese Steaks'"
```

NOTE: eScript and Browser Script require backslashes instead of double quotes for marking special characters. For example: `SetSearchSpec("Comments", "\'\"We must\'");` and `SetSearchSpec("Name", "\'Phillie\'\'s Cheese Steaks\'");`

Searching for text in non-text fields. If the search expression queries a field of any type other than text, or if it is an expression other than a field-level query, text must be placed within quotes if it contains any characters other than the following:

```
ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz _ ? \ " ' [
```

As with text field search expressions, quotes must be doubled.

Retrieving all records. To retrieve all records efficiently, use ClearToQuery followed by ExecuteQuery, without using SetSearchSpec.

Searching for a null field. To search for null fields, 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", ""
```

Any dates used with SetSearchSpec must use the format MM/DD/YYYY, regardless of the Regional control panel settings of the server or client computer.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

For Siebel VB examples, read "FirstRecord Method" on page 184, "SetFormattedFieldValue Method" on page 221, and "BusComp_PreQuery Event" on page 249. For a Siebel eScript example, read "ClearToQuery Method" on page 177.

Example

This Siebel VB code searches for a contact by name and then navigates to the record displayed in a view.

```
(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.ActivateField "Last Name"
NewComp.ActivateField "First Name"
NewComp.ActivateField "Account Id"
NewComp.ClearToQuery
NewComp.SetSearchSpec "First Name", RecId1
NewComp.SetSearchSpec "First Name", RecId2
NewComp.SetSearchSpec "Account Id", RecId3
NewComp.ExecuteQuery ForwardBackward

TheApplication.GotoView TargetView , NewBusObj

End Sub
```

The following example is in Siebel eScript:

```
var oAccntBO = TheApplication().GetBusObject("Account");
var oAccntBC = oAccntBO.GetBusComp("Account");
var oAddrBC;

with (oAccntBC)
{
   SetViewMode(SalesRepView);
   ActivateField("Name");
   ClearToQuery();
   SetSearchSpec("Name", "Hong Kong Flower Shop");
   ExecuteQuery();
   oAddrBC = GetMVGBusComp("Street Address");
}

with (oAddrBC)
{
   NewRecord(NewAfter);
   SetFieldValue("City", "Denver");
   WriteRecord();
}

oAddrBC = null;
oAccntBC = null;
oAccntBO = null;
```

See Also

"ExecuteQuery Method" on page 181
"ClearToQuery Method" on page 177
"SetSearchExpr Method" on page 226
"SetSortSpec Method"

SetSortSpec Method

SetSortSpec sets the sorting specification for a query.

Syntax

BusComp.SetSortSpec *sortSpec*

Argument	Description
sortSpec	String containing the sort specification

Returns

Not applicable

Usage

SetSortSpec, if used, must be called after ClearToQuery and before ExecuteQuery. The sortSpec argument is a string of the form:

```
"fieldName1,fieldName2,...(ASCENDING)"
```

or

```
"fieldName1,fieldName2,...(DESCENDING)"
```

The entire string must be placed in quotes. You can sort on various fields in different orders by separating the field names and order specifications with commas, as in the example.

The argument assigned to SetSortSpec is the same used after the equal sign in a predefined query. For example, the first line following is a sort specification in a predefined query; the second is the equivalent sort specification used with the various interface methods. Note that *Name* is the name of a business component field.

```
'Account'.Sort = "Name(ASCENDING)"
```

```
BC.SetSortSpec "Name(ASCENDING)"
```

Any dates used with SetSortSpec must use the format MM/DD/YYYY, regardless of the Regional control panel settings of the server or client computer.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

This Siebel VB example sorts the Opportunity list first by Account in reverse order, then in alphabetical order by Site. Note that the column names in the Opportunity list applet are not the same as those in the underlying business component.

NOTE: This example merely demonstrates how to sort in ascending and descending order. In actual practice you should not sort in both directions in a single sort specification, as it degrades performance considerably.

```
Function BusComp_PreQuery As Integer
```

```
With Me
   .ActivateField("Account")
   .ActivateField("Account Location")
   .ClearToQuery
   .SetSortSpec "Account(DESCENDING), Account Location(ASCENDING)"
   .ExecuteQuery
End With

   BusComp_PreQuery = ContinueOperation

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();
}

   return (ContinueOperation);

}
```

See Also

"SetSearchExpr Method" on page 226
"SetSearchSpec Method" on page 227

SetUserProperty Method

Sets the value of a named business component user property. The user properties are similar to instance variables of a BusComp.

Syntax

BusComp.SetUserProperty *propertyName*, *newValue*

Argument	Description
propertyName	String containing the name of the user property to set
newValue	String containing the property value

Returns

Not applicable

Usage

The advantage of user properties is that they can be accessed from anywhere in the code (including from other applications through COM) using GetUserProperty. An instance variable, on the other hand, can be accessed only from within Siebel VB from the same object on which the variable is declared.

The value of the property is reset every time you instantiate a new business component.

NOTE: SetUserProperty does not interact directly with user properties defined in Siebel Tools.

Used With

COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

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");
   }
}
```

See Also

"GetUserProperty Method" on page 200

SetViewMode Method

SetViewMode sets the visibility type for the business component. This is used prior to a query.

Syntax

BusComp.SetViewMode *mode*

where *mode* is a Siebel ViewMode constant or its corresponding integer value. The constants shown are defined in three environments.

Siebel ViewMode constants correspond to applet visibility types. For more information about applet visibility types, see *Security Guide for Siebel Business Applications*.

Siebel ViewMode Constant	Integer Value	Comments
SalesRepView	0	Applies single position or sales team access control, and displays records owned by the user's position or records whose sales team contains the user's position, as determined by the business component's Visibility field or Visibility MVField. To use this visibility applet type, the business component must have a view mode with an Owner Type of Position.
ManagerView	1	Displays records that the user and the user's direct reports have access to. Example: My Team's Accounts. Typically used by managers. If the business component on which the view is based uses single position access control, then this constant displays records associated directly with the user's active position and with subordinate positions. If the business component on which the view is based uses sales team access control, then this constant displays records for which the user's active position is the primary position on the team or a subordinate position is the primary member on the team. If a user's position has no subordinate positions, then no data is displayed, not even the user's own data. To use this visibility applet type, the business component must have a view mode with an Owner Type of Position.
PersonalView	2	Displays records the user has direct access to, as determined by the business component's Visibility field. To use this visibility applet type, the business component must have a view mode with an Owner Type of Person. Example: My Accounts. Typically used by individual contributors.
AllView	3	Displays all records for which there is a valid owner. Example: All Accounts Across Organizations.
OrganizationView	5	Applies single-organization or multiple-organization access control, as determined by the business component's Visibility field or Visibility MVField. To use this visibility applet type, the business component must have a view mode with an Owner Type of Organization. Displays records for organizations where a valid owner has been assigned to the record and the user's position is associated with the organization. Example: All Accounts List View.

Siebel ViewMode Constant	Integer Value	Comments
GroupView	7	Displays either a list of the category's first level subcategories (child categories) to which the user has access or displays records in the current category, depending on the applet being used. If the user is at the catalog level, then this displays the first level categories.
CatalogView	8	Displays a flat list of records in categories across every catalog to which the user has access. To use this visibility applet type, the business component must have a view mode with an Owner Type of Catalog Category. Typically used in product pick lists and other lists of products, such as a recommended product list.
SubOrganizationView	9	If the business component on which the view is based uses single organization access control, then this constant displays records associated directly with the user's active organization or with a descendent organization. Descendent organizations are defined by the organization hierarchy. To use this visibility applet type, the business component must have a view mode with an Owner Type of Organization. If the business component on which the view is based uses multiple organization access control, then this constant displays records for which the user's active organization or a descendent organization is the primary organization. Example: All Opportunities Across My Organization. Typically used by executives.

Returns

Not applicable

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

See Also

"GetViewMode Method" on page 201

Example

The following example is in Siebel VB. For another example, see "BusComp_PreDeleteRecord Event" on page 246.

```
(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
   .ActivateField "Name"
   .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();
   ActivateField("Name");
   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

UndoRecord reverses any uncommitted changes made to the record. This includes reversing uncommitted modifications to fields, as well as deleting an active record that has not yet been committed to the database.

Syntax

BusComp.UndoRecord

Argument	Description
Not applicable	

Returns

Not applicable

Usage

If you are using UndoRecord to delete a new record, it is useful only after NewRecord has been called and before the new record has been committed. If you are using UndoRecord to reverse changes made to field values, it is useful only before the changes have been committed through a call to WriteRecord, or before the user has stepped off the record through the user interface. UndoRecord reverses uncommitted changes to a record. Therefore, if you wish to have a fine degree of control over which changes are reversed, place the code in the PreNewRecord, PreSetFieldValue, or PreWriteRecord event, and issue a CancelOperation to cancel the change invoked by the particular event.

Used With

COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

See Also

"NewRecord Method" on page 210

WriteRecord Method

Commits to the database any changes made to the current record.

Syntax

oBusComp.WriteRecord

Argument	Description
Not applicable	

Returns

Not applicable

Usage

After creating new records and assigning values to fields, call WriteRecord to commit the new record to the database.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

This Siebel VB example inserts an activity if the Sales Stage field is set to 02. For other examples, see "GetMVGBusComp Method" on page 195 and "NewRecord Method" on page 210.

```
(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
```

Business Component Events

The following topics describe business component events:

- "BusComp_Associate Event" on page 240
- "BusComp_ChangeRecord Event" on page 241
- "BusComp_CopyRecord Event" on page 242
- "BusComp_DeleteRecord Event" on page 243

BusComp_Associate Event

The Associate event is called after a record is added to a business component to create an association.

Syntax

BusComp_Associate

Argument	Description
Not applicable	

Returns

Not applicable

Usage

The semantics are the same as for BusComp_NewRecord.

Used With

Server Script

See Also

"BusComp_NewRecord Event" on page 244

BusComp_ChangeRecord Event

The ChangeRecord event is called after a record becomes the current row in the business component.

Syntax

BusComp_ChangeRecord

Argument	Description
Not applicable	

Returns

Not applicable

Usage

Code in the ChangeRecord event handler is executed each time that the focus changes to another record. Avoid lengthy operations in this event handler to enable smooth scrolling in list applets.

Used With

Server Script

Example

This Siebel VB example uses two subprograms in the (general) (declarations) section to set up an audit trail for service requests. The ChangeRecord event handler is used to initialize the values from the service record so that they can be compared 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

The CopyRecord event is called after a row has been copied in the business component and that row has been made active.

Syntax

BusComp_CopyRecord

Argument	Description
Not applicable	

Returns

Not applicable

Usage

BusComp_CopyRecord is called instead of BusComp_NewRecord when a new record is created:

- Through BusComp.NewRecord NewAfterCopy|NewBeforeCopy
- Through any UI copy record mechanism (Edit > Copy Record; CTRL+B)

Used With

Server Script

BusComp_DeleteRecord Event

The DeleteRecord event is called after a row is deleted. The current context is a different row (the Fields of the just-deleted row are no longer available).

Syntax

BusComp_DeleteRecord

Argument	Description
Not applicable	

Usage

When a user reads and deletes an existing record or creates and undoes a new record, this invokes DeleteRecord. This invocation causes any associated scripts to be executed.

Returns

Not applicable

Used With

Server Script

BusComp_InvokeMethod Event

The InvokeMethod event is called when the InvokeMethod method is called on a business component.

Syntax

BusComp_InvokeMethod(*methodName*)

Argument	Description
methodName	String containing the name of the method that was invoked

Returns

Not applicable

Usage

The InvokeMethod event is called when a specialized method is called on a business component, or when the InvokeMethod method has been explicitly called on a business component.

Used With

Server Script

BusComp_NewRecord Event

The NewRecord event is called after a new row has been created in the business component and that row has been made active. The event may be used to set up default values for Fields.

Syntax

BusComp_NewRecord

Argument	Description
Not applicable	

Returns

Not applicable

Usage

BusComp_NewRecord is called when a new record is created unless the new record was created:

- Through BusComp.NewRecord NewAfterCopy|NewBeforeCopy
- Through any UI copy record mechanism (Edit > Copy Record; CTRL+B)

In these cases, BusComp_CopyRecord is called instead of BusComp_NewRecord.

Used With

Server Script

Example

For an example, read "Pick Method" on page 213.

BusComp_PreAssociate Event

The PreAssociate event is called before a record is added to a business component to create an association. The semantics are the same as for BusComp_PreNewRecord.

Syntax

BusComp_PreAssociate

Argument	Description
Not applicable	

Returns

ContinueOperation or CancelOperation

Usage

CancelOperation stops the execution of the underlying Siebel code associated with the event. However, if there is code in the same script following CancelOperation, that code runs regardless of the CancelOperation.

Used With

Server Script

BusComp_PreCopyRecord Event

The PreCopyRecord event is called before a new row is copied in the business component. The event may be used to perform pre-copy validation.

Syntax

BusComp_PreNewRecord

Argument	Description
Not applicable	

Returns

ContinueOperation or CancelOperation

Usage

CancelOperation stops the execution of the underlying Siebel code associated with the event. However, if there is code in the same script following CancelOperation, that code runs regardless of the CancelOperation.

Used With

Server Script

BusComp_PreDeleteRecord Event

The PreDeleteRecord event is called before a row is deleted in the business component. The event may be used to prevent the deletion or to perform any actions in which you need access to the record that is to be deleted.

Syntax

BusComp_PreDeleteRecord

Argument	Description
Not applicable	

Returns

ContinueOperation or CancelOperation

Usage

This event is called after the user has confirmed the deletion of the record, but before the record is deleted from the database.

CancelOperation stops the execution of the underlying Siebel code associated with the event. However, if there is code in the same script following CancelOperation, that code runs regardless of the CancelOperation.

Used With

Server Script

Example

This Siebel VB example prevents the deletion of an account that has associated opportunities.

```
(general) (declarations)
Option Explicit

Function BusComp_PreDeleteRecord As Integer
   Dim iReturn as integer
   Dim oBC as BusComp
   Dim oBO as BusObject
   Dim sAcctRowId as string
```

```
      iReturn = ContinueOperation
      sAcctRowId = me.GetFieldValue("Id")
      set oBO = TheApplication.GetBusObject("Opportunity")
      set oBC = oBO.GetBusComp("Opportunity")

      With oBC
         .SetViewMode AllView
         .ActivateField "Account Id"
         .ClearToQuery
         .SetSearchSpec "Account Id", sAcctRowId
         .ExecuteQuery ForwardOnly
         If (.FirstRecord) = 1 Then
            RaiseErrorText("Opportunities exist for the Account - _
               Delete is not allowed")
            iReturn = CancelOperation
         End If
      End With

      BusComp_PreDeleteRecord = iReturn

      Set oBC = Nothing
      Set oBO = Nothing

   End Function
```

BusComp_PreGetFieldValue Event

The PreGetFieldValue event is called when the value of a business component field is accessed.

Syntax

BusComp_PreGetFieldValue(*FieldName*, *FieldValue*)

Argument	Description
FieldName	String containing the name of the field accessed
FieldValue	String containing the value accessed

Returns

ContinueOperation or CancelOperation

Usage

PreGetFieldValue is called at least once for each user interface element that displays the BusComp field value, and it may also be called as a result of other internal uses.

NOTE: PreGetFieldValue is called every time the user interface is updated to repaint fields on the screen. Therefore, a script attached to this event runs very frequently, which may cause the computer to appear to be unresponsive.

Even empty scripts are invoked by the framework and thus cause a performance impact. If you want to remove an existing script from BusComp_PreInvokeMethod to improve performance, you must inactivate the appropriate record using Siebel Tools.

CancelOperation stops the execution of the underlying Siebel code associated with the event. However, if there is code in the same script following CancelOperation, that code runs regardless of the CancelOperation.

Used With

Server Script

BusComp_PreInvokeMethod Event

The PreInvokeMethod event is called before a specialized method is invoked on the business component.

Syntax

BusComp_PreInvokeMethod(*methodName*)

Argument	Description
methodName	String containing the name of the method invoked

Returns

ContinueOperation or CancelOperation

Usage

The PreInvokeMethod event is called just before a specialized method is invoked on the business component. Specialized methods are methods based on applet or business component classes other than CSSFrame and CSSBusComp, respectively, that is, specialized classes.

CancelOperation stops the execution of the underlying Siebel code associated with the event. However, if there is code in the same script following CancelOperation, that code runs regardless of the CancelOperation.

Used With

Server Script

BusComp_PreNewRecord Event

The PreNewRecord event is called before a new row is created in the business component. The event may be used to perform preinsert validation.

Syntax

BusComp_PreNewRecord

Argument	Description
Not applicable	

Returns

ContinueOperation or CancelOperation

Usage

CancelOperation stops the execution of the underlying Siebel code associated with the event. However, if there is code in the same script following CancelOperation, that code runs regardless of the CancelOperation.

Used With

Server Script

BusComp_PreQuery Event

The PreQuery event is called before query execution.

Syntax

BusComp_PreQuery

Argument	Description
Not applicable	

Returns

ContinueOperation or CancelOperation

Usage

This event may be used to modify the search criteria or to restrict the execution of certain queries.

CancelOperation stops the execution of the underlying Siebel code associated with the event. However, if there is code in the same script following CancelOperation, that code runs regardless of the CancelOperation.

Used With

Server Script

Example

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

The PreSetFieldValue event is called before a value is pushed down into the business component from the user interface or through a call to SetFieldValue.

Syntax

BusComp_PreSetFieldValue(*FieldName*, *FieldValue*)

Argument	Description
FieldName	String containing the name of the changed field
FieldValue	String containing the changed value

Returns

ContinueOperation or CancelOperation

Usage

The PreSetFieldValue event is called each time a field is to be changed or populated for a given business component.

When using a picklist to populate multiple fields, PreSetFieldValue is fired for each field that is populated. For example, you have an applet that you use to populate Last Name, First Name, and Contact ID. Therefore, PreSetFieldValue fires three times, once for each field.

CancelOperation stops the execution of the underlying Siebel code associated with the event. However, if there is code in the same script following CancelOperation, that code runs regardless of the CancelOperation. In the preceding example, if your script returns CancelOperation for a field, that field is not populated. However, PreSetVieldValue still fires for the other two fields populated by the picklist.

NOTE: To prevent infinite recursions, if the PreSetFieldValue event is running it does not run again for the same business component instance, even if used on a different field in the business component.

Used With

Browser Script, Server Script

Example

This Siebel VB example uses the PreSetFieldValue event to check if a quote discount is greater than 20 percent, and to take appropriate action if it is. For other examples of BusComp_PreSetFieldValue, read "LoginId Method" on page 138, and "ExecuteQuery Method" on page 181.

```
Function BusComp_PreSetFieldValue (FieldName As String,
               FieldValue As String) As Integer
‘Routine 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);
         return (CancelOperation);
      }
```

```
            else
            {
               return (ContinueOperation);
            }
         }
         else
         {
            return (ContinueOperation);
         }
      }
```

BusComp_PreWriteRecord Event

The PreWriteRecord event is called before a row is written out to the database. The event may perform any final validation necessary before the actual save occurs.

Syntax

BusComp_PreWriteRecord

Argument	Description
Not applicable	

Returns

ContinueOperation or CancelOperation

Usage

CancelOperation stops the execution of the underlying Siebel code associated with the event. However, if there is code in the same script following CancelOperation, that code runs regardless of the CancelOperation.

The PreWriteRecord event triggers only if a field value was modified or inserted, or when a record is deleted. When a record is deleted, PreWriteRecord is called to delete the implied join records to the initial record.

When associating a multi-value group record (based on an M:M relationship) with the business component that invokes the association, the PreWriteRecord and WriteRecord events execute. These events execute even if no fields on the base or invoking business component are updated by the association. The PreWriteRecord and WriteRecord events are executed to acknowledge the update to the intersection table.

Used With

Server Script

Example

```
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

The Query event is called just after the query is complete and the rows have been retrieved, but before the rows are actually displayed.

Syntax

BusComp_Query

Argument	Description
Not applicable	

Returns

Not applicable

Used With

Server Script

Example

In this Siebel VB example, important information is defined using the Action business component with a special activity type. If the user starts an account query, the code checks whether important information is available. If so, the information is displayed 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

The SetFieldValue event is called when a value is pushed down into the business component from the user interface or through a call to SetFieldValue. This event is not triggered for any predefaulted or calculated fields in Siebel Tools.

Syntax

BusComp_SetFieldValue(*FieldName*)

Argument	Description
FieldName	String containing the name of the affected field

Returns

Not applicable

Used With

Server Script

Example

This Siebel VB example shows how to invoke methods on an existing BusComp when the SetFieldValue event is triggered.

```
Sub BusComp_SetFieldValue (FieldName As String)
Dim desc As String
Dim newDesc As String
If FieldName = "Type" Then
   newDesc = [can be any valid string containing 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

The WriteRecord event is called after a row is written out to the database.

The WriteRecord event triggers after the record has been committed to the database. Do not use SetFieldValue in a WriteRecord event. If you need to use SetFieldValue, put it a PreWriteRecord event (explained in "BusComp_PreWriteRecord Event" on page 252).

Syntax

BusComp_WriteRecord

Argument	Description
Not applicable	

Returns

Not applicable

Usage

When associating a multi-value group record (based on an M:M relationship) with the business component that invokes the association, the PreWriteRecord and WriteRecord events execute. These events execute even if no fields on the base or invoking business component are updated by the association. The PreWriteRecord and WriteRecord events are executed to acknowledge the update to the intersection table.

Used With

Server Script

Business Object Methods

In the method descriptions, the term *oBusObj* indicates a variable containing a BusObject.

- "GetBusObject Method" on page 121
- "GetLastErrCode Method" on page 257
- "GetLastErrText Method" on page 258
- "Name Method" on page 258
- "Release Method" on page 259

GetBusComp Method

The GetBusComp method returns the specified business component.

Syntax

oBusObj.GetBusComp (*BusCompName*)

Argument	Description
BusCompName	String containing the desired business component in the business object

Returns

The requested business component

Usage

BusCompName is case-sensitive, and must match in case the form of the name as it appears in Siebel Tools. If an instance of *BusCompName* already exists, that instance is returned. The interpreter instantiates and returns a new instance of a business component using *BusCompName* if one does not already exist.

If you already have a BusComp but you want to create a new one (without getting any existing ones), use GetBusObject() first. This creates a new BusComp() that is not the same as the one already existing (for example in an applet.) Then use the new business object to do a GetBusComp() to create new business components. If you use the business object that already exists you pick up any child business components that already exist, even if you use GetBusComp() to get them.

The Nothing function should be used to destroy the instantiated business component when it is no longer necessary.

NOTE: In Browser Script, the GetBusComp() method can only access business components in the current view; in Server Script, the GetBusComp() method can access every business component that has been instantiated in the active business object.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Server Script

Examples

The following examples are in Siebel eScript.

To access a business component in the UI context:

```
var ActiveBO = TheApplication().ActiveBusObject();
var ConBC = ActiveBO.GetBusComp("Contact");
```

To access a business component in the non-UI context:

```
var BO = TheApplication().GetBusObject("Account");
var ConBC = BO.GetBusComp("Contact");
```

GetLastErrCode Method

The GetLastErrCode method returns the last error code.

Syntax

oBusObj.GetLastErrCode

Argument	Description
Not applicable	

Returns

The last error code as a short integer; 0 indicates no error.

Usage

After execution of a method, the GetLastErrCode can be invoked to check if any error was returned from the previous operation. The GetLastErrText method can be invoked to retrieve the text of the error message.

Used With

COM Data Control, Mobile Web Client Automation Server

See Also

"GetLastErrText Method" on page 258

GetLastErrText Method

The GetLastErrText method returns the last error text.

Syntax

oBusObj.GetLastErrText

Argument	Description
Not applicable	

Returns

A string containing the last error text message.

Usage

After execution of a method, the GetLastErrCode can be invoked to check if any error was returned from the previous operation. The GetLastErrText method can be invoked to retrieve the text of the error message.

Used With

COM Data Control, Mobile Web Client Automation Server

See Also

"GetLastErrCode Method" on page 257

Name Method

The Name method returns the name of the business object.

Syntax

oBusObj.Name

Argument	Description
Not applicable	

Returns

A string containing the business object name

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

For an example, read "Name Method" on page 209.

Release Method

The Release()method enables the release of the Business Object and its resources on the Siebel Server.

Syntax

oBusObj.release()

Argument	Description
Not applicable	

Returns

Not applicable

Used With

Java Data Bean

Example

The following example is for Java Data Bean:

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

```
{
...

// create Siebel Data Bean
// login into Siebel Data Bean

...

// Create Siebel Bus Object.
// get the Bus Object from SiebelDataBean

...

// Use the business Object
// Release the business object resources

...

busObj.release();
}
```

Business Service Methods

In the method descriptions, the placeholder *oService* refers to a variable containing a business service.

GetFirstProperty Method

This method retrieves the name of the first property of a business service.

Syntax

oService.GetFirstProperty()

Argument	Description
Not applicable	

Returns

A string containing the name of the first property of the business service

Usage

This method retrieves the name of the first property, in order of definition, of a business service. Use GetFirstProperty and GetNextProperty to retrieve the name of a property. You can then use the retrieved name as an argument to GetProperty to retrieve the property value, or with SetProperty to assign property values.

Used With

Browser Script, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Examples

This function returns the number of Property Sets that belong to the Business Service given in parameter.

The following example is in Siebel eScript:

```
function countPropSets(busService)
{
   var propSetName = busService.GetFirstProperty();
   var count = 0;

   while(propSetName != null && propSetName != "")
   {
      count++;
      propSetName = busService.GetNextProperty();
   }

   return count;
}
```

The following example is in Java:

```
public int countPropSets(SiebelService busService)
{
   int count = 0;
   try
   {
      String propSetName = busService.getFirstProperty();
      while(propSetName != null && propSetName != "")
```

```
            {
               count++;
               propSetName = busService.getNextProperty();
            }

         }

          catch(SiebelException sExcept)
         {
            return 0;
         }

         return count;
      }
```

See Also

"GetNextProperty Method" on page 263
"GetProperty Method" on page 265
"SetProperty Method" on page 270

GetLastErrCode Method

The GetLastErrCode method returns the most recent error code.

Syntax

BusComp.GetLastErrCode

Argument	Description
Not applicable	

Returns

The last error code as a short integer; 0 indicates no error.

Usage

After execution of a method, the GetLastErrCode can be invoked to check if any error was returned from the previous operation. The GetLastErrText method can be invoked to retrieve the text of the error message.

Used With

Mobile Web Client Automation Server

See Also

"GetLastErrText Method"

GetLastErrText Method

The GetLastErrText method returns the last error text message.

Syntax

BusComp.GetLastErrText

Argument	Description
Not applicable	

Returns

The most recent error text message as a string

Usage

After execution of a method, the GetLastErrCode can be invoked to check if any error was returned from the previous operation. The GetLastErrText method can be invoked to retrieve the text of the error message.

Used With

Mobile Web Client Automation Server

See Also

"GetLastErrCode Method" on page 262

GetNextProperty Method

When the name of the first property has been retrieved, this method retrieves the name of the next property of a business service.

Syntax

oService.GetNextProperty()

Argument	Description
Not applicable	

Returns

A string containing the name of the next property of a business service, or a null string ("") if no more properties exist.

Usage

After retrieving the name of the first property with GetFirstProperty, the GetNextProperty method should be used in a loop, to be terminated when a null string ("") is returned. When property names have been retrieved, they can be used as arguments to GetProperty to retrieve the property value, or with SetProperty to assign property values.

Used With

Browser Script, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Examples

This function returns the number of Property Sets that belong to the Business Service given in parameter.

The following example is in Siebel eScript:

```
function countPropSets(busService)
{
   var propSetName = busService.GetFirstProperty();
   var count = 0;

   while(propSetName != null && propSetName != "")
   {
      count++;
      propSetName = busService.GetNextProperty();
   }

   return count;
}
```

The following example is in Java:

```
public int countPropSets(SiebelService busService)
{
   int count = 0;
   try
   {
      String propSetName = busService.getFirstProperty();
      while(propSetName != null && propSetName != "")
      {
         count++;
         propSetName = busService.getNextProperty();
      }

   }

   catch(SiebelException sExcept)
   {
      return 0;
   }
```

```
      return count;
   }
```

See Also

"GetFirstProperty Method" on page 290
"GetProperty Method"
"SetProperty Method" on page 270

GetProperty Method

The GetProperty method returns the value of the property whose name is specified in its argument.

Syntax

*oService.*GetProperty(*propName*)

Argument	Description
propName	The name of the property whose value is to be returned

Returns

A string containing the value of the property indicated by propName or NULL if the property does not exist.

Usage

You must know the name of a property to retrieve its value. To retrieve property names, use the GetFirstProperty and GetNextProperty methods.

Used With

Browser Script, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

See Also

"GetFirstProperty Method" on page 290
"GetNextProperty Method" on page 263
"SetProperty Method" on page 270

InvokeMethod Method

The InvokeMethod method calls a method on the business service. This can be a documented specialized method or a user-created method.

eScript Syntax

oService.InvokeMethod(*methodName, InputArguments, OutputArguments*)

Siebel VB Syntax

oService.InvokeMethod *methodName, InputArguments, OutputArguments*

Argument	Description
methodName	A string representing the name of the method to execute
InputArguments	A property set containing the arguments required by the method
OutputArguments	A property set containing the arguments to be returned by the method (passed by reference)

Browser Script Syntax

outputPropSet=*Service*.InvokeMethod(*MethodName, inputPropSet*)

Argument	Description
methodName	The name of the method
inputPropSet	A property set containing the method arguments
outputPropSet	A property set containing the output arguments of the Property Set

Returns

Not applicable

Usage

Built-in business services work the same way as business component invoke methods. That is, you can call specialized methods on the service that are not exposed directly through the object interface.

Run-time business services can hold user-defined methods, which must be implemented in scripts written in Siebel VB or Siebel eScript. The scripts must be written in these languages within Siebel Tools; however, they can be called through external interfaces.

Although the InvokeMethod function does not return a value, the properties in the *OutputArguments* property set may have been modified.

NOTE: The InvokeMethod method should be used only with documented specialized methods. Siebel Systems does not support calling specialized methods with InvokeMethod, unless they are listed in this book.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

See Also

"Service_InvokeMethod Event" on page 271
"Service_PreInvokeMethod Event" on page 274

Name Method

The Name property contains the name of the service.

Syntax

oService.Name

Argument	Description
Not applicable	

Returns

A string containing the service name

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

Example

The following example is in Browser Script:

```
var svc = theApplication().GetService("Data Quality Manager"):
theApplication().SWEAlert("The active service is " + svc.Name());
```

PropertyExists Method

This method returns a Boolean value indicating whether a specified property exists.

Syntax

oService.PropertyExists(*propName*)

Argument	Description
propName	A string representing the name of a property of the specified service

Returns

In Siebel VB, an integer (0 for false, 1 for true); in other interfaces, a Boolean

Usage

Because GetProperty returns a null string ("") for nonexistent properties, you should use PropertyExists() in an if statement to determine whether a specific property has been set.

Used With

Browser Script, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Release Method

The Release method() enables the release of the Business Service and its resources on the Siebel Server.

Syntax

oBusSvc.release()

Argument	Description
not applicable	

Returns

Not applicable

Used With

Java Data Bean

Example

The following example logs in to a Siebel Server. It then instantiates a business object, a business component, and a business service. Then, 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 Data Bean
            m_dataBean = new SiebelDataBean();

            // login to the servers
            m_dataBean.login("siebel.TCPIP.None.None://<gateway>:<port>/<enterprise>/
    <object manager>","<user id>","<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

This method removes a property from a business service.

Syntax

oService.RemoveProperty(*propName*)

Argument	Description
propName	A string indicating the name of the property to be removed

Returns

Not applicable

Usage

This method removes the property *propName* from the business service *oService*. As a result, subsequent calls to PropertyExists for that property returns FALSE.

Used With

Browser Script, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

See Also

"PropertyExists Method" on page 267

SetProperty Method

This method assigns a value to a property of a business service.

Syntax

oService.SetProperty(*propName, propValue*)

Argument	Description
propName	A string indicating the name of the property whose value is to be set
propValue	A string containing the value to assign to the property indicated by *propName*

Returns

Not applicable

Usage

SetProperty is used to set the value of a property of the business service from one of the methods of the service or from an external object.

Used With

Browser Script, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script

Example

For an example, read "Service_PreInvokeMethod Event" on page 274.

See Also

"GetProperty Method" on page 265

Business Service Events

The following topics describe business service events:

- "Service_InvokeMethod Event"
- "Service_PreCanInvokeMethod Event" on page 273
- "Service_PreInvokeMethod Event" on page 274

Service_InvokeMethod Event

The InvokeMethod event is called after the InvokeMethod method is called on a business service.

Server Script Syntax

Service_InvokeMethod(*methodName, InputArguments, OutputArguments*)

Argument	Description
methodName	A string representing the name of the method to execute
InputArguments	A property set containing the arguments required by the method
OutputArguments	A property set containing the arguments to be returned by the method

Browser Script Syntax

OutputArguments=*oService.*InvokeMethod(*methodName, InputArguments*)

Argument	Description
methodName	A string representing the name of the method to execute
InputArguments	A property set containing the arguments required by the method
OutputArguments	A property set containing the arguments to be returned by the method

Returns

Not applicable

Usage

Although this event does not return a value, it may add properties to, or alter the values of the properties in, the property set *OutputArguments.*

When you invoke business service methods through Browser Script, the business service may be implemented as a browser-based business service (written in JavaScript) or a server-based business service. Initially, the high interactivity mode framework checks if the business service resides in the browser, and if it does not find it, it sends the request to the server for execution.

NOTE: Browser Script may invoke a browser-based or server-based business service, but Server Script can only invoke a server-based business service.

NOTE: Although the InvokeMethod function does not return a value in Server Script, it may modify the properties in the *OutputArguments* property set.

Used With

Browser Script, Server Script

Example

This Browser Script example invokes the Shipping Engine business service created in "Service_PreInvokeMethod Event" on page 274 in response to a button click. The InvokeMethod property on the Button is set to "CalcShipping". It gets values from the keyboard through prompts (JavaScript method), passes a property set to the service, and gets return values by means of another property set.

```
function Applet_PreInvokeMethod (name, inputPropSet)

{
   if (name == "CalcShipping") {
      var svc = theApplication().GetService("Shipping Engine");
      var inputs = theApplication().NewPropertySet();
      var outputs = theApplication().NewPropertySet();

      var size = prompt("Enter the sum of H+W+D in inches");
      var shipper = prompt("Enter the shipping company");
      var weight = prompt("Enter the shipping weight in pounds");

      with (inputs) {
         SetProperty ("Size", size);
         SetProperty ("Shipping Company", shipper);
         SetProperty ("Ship Method", shipMethod);
         SetProperty ("Weight", weight);
         }

      outputs = svc.InvokeMethod("CalculateShipping", inputs);
      var cost = outputs.GetProperty("Cost");
      var delDate = outputs.GetProperty("Delivery Date");
```

```
            theApplication().SWEAlert ("Shipping by " + shipper + ":\n Shipping Cost is " +
                  cost + ",\n Estimated delivery date is " +
                  delDate);

            return (CancelOperation);

         }

         else

            return (ContinueOperation);

      }
```

See Also

"Service_PreInvokeMethod Event" on page 274

Service_PreCanInvokeMethod Event

The PreCanInvokeMethod event is called before the PreInvokeMethod, allowing the developer to determine whether or not the user has the authority to invoke the business service method.

Server Syntax

Service_PreCanInvokeMethod(*MethodName*, *&CanInvoke*)

Argument	Description
MethodName	A string representing the name of the method to be executed
&CanInvoke	A string representing whether or not the business service method can be invoked. Valid values are TRUE and FALSE.

Browser Syntax

Service_PreCanInvokeMethod(*MethodName)*

Argument	Description
MethodName	A string representing the name of the method to be executed

Returns

CancelOperation or ContinueOperation

Used With

Browser Script, Server Script

Service_PreInvokeMethod Event

The PreInvokeMethod event is called before a specialized method on the business service is invoked.

Syntax

Service_PreInvokeMethod(*methodName, InputArguments, OutputArguments*)

Argument	Description
methodName	A string representing the name of the method to execute
InputArguments	A property set containing the arguments required by the method
OutputArguments	A property set containing the arguments to be returned by the method

Returns

“ContinueOperation” or “CancelOperation”

Usage

If implementing a new method, or overriding the behavior of a method implemented in a specialized business service, the script should return CancelOperation to avoid invoking an “Unknown method name” error. As Figure 8 illustrates, this error is predictable if the PreInvokeMethod event is scripted. This occurs because there is no native code to execute in the InvokeMethod event. CancelOperation tells the Siebel application to cancel the remaining operations associated with the event.

NOTE: The example in Figure 8 applies only to new and user-defined methods. For existing standard Siebel methods, it is not necessary to use CancelOperation.

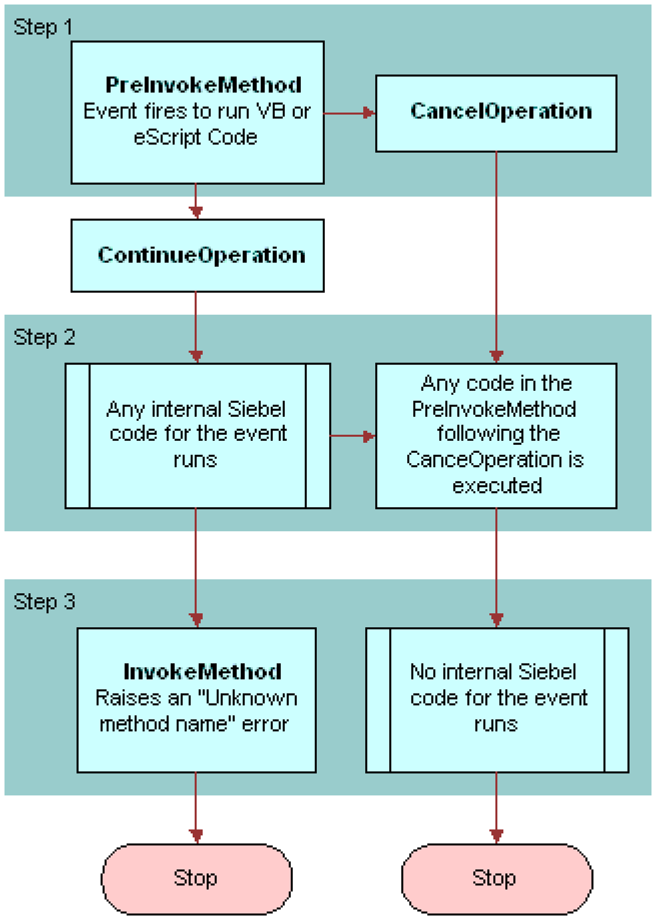

Step 1
PreInvokeMethod Event fires to run VB or eScript Code
CancelOperation
ContinueOperation
Step 2
Any internal Siebel code for the event runs
Any code in the PreInvokeMethod following the CanceOperation is executed
Step 3
InvokeMethod Raises an "Unknown method name" error
No internal Siebel code for the event runs
Stop
Stop

Figure 8. The Effects of CancelOperation and ContinueOperation

Service_InvokeMethod is rarely scripted, but can be used for such post-operation events as posting a notice to a log when the event completes successfully.

Used With

Browser Script, Server Script

Example

This Siebel VB example creates the new service “Shipping Engine.”

```
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("Total Dimensions"))
      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
```

See Also

"Service_InvokeMethod Event" on page 271

Control Methods

In the method descriptions, the placeholder *controlVar* stands for the name of the control on which the method is invoked; for example, `Button1_Click`.

NOTE: Control Methods do not work with ActiveX controls.

- "Applet Method" on page 277
- "BusComp Method" on page 278
- "GetProperty Method" on page 278
- "GetValue Method" on page 279
- "Name Method" on page 280
- "SetProperty Method" on page 282
- "SetValue Method" on page 283

Applet Method

The Applet method returns the parent applet object for a control.

Syntax

controlVar.Applet

Argument	Description
Not applicable	

Returns

The parent applet of the control

Usage

Obtaining the parent applet allows you to perform operations on the applet object, not just the control.

Used With

Browser Script

BusComp Method

The BusComp method returns the corresponding business component for the control.

Syntax

controlVar.BusComp

Argument	Description
Not applicable	

Returns

The business component associated with the control's parent applet.

Used With

Browser Script

For an example, read "Name Method" on page 209.

GetProperty Method

The GetProperty method returns the value of the property of a control.

Syntax

controlVar.GetProperty(*propName*)

Argument	Description
propName	The name of the property to be retrieved

Returns

The value of the property of a control.

Usage

GetProperty can be used with the following controls: CheckBox, ComboBox, TextBox, TextArea, and Label.

Use GetProperty to call the following properties: Background Color, Enabled, FontType, FontColor, FontSize, FontStyle, Height, Width, Shown, Read Only, Visible.

If more than one property is to be retrieved, each must be retrieved in a separate statement.

Used With

Browser Script

Example

This code sample uses GetProperty to return values for FontSize, Background Color, Width, and Height:

```
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

The GetValue method returns the value of the control. The type of the return value depends on the specific control object.

Syntax

controlVar.GetValue

Argument	Description
Not applicable	

Returns

The value displayed by the control for the data type of the underlying field.

NOTE: GetValue cannot return a literal value input into a control by a user. The method instead returns the value that the user's entry has been stored as, based on the data type of the underlying field.

Usage

The GetValue and SetValue methods work only for controls that are associated with business component fields. Therefore, these methods are not applicable to labels.

Used With

Browser Script

Name Method

The Name method returns the name of the object.

Syntax

controlVar.Name

Argument	Description
Not applicable	

Returns

A string containing the object name

Used With

Browser Script

Example

For an example, read "Name Method" on page 209.

SetLabelProperty Method

The SetLabelProperty method sets visual properties of a label.

Syntax

controlVar.SetLabelProperty(*propName*, *propValue*)

Argument	Description
propName	The name of the property to be set, as described in the following table
propValue	The value to assign to the property, as described in the following table

Returns

Not applicable

Usage

If more than one property is to be set, each must be set in a separate statement.

The following table lists the properties that can be set for a label, and the values that can be assigned to them.

Property	Value	Description
BgColor	string	Determines Background Color for a label: for example, red is “ff0000”, green is “00ff00”, and blue is “0000ff”
FontColor	string	Determines FontColor for a label: for example, green is “00ff00”
FontType	string	Determines FontType for a label: for example, “Times Roman”
FontSize	string	Determines FontSize for a label: for example, “12 pt”
FontStyle	string	Determines FontStyle for a label: for example, “Italic”
FontWeight	string	Determines FontWeight for a label. Acceptable values are bold, bolder, lighter, normal, 100, 200, 300, 400 (equivalent to normal), 500, 600, 700 (equivalent to bold), 800, and 900. Default is normal.
Height	string	Determines Height for a label, in pixels: for example, “5”
Visible	visible or hidden	Determines whether the label is visible. Defaults to repository definition unless explicitly modified by using SetLabelProperty.
Width	string	Determines Width for a label, in pixels: for example, “80”

The SetLabelProperty method is not enabled by default. You must enable it in Siebel Tools before using it in a script. To enable the SetLabelProperty, expand the Control node in the Tools Object Explorer and select the Control User Prop node. Then add a new Control User Prop named “useLabelID” with a value of “TRUE”.

Used With

Browser Script

Example

The following code shows the use of SetLabelProperty.

```
function Applet_PreInvokeMethod (name, inputPropSet){
   // example of changing the Font Size of the Location label
   if (name == "fontsize") {
      var ctl = this.FindControl("Location");
      var fSize = prompt("Please specify the desired label font size (numeric value
only).");
      ctl.SetLabelProperty("FontSize", fSize);
      return ("CancelOperation");
   }

   // example of changing the Background Color of the Location label
   else if (name == "bgcolor") {
      var ctl = this.FindControl("Location");
      var bgColor = prompt("Specify the background color of the label. Please enter
a valid six hexadecimal digit RGB value");
```

```
         ctl.SetLabelProperty("BgColor", bgColor);
         return ("CancelOperation");
      }

      // example of changing the Font Type of the Location label
      else if (name == "fonttype") {
         var ctl = this.FindControl("Location");
         var fontType = prompt("Please specify the font type for the label");
         ctl.SetLabelProperty("FontType", fontType);
         return ("CancelOperation");
      }

      // example of changing the Font Color of the Location label
      else if (name == "fontcolor") {
         var ctl = this.FindControl("Location");
         var fontColor = prompt("Specify the font color of the label.  Please enter a
   valid six hexadecimal digit RGB value");
         ctl.SetLabelProperty("FontColor", fontColor);
         return ("CancelOperation");
      }
      else
         return ("ContinueOperation");
      }
```

SetProperty Method

The SetProperty method sets visual properties of a control.

Syntax

controlVar.SetProperty(*propName*, *propValue*)

Argument	Description
propName	The name of the property to be set, as described in the following table
propValue	The value to assign to the property, as described in the following table

Returns

Not applicable

Usage

SetProperty can be used with the following controls: CheckBox, ComboBox, TextBox, and TextArea.

If more than one property is to be set, each must be set in a separate statement.

The following table lists the properties that can be set for a control, and the values that can be assigned to them.

Property	Value	Description
BgColor	string	Determines Background Color for a control: for example, red is “ff0000”, green is “00ff00”, and blue is “0000ff”
Enabled	TRUE or FALSE	Is the button active? (Unless explicitly modified by using SetProperty, default is TRUE.)
FontColor	string	Determines FontColor for a control: for example, green is “00ff00”
FontType	string	Determines FontType for a control: for example, “Times Roman”
FontSize	string	Determines FontSize for a control: for example, “12 pt”
FontStyle	string	Determines FontStyle for a control: for example, “Bold”
Height	string	Determines Height for a control, in pixels: for example, “5”
Shown	TRUE or FALSE	Is the control shown? (Unless explicitly modified by using SetProperty, default is as defined in the repository.)
ReadOnly	TRUE or FALSE	Determines whether the control is read-only. Defaults to repository definition unless explicitly modified by using SetProperty.
Visible	TRUE or FALSE	Determines whether the control is visible. Defaults to repository definition unless explicitly modified by using SetProperty.
Width	string	Determines Width for a control, in pixels: for example, “80”

Used With

Browser Script

Example

The following code shows the use of SetProperty.

```
objCheckBox.SetProperty("FontColor", "00ff00");
objCheckBox.SetProperty("FontStyle", "italic");
objCheckBox.SetProperty("FontType", "Verdana");
objCheckBox.SetProperty("FontSize", "25pt");
objCheckBox.SetProperty("BgColor", "00f000");
objCheckBox.SetProperty("Width", "100");
objCheckBox.SetProperty("Height", "100");
```

SetValue Method

The SetValue method sets the contents of the specified control to the value indicated.

Syntax

controlVar.SetValue (*controlValue*)

Argument	Description
controlValue	String containing the value to which to set the control

Returns

Not applicable

Usage

The GetValue and SetValue methods work only for controls that are associated with business component fields. Therefore, these methods are not applicable to labels. SetValue sets the contents of a control. The user can still change those contents before they are committed to the BusComp field.

SetValue does not validate the format of the data. Data validation occurs at the time user commits the record by stepping off the field/record or saving the record. SetValue can also set the value for a read-only control. However, such value is lost when the record is committed. Also, these methods only work on form applets.

Used With

Browser Script

Example

The following code shows the use of GetValue and SetValue.

```
function Applet_PreInvokeMethod (name, inputPropSet)
{
   // Example of changing the value of the Abstract control to uppercase

   if(name == "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

   if(name == "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
   if(name == "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 commits the record
      ctl= null;
      return("CancelOperation");
   }

}
```

Property Set Methods

In the method descriptions, the placeholder *oPropSet* refers to a variable containing a property set.

AddChild Method

The AddChild method is used to add subsidiary property sets to a property set, so as to form hierarchical (tree-structured) data structures.

Syntax

oPropSet.AddChild(*childPropSet as PropertySet)*

Argument	Description
childObject	A property set to be made subsidiary to the property set indicated by *oPropSet*

Returns

An integer indicating the index of the child property set.

Usage

Property sets can be used to create tree-structured data structures. Any number of arbitrarily structured child property sets can be added to a property set. You may use child property sets to structure a property set in a manner similar to the data model. For example, the parent property set might be Account, with child property sets for opportunities, contacts, activities, and so on. At the same time, you could construct an independent property set called Opportunity, to which accounts, contacts, and activities might be children.

If a property set is instantiated within script and then added to a parent property set, the child property set is not released when the parent property set is released. This is because a reference to the child property set still exists independently.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

Example

The following fragment of eScript code shows how child property sets may be added to a parent property set.

```
var Account = TheApplication().NewPropertySet();
var Opportunity = TheApplication().NewPropertySet();
var Contact = TheApplication().NewPropertySet();
var Activity = TheApplication().NewPropertySet();

Account.AddChild(Opportunity);
Account.AddChild(Contact);
Account.AddChild(Activity);
```

See Also

“GetChild Method” on page 288
“InsertChildAt Method” on page 295
“RemoveChild Method” on page 296

Copy Method

This method returns a copy of a property set.

Syntax

oPropSet.Copy()

Argument	Description
Not applicable	

Returns

A copy of the property set indicated by *oPropSet*

Usage

This method creates a copy of a property set, including any properties and children it may have. Because property sets are generally passed by reference, making a copy allows the method to manipulate the property set without affecting the original definition.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

Example

This Siebel VB example uses a copy of a property set to store the original values of its properties, and displays both 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

End Sub
```

GetChild Method

Syntax

GetChild returns a specified child property set of a property set.

oPropSet.GetChild(*index*)

Argument	Description
index	An integer representing the index number of the child property set to be retrieved

Returns

The property set at index *index* of the parent property set

Usage

When child property sets are created, each is given an index number within the parent property set, starting at 0. Property sets added using AddChild get the next available index number. However, a property set added using InsertChildAt inserts a new property set at a specified index. The property set previously at that index, and every property set after it, have their indexes increased by 1. Similarly, a property set removed using RemoveChild decreases the indexes of following child property sets by 1.

NOTE: This method returns the number of direct descendants only. That is, if the child property sets have children of their own, these grandchildren are not included in the computation of the return value.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

Example

This Siebel eScript example sets the Name property of child property sets to the same value.

```
function Test1_Click ()
{
   var Account = TheApplication().NewPropertySet();
   var Opportunity = TheApplication().NewPropertySet();
   var Contact = TheApplication().NewPropertySet();
   var Activity = TheApplication().NewPropertySet();
   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');
   }
}
```

See Also

"AddChild Method" on page 286
"InsertChildAt Method" on page 295

GetChildCount Method

This method returns the number of child property sets attached to a parent property set.

Syntax

oPropSet.GetChildCount()

Argument	Description
Not applicable	

Returns

The number of child property sets subordinate to *oPropSet*

Usage

This method returns the actual number of child property sets of *oPropSet.* Because index numbers for child property sets start at 0, a child count of 3 indicates that there are child property sets at indexes 0, 1, and 2.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

Example

For an example, read "GetChild Method" on page 288.

GetFirstProperty Method

This method returns the name of the first property in a property set.

Syntax

oPropSet.GetFirstProperty()

Argument	Description
Not applicable	

Returns

A string representing the name of the first property in a property set

Usage

GetFirstProperty() retrieves the name of the first property, in order of definition, of a business service. Use GetFirstProperty and GetNextProperty to retrieve the name of a property. You can then use the retrieved name as an argument to GetProperty to retrieve the property value, or with SetProperty to assign property values.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

Example

This example uses GetFirstProperty to get the first property, then retrieves all subsequent properties using GetNextProperty. The loop terminates when GetNextProperty retrieves a null.

```
function Service_PreInvokeMethod (MethodName, Inputs, Outputs)
{
   var propName = "";
   var propVal = "";

   propName = Inputs.GetFirstProperty();

   // stay in loop if the property name is not null
   // or a null string
   while ((propName != "") && (propName != null)) {
      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);
}
```

See Also

"GetNextProperty Method"
"GetProperty Method" on page 292

GetNextProperty Method

This method returns the next property in a property set.

Syntax

oPropSet.GetNextProperty()

Argument	Description
Not applicable	

Returns

A string representing the name of the next property in a property set

Usage

After retrieving the name of the first property with the GetFirstProperty method, GetNextProperty should be used in a loop, to be terminated when a null string ("") is returned. When property names have been retrieved, they may be used as arguments to GetProperty to retrieve the property value, or with SetProperty to assign property values.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

Example

For an example, read "GetFirstProperty Method" on page 290.

See Also

"GetFirstProperty Method" on page 290
"GetProperty Method"

GetProperty Method

This method returns the value of a property when given the property name.

Syntax

oPropSet.GetProperty(*propName*)

Argument	Description
propName	A string representing the name of a property as returned by GetFirstProperty or GetNextProperty

Returns

A string representing the value stored in the property indicated by *propName*, or an empty string ("") if the property does not exist

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

Example

The following fragment of Siebel eScript code receives a set of input properties used with the Shipping Engine service described in “Service_PreInvokeMethod Event” on page 274.

```
var Inputs = TheApplication().NewPropertySet();

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"));
```

See Also

“GetFirstProperty Method” on page 290
“GetNextProperty Method” on page 291
“SetProperty Method” on page 298

GetPropertyCount Method

This method returns the number of properties attached to a property set.

Syntax

oPropSet.GetPropertyCount

Argument	Description
Not applicable	

Returns

The number of properties contained within a property set

Used With

Browser Script, COM Data Control, COM Data Server, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

GetType Method

This method retrieves the data value stored in the type attribute of a property set.

Syntax

oPropSet.GetType

Argument	Description
Not applicable	

Returns

A string representing the value stored in the type attribute of the property set

Usage

Type, like value, is a special storage location for a data value.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

See Also

"GetValue Method"
"SetType Method" on page 299

GetValue Method

This method retrieves the data value stored in the value attribute of a property set.

Syntax

oPropSet.GetValue

Argument	Description
Not applicable	

Returns

A string representing the data value stored in the value attribute of a property set

Usage

Value, like type, is a special storage location for a data value.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

See Also

"GetProperty Method" on page 292
"GetType Method" on page 293
"SetValue Method" on page 300

InsertChildAt Method

This method inserts a child property set into a parent property set at a specific location.

Syntax

oPropSet.InsertChildAt *childObject*, *index*

Argument	Description
childObject	A property set to be made subsidiary to the property set indicated by *oPropSet*
index	An integer representing the position at which *childObject* is to be inserted

Returns

Not applicable

Usage

This method inserts the property set *childObject* at the location *index*. Index numbers start at 0. When a child property set is inserted, the property set previously at the location *index* has its index increased by 1, as do subsequent child property sets.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

See Also

"AddChild Method" on page 286

PropertyExists Method

This method returns a Boolean value indicating whether a specified property exists in a property set.

Syntax

oPropSet.PropertyExists(*propName*)

Argument	Description
propName	A string representing the name of the property to be found

Returns

In Siebel VB, an integer (0 for false, 1 for true); in other interfaces, a Boolean

Usage

Because GetProperty returns a null string ("") for every nonexistent property, use PropertyExists() in an if statement to determine whether a specific property has been set.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

Example

For an example, read "GetFirstProperty Method" on page 290.

RemoveChild Method

This method removes a child property set from a parent property set.

Syntax

oPropSet.RemoveChild *index*

Argument	Description
index	An integer representing the index number of the child property set to be removed

Returns

Not applicable

Usage

When a child property set is removed, every child property set with an index higher than that of the removed set has its index decremented by 1.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

Example

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(0)
Next i
```

See Also

"AddChild Method" on page 286
"InsertChildAt Method" on page 295

RemoveProperty Method

This method removes a property from a property set.

Syntax

oPropSet.RemoveProperty *propName*

Argument	Description
propName	The name of the property to be removed

Returns

Not applicable

Usage

This method removes the property *propName* from the property set *oPropSet*.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

Reset Method

This method removes every properties and child property set from a property set.

Syntax

oPropSet.Reset()

Argument	Description
Not applicable	

Returns

Not applicable

Usage

This method removes every property and children from a property set, allowing the property set to be reused with new properties.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

SetProperty Method

This method assigns a data value to a property in a property set.

Syntax

oPropSet.SetProperty *propName, propValue*

Argument	Description
propName	A string representing the name of a property
propValue	A string representing the value to be assigned to *propName*

Returns

Not applicable

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

Example

This Siebel VB fragment makes use of the business service “Shipping Engine,” which is illustrated in “Service_PreInvokeMethod Event” on page 274.

```
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
```

See Also

"GetProperty Method" on page 292

SetType Method

This method assigns a data value to the type attribute of a property set.

Syntax

oPropSet.SetType *type*

Argument	Description
type	A string representing data to be stored in the type attribute

Returns

Not applicable

Usage

Type, like value, is a special storage location for a data value.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

See Also

"GetType Method" on page 293
"SetValue Method" on page 300

SetValue Method

This method assigns a data value to the value attribute of a property set.

Syntax

oPropSet.SetValue *value*

Argument	Description
value	A string representing data to be stored in the value attribute

Returns

Not applicable

Usage

Values, like properties and types, are storage locations for a data value.

Used With

Browser Script, COM Data Control, COM Data Server, Java Data Bean, Mobile Web Client Automation Server, Server Script, Web Client Automation Server

See Also

"GetValue Method" on page 294
"SetProperty Method" on page 298
"SetValue Method"

Miscellaneous Methods

The following methods do not belong to any other category:

- "GetErrorCode Method" on page 300
- "GetErrorMessage Method" on page 302
- "TheApplication Method" on page 302

GetErrorCode Method

This method is used with the Java Data Bean to display numeric error codes.

Syntax

public int getErrorCode()

Argument	Description
Not applicable	

Returns

A numeric error code

Used With

Java Data Bean

Example

This example for the Siebel Java Data Bean retrieves the first record in the Account business component. If an error occurs during execution, the script displays the error code and error message.

```
try
{
   //Instantiate the Siebel Data Bean
   Sieb_dataBean = new SiebelDataBean();
   String Cstr = "GatewayServer, EntServer, FINSObjMgr";
   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);
}

...
```

See Also

"GetErrorMessage Method"

GetErrorMessage Method

This method is used with the Java Data Bean to display error messages.

Syntax

public string getErrorMessage()

Argument	Description
Not applicable	

Returns

A string containing an error message

Used With

Java Data Bean

See Also

"GetErrorCode Method"

TheApplication Method

TheApplication is a global method that returns the unique object of type Application. This is the root of objects within the Siebel Applications object hierarchy. Use this method to determine the object reference of the application, which is later used to find other objects or to invoke methods on the application object.

Browser Script Syntax

theApplication()

VB Syntax

TheApplication

eScript Syntax

TheApplication()

Argument	Description
Not applicable	

Returns

Application, an object for use in finding other objects or invoking methods

Usage

For example, when using Siebel eScript to determine whether you are logged in to a server database or local database, use `TheApplication().InvokeMethod("GetDataSource")`.

Used With

Browser Script, Server Script

Example

The following example is in Siebel VB. It retrieves 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
```

5 Accessing Siebel COM Data Server with C++

This chapter presents a series of steps to build a simple COM client in Visual C++ and the Microsoft Foundation Class (MFC) library, which accesses the Siebel Data Server. Use this to build real-time interfaces to Siebel using C++ for integration purposes.

Building the Siebel COM Client in C++

The following procedure explains how to build the Siebel COM Client in C++.

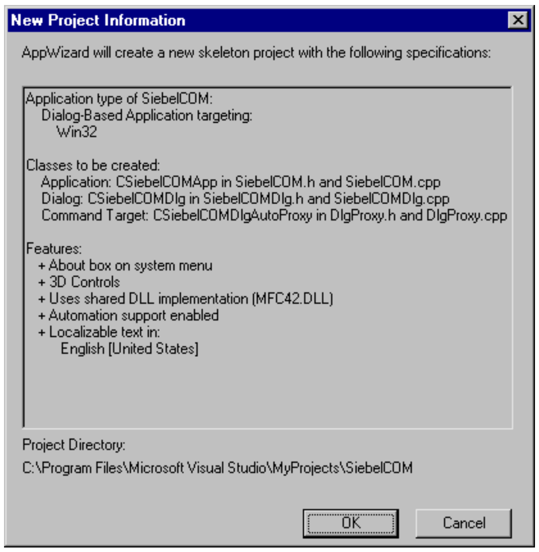
To build the Siebel COM client in C++

1. In Microsoft Visual C++, choose File > New > Project.
2. Select the `MFC AppWizard (exe)` project type.
3. In the Project name field, enter `SiebelCOM`, and then click OK.

   The MFC AppWizard starts.
4. Select the Dialog-based option and then click Next.
5. In the "What other support would you like to include?" frame, check Automation and clear ActiveX Controls, and then click Next. Click Next again.

6 Click Finish.

Microsoft Visual C++ displays the project information, as shown in the following illustration.



AppWizard will create a new skeleton project with the following specifications:

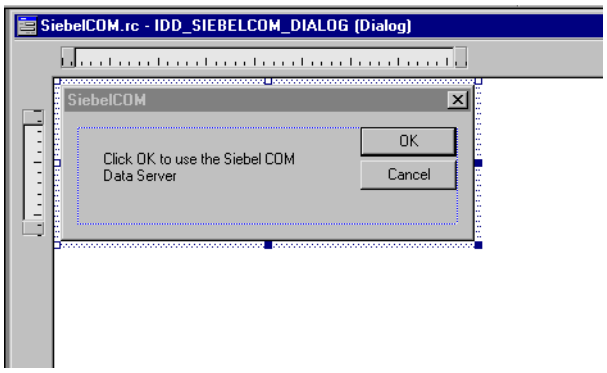
```
Application type of SiebelCOM:
    Dialog-Based Application targeting:
        Win32

Classes to be created:
    Application: CSiebelCOMApp in SiebelCOM.h and SiebelCOM.cpp
    Dialog: CSiebelCOMDlg in SiebelCOMDlg.h and SiebelCOMDlg.cpp
    Command Target: CSiebelCOMDlgAutoProxy in DlgProxy.h and DlgProxy.cpp

Features:
   + About box on system menu
   + 3D Controls
   + Uses shared DLL implementation (MFC42.DLL)
   + Automation support enabled
   + Localizable text in:
        English [United States]
```

Project Directory:
C:\Program Files\Microsoft Visual Studio\MyProjects\SiebelCOM

7 Click OK.

The Application Wizard generates the standard MFC code that serves as the skeleton for this project. Headers and libraries necessary to support COM automation are included. Refer to the Microsoft Visual Studio [MSDN] documentation for a detailed description of the MFC libraries.

8 The newly created dialog box appears in the workspace. You can resize the box and change the text in the label by editing its properties. Right-click the label in the dialog box to edit its properties. Modify the dialog box so that it looks something like the following illustration.


SiebelCOM.rc - IDD_SIEBELCOM_DIALOG (Dialog)
SiebelCOM
Click OK to use the Siebel COM Data Server
OK
Cancel

9 Choose View > ClassWizard > Automation.

10 Click Add Class > From a type library.

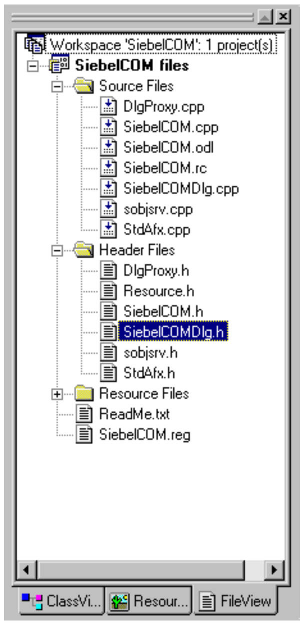
11 Navigate to the `C:\Sea750\client\bin` folder. Choose `sobjsrv.tlb`.

12 In the Confirm Classes dialog box, make sure all five Siebel classes are selected, and then click OK. Click OK again to close the Class Wizard.

13 Add code to communicate with the Siebel COM Server.

a In the workspace window, click the FileView tab.

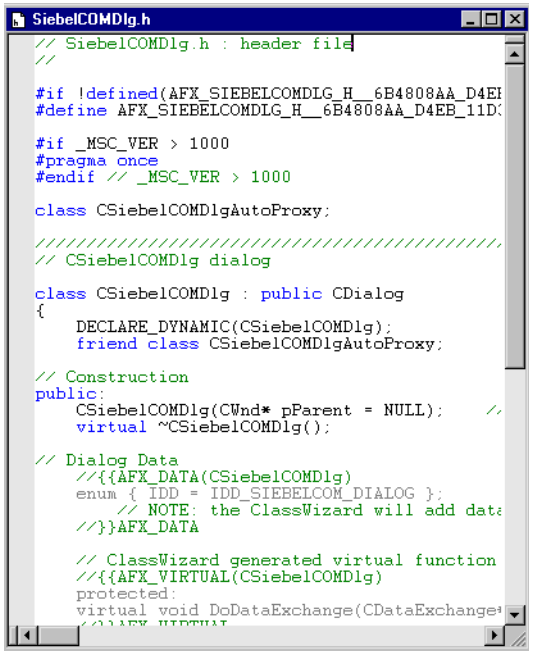
b Expand the Source Files and Header Files folders, as shown in the following illustration.



```
Workspace 'SiebelCOM': 1 project(s)
  SiebelCOM files
    Source Files
      DlgProxy.cpp
      SiebelCOM.cpp
      SiebelCOM.odl
      SiebelCOM.rc
      SiebelCOMDlg.cpp
      sobjsrv.cpp
      StdAfx.cpp
    Header Files
      DlgProxy.h
      Resource.h
      SiebelCOM.h
      SiebelCOMDlg.h
      sobjsrv.h
      StdAfx.h
    Resource Files
    ReadMe.txt
    SiebelCOM.reg
```

c Double-click the `SiebelCOMDlg.h` file.

The code window opens, as shown in the following illustration.



SiebelCOMDlg.h

```
// SiebelCOMDlg.h : header file
//

#if !defined(AFX_SIEBELCOMDLG_H__6B4808AA_D4E
#define AFX_SIEBELCOMDLG_H__6B4808AA_D4EB_11D

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

class CSiebelCOMDlgAutoProxy;

//////////////////////////////////////////////
// CSiebelCOMDlg dialog

class CSiebelCOMDlg : public CDialog
{
    DECLARE_DYNAMIC(CSiebelCOMDlg);
    friend class CSiebelCOMDlgAutoProxy;

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

// Dialog Data
    //{{AFX_DATA(CSiebelCOMDlg)
    enum { IDD = IDD_SIEBELCOM_DIALOG };
        // NOTE: the ClassWizard will add data
    //}}AFX_DATA

    // ClassWizard generated virtual function
    //{{AFX_VIRTUAL(CSiebelCOMDlg)
    protected:
    virtual void DoDataExchange(CDataExchange
```

d Enter the code that is highlighted in boldface in Figure 9 into the SiebelCOMDlg.h file.

```
#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();
```

Figure 9. Code for SiebelCOMDlg.h

e Choose File > Open and select the `SiebelCOMDlg.cpp` file. Add the code that is highlighted in boldface in Figure 10 to the `OnInitDialog` procedure.

```
BOOL CSiebelCOMDlg::OnInitDialog()
{
   CDialog::OnInitDialog();

   // Add “About...” menu item to system menu

   // IDM_ABOUTBOX must be in the system command range.
   ASSERT((IDM_ABOUTBOX & 0xFFF0) == IDM_ABOUTBOX);
   ASSERT(IDM_ABOUTBOX < 0xF000);

   CMenu* pSysMenu = GetSystemMenu(FALSE);
   if (pSysMenu != NULL)
   {
      CString strAboutMenu;
      strAboutMenu.LoadString(IDS_ABOUTBOX);
      if (!strAboutMenu.IsEmpty())
      {
         pSysMenu->AppendMenu(MF_SEPARATOR);
         pSysMenu->AppendMenu(MF_STRING, IDM_ABOUTBOX, strAboutMenu);
      }
   }

   // Set the icon for this dialog. The framework does this
   // automatically when the application’s main window
   // is not a dialog
   SetIcon(m_hIcon, TRUE); // Set big icon
   SetIcon(m_hIcon, FALSE); // Set small icon

   // 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 set the focus to a control
}
```

Figure 10. Code to Be Added to OnInitDialog Routine in SiebelCOMDlg.cpp

f In the same file, add the code that is highlighted in boldface in Figure 11 and Figure 12 to the OnOKDialog procedure. Make sure that the line beginning with sApp.LoadObjects points to the location of the CFG file you intend to use. In the line beginning with sApp.Login, make sure that you have entered a valid logon name and password.

```
void CSiebelCOMDlg::OnOK()
{

   short sErr;

   //Load Configuration File
      // Make sure that The  following line points to the configuration
      // file you intend to use!
   sApp.LoadObjects("C:\\siebel\\bin\\siebel.cfg", &sErr);
   if(sErr)
   {
      AfxMessageBox("LoadObjects failed.");
      return;
   } else
   {
      AfxMessageBox("CFG file loaded.");
   }

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

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

Figure 11. Code to be Added to OnOKDialog Routine in SiebelCOMDlg.cpp

```
//Get Account BusComp
   LPDISPATCH lpdBc;
   lpdBc = Bo.GetBusComp("Account", &sErr);
   if (sErr)
   {
      AfxMessageBox("GetBusComp failed.");
      return;
   } else
   {
      AfxMessageBox("Account BusComp retrieved.");
   }
   SiebelBusComp Bc(lpdBc);

   //Get the name of the first account
   Bc.ActivateField("Name", &sErr);
   if (sErr) return;
   Bc.ClearToQuery(&sErr);
   if (sErr) return;
   Bc.SetSearchSpec("Name","*",&sErr);
   if (sErr) return;
   Bc.ExecuteQuery(0,&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);

   return;

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

Figure 12. Code to Be Added to OnOKDialog Routine in SiebelCOMDlg.cpp

When you have finished creating your program, test it to make sure it works properly.

Testing Your Program

To test your program

1. Start your Siebel client application using the same CFG file and login arguments you specified in the code.
2. Choose Screens > Accounts > All Accounts. Verify that there is at least one account visible in the Account list applet. If there is not, create one. Exit the Siebel client.

3 Open the CFG file you specified in the code and make sure that the `DataSource` key indicates the database source you specified at logon in Step 2.

4 In Microsoft Visual C++, choose Build > Build SiebelCOM.exe, or press F7. If there are any errors or warnings reported in the output window, correct the errors and repeat this step.

5 Choose Build > Execute SiebelCOM.exe, or press F5.

A message box displays the message “Siebel Data Server initialized.”

6 Click OK.

The customized dialog box opens.

7 The application displays a series of message boxes, with the following messages:

“CFG file loaded.”
“Logged into Siebel database.”
“Account BusObject retrieved.”
“Account BusComp retrieved.”

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

6 COM Data Control Quick Reference

This quick reference has the following topics:

Application Methods for COM Data Control

Table 21 lists a summary of the Application methods' syntax.

Table 21. Application Methods Syntax Summary

Method	Description	Syntax

Attach Method	Allows an external application to reconnect to an existing Siebel session.	`Dim application as SiebelDataControl`
		`Dim status as Boolean`
		`status = application.Attach(sessionID As String)`

CurrencyCode Method	Returns the three-letter operating currency code.	`Dim application as SiebelDataControl`
		`Dim sCur as String`
		`sCur = Application.CurrencyCode`

Detach Method	Returns a string containing the Siebel session ID.	`Dim application as SiebelDataControl`
		`Dim sessionId as String`
		`sessionId = application.Detach()`

EnableExceptions Method	Enables/disables native COM error handling.	`Dim application as SiebelDataControl`
		`Dim bEnable as Boolean`
		`bEnable = application.EnableExceptions(`*`bEnable`*`)`

GetBusObject Method	Instantiates and returns a new instance of the business object specified in the argument.	`Dim application as SiebelDataControl`
		`Dim busObject as SiebelBusObject`
		`set busObject = application.GetBusObject(`*`busobjName`*` as String)`

Table 21. Application Methods Syntax Summary

Method	Description	Syntax

GetLastErrCode Method	Returns the last error code.	`Dim application as SiebelDataControl`
		`Dim iErr as Integer`
		`iErr = application.GetLastErrCode`

GetLastErrText Method	Returns the last error text message.	`Dim application as SiebelDataControl`
		`Dim sText as String`
		`sText = application.GetLastErrText`

GetProfileAttr Method	Returns the value of an attribute in a user profile.	`Dim application as SiebelDataControl`
		`Dim sText as String`
		`sText =`
		`application.GetProfileAttr(profileAttr`
		`ibuteName as string)`

GetService Method	Instantiates and returns a new instance of the argument-specified service.	`Dim application as SiebelDataControl`
		`Dim service as SiebelService`
		`set service = application.GetService(`
		`serviceName as String)`

GetSharedGlobal Method	Returns the shared user-defined global variables.	`Dim application as SiebelDataControl`
		`Dim sText as string`
		`sText =`
		`application.GetSharedGlobal(globalVari`
		`ableName as string)`

InvokeMethod Method	Calls the named specialized method.	`Dim application as SiebelDataControl`
		`Dim sReturn as String`
		`sReturn =`
		`application.InvokeMethod(`*`methodName`*` as`
		`String, `*`methodArgs`*` as String or`
		`StringArray)`

Login Method	Allows external applications to log in to the COM Data Server.	`Dim application as SiebelDataControl`
		`Dim sErr as String`
		`sErr = application.Login(`*`connectString`*
		`as String, `*`userName`*` as String, `*`password`*
		`as String)`

LoginId Method	Returns the login ID of the user who started the Siebel application.	`Dim application as SiebelDataControl`
		`Dim sID as String`
		`sID = application.LoginId`

LoginName Method	Returns the login name of the user who started the Siebel application.	`Dim application as SiebelDataControl`
		`Dim sUser as String`
		`sUser = application.LoginName`

Logoff Method	Disconnects the client from the server.	`Dim SiebApp as SiebelDataControl`
		`boolVal=siebApp.LogOff()`

NewPropertySet Method	Constructs and returns a new property set object.	`Dim application as SiebelDataControl`
		`Dim PropSet as PropertySet`
		`PropSet = oApplication.NewPropertySet()`

Table 21. Application Methods Syntax Summary

Method	Description	Syntax

PositionId Method	Returns the position ID that describes the user's current position.	`Dim application as SiebelDataControl`
		`Dim sRow as String`
		`sRow = application.PositionId`

PositionName Method	Returns the position name of the user's current position.	`Dim application as SiebelDataControl`
		`Dim sPosition as String`
		`sPosition = application.PositionName`

SetPositionId Method	Sets the active position to the Position ID specified in the argument.	`Dim application as SiebelDataControl`
		`Dim status as Boolean`
		`status =`
		`application.SetPositionId(sPosId)`

SetPositionName Method	Sets the active position to the position name specified in the argument. Returns a Boolean value indicating whether or not method succeeded.	`Dim application as SiebelDataControl`
		`Dim status as Boolean`
		`status =`
		`application.SetPositionName(sPosName)`

SetProfileAttr Method	Used in personalization to assign values to attributes in a user profile.	`Dim application as SiebelDataControl`
		`application.SetProfileAttr(`*`name`*` as`
		`String, `*`value`*` as String)`

SetSharedGlobal Method	Sets a shared user-defined global variable, which may be accessed using GetSharedGlobal.	`Dim application as SiebelDataControl`
		`Dim SiebApp as SiebelDataControl`
		`boolVal=SetSharedGlobal(`*`varName`*` As`
		`String, `*`value`*` As String)`

Trace Method	Appends a message to the trace file.	`Dim application as SiebelDataControl`
		`Dim SiebApp as SiebelDataControl`
		`boolVal=siebApp.TraceOn(`*`msg`*` As String)`
		`As Boolean`

TraceOff Method	Turns off the tracing started by the TraceOn method.	`Dim application as SiebelDataControl`
		`Dim SiebApp as SiebelDataControl`
		`boolVal=siebApp.TraceOff as Boolean`

TraceOn Method	Turns on the tracking of allocations and deallocations of Siebel objects, and SQL statements generated by the Siebel application.	`Dim application as SiebelDataControl`
		`Dim SiebApp as SiebelDataControl`
		`boolVal=siebApp.TraceOn(`*`fileName`*` As`
		`String, `*`category`*` As String, `*`src`*` As`
		`String) As Boolean`

Business Component Methods for COM Data Control

Table 22 lists a summary of the Business Component methods’ syntax.

Table 22. Business Component Methods Syntax Summary

Method	Description	Syntax

ActivateField Method	Allows queries to retrieve data for the specified field.	`Dim busComp as SiebelBusComp`
		`BusComp.ActivateField(`*`fieldName`*
		`as String)`

ActivateMultipleFields Method	Allows queries to retrieve data for the fields specified in the property set.	`Dim busComp as SiebelBusComp`
		`busComp.ActivateMultipleFields(oP`
		`ropSet as SiebelPropertySet)`

Associate Method	Creates a new many-to-many relationship for the parent object through an association business component.	`Dim busComp as SiebelBusComp`
		`busComp.Associate(`*`whereIndicator`*
		`as Integer)`

BusObject Method	Returns the business object that contains the business component.	`Dim busComp as SiebelBusComp`
		`Dim busObject as SiebelBusObject`
		`Set busObject = busComp.BusObject`

ClearToQuery Method	Clears the current query and sort specifications on the business component.	`Dim busComp as SiebelBusComp`
		`busComp.ClearToQuery`

DeactivateFields Method	Deactivates every currently activated field.	`Dim busComp as SiebelBusComp`
		`busComp.DeactivateFields`

DeleteRecord Method	Removes the current record from the business component.	`Dim busComp as SiebelBusComp`
		`busComp.DeleteRecord`

ExecuteQuery Method	Retrieves a set of BusComp records.	`Dim buscomp as SiebelBusComp`
		`buscomp.ExecuteQuery(cursorMode`
		`As Integer) As Boolean`

ExecuteQuery2 Method	Retrieves a set of BusComp records.	`Dim buscomp as SiebelBusComp`
		`buscomp.ExecuteQuery2(cursorMode`
		`As Integer,ignoreMaxCursorSize As`
		`Integer) As Boolean`

FirstRecord Method	Moves to the first record in the business component.	`Dim busComp as SiebelBusComp`
		`Dim bIsRecord as Boolean`
		`bIsRecord = busComp.FirstRecord`

GetFieldValue Method	Returns a value for the field specified in the argument.	`Dim busComp as SiebelBusComp`
		`Dim sValue as String`
		`sValue =`
		`busComp.GetFieldValue(`*`FieldName`*
		`as String)`

Table 22. Business Component Methods Syntax Summary

Method	**Description**	**Syntax**

GetFormattedFieldValue Method	Returns a formatted value for the field specified in the argument.	`Dim busComp as SiebelBusComp`
		`Dim sValue as String`
		`sValue =`
		`busComp.GetFormattedFieldValue(`*`FieldName`*` as String)`

GetLastErrCode Method	Returns the most recent error code.	`Dim errCode As Integer`
		`Dim SiebApp as SiebelDataControl`
		`errCode=siebApp.GetLastErrCode`

GetLastErrText Method	Returns the most recent error text message.	`Dim busComp as SiebelBusComp`
		`Dim sErr as String`
		`busComp.GetLastErrText`

GetMultipleFieldValues Method	Returns a value for the fields specified in the property set.	`Dim busComp as SiebelBusComp`
		`busComp.GetMultipleFieldValues(oFieldNames as SiebelPropertySet,`
		`oFieldValues as`
		`SiebelPropertySet)`

GetMVGBusComp Method	Returns the MVG business component associated with the field specified in the argument.	`Dim busComp as SiebelBusComp`
		`Dim mVGBusComp as SiebelBusComp`
		`set mVGBusComp =`
		`busComp.GetMVGBusComp(`*`FieldName`*
		`as String)`

GetNamedSearch Method	Returns the argument-named search specification.	`Dim busComp as SiebelBusComp`
		`Dim sValue as String`
		`sValue =`
		`busComp.GetNamedSearch(`*`SearchName`*
		`as String)`

GetPicklistBusComp Method	Returns the pick business component associated with the field specified in the argument.	`Dim busComp as SiebelBusComp`
		`Dim pickBusComp as SiebelBusComp`
		`Set pickBusComp =`
		`busComp.GetPicklistBusComp(FieldName as String)`

GetSearchExpr Method	Returns the current search expression.	`Dim busComp as SiebelBusComp`
		`Dim sExpr as String`
		`sExpr = busComp.GetSearchExpr`

GetSearchSpec Method	Returns the current search specification for the field specified in the argument.	`Dim busComp as SiebelBusComp`
		`Dim sSpec as String`
		`sSpec =`
		`busComp.GetSearchSpec(`*`FieldName`*
		`as String)`

GetUserProperty Method	Returns the value of a named user property.	`Dim buscomp as SiebelBusComp`
		`Dim retStr as String`
		`retStr=buscomp.GetUserProp(prop`
		`As String) As String`

Table 22. Business Component Methods Syntax Summary

Method	Description	Syntax

GetViewMode Method	Returns the visibility mode for the business component.	`Dim busComp as SiebelBusComp`
		`Dim iMode as Integer`
		`iMode = busComp.GetViewMode`

InvokeMethod Method	Calls the specialized method named in the argument.	`Dim busComp as SiebelBusComp`
		`Dim sReturn as String`
		`sReturn =`
		`busComp.InvokeMethod(`*`methodName`*
		`as String,` *`methodArgs`* `as String or StringArray)`

LastRecord Method	Moves to the last record in the business component.	`Dim busComp as SiebelBusComp`
		`Dim bReturn as Boolean`
		`bReturn = busComp.LastRecord`

Name Method	Returns the name of the business component.	`Dim busComp as SiebelBusComp`
		`Dim sName as String`
		`sName = busComp.Name`

NewRecord Method	Adds a new record to the business component.	`Dim busComp as SiebelBusComp`
		`busComp.NewRecord(`*`whereIndicator`*
		`as Integer)`

NextRecord Method	Moves to the next record in the business component.	`Dim busComp as SiebelBusComp`
		`bReturn as Boolean`
		`bReturn = busComp.NextRecord`

ParentBusComp Method	Returns the parent business component.	`Dim busComp as SiebelBusComp`
		`Dim parentBusComp as SiebelBusComp`
		`Set parentBusComp =`
		`busComp.ParentBusComp`

Pick Method	Places the currently selected record in a picklist business component into the appropriate fields of the parent business component.	`Dim busComp as SiebelBusComp`
		`busComp.Pick`

PreviousRecord Method	Moves to the previous record in the business component.	`Dim busComp as SiebelBusComp`
		`Dim bReturn as Boolean`
		`bReturn = busComp.PreviousRecord`

RefineQuery Method	Refines a query after a query has been executed.	`Dim busComp as SiebelBusComp`
		`busComp.RefineQuery`

SetFieldValue Method	Assigns a new value to the named field for the current row of the business component.	`Dim busComp as SiebelBusComp`
		`busComp.SetFieldValue(`*`FieldName`*
		`as String,` *`FieldValue`* `as String)`

Table 22. Business Component Methods Syntax Summary

Method	Description	Syntax
SetFormattedFieldValue Method	Accepts the field value in the current local format and assigns the new value to the named field for the current row of the business component.	`Dim busComp as SiebelBusComp` `busComp.SetFormattedFieldValue(`*`FieldName`*` as String, `*`FieldValue`*` as String)`
SetMultipleFieldValues Method	Assigns a new value to the fields specified in the property set for the current row of the business component.	`Dim busComp as SiebelBusComp` `BusComp.SetMultipleFieldValues(oPropSet as SiebelPropertySet)`
SetNamedSearch Method	Sets a named search specification on the business component.	`Dim busComp as SiebelBusComp` `busComp.SetNameSearch(`*`searchName`*` as String, `*`searchSpec`*` as String)`
SetSearchExpr Method	Sets the search specification for the business component.	`Dim busComp as SiebelBusComp` `busComp.SetSearchExpr(`*`searchSpec`*` as String)`
SetSearchSpec Method	Sets the search specification for the specified field.	`Dim busComp as SiebelBusComp` `busComp.SetSearchSpec(`*`FieldName`*` as String, searchSpec as String)`
SetSortSpec Method	Sets the sort specification for a query.	`Dim busComp as SiebelBusComp` `busComp.SetSortSpec(`*`sortSpec`*` as String)`
SetViewMode Method	Sets the visibility type for the business component.	`Dim buscomp as SiebelBusComp` `Dim boolVal as Boolean` `boolVal=buscomp.SetViewMode(mode As Integer) As Boolean`
UndoRecord Method	Reverses any uncommitted changes made to the record.	`Dim busComp as SiebelBusComp` `busComp.UndoRecord`
WriteRecord Method	Commits to the database any changes made to the current record.	`Dim busComp as SiebelBusComp` `busComp.WriteRecord`

Business Object Methods for COM Data Control

Table 23 lists a summary of the Business Object methods' syntax.

Table 23. Business Object Methods Syntax Summary

Method	Description	Syntax

GetBusComp Method	Returns the specified business component.	`Dim busObject as SiebelBusObject`
		`Dim busComp as SiebelBusComp`
		`set busComp =`
		`BusObject.GetBusComp(`*`BusCompName`*` as String)`

GetLastErrCode Method	Returns the most recent error code.	`Dim busObject as SiebelBusObject`
		`Dim iErr as Integer`
		`busObject.GetLastErrCode`

GetLastErrText Method	Returns the most recent error text.	`Dim busObject as SiebelBusObject`
		`Dim sErr as String`
		`busObject.GetLastErrText`

Name Method	Returns the name of the control.	`Dim busObject as SiebelBusObject`
		`Dim sName as String`
		`sName = busObject.Name`

Business Service Methods for COM Data Control

Table 24 lists a summary of the Business Service methods' syntax.

Table 24. Business Service Methods Syntax Summary

Method	Description	Syntax

GetFirstProperty Method	Retrieves the name of the first property of a business service.	`Dim oService as SiebelService`
		`Dim sName as String`
		`sName = oService.GetFirstProperty()`

GetNextProperty Method	Once the name of the first property has been retrieved, retrieves the name of the next property of a business service.	`Dim oService as SiebelService`
		`Dim sName as String`
		`sName = oService.GetNextProperty()`

GetProperty Method	Retrieves the value stored in the specified property.	`Dim oService as SiebelService`
		`Dim sValue as String`
		`sValue =`
		`oService.GetProperty(`*`propName`*` as String)`

Table 24. Business Service Methods Syntax Summary

Method	Description	Syntax

Name Method	Returns the name of the business service.	`Dim oService as SiebelService`
		`Dim sName as String`
		`sName = oService.Name`

InvokeMethod Method	Calls a specialized method or a user-created method on the business service.	`Dim oService as SiebelService`
		`Dim Return`
		`Return =`
		`oService.InvokeMethod(methodName as String, InputArguments as SiebelPropertySet, OutputArguments as SiebelPropertySet)`

PropertyExists Method	Returns a Boolean value indicating whether the property specified in the argument exists.	`Dim oService as SiebelService`
		`Dim propExists as Boolean`
		`propExists = oService.PropertyExists( propName as String)`

RemoveProperty Method	Removes a property from a business service.	`Dim oService as SiebelService`
		`oService.RemoveProperty(`*propName* `as String)`

SetProperty Method	Assigns a value to a property of a business service.	`Dim oService as SiebelService`
		`oService.SetProperty(`*propName* `as String,` *propValue* `as String)`

Property Set Methods for COM Data Control

Table 25 lists a summary of the Property Set methods' syntax.

Table 25. Property Set Methods Syntax Summary

Method	Description	Syntax

AddChild Method	Adds subsidiary property sets to a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim iIndex as Integer`
		`iIndex = oPropSet.AddChild(`
		`childObject as Property Set)`

Copy Method	Returns a copy of a property set.	`Dim oPropSet1 as SiebelPropertySet`
		`Dim oPropSet2 as SiebelPropertySet`
		`oPropSet2 = oPropSet1.Copy()`

GetChild Method	Returns a specified child property set of a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim sPropVal as String`
		`sPropVal = oPropSet.GetChild(`*index* `as Integer)`

Table 25. Property Set Methods Syntax Summary

Method	Description	Syntax

GetChildCount Method	Returns the number of child property sets attached to a parent property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim iCount as Integer`
		`iCount = oPropSet.GetChildCount()`

GetFirstProperty Method	Returns the name of the first property in a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim sPropName as String`
		`sPropName =`
		`oPropSet.GetFirstProperty()`

GetNextProperty Method	Returns the name of the next property in a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim sPropName as String`
		`sPropName =`
		`oPropSet.GetNextProperty()`

GetProperty Method	Returns the value of a property when given the property name.	`Dim oPropSet as SiebelPropertySet`
		`Dim sPropVal as String`
		`sPropVal =`
		`oPropSet.GetProperty(`*propName* `as`
		`String)`

GetPropertyCount Method	Returns the number of properties attached to a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim count as Long`
		`count = oPropSet .GetPropertyCount`

GetType Method	Returns the value stored in a type in a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim sTypeVal as String`
		`sTypeVal = oPropSet.GetType()`

GetValue Method	Returns a value stored as part of a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim sValVal as String`
		`sValVal = oPropSet.GetValue()`

InsertChildAt Method	Inserts a child property set into a parent property set at a specific location.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.InsertChildAt(childObject as`
		`SiebelPropertySet, index as Long)`

PropertyExists Method	Returns a Boolean value indicating whether the property specified in the argument exists.	`Dim oPropSet as Property Set`
		`Dim propExists as Boolean`
		`propExists = oPropSet.PropertyExists(`
		`propName as String)`

RemoveChild Method	Removes a child property set as a specified index from a parent property set.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.RemoveChild(index as Long)`

RemoveProperty Method	Removes the property specified in its argument from a property set.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.RemoveProperty(`*propName* `as`
		`String)`

Reset Method	Removes every property and child property set from a property set.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.Reset()`

Table 25. Property Set Methods Syntax Summary

Method	Description	Syntax
SetProperty Method	Assigns a value to the property of a property set specified in its argument.	`Dim oPropSet as SiebelPropertySet` `oPropSet.SetProperty(`*`propName`*` as String, `*`propValue`*` as String)`
SetType Method	Assigns a data value to a type member of a property set.	`Dim oPropSet as SiebelPropertySet` `oPropSet.SetType(`*`value`*` as String)`
SetValue Method	Assigns a data value to a value member of a property set.	`Dim oPropSet as SiebelPropertySet` `oPropSet.SetValue(`*`value`*` as String)`

7 COM Data Server Quick Reference

This quick reference has the following topics:

Application Methods for COM Data Server

Table 26 lists a summary of the Applications methods' syntax.

Table 26. Application Methods Syntax Summary

Method	Description	Syntax

CurrencyCode Method	Returns the three-letter operating currency code.	`Dim application as SiebelApplication`
		`Dim sCur as String`
		`sCur = Application.CurrencyCode(ErrCode as Integer)`

GetBusObject Method	Instantiates and returns a new instance of the business object specified in the argument.	`Dim application as SiebelApplication`
		`Dim busObject as SiebelBusObject`
		`set busObject = application.GetBusObject(`*`busobjName`*` as String, ErrCode as Integer)`

GetLastErrCode Method	Returns the last Siebel error number.	`Dim application as SiebelApplication`
		`Dim iErrNum as Integer`
		`iErrNum = application.GetLastErrCode(ErrCode as Integer)`

GetLastErrText Method	Returns the last error text message.	`Dim application as SiebelApplication`
		`Dim sText as String`
		`sText = application.GetLastErrText(ErrCode as Integer)`

Table 26. Application Methods Syntax Summary

Method	Description	Syntax

GetProfileAttr Method	Returns the value of an attribute in a user profile.	`Dim application as SiebelApplication`
		`Dim sText as String`
		`sText = application.GetProfileAttr(Name as String)`

GetService Method	Instantiates and returns a new instance of the argument-specified service.	`Dim Application as SiebelApplication`
		`Dim Service as SiebelService`
		`set Service = Application.GetService(`*`serviceName`*` as String, ErrCode as Integer)`

GetSharedGlobal Method	Gets the shared user-defined global variables.	`Dim application as SiebelApplication`
		`Dim sName as String`
		`sName = application.GetSharedGlobal(`*`varName`*` as String, ErrCode as Integer)`

LoadObjects Method	Starts the COM Data Server object and returns a reference to the Application object.	`Dim application as SiebelApplication`
		`Dim returned as SiebelApplication`
		`application.LoadObjects(`*`pathName\cfgFileName`*` as String, ErrCode as Integer)`

Login Method	Allows external applications to log in to the COM Data Server.	`Dim application as SiebelApplication`
		`application.Login(userName as String, password as String, ErrCode as Integer)`

LoginId Method	Returns the login ID of the user who started the Siebel application.	`Dim application as SiebelApplication`
		`Dim sID as String`
		`sID = application.LoginId(ErrCode as Integer)`

LoginName Method	Returns the login name of the user who started the Siebel application.	`Dim application as SiebelApplication`
		`Dim sUser as String`
		`sUser = application.LoginName(ErrCode as Integer)`

NewPropertySet Method	Constructs and returns a new property set object.	`Dim oApplication as SiebelApplication`
		`Dim oPropSet as PropertySet`
		`oPropSet = oApplication.NewPropertySet()`

PositionId Method	Returns the position ID that describes the user's current position.	`Dim application as SiebelApplication`
		`Dim sRow as String`
		`sRow = application.PositionId(ErrCode as Integer)`

PositionName Method	Returns the position name of the user's current position.	`Dim application as SiebelApplication`
		`Dim sPosition as String`
		`sPosition = application.PositionName(ErrCode as Integer)`

Table 26. Application Methods Syntax Summary

Method	Description	Syntax

SetPositionId Method	Sets the active position to the position ID specified in the argument. Returns a Boolean value indicating if the method succeeded.	`Dim application as SiebelApplication`
		`Dim posId as String`
		`Dim status as Boolean`
		`status = application.SetPositionId(posId as String, ErrCode as Integer)`

SetPositionName Method	Sets the active position to the position name specified in the argument. Returns a Boolean value indicating if the method succeeded.	`Dim application as SiebelApplication`
		`Dim posName as String`
		`Dim status as Boolean`
		`status = application.SetPositionName(posName as String, ErrCode as Integer)`

SetProfileAttr Method	Used in personalization to assign values to attributes in a user profile.	`Dim application as SiebelApplication`
		`application.SetProfileAttr(`*`name`*` as String, `*`value`*` as String, ErrCode as Integer)`

SetSharedGlobal Method	Sets a shared user-defined global variable.	`Dim application as SiebelApplication`
		`application.SetSharedGlobal(`*`varName`*` as String, value as String, ErrCode as Integer)`

Trace Method	Appends a message to the trace file.	`Dim application as SiebelApplication`
		`application.Trace(`*`message`*` as String, ErrCode as Integer)`

TraceOff Method	Turns off the tracing started by TraceOn.	`Dim application as SiebelApplication`
		`application.TraceOff(ErrCode as Integer)`

TraceOn Method	Turns tracing on	`Dim application as SiebelApplication`
		`application.TraceOn(`*`filename`*` as String, `*`type`*` as Integer, Selection as String, ErrCode as Integer)`

Business Component Methods for COM Data Server

Table 27 lists a summary of the Business Component methods' syntax.

Table 27. Business Component Methods Syntax Summary

Method	Description	Syntax
ActivateField Method	Allows queries to retrieve data for the specified field.	`Dim busComp as SiebelBusComp` `busComp.ActivateField(`*`fieldName`*` as String, ErrCode as Integer)`
ActivateMultipleFields Method	Allows queries to retrieve data for the fields specified in the property set.	`Dim buscomp as SiebelBusComp` `buscomp.ActivateMultipleFields(oPropSet as SiebelPropertySet, ErrCode as Integer)`
Associate Method	Creates a new many-to-many relationship for the parent object through an association business component.	`Dim busComp as SiebelBusComp` `busComp.Associate(`*`whereIndicator`*` as Integer, ErrCode as Integer)`
BusObject Method	Returns the business object that contains the business component.	`Dim busComp as SiebelBusComp` `Dim busObject as BusObject` `Set busObject = busComp.BusObject(ErrCode as Integer)`
ClearToQuery Method	Clears the current query and sort specifications on the business component.	`Dim busComp as SiebelBusComp` `busComp.ClearToQuery(ErrCode as Integer)`
DeactivateFields Method	Deactivates every currently activated field.	`Dim busComp as SiebelBusComp` `busComp.DeactivateFields(ErrCode as Integer)`
DeleteRecord Method	Removes the current record from the business component.	`Dim busComp as SiebelBusComp` `busComp.DeleteRecord(ErrCode as Integer)`
ExecuteQuery Method	Retrieves a set of BusComp records.	`Dim busComp as SiebelBusComp` `busComp.ExecuteQuery(`*`cursorMode`*` as Boolean, ErrCode as Integer)`
ExecuteQuery2 Method	Retrieves a set of BusComp records.	`Dim busComp as SiebelBusComp` `busComp.ExecuteQuery2(`*`cursorMode`*` as Boolean, `*`ignoreMaxCursorSize`*` as Boolean, ErrCode as Integer)`

Table 27. Business Component Methods Syntax Summary

Method	Description	Syntax

FirstRecord Method	Moves to the first record in the business component.	`Dim busComp as SiebelBusComp`
		`Dim bIsRecord as Boolean`
		`bIsRecord =`
		`busComp.FirstRecord(ErrCode as Integer)`

FirstSelected Method	Returns the association business component.	`Dim busComp as SiebelBusComp`
		`Dim AssocBusComp as BusComp`
		`Set AssocBusComp =`
		`busComp.GetAssocBusComp(ErrCode as Integer)`

GetFieldValue Method	Returns a value for the field specified in the argument.	`Dim busComp as SiebelBusComp`
		`Dim sValue as String`
		`sValue =`
		`busComp.GetFieldValue(`*`FieldName`*` as String, ErrCode as Integer)`

GetFormattedFieldValue Method	Returns a formatted value for the field specified in the argument.	`Dim busComp as SiebelBusComp`
		`Dim sValue as String`
		`sValue =`
		`busComp.GetFormattedFieldValue(`*`FieldName`*` as String, ErrCode as Integer)`

GetMultipleFieldValues Method	Returns a value for the fields specified in the property set.	`Dim buscomp as SiebelBusComp`
		`Dim retValue as Boolean`
		`retValue =`
		`buscomp.GetMultipleFieldValues(oPropSetName as SiebelPropertySet, oPropSetValue as SiebelPropertySet, ErrCode as Integer)`

GetMVGBusComp Method	Returns the MVG business component associated with the field specified in the argument.	`Dim busComp as SiebelBusComp`
		`Dim mVGBusComp as SiebelBusComp`
		`set mVGBusComp =`
		`busComp.GetMVGBusComp(`*`FieldName`*` as String, ErrCode as Integer)`

GetNamedSearch Method	Returns the argument-named search specification.	`Dim busComp as SiebelBusComp`
		`Dim sValue as String`
		`sValue =`
		`busComp.GetNamedSearch(`*`SearchName`*` as String, ErrCode as Integer)`

GetPicklistBusComp Method	Returns the pick business component associated with the field specified in the argument.	`Dim busComp as SiebelBusComp`
		`Dim pickBusComp as SiebelBusComp`
		`Set pickBusComp =`
		`busComp.GetPicklistBusComp(`*`FieldName`*` as String, ErrCode as Integer)`

Table 27. Business Component Methods Syntax Summary

Method	Description	Syntax

GetSearchExpr Method	Returns the current search expression.	`Dim busComp as SiebelBusComp`
		`Dim sExpr as String`
		`sExpr =`
		`busComp.GetSearchExpr(ErrCode as Integer)`

GetSearchSpec Method	Returns the current search specification for the field specified in the argument.	`Dim busComp as BusComp`
		`Dim sSpec as String`
		`sSpec =`
		`busComp.GetSearchSpec(`*`FieldName`*` as String, ErrCode as Integer)`

GetUserProperty Method	Returns the value for the property name whose name is specified in the argument.	`Dim busComp as SiebelBusComp`
		`Dim sValue as String`
		`sValue =`
		`busComp.GetUserProperty(`*`propertyName`*` as String, ErrCode as Integer)`

GetViewMode Method	Returns the visibility mode for the business component.	`Dim busComp as SiebelBusComp`
		`Dim iMode as Integer`
		`iMode =`
		`busComp.GetViewMode(ErrCode as Integer)`

LastRecord Method	Moves to the last record in the business component.	`Dim busComp as SiebelBusComp`
		`Dim bReturn as Boolean`
		`bReturn =`
		`busComp.LastRecord(ErrCode as Integer)`

Name Method	Returns the name of the business component.	`Dim busComp as SiebelBusComp`
		`Dim sName as String`
		`sName = busComp.Name(ErrCode as Integer)`

NewRecord Method	Adds a new record to the business component.	`Dim busComp as SiebelBusComp`
		`busComp.NewRecord(`*`whereIndicator`*` as Integer, ErrCode as Integer)`

NextRecord Method	Moves to the next record in the business component.	`Dim busComp as SiebelBusComp`
		`Dim bReturn as Boolean`
		`bReturn =`
		`busComp.NextRecord(ErrCode as Integer)`

ParentBusComp Method	Returns the parent business component.	`Dim busComp as SiebelBusComp`
		`Dim parentBusComp as SiebelBusComp`
		`Set parentBusComp =`
		`busComp.ParentBusComp(ErrCode as Integer)`

Table 27. Business Component Methods Syntax Summary

Method	Description	Syntax

Pick Method	Places the currently selected record in a picklist business component into the appropriate fields of the parent business component.	`Dim busComp as SiebelBusComp`
		`busComp.Pick(ErrCode as Integer)`

PreviousRecord Method	Moves to the previous record in the business component.	`Dim busComp as SiebelBusComp`
		`Dim bReturn as Boolean`
		`bReturn =`
		`busComp.PreviousRecord(ErrCode as Integer)`

RefineQuery Method	Refines a query after a query has been executed.	`Dim busComp as SiebelBusComp`
		`busComp.RefineQuery(ErrCode as Integer)`

SetFieldValue Method	Assigns a new value to the named field for the current row of the business component.	`Dim busComp as SiebelBusComp`
		
		`SetFieldValue(fieldname As String, fieldValue As string,errCode as Integer)`

SetFormattedFieldValue Method	Accepts the field value in the current local format and assigns the new value to the named field for the current row of the business component.	`Dim busComp as SiebelBusComp`
		`busComp.SetFormattedFieldValue(`*`FieldName`*` as String, `*`FieldValue`*` as String, ErrCode as Integer)`

SetMultipleFieldValues Method	Assigns a new value to the fields specified in the property set for the current row of the business component.	`Dim buscomp as SiebelBusComp`
		`buscomp.SetMultipleFieldValues(oPropSet as SiebelPropertySet, ErrCode as Integer)`

SetNamedSearch Method	Sets a named search specification on the business component.	`Dim busComp as SiebelBusComp`
		`busComp.SetNamedSearch(`*`searchName`*` as String, searchSpec as String, ErrCode as Integer)`

SetSearchExpr Method	Sets the search specification for the business component.	`Dim busComp as SiebelBusComp`
		`busComp.SetSearchExpr(`*`searchSpec`*` as String, ErrCode as Integer)`

SetSearchSpec Method	Sets the search specification for the specified field.	`Dim busComp as SiebelBusComp`
		`busComp.SetSearchSpec(`*`FieldName`*` as String, `*`searchSpec`*` as String, ErrCode as Integer)`

SetSortSpec Method	Sets the sort specification for a query.	`Dim busComp as SiebelBusComp`
		`busComp.SetSortSpec(`*`sortSpec`*` as String, ErrCode as Integer)`

Table 27. Business Component Methods Syntax Summary

Method	Description	Syntax
SetUserProperty Method	Sets the value of the specified User Property.	`Dim busComp as SiebelBusComp` `busComp.SetUserProperty(`*propertyName* `as String,` *newValue* `as String, ErrCode as Integer)`
SetViewMode Method	Sets the visibility type for the business component.	`Dim buscomp as SiebelBusComp` `buscomp.SetViewMode(mode As Integer, errCode As Integer)`
UndoRecord Method	Reverses any uncommitted changes made to the record.	`Dim busComp as SiebelBusComp` `busComp.UndoRecord(ErrCode as Integer)`
WriteRecord Method	Commits to the database any changes made to the current record	`Dim busComp as SiebelBusComp` `busComp.WriteRecord(ErrCode as Integer)`

Business Object Methods for COM Data Server

Table 28 lists a summary of the Business Object methods' syntax.

Table 28. Business Object Methods Syntax Summary

Method	Description	Syntax
GetBusComp Method	Returns the specified business component.	`Dim busObject as SiebelBusObject` `Dim busComp as SiebelBusComp` `set busComp = busObject.GetBusComp(`*BusCompName* `as String, ErrCode as Integer)`
Name Method	Returns the name of the control.	`Dim busObject as SiebelBusObject` `Dim sName as String` `sName = busObject.Name(ErrCode as Integer)`

Business Service Methods for COM Data Server

Table 29 lists a summary of the Business Service methods' syntax.

Table 29. Business Service Methods Syntax Summary

Method	Description	Syntax

GetFirstProperty Method	Retrieves the name of the first property of a business service.	`Dim oService as SiebelService`
		`Dim sName as String`
		`sName =`
		`oService.GetFirstProperty(ErrCode as Integer)`

GetNextProperty Method	Once the name of the first property has been retrieved, retrieves the name of the next property of a business service.	`Dim oService as SiebelService`
		`Dim sName as String`
		`sName = oService.GetNextProperty(ErrCode as Integer)`

GetProperty Method	Retrieves the value stored in the specified property.	`Dim oService as SiebelService`
		`Dim sValue as String`
		`sValue = oService.GetProperty(`*`propName`*` as String, ErrCode as Integer)`

Name Method	Returns the name of the business service.	`Dim oService as SiebelService`
		`Dim sName as String`
		`sName = oService.Name`

InvokeMethod Method	Calls a specialized method or a user-created method on the business service.	`Dim oService as SiebelService`
		`oService.InvokeMethod(methodName as String, InputArguments as SiebelPropertySet, OutputArguments as SiebelPropertySet, ErrCode as Integer)`

PropertyExists Method	Returns a Boolean value indicating whether the property specified in the argument exists.	`Dim oService as SiebelService`
		`Dim propExists as Boolean`
		`propExists = oService.PropertyExists(`
		`propName`` as String)`

RemoveProperty Method	Removes a property from a business service.	`Dim oService as SiebelService`
		`oService.RemoveProperty(`*`propName`*` as String, ErrCode as Integer)`

SetProperty Method	Assigns a value to a property of a business service.	`Dim oService as SiebelService`
		`oService.SetProperty(`*`propName`*` as String,`
		`propValue`` as String, ErrCode as Integer)`

Property Set Methods for COM Data Server

Table 30 lists a summary of the Property Set methods' syntax.

Table 30. Property Set Methods Syntax Summary

Method	Description	Syntax

AddChild Method	Adds subsidiary property sets to a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim iIndex as Integer`
		`iIndex = oPropSet.AddChild( childObject as Property Set, errCode as Integer)`

Copy Method	Returns a copy of a property set.	`Dim oPropSet1 as SiebelPropertySet`
		`Dim oPropSet2 as SiebelPropertySet`
		`oPropSet2 = oPropSet1.Copy(ErrCode as Integer)`

GetChild Method	Returns a specified child property set of a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim oChildPropSet as SiebelPropertySet`
		`oChildPropSet = oPropSet.GetChild(` *`index`* `as Integer, ErrCode as Integer)`

GetChildCount Method	Returns the number of child property sets attached to a parent property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim iCount as Integer`
		`iCount = oPropSet.GetChildCount(ErrCode as Integer)`

GetFirstProperty Method	Returns the name of the first property in a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim sPropName as String`
		`sPropName =`
		`oPropSet.GetFirstProperty(ErrCode as Integer)`

GetNextProperty Method	Returns the name of the next property in a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim sPropName as String`
		`sPropName =`
		`oPropSet.GetNextProperty(ErrCode as Integer)`

GetProperty Method	Returns the value of a property when given the property name.	`Dim oPropSet as SiebelPropertySet`
		`Dim sPropVal as String`
		`sPropVal =`
		`oPropSet.GetProperty(`*`propName`* `as String, ErrCode as Integer)`

GetPropertyCount Method	Returns the number of properties contained within the property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim propCount as Integer`
		`propCount = oPropSet.GetPropertyCount (ErrCode as Integer)`

Table 30. Property Set Methods Syntax Summary

Method	Description	Syntax

GetType Method	Returns the value stored in a type in a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim sTypeVal as String`
		`sTypeVal = oPropSet.GetType(`*`value`*` as String)`

GetValue Method	Returns a value stored as part of a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim sValVal as String`
		`sValVal = oPropSet.GetValue(`*`ErrCode`*` as Integer)`

InsertChildAt Method	Inserts a child property set into a parent property set at a specific location.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.InsertChildAt(`*`childObject`*` as String, `*`index`*` as Integer, ErrCode as Integer)`

PropertyExists Method	Returns a Boolean value indicating whether the property specified in the argument exists.	`Dim oPropSet as Property Set`
		`Dim propExists as Boolean`
		`propExists = oPropSet.PropertyExists(`*`propName`*` as String, ErrCode as Integer)`

RemoveChild Method	Removes a child property set as a specified index from a parent property set.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.RemoveChild(`*`index`*` as Integer, errCode as Integer)`

RemoveProperty Method	Removes the property specified in its argument from a property set.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.RemoveProperty(`*`propName`*` as String, ErrCode as Integer)`

Reset Method	Removes every property and child property set from a property set.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.Reset(ErrCode as Integer)`

SetProperty Method	Assigns a value to the property of a property set specified in its argument.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.SetProperty(`*`propName`*` as String, `*`propValue`*` as String, ErrCode as Integer)`

SetType Method	Assigns a data value to a type member of a property set.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.SetType(`*`value`*` as String, ErrCode as Integer)`

SetValue Method	Assigns a data value to a value member of a property set.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.SetValue(`*`value`*` as String, errCode as Integer)`

8 Mobile Web Client Automation Server Quick Reference

This quick reference has the following topics:

Application Methods for Mobile Web Client Automation Server

Table 31 lists a summary of the Application methods' syntax.

Table 31. Application Methods Syntax Summary

Method	Description	Syntax

ActiveBusObject Method	Returns the business object for the business component of the active applet.	`Dim application as SiebelWebApplication`
		`Dim busObject as SiebelBusObject`
		`Set busObject =`
		`application.ActiveBusObject`

ActiveViewName Method	Returns the name of the active view.	`Dim application as SiebelWebApplication`
		`Dim sView as String`
		`sView = application.ActiveViewName`

CurrencyCode Method	Returns the three-letter operating currency code.	`Dim application as SiebelWebApplication`
		`Dim sCur as String`
		`sCur = Application.CurrencyCode`

EnableExceptions Method	Enables or disables native COM error handling.	`Dim application as SiebelWebApplication`
		`application.EnableExceptions(bEnable as`
		`Boolean)`
		`Call`
		`application.EnableExceptions(bEnable as`
		`Integer)`

GetBusObject Method	Instantiates and returns a new instance of the business object specified in the argument.	`Dim application as SiebelWebApplication`
		`Dim busObject as SiebelBusObject`
		`set busObject =`
		`application.GetBusObject(`*busobjName* `as`
		`String)`

Table 31. Application Methods Syntax Summary

Method	Description	Syntax

GetLastErrCode Method	Gets the last error code.	`Dim application as SiebelWebApplication`
		`Dim iErr as Integer`
		`iErr = application.GetLastErrCode`

GetLastErrText Method	Returns the last error text message.	`Dim application as SiebelWebApplication`
		`Dim sText as String`
		`sText = application.GetLastErrText`

GetProfileAttr Method	Returns the value of an attribute in a user profile.	`Dim application as SiebelWebApplication`
		`Dim profValue as String`
		`profValue =`
		`application.GetProfileAttr(profName as String)`

GetService Method	Instantiates and returns a new instance of the argument-specified service.	`Dim application as SiebelWebApplication`
		`Dim oService as SiebelService`
		`set oService =`
		`Application.GetService(`*`serviceName`*` as String)`

GetSharedGlobal Method	Returns the shared user-defined global variables.	`Dim application as SiebelWebApplication`
		`Dim name as String`
		`name = application.GetSharedGlobal (sName as String)`

InvokeMethod Method	Calls the named specialized method.	`Dim application as SiebelWebApplication`
		`Dim sReturn as String`
		`sReturn =`
		`application.InvokeMethod(methodName as String, `*`methodArgs`*` as String or StringArray)`

LoginId Method	Returns the login ID of the user who started the Siebel application.	`Dim application as SiebelWebApplication`
		`Dim sID as string`
		`sID = application.LoginId`

LoginName Method	Returns the login name of the user who started the Siebel application.	`Dim application as SiebelWebApplication`
		`Dim sUser as String`
		`sUser = application.LoginName`

Logoff Method	Terminates the Mobile Web Client session.	`Dim application as SiebelWebApplication`
		`Dim status as Boolean`
		`Status = application.Logoff`

NewPropertySet Method	Constructs a new property set object.	`Dim application as SiebelWebApplication`
		`Dim propset As SiebelPropertySet`
		`set propset = application.NewPropertySet`

PositionId Method	Returns the position ID that describes the user's current position.	`Dim application as SiebelWebApplication`
		`Dim sRow as String`
		`sRow = application.PositionId`

Table 31. Application Methods Syntax Summary

Method	**Description**	**Syntax**

PositionName Method	Returns the position name of the user's current position.	`Dim application as SiebelWebApplication`
		`Dim sPosition as String`
		`sPosition = application.PositionName`

SetPositionId Method	Sets the active position to the Position ID specified in the argument.	`Dim application as SiebelWebApplication`
		`Dim posId as String`
		`Dim status as Boolean`
		`status =`
		`application.SetPositionId(posId)`

SetPositionName Method	Sets the active position to the position name specified in the argument.	`Dim application as SiebelWebApplication`
		`Dim posName as String`
		`Dim status as Boolean`
		`status =`
		`application.SetPositionName(posName)`

SetProfileAttr Method	Used in personalization to assign values to attributes in a user profile.	`Dim oApplication as SiebelWebApplication`
		`Dim bool as Boolean`
		`bool = oApplication.SetProfileAttr(`*name*
		`as String,` *value* `as String)`

SetSharedGlobal Method	Sets a shared user-defined global variable.	`Dim application as SiebelWebApplication`
		`Dim bool as Boolean`
		`bool =`
		`application.SetSharedGlobal(varName as`
		`String,` *value* `as String)`

Trace Method	Appends a message to the trace file.	`Dim application as SiebelWebApplication`
		`application.Trace(message as String)`

TraceOff Method	Turns off the tracing started by TraceOn.	`Dim application as SiebelWebApplication`
		`Dim bool as Boolean`
		`bool = application.TraceOff`

TraceOn Method	Turns tracing on.	`Dim application as SiebelWebApplication`
		`Dim bool as Boolean`
		`bool = application.TraceOn(`*filename* `as`
		`String,` *type* `as String, Selection as`
		`String)`

Business Component Methods for Mobile Web Client Automation Server

Table 32 lists a summary of the Business Component methods' syntax.

Table 32. Business Component Methods Syntax Summary

Method	Description	Syntax

ActivateField Method	Allows queries to retrieve data for the specified field.	`Dim busComp as SiebelBusComp`
		`Dim bool as Boolean`
		`bool =`
		`BusComp.ActivateField(`*`fieldName`*` as String)`

ActivateMultipleFields Method	Allows queries to retrieve data for the fields specified in the property set.	`Dim buscomp as SiebelBusComp`
		`buscomp.ActivateMultipleFields(oPropSet as SiebelPropertySet)`

Associate Method	Creates a new many-to-many relationship for the parent object through an association business component.	`Dim busComp as SiebelBusComp`
		`Dim bool as Boolean`
		`bool =`
		`busComp.Associate(`*`whereIndicator`*` as Integer)`

BusObject Method	Returns the business object that contains the business component.	`Dim busComp as SiebelBusComp`
		`Dim busObject as SiebelBusObject`
		`Set BusObject = busComp.BusObject`

ClearToQuery Method	Clears the current query and sort specifications on the business component.	`Dim busComp as SiebelBusComp`
		`Dim bool as Boolean`
		`bool = busComp.ClearToQuery`

DeactivateFields Method	Deactivates every currently activated field.	`Dim busComp as SiebelBusComp`
		`Dim bool as Boolean`
		`bool = busComp.DeactivateFields`

DeleteRecord Method	Removes the current record from the business component.	`Dim busComp as SiebelBusComp`
		`Dim bool as Boolean`
		`bool = busComp.DeleteRecord`

ExecuteQuery Method	Retrieves a set of BusComp records.	`Dim busComp as SiebelBusComp`
		`Dim bool as Boolean`
		`bool =`
		`busComp.ExecuteQuery(`*`cursorMode`*` as Integer)`

ExecuteQuery2 Method	Retrieves a set of BusComp records.	`Dim busComp as SiebelBusComp`
		`Dim bool as Boolean`
		`bool =`
		`busComp.ExecuteQuery2(`*`cursorMode`*` as Integer, `*`ignoreMaxCursorSize`*` as Boolean)`

Table 32. Business Component Methods Syntax Summary

Method	Description	Syntax

FirstRecord Method	Moves to the first record in the business component.	`Dim busComp as SiebelBusComp`
		`Dim bIsRecord as Boolean`
		`bIsRecord = busComp.FirstRecord`

GetAssocBusComp Method	Returns the association business component.	`Dim busComp as SiebelBusComp`
		`Dim AssocBusComp as SiebelBusComp`
		`Set AssocBusComp =`
		`busComp.GetAssocBusComp`

GetFieldValue Method	Returns a value for the field specified in the argument.	`Dim busComp as SiebelBusComp`
		`Dim sValue as String`
		`sValue =`
		`busComp.GetFieldValue(`*FieldName*`as String)`

GetFormattedFieldValue Method	Returns a formatted value for the field specified in the argument.	`Dim busComp as SiebelBusComp`
		`Dim sValue as String`
		`sValue =`
		`busComp.GetFormattedFieldValue(`*FieldName*` as String)`

GetLastErrCode Method	Returns the last Siebel error number.	`Dim buscomp as SiebelBusComp`
		`Dim iErr as Integer`
		`iErr = buscomp.GetLastErrCode`

GetLastErrText Method	Returns the last error text message.	`Dim busComp as SiebelBusComp`
		`Dim sErr as String`
		`sErr = busComp.GetLastErrText`

GetMultipleFieldValues Method	Returns a value for the fields specified in the property set.	`Dim buscomp as SiebelBusComp`
		`buscomp.GetMultipleFieldValues(oPropSet as SiebelPropertySet, PValues as SiebelPropertySet)`

GetMVGBusComp Method	Returns the MVG business component associated with the field specified in the argument.	`Dim busComp as SiebelBusComp`
		`Dim mVGBusComp as SiebelBusComp`
		`set mVGBusComp =`
		`busComp.GetMVGBusComp(`*FieldName*`as String)`

GetNamedSearch Method	Returns the argument-named search specification.	`Dim busComp as SiebelBusComp`
		`Dim sValue as String`
		`sValue =`
		`busComp.GetNamedSearch(`*SearchName*` as String)`

GetPicklistBusComp Method	Returns the pick business component associated with the field specified in the argument.	`Dim busComp as SiebelBusComp`
		`Dim pickBusComp as SiebelBusComp`
		`Set pickBusComp =`
		`busComp.GetPicklistBusComp(`*FieldName*` as String)`

Table 32. Business Component Methods Syntax Summary

Method	Description	Syntax

GetSearchExpr Method	Returns the current search expression.	`Dim busComp as SiebelBusComp`
		`Dim sExpr as String`
		`sExpr = busComp.GetSearchExpr`

GetSearchSpec Method	Returns the current search specification for the field specified in the argument.	`Dim busComp as SiebelBusComp`
		`Dim sSpec as String`
		`sSpec =`
		`busComp.GetSearchSpec(`*`FieldName`*`as String)`

GetUserProperty Method	Returns the value for the property name specified in the argument.	`Dim busComp as SiebelBusComp`
		`Dim sValue as String`
		`sValue =`
		`busComp.GetUserProperty(`*`propertyName`*` as String)`

GetViewMode Method	Returns the visibility mode for the business component.	`Dim busComp as SiebelBusComp`
		`Dim iMode as Integer`
		`iMode = busComp.GetViewMode`

InvokeMethod Method	Calls the specialized method named in the argument.	`Dim busComp as SiebelBusComp`
		`Dim sReturn as String`
		`sReturn = busComp.InvokeMethod(`
		`methodName`` as String, `*`methodArgs`*
		`as String  or StringArray)`

LastRecord Method	Moves to the last record in the business component.	`Dim busComp as SiebelBusComp`
		`Dim bReturn as Boolean`
		`bReturn = busComp.LastRecord`

Name Method	Returns the name of the business component.	`Dim busComp as SiebelBusComp`
		`Dim sName as String`
		`sName = busComp.Name`

NewRecord Method	Adds a new record to the business component.	`Dim busComp as SiebelBusComp`
		`Dim bool as Boolean`
		`bool =`
		`busComp.NewRecord(`*`whereIndicator`*
		`as Integer)`

NextRecord Method	Moves to the next record in the business component.	`Dim busComp as SiebelBusComp`
		`Dim bReturn as Boolean`
		`bReturn = busComp.NextRecord`

ParentBusComp Method	Returns the parent business component.	`Dim busComp as SiebelBusComp`
		`Dim parentBusComp as SiebelBusComp`
		`Set parentBusComp =`
		`busComp.ParentBusComp`

Table 32. Business Component Methods Syntax Summary

Method	Description	Syntax

Pick Method	Places the currently selected record in a picklist business component into the appropriate fields of the parent business component.	`Dim busComp as SiebelBusComp`
		`busComp.Pick`

PreviousRecord Method	Moves to the previous record in the business component.	`Dim busComp as SiebelBusComp`
		`Dim bReturn as Boolean`
		`bReturn = busComp.PreviousRecord`

RefineQuery Method	Refines a query after a query has been executed.	`Dim busComp as SiebelBusComp`
		`busComp.RefineQuery`

SetFieldValue Method	Assigns a new value to the named field for the current row of the business component.	`Dim busComp as SiebelBusComp`
		`busComp.SetFieldValue(`*`FieldName`*` as String, `*`FieldValue`*` as String)`

SetFormattedFieldValue Method	Accepts the field value in the current local format and assigns the new value to the named field for the current row of the business component.	`Dim busComp as SiebelBusComp`
		`busComp.SetFormattedFieldValue(`*`FieldName`*` as String, `*`FieldValue`*` as String)`

SetMultipleFieldValues Method	Assigns a new value to the fields specified in the property set for the current row of the business component.	`Dim buscomp as SiebelBusComp`
		`buscomp.SetMultipleFieldValues(oPropSet as SiebelPropertySet)`

SetNamedSearch Method	Sets a named search specification on the business component.	`Dim busComp as SiebelBusComp`
		`busComp.SetNamedSearch(`*`searchName`*` as String, `*`searchSpec`*` as String)`

SetSearchExpr Method	Sets the search expression for the business component.	`Dim busComp as SiebelBusComp`
		`busComp.SetSearchExpr(`*`searchSpec`*` as String)`

SetSearchSpec Method	Sets the search specification for the specified field.	`Dim busComp as SiebelBusComp`
		`busComp.SetSearchSpec(`*`FieldName`*` as String, `*`searchSpec`*` as String)`

SetSortSpec Method	Sets the sort specification for a query.	`Dim busComp as SiebelBusComp`
		`busComp.SetSortSpec(`*`sortSpec`*` as String)`

SetUserProperty Method	Sets the value of the specified User Property.	`Dim busComp as SiebelBusComp`
		`busComp.SetUserProperty(`*`propertyName`*` as String, `*`newValue`*` as String)`

Table 32. Business Component Methods Syntax Summary

Method	Description	Syntax

SetViewMode Method	Sets the visibility type for the business component.	`Dim buscomp as SiebelBusComp`
		`buscomp.SetViewMode(mode As Integer)`

UndoRecord Method	Reverses any uncommitted changes made to the record.	`Dim busComp as SiebelBusComp`
		`busComp.UndoRecord`

WriteRecord Method	Commits to the database any changes made to the current record.	`Dim busComp as SiebelBusComp`
		`busComp.WriteRecord`

Business Object Methods for Mobile Web Client Automation Server

Table 33 lists a summary of the Business Object methods' syntax.

Table 33. Business Object Methods Syntax Summary

Method	Description	Syntax

GetBusComp Method	Returns the specified business component.	`Dim busObject as SiebelBusObject`
		`Dim busComp as SiebelBusComp`
		`set busComp =`
		`busObject.GetBusComp(`*`BusCompName`*` as String)`

GetLastErrCode Method	Returns the last Siebel error number.	`Dim busobject as SiebelBusObject`
		`Dim iErr as Integer`
		`iErr = busobject.GetLastErrCode`

GetLastErrText Method	Returns the last error text message.	`Dim busobject as SiebelBusObject`
		`Dim sValue as String`
		`sValue= busobject.GetLastErrText`

Name Method	Returns the name of the business object.	`Dim busObject as SiebelBusObject`
		`Dim sName as String`
		`sName = busObject.Name`

Business Service Methods for Mobile Web Client Automation Server

Table 34 lists a summary of the Business Service methods' syntax.

Table 34. Business Service Methods Syntax Summary

Method	Description	Syntax

GetFirstProperty Method	Retrieves the name of the first property of a business service.	`Dim oService as SiebelService`
		`Dim sName as String`
		`sName = oService.GetFirstProperty`

GetNextProperty Method	Once the name of the first property has been retrieved, retrieves the name of the next property of a business service.	`Dim oService as SiebelService`
		`Dim sName as String`
		`sName = oService.GetNextProperty`

GetProperty Method	Retrieves the value stored in the specified property.	`Dim oService as SiebelService`
		`Dim sValue as String`
		`sValue = oService.GetProperty(`*`propName`*` as String)`

InvokeMethod Method	Calls a specialized method or a user-created method on the business service.	`Dim oService as SiebelService`
		`oService.InvokeMethod(`*`methodName`*` as String, `*`InputArguments`*` as SiebelPropertySet, `*`OutputArguments`*` as SiebelPropertySet)`

Name Method	Returns the name of the business service.	`Dim oService as SiebelService`
		`Dim sName as String`
		`sName = oService.Name`

PropertyExists Method	Returns a Boolean value indicating whether the property specified in the argument exists.	`Dim oService as SiebelService`
		`Dim bool as Boolean`
		`bool = oService.PropertyExists(`*`propName`*` as String)`

RemoveProperty Method	Removes a property from a business service.	`Dim oService as SiebelService`
		`Dim bool as Boolean`
		`bool = oService.RemoveProperty(`*`propName`*` as String)`

SetProperty Method	Assigns a value to a property of a business service.	`Dim oService as SiebelService`
		`oService.SetProperty(`*`propName`*` as String, `*`propValue`*` as String)`

Property Set Methods for Mobile Web Client Automation Server

Table 35 lists a summary of the Property Set methods' syntax.

Table 35. Property Set Methods Syntax Summary

Method	Description	Syntax

AddChild Method	Adds subsidiary property sets to a property set.	`Dim oPropSet as SiebelPropertyset`
		`oPropSet.AddChild(`*`childObject`*` as SiebelPropertySet)`

Copy Method	Returns a copy of a property set.	`Dim oPropSet1 as SiebelPropertyset`
		`Dim oPropSet2 as SiebelPropertyset`
		`set oPropSet2 = oPropSet1.Copy`

GetChild Method	Returns a specified child property set of a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim childPropSet as SiebelPropertySet`
		`set childPropSet = oPropSet.GetChild(index as Long)`

GetChildCount Method	Returns the number of child property sets attached to a parent property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim iCount as Long`
		`iCount = oPropSet.GetChildCount`

GetFirstProperty Method	Returns the name of the first property in a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim sPropName as String`
		`sPropName = oPropSet.GetFirstProperty`

GetLastErrCode Method	Returns the last Siebel error number.	`Dim oPropSet as SiebelPropertySet`
		`Dim iErr as Integer`
		`iErr = oPropSet.GetLastErrCode`

GetLastErrText Method	Returns the last error text message.	`Dim oPropSet as SiebelPropertySet`
		`Dim sValue as String`
		`sValue = oPropSet.GetLastErrText`

GetNextProperty Method	Returns the name of the next property in a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim sPropName as String`
		`sPropName = oPropSet.GetNextProperty`

GetProperty Method	Returns the value of a property when given the property name.	`Dim oPropSet as SiebelPropertySet`
		`Dim sPropVal as String`
		`sPropVal = oPropSet.GetProperty(`*`propName`*` as String)`

GetPropertyCount Method	Returns the number of properties contained within the property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim lCount as Long`
		`lCount = oPropSet.GetPropertyCount`

Table 35. Property Set Methods Syntax Summary

Method	Description	Syntax

GetType Method	Retrieves the data value stored in the type attribute of a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim sTypeVal as String`
		`sTypeVal = oPropSet.GetType`

GetValue Method	Retrieves the data value stored in the value attribute of a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim sValVal as String`
		`sValVal = oPropSet.GetValue`

InsertChildAt Method	Inserts a child property set into a parent property set at a specific location.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.InsertChildAt(`*`childObject`*` as SiebelPropertySet, `*`index`*` as Long)`

PropertyExists Method	Returns a Boolean value indicating whether the property specified in the argument exists.	`Dim oPropSet as SiebelPropertySet`
		`Dim bool as Boolean`
		`bool = oPropSet.PropertyExists(`*`propName`*` as String)`

RemoveChild Method	Removes a child property set as a specified index from a parent property set.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.RemoveChild(`*`index`*` as Long)`

RemoveProperty Method	Removes the property specified in its argument from a property set.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.RemoveProperty(`*`propName`*` as String)`

Reset Method	Removes every property and child property set from a property set.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.Reset`

SetProperty Method	Assigns a value to the property of a property set specified in its argument.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.SetProperty(`*`propName`*` as String, `*`propValue`*` as String)`

SetType Method	Assigns a data value to a type member of a property set.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.SetType(`*`value`*` as String)`

SetValue Method	Assigns a data value to a value member of a property set.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.SetValue(`*`value`*` as String)`

9 Siebel Web Client Automation Server Quick Reference

This quick reference has the following topics:

- "SiebelHTMLApplication Methods for Siebel Web Client Automation Server"
- "SiebelService Methods for Siebel Web Client Automation Server" on page 350
- "PropertySet Methods for Siebel Web Client Automation Server" on page 350

SiebelHTMLApplication Methods for Siebel Web Client Automation Server

Table 36 lists a summary of the Siebel HTMLApplication methods' syntax.

Table 36. SiebelHTMLApplication Methods Syntax Summary

Method	Description	Syntax

GetLastErrCode Method	Returns the last error code.	`Dim siebelApp As SiebelHTMLApplication`
		`Dim iErr as Long`
		`iErr = siebelApp.GetLastErrCode`

GetLastErrText Method	Returns the last error text message.	`Dim siebelApp As SiebelHTMLApplication`
		`Dim sText as String`
		`sText = siebelApp.GetLastErrText`

GetService Method	Instantiates and returns a new instance of the service specified in the argument.	`Dim siebelApp As SiebelHTMLApplication`
		`Dim svc As SiebelService`
		`Set svc = siebelApp.GetService(`*`ServiceName`*` as String)`

Name Method	Returns the name of the current application as defined in the repository.	`Dim siebelApp As SiebelHTMLApplication`
		`Dim name as String`
		`name = siebelApp.Name`

NewPropertySet Method	Constructs and returns a new property set object.	`Dim siebelApp As SiebelHTMLApplication`
		`Dim propSet as SiebelPropertySet`
		`Set propSet = siebelApp.NewPropertySet`

SiebelService Methods for Siebel Web Client Automation Server

Table 37 lists a summary of the SiebelService methods' syntax.

Table 37. SiebelService Methods Syntax Summary

Method	Description	Syntax

GetLastErrCode Method	Returns the last error code.	`Dim svc As SiebelService`
		`Dim iErr as Long`
		`iErr = svc.GetLastErrCode`

GetLastErrText Method	Returns the last error text message.	`Dim svc As SiebelService`
		`Dim sText as String`
		`sText = svc.GetLastErrText`

InvokeMethod Method	Calls a specialized method or a user-created method on the business service.	`Dim svc As SiebelService`
		`svc.InvokeMethod(`*`MethodName as String, inputPropSet as SiebelPropertySet, outputPropSet as SiebelPropertySet`*`)`

Name Method	Returns the name of the business service.	`Dim svc As SiebelService`
		`Dim name as String`
		`name = svc.Name`

PropertySet Methods for Siebel Web Client Automation Server

Table 38 lists a summary of the PropertySet methods' syntax.

Table 38. PropertySet Methods Syntax Summary

Method	Description	Syntax

AddChild Method	Adds subsidiary property sets to a property set.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.AddChild(`*`childObject`*` as SiebelPropertySet)`

Copy Method	Returns a copy of a property set.	`Dim oPropSet1 as SiebelPropertySet`
		`Dim oPropSet2 as SiebelPropertySet`
		`Set oPropSet2 = oPropSet1.Copy`

GetChild Method	Returns a specified child property set of a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim oChildPropSet as SiebelPropertySet`
		`Set oChildPropSet = oPropSet.GetChild(`*`index`*` as Long)`

Table 38. PropertySet Methods Syntax Summary

Method	Description	Syntax

GetChildCount Method	Returns the number of child property sets attached to a parent property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim iCount as Long`
		`iCount = oPropSet.GetChildCount`

GetFirstProperty Method	Returns the name of the first property in a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim sPropName as String`
		`sPropName =`
		`oPropSet.GetFirstProperty`

GetLastErrCode Method	Returns the last error code.	`Dim oPropSet as SiebelPropertySet`
		`Dim iErr as Long`
		`iErr = oPropSet.GetLastErrCode`

GetLastErrText Method	Returns the last error text message.	`Dim oPropSet as SiebelPropertySet`
		`Dim sText as String`
		`sText = oPropSet.GetLastErrText`

GetNextProperty Method	Returns the name of the next property in a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim sPropName as String`
		`sPropName = oPropSet.GetNextProperty`

GetProperty Method	Returns the value of a property when given the property name.	`Dim oPropSet as SiebelPropertySet`
		`Dim sValue as String`
		`sValue =`
		`oPropSet.GetProperty(`*propName* `as String)`

GetPropertyCount Method	Returns the number of properties attached to a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim iCount as Long`
		`iCount = oPropSet.GetPropertyCount`

GetType Method	Returns the value stored in a type in a property set.	`Dim oPropSet as SiebelPropertySet`
		`Dim type as String`
		`type = oPropSet.GetType`

GetValue Method	Returns a value stored as part of a property set.	`Dim oPropSet as SiebelProperty`
		`SetDim sValue as String`
		`sValue = oPropSet.GetValue`

InsertChildAt Method	Inserts a child property set into a parent property set at a specific location.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.InsertChildAt(`*childObject*
		`as SiebelPropertySet,` *index* `as Long)`

PropertyExists Method	Returns a Boolean value indicating whether the property specified in the argument exists.	`Dim oPropSet as SiebelProperty`
		`Dim bool as Boolean`
		`bool =`
		`oPropSet.PropertyExists(`*propName* `as String)`

RemoveChild Method	Removes a child property set as a specified index from a parent property set.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.RemoveChild(`*index* `as Long)`

Table 38. PropertySet Methods Syntax Summary

Method	Description	Syntax

RemoveProperty Method	Removes the property specified in its argument from a property set.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.RemoveProperty(`*`propName`*` as String)`

Reset Method	Removes every property and child property set from a property set.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.Reset`

SetProperty Method	Assigns a value to the property of a property set specified in its argument.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.SetProperty(`*`propName`*` as String, `*`propValue`*` as String)`

SetType Method	Assigns a data value to a type member of a property set.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.SetType(`*`value`*` as String)`

SetValue Method	Assigns a data value to a value member of a property set.	`Dim oPropSet as SiebelPropertySet`
		`oPropSet.SetValue(`*`value`*` as String)`

10 Java Data Bean Quick Reference

This quick reference has the following topics:

- "Data Bean Methods for Java Data Bean"
- "Business Component Methods for Java Data Bean" on page 355
- "Business Object Methods for Java Data Bean" on page 358
- "Business Service Methods for Java Data Bean" on page 359
- "Property Set Methods for Java Data Bean" on page 360
- "SiebelException Methods for Java Data Bean" on page 361

Data Bean Methods for Java Data Bean

Table 39 lists a summary of the SiebelDataBean methods' syntax.

Table 39. SiebelDataBean Methods Syntax Summary

Method	Description	Syntax
Attach Method	Allows an external application to reconnect to an existing Siebel session.	`boolean attach(String sessionID) throws SiebelException`
CurrencyCode Method	Returns the three-letter operating currency code.	`String currencyCode()`
Detach Method	Returns a string containing the Siebel session ID.	`String detach() throws SiebelException`
GetBusObject Method	Instantiates and returns a new instance of the business object specified in the argument.	`SiebelBusObject getBusObject(String boName) throws SiebelException`
GetProfileAttr Method	Returns the value of an attribute in a user profile.	`String getProfileAttr(String attrName) throws SiebelException`
GetService Method	Returns a specified service. If the service is not already running, it is constructed.	`SiebelService getService(string serviceName) throws SiebelException`
InvokeMethod Method	Calls the named specialized method.	`String invokeMethod(String name, String[] args) throws SiebelException`

Table 39. SiebelDataBean Methods Syntax Summary

Method	Description	Syntax
Login Method	Allows external applications to log in to the Data Bean.	`boolean login(String connString, String userName, String passWord) throws SiebelException`
LoginId Method	Returns the login ID of the user who started the Siebel application.	`String loginId()`
LoginName Method	Returns the login name of the user who started the Siebel application.	`String loginName()`
Logoff Method	Disconnects the client from the server.	`boolean logoff() throws SiebelException`
NewPropertySet Method	Constructs and returns a new property set object.	`SiebelPropertySet newPropertySet()`
PositionId Method	Returns the position ID that describes the user's current position.	`String positionId()`
PositionName Method	Returns the position name of the user's current position.	`String positionName()`
SetPositionId Method	Sets the active position to the Position ID specified in the argument.	`boolean setPositionId(String posId) throws SiebelException`
SetPositionName Method	Sets the active position to the position name specified in the argument. Returns a Boolean value indicating if the method succeeded.	`boolean setPositionName(String posName) throws SiebelException`
SetProfileAttr Method	SetProfileAttr is used in personalization to assign values to attributes in a user profile.	`boolean setProfileAttr(String attrName,String attrValue) throws SiebelException`
Trace Method	The Trace method appends a message to the trace file. Trace is useful for debugging SQL query execution. This method does not trace Java standard output.	`boolean trace(String message) throws SiebelException`

Table 39. SiebelDataBean Methods Syntax Summary

Method	Description	Syntax
TraceOff Method	TraceOff turns off the tracing started by the TraceOn method. This method does not trace Java standard output.	`boolean traceOff() throws SiebelException`
TraceOn Method	TraceOn turns on the tracking of allocations and deallocations of Siebel objects, and SQL statements generated by the Siebel application. This method does not trace Java standard output.	`boolean traceOn(String filename, String Category, String selection)throws SiebelException`

Business Component Methods for Java Data Bean

Table 40 lists a summary of the Siebel BusComp methods' syntax.

Table 40. SiebelBusComp Methods Syntax Summary

Method	Description	Syntax
ActivateField Method	Allows queries to retrieve data for the specified field.	`boolean activateField(String fieldName) throws SiebelException`
ActivateMultipleFields Method	Allows queries to retrieve data for the fields specified in the property set.	`boolean activateMultipleFields(SiebelPropertySet psFields) throws SiebelException`
Associate Method	Creates a new many-to-many relationship for the parent object through an association business component.	`boolean associate(boolean isInsertBefore) throws SiebelException`
BusObject Method	Returns the business object that contains the business component.	`SiebelBusObject busObject() throws SiebelException`
ClearToQuery Method	Clears the current query and sort specifications on the business component.	`boolean clearToQuery() throws SiebelException`
DeactivateFields Method	Deactivates every currently activated field.	`boolean deactivateFields()`

Table 40. SiebelBusComp Methods Syntax Summary

Method	Description	Syntax
DeleteRecord Method	Removes the current record from the business component.	`boolean deleteRecord() throws SiebelException`
ExecuteQuery Method	Retrieves a set of BusComp records.	`boolean executeQuery(boolean cursorMode) throws SiebelException`
ExecuteQuery2 Method	Retrieves a set of BusComp records.	`boolean executeQuery2(boolean cursorMode, boolean ignoreMaxCursorSize) throws SiebelException`
FirstRecord Method	Moves to the first record in the business component.	`boolean firstRecord() throws SiebelException`
GetFieldValue Method	Returns a value for the field specified in the argument.	`String getFieldValue(String fieldName) throws SiebelException`
GetFormattedFieldValue Method	Returns a formatted value for the field specified in the argument.	`String getFormattedFieldValue(String fieldName) throws SiebelException`
GetMultipleFieldValues Method	Returns values for the fields specified in the property set.	`boolean getMultipleFieldValues(SiebelPropertySet Src, SiebelPropertySet result) throws SiebelException`
GetMVGBusComp Method	Returns the MVG business component associated with the field specified in the argument.	`SiebelBusComp getMVGBusComp(String fieldName) throws SiebelException`
GetNamedSearch Method	Returns the argument-named search specification.	`String getNamedSearch(String searchName) throws SiebelException`
GetPicklistBusComp Method	Returns the pick business component associated with the field specified in the argument.	`SiebelBusComp getPicklistBusComp(String fieldName) throws SiebelException`
GetSearchExpr Method	Returns the current search expression.	`String getSearchExpr() throws SiebelException`
GetSearchSpec Method	Returns the current search specification for the field specified in the argument.	`String getSearchSpec(String fieldName) throws SiebelException`
GetUserProperty Method	Returns the value for the specified property.	`String getUserProperty(String property) throws SiebelException`

Table 40. SiebelBusComp Methods Syntax Summary

Method	Description	Syntax
GetViewMode Method	Returns the visibility mode for the business component.	`int getViewMode()`
InvokeMethod Method	Calls the specialized method named in the argument.	`String invokeMethod(String methodName, String[] methodArgs) throws SiebelException`
LastRecord Method	Moves to the last record in the business component.	`boolean lastRecord() throws SiebelException`
Name Method	Returns the name of the business component.	`String name()`
NewRecord Method	Adds a new record to the business component.	`boolean newRecord(boolean isInsertBefore) throws SiebelException`
NextRecord Method	Moves to the next record in the business component.	`boolean nextRecord() throws SiebelException`
ParentBusComp Method	Returns the parent business component.	`SiebelBusComp parentBusComp() throws SiebelException`
Pick Method	Places the currently selected record in a picklist business component into the appropriate fields of the parent business component.	`boolean pick() throws SiebelException`
PreviousRecord Method	Moves to the previous record in the business component.	`boolean previousRecord() throws SiebelException`
RefineQuery Method	Refines a query after a query has been executed.	`boolean refineQuery() throws SiebelException`
Release Method	Enables the release of the business component and its resources on the Siebel Server.	`void release()`
SetFieldValue Method	Assigns a new value to the named field for the current row of the business component.	`boolean setFieldValue(String fieldName, String fieldValue) throws SiebelException`
SetFormattedFieldValue Method	Accepts the field value in the current local format and assigns the new value to the named field for the current row of the business component.	`boolean setFormattedFieldValue(String fieldName, String fieldValue) throws SiebelException`

Table 40. SiebelBusComp Methods Syntax Summary

Method	Description	Syntax
SetMultipleFieldValues Method	Assigns new values to the multiple fields specified in the property set for the current row of the business component.	`boolean setMultipleFieldValues(SiebelPropertySet psFields) throws SiebelException`
SetNamedSearch Method	Sets a named search specification on the business component.	`boolean setNamedSearch(String searchName, String searchText) throws SiebelException`
SetSearchExpr Method	Sets an entire search expression on the business component.	`boolean setSearchExpr(String searchExpr) throws SiebelException`
SetSearchSpec Method	Sets the search specification for the specified field.	`boolean setSearchSpec(String fieldName, String searchSpec) throws SiebelException`
SetSortSpec Method	Sets the sort specification for a query.	`boolean setSortSpec(String sortSpec) throws SiebelException`
SetUserProperty Method	Sets the value of the specified User Property.	`boolean setUserProperty(String propName, String propVal)`
SetViewMode Method	Sets the visibility type for the business component.	`boolean setViewMode(int mode) throws SiebelException`
UndoRecord Method	Reverses any uncommitted changes made to the record.	`boolean undoRecord() throws SiebelException`
WriteRecord Method	Commits to the database any changes made to the current record.	`boolean writeRecord() throws SiebelException`

Business Object Methods for Java Data Bean

Table 41 lists a summary of the Siebel BusObject methods’ syntax.

Table 41. SiebelBusObject Methods Syntax Summary

Method	Description	Syntax
GetBusComp Method	Returns the specified business component.	`SiebelBusComp getBusComp(String busCompName) throws SiebelException`

Table 41. SiebelBusObject Methods Syntax Summary

Method	Description	Syntax
Name Method	Returns the name of the business object.	`String name()`
Release Method	Enables the release of the business object and its resources on the Siebel Server.	`void release()`

Business Service Methods for Java Data Bean

Table 42 lists a summary of the SiebelService methods' syntax.

Table 42. SiebelService Methods Syntax Summary

Method	Description	Syntax
GetFirstProperty Method	Retrieves the name of the first property of a business service.	`String getFirstProperty()`
GetNextProperty Method	Once the name of the first property has been retrieved, retrieves the name of the next property of a business service.	`String getNextProperty()`
GetProperty Method	Retrieves the value stored in the specified property.	`String getProperty(String propName) throws SiebelException`
InvokeMethod Method	Calls a specialized method or a user-created method on the business service.	`boolean invokeMethod(String methodName, SiebelPropertySet inputPropertySet, SiebelPropertySet outputPropertySet) throws SiebelException`
Name Method	Returns the name of the business service.	`String Name()`
PropertyExists Method	Returns a Boolean value indicating whether the property specified in the argument exists.	`boolean propertyExists(String propName) throws SiebelException`
Release Method	Enables the release of the Business Service and its resources on the Siebel Server.	`void release()`

Table 42. SiebelService Methods Syntax Summary

Method	Description	Syntax
RemoveProperty Method	Removes a property from a business service.	`void removeProperty(String propName) throws SiebelException`
SetProperty Method	Assigns a value to a property of a business service.	`void setProperty(String propName, String propValue) throws SiebelException`

Property Set Methods for Java Data Bean

Table 43 lists a summary of the SiebelPropertySet methods' syntax.

Table 43. SiebelPropertySet Methods Syntax Summary

Method	Description	Syntax
AddChild Method	Adds subsidiary property sets to a property set.	`int addChild(SiebelPropertySet propertySet)`
Copy Method	Returns a copy of a property set.	`SiebelPropertySet copy(SiebelPropertySet propertySet)`
GetChild Method	Returns a specified child property set of a property set.	`SiebelPropertySet getChild(int index)`
GetChildCount Method	Returns the number of child property sets attached to a parent property set.	`int getChildCount()`
GetFirstProperty Method	Returns the name of the first property in a property set.	`String getFirstProperty()`
GetNextProperty Method	Returns the name of the next property in a property set.	`String getNextProperty()`
GetProperty Method	Returns the value of a property when given the property name.	`String getProperty(String propertyName)`
GetPropertyCount Method	Returns the number of properties attached to a property set.	`int GetPropertyCount()`
GetType Method	Returns the value stored in the Type attribute of a PropertySet.	`String getType()`
GetValue Method	Returns the value stored in the Value attribute of a PropertySet.	`String getValue()`
InsertChildAt Method	Inserts a child property set into a parent property set at a specific location.	`boolean insertChildAt(SiebelPropertySet propertySet, int index)`

Table 43. SiebelPropertySet Methods Syntax Summary

Method	Description	Syntax
PropertyExists Method	Returns a Boolean value indicating whether the property specified in the argument exists.	`boolean propertyExists(String propertyName)`
RemoveChild Method	Removes a child property set as a specified index from a parent property set.	`boolean removeChild(int index)`
RemoveProperty Method	Removes the property specified in its argument from a property set.	`boolean removeProperty(String propertyName)`
Reset Method	Removes every property and child property set from a property set.	`boolean reset()`
SetProperty Method	Assigns a value to the property of a property set specified in its argument.	`boolean setProperty(String propertyName, String propertyValue)`
SetType Method	Assigns a data value to a type member of a property set.	`boolean setType(String type)`
SetValue Method	Assigns a data value to a value member of a property set.	`boolean setValue(String value)`

SiebelException Methods for Java Data Bean

Table 44 lists a summary of the SiebelException methods' syntax.

Table 44. SiebelException Methods Syntax Summary

Method	Description	Syntax
GetErrorCode Method	Gets a numeric error code.	`int getErrorCode()`
GetErrorMessage Method	Gets an error message.	`String getErrorMessage()`

For more information on the Java Data Bean Interface, read the Javadoc files, which are contained in a file named Siebel_JavaDoc.jar. This file is normally located in: \siebsrvr\CLASSES.

11 Siebel VB Quick Reference

This quick reference has the following topics:

Applet Methods for Siebel VB

Table 45 lists a summary of the Applet methods' syntax.

Table 45. Applet Methods Syntax Summary

Method	Description	Syntax

BusComp Method	Function that returns the business component that is associated with the applet.	`Dim oApplet as Applet`
		`Dim oBusComp as BusComp`
		`Set oBusComp = oApplet.BusComp`

BusObject Method	Function that returns the business object for the business component of the applet.	`Dim oApplet as Applet`
		`Dim oBusObject as BusObject`
		`Set oBusObject = oApplet.BusObject`

InvokeMethod Method	Invokes the specialized or custom method specified by its argument.	`Dim oApplet as Applet` `oApplet.InvokeMethod` *methodName* as `String,` *methodArgs as String or StringArray*

Name Method	Function that returns the name of the applet.	`Dim oApplet as Applet`
		`Dim sApplet as String`
		`sApplet = oApplet.Name`

Table 46 lists a summary of the WebApplet Events.

Table 46. WebApplet Events Summary

Event	Description	Syntax
WebApplet_InvokeMethod Event	Called after a specialized method or a user-defined method on the Web applet has been executed.	`WebApplet_InvokeMethod(MethodName as String)`
WebApplet_PreCanInvokeMethod Event	Called before the PreInvokeMethod, allowing the developer to determine whether or not the user has the authority to invoke the applet method.	`WebApplet_PreCanInvokeMethod(MethodName as String, &CanInvoke as String)`
WebApplet_PreInvokeMethod Event	Called before a specialized method for the Web applet is invoked or a user-defined method is invoked through oWebApplet.Invoke Method.	`WebApplet_PreInvokeMethod(MethodName as String)`
WebApplet_Load Event	Called just after an applet is loaded.	`WebApplet_Load`

Table 46. WebApplet Events Summary

Event	Description	Syntax
WebApplet_ShowControl Event	Allows scripts to modify the HTML generated by the Siebel Web Engine to render a control on a Web page in a standard interactivity application.	`WebApplet_ShowControl`
WebApplet_ShowListColumn Event	Allows scripts to modify the HTML generated by the Siebel Web Engine to render a list column on a Web page in a standard interactivity application.	`WebApplet_ShowListColumn`

Application Methods for Siebel VB

Table 47 lists a summary of the Application methods' syntax.

Table 47. Application Methods Syntax Summary

Method	Description	Syntax

ActiveBusObject Method	Returns the business object for the business component of the active applet.	`Dim oApplication as Application`
		`Dim oBusObject as BusObject`
		`Set oBusObject = oApplication.ActiveBusObject`

ActiveViewName Method	Function that returns the name of the active view.	`Dim oApplication as Application`
		`Dim sView as String`
		`sView = oApplication.ActiveViewName`

CurrencyCode Method	Returns the three-letter operating currency code.	`Dim oApplication as Application`
		`Dim sCur as String`
		`sCur = oApplication.CurrencyCode`

GetBusObject Method	Instantiates and returns a new instance of the argument-specified business object.	`Dim oApplication as Application`
		`Dim oBusObject as BusObject`
		`set oBusObject =`
		`oApplication.GetBusObject` *busobject* `as String`

Table 47. Application Methods Syntax Summary

Method	Description	Syntax

GetProfileAttr Method	Returns the value of an attribute in a user profile.	`Dim oApplication as Application`
		`Dim sAttr as String`
		`SAttr = oApplication.GetProfileAttr(`*`name`*` as String)`

GetService Method	Instantiates and returns a new instance of the argument-specified service.	`Dim oApplication as Application`
		`Dim oService as Service`
		`set oService = oApplication.GetService(`*`serviceName`*` as String)`

GetSharedGlobal Method	Gets the shared user-defined global variables.	`Dim oApplication as Application`
		`Dim sName as String`
		`sName = Application.GetSharedGlobal(`*`varName`*` as String)`

GotoView Method	Activates the named view and its business object.	`Dim oApplication as Application`
		`oApplication.GotoView `*`viewName`*` as String, [`*`BusinessObjectName`*` as BusObject]`

InvokeMethod Method	Calls the named specialized method.	`Dim oApplication as Application`
		`Dim sReturn as String`
		`sReturn = oApplication.InvokeMethod(methodName as String, `*`methodArgs`*` as String or StringArray)`

LoginId Method	Function that returns the login ID of the user who started the Siebel application.	`Dim oApplication as Application`
		`Dim sID as String`
		`iID = oApplication.LoginId`

LoginName Method	Function that returns the login name of the user who started the Siebel application.	`Dim oApplication as Application`
		`Dim sUser as String`
		`sUser = oApplication.LoginName`

NewPropertySet Method	Constructs and returns a new property set object.	`Dim oApplication as Application`
		`Dim oPropSet as ProperySet`
		`oPropSet = oApplication.NewPropertySet()`

PositionId Method	Function that returns the position ID that describes the user's current position.	`Dim oApplication as Application`
		`Dim sRow as String`
		`sRow = oApplication.PositionId`

PositionName Method	Function that returns the position name of the user's current position.	`Dim oApplication as Application`
		`Dim sPosition as String`
		`sPosition = oApplication.PositionName`

RaiseError Method	Raises a scripting error message to the browser. The error code is a canonical number.	`Dim oApplication as Application`
		`oApplication.RaiseError keyValue as String, parma1 as String, ...`

Table 47. Application Methods Syntax Summary

Method	Description	Syntax
RaiseErrorText Method	Raises a scripting error message to the browser. The error text is the specified literal string.	`Dim oApplication as Application` `oApplication.RaiseErrorText message as String`
SetPositionId Method	Sets the active position to the position ID specified in the argument.	`Dim oApplication as Application` `oApplication.SetPositionId posId as string`
SetPositionName Method	Sets the active position to the position name specified in the argument. Returns a Boolean value indicating whether or not method succeeded.	`Dim oApplication as Application` `oApplication.SetPositionName posName as string`
SetProfileAttr Method	Used in personalization to assign values to attributes in a user profile.	`Dim oApplication as Application` `oApplication.SetProfileAttr` *`name`* `as String,` *`value`* `as String`
SetSharedGlobal Method	Sets a shared user-defined global variable.	`Dim oApplication as Application` `oApplication.SetSharedGlobal` *`varName`* `as String,` *`value`* `as String`
Trace Method	Appends a message to the trace file.	`Dim oApplication as Application` `oApplication.Trace` *`message`* `as String`
TraceOff Method	Turns off the tracing started by TraceOn.	`Dim oApplication as Application` `oApplication.TraceOff`
TraceOn Method	Turns tracing on.	`Dim oApplication as Application` `oApplication.TraceOn` *`filename`* `as String,` *`type`* `as String,` *`selection`* `as String`

Table 48 lists a summary of the Application Events.

Table 48. Application Events Summary

Event	Description	Syntax
Application_Close Event	Called before the application exits.	`Application_Close`
Application_Navigate Event	Called after the client has navigated to a view.	`Application_Navigate`
Application_InvokeMethod Event	Called after a specialized method is invoked.	`Application_InvokeMethod(methodName as String)`
Application_PreInvokeMethod Event	Called before a specialized method is invoked.	`Application_PreInvokeMethod(methodName as String)`

Table 48. Application Events Summary

Event	Description	Syntax
Application_PreNavigate Event	Called before the client has navigated from one view to the next.	`Application_PreNavigate (DestViewName As String, DestBusObjName As String)`
Application_Start Event	Called when the client starts.	`Application_Start(`*`commandLine`*` as String)`

Business Component Methods for Siebel VB

Table 49 lists a summary of the Business Component methods' syntax.

Table 49. Business Component Methods Syntax Summary

Method	Description	Syntax
ActivateField Method	Allows queries to retrieve data for the specified field.	`Dim oBusComp as BusComp` `oBusComp.ActivateField `*`fieldName`*` as String`
ActivateMultipleFields Method	Allows queries to retrieve data for the fields specified in the property set.	`Dim oBusComp as BusComp` `oBusComp.ActivateMultipleFields `*`oPropSet`*` as PropertySet`
Associate Method	Creates a new many-to-many relationship for the parent object through an association business component.	`Dim oBusComp as BusComp` `oBusComp.Associate `*`whereIndicator`*` as Integer`
BusObject Method	Function that returns the business object that contains the business component.	`Dim oBusComp as BusComp` `Dim oBusObject as BusObject` `Set oBusObject = oBusComp.BusObject`
ClearToQuery Method	Clears the current query and sort specifications on the business component.	`Dim oBusComp as BusComp` `oBusComp.ClearToQuery`
DeactivateFields Method	Deactivates every currently activated field.	`Dim oBusComp as BusComp` `oBusComp.DeactivateFields`
DeleteRecord Method	Removes the current record from the business component.	`Dim oBusComp as BusComp` `oBusComp.DeleteRecord`
ExecuteQuery Method	Retrieves a set of BusComp records.	`Dim oBusComp as BusComp` `oBusComp.ExecuteQuery `*`cursorMode`*` as Integer`

Table 49. Business Component Methods Syntax Summary

Method	Description	Syntax

ExecuteQuery2 Method	Retrieves a set of BusComp records.	`Dim oBusComp as BusComp`
		`oBusComp.ExecuteQuery2` *`cursorMode`* `as Integer,` *`ignoreMaxCursorSize`* `as Integer`

FirstRecord Method	Moves to the first record in the business component.	`Dim oBusComp as BusComp`
		`Dim iIsRecord as Integer`
		`iIsRecord = oBusComp.FirstRecord`

FirstSelected Method	Moves the focus to the first record of the multiple selection in the business component.	`Dim oBusComp as BusComp`
		`Dim iIsMultipleSection as Integer`
		`iIsMultipleSelection =`
		`oBusComp.FirstSelected`

GetAssocBusComp Method	Function that returns the association business component.	`Dim oBusComp as BusComp`
		`Dim AssocBusComp as BusComp`
		`Set AssocBusComp =`
		`oBusComp.GetAssocBusComp`

GetFieldValue Method	Function that returns a value for the argument-specified field.	`Dim oBusComp as BusComp`
		`Dim sValue as String`
		`sValue =`
		`oBusComp.GetFieldValue(`*`FieldName`*
		`as String)`

GetFormattedFieldValue Method	Function that returns a formatted value for the argument-specified field.	`Dim oBusComp as BusComp`
		`Dim sValue as String`
		`sValue =`
		`oBusComp.GetFormattedFieldValue(`*`F`*
		`ieldName` `as String)`

GetMultipleFieldValues Method	Returns a value for the fields specified in the property set.	`Dim oBusComp as BusComp`
		`oBusComp.GetMultipleFieldValues`
		`oFields` `as PropertySet,` *`oValues`* `as PropertySet`

GetMVGBusComp Method	Function that returns the MVG business component associated with the argument-specified field.	`Dim oBusComp as BusComp`
		`Dim MvgBusComp as BusComp`
		`set MvgBusComp =`
		`oBusComp.GetMVGBusComp(`*`FieldName`*
		`as String)`

GetNamedSearch Method	Function that returns the argument-named search specification.	`Dim oBusComp as BusComp`
		`Dim sValue as String`
		`sValue =`
		`oBusComp.GetNamedSearch(`*`SearchNam`*
		`e` `as String)`

GetPicklistBusComp Method	Function that returns the pick business component associated with the argument-specified field.	`Dim oBusComp as BusComp`
		`Dim pickBusComp as BusComp`
		`Set pickBusComp =`
		`oBusComp.GetPicklistBusComp(`*`Field`*
		`Name` `as String)`

Table 49. Business Component Methods Syntax Summary

Method	Description	Syntax

GetSearchExpr Method	Function that returns the current search expression.	`Dim oBusComp as BusComp`
		`Dim sExpr as String`
		`sExpr = oBusComp.GetSearchExpr`

GetSearchSpec Method	Function that returns the current search specification for the argument-specified field.	`Dim oBusComp as BusComp`
		`Dim sSpec as String`
		`sSpec =`
		`oBusComp.GetSearchSpec(`*`FieldName`*`as String)`

GetUserProperty Method	Function that returns the value for an argument-specified property name.	`Dim oBusComp as BusComp`
		`Dim sValue as String`
		`sValue =`
		`oBusComp.GetUserProperty(`*`property Name`*` as String)`

GetViewMode Method	Function that returns the visibility mode for the business component.	`Dim oBusComp as BusComp`
		`Dim iMode as Integer`
		`iMode = oBusComp.GetViewMode`

InvokeMethod Method	Calls the specialized method or user-created method specified in the argument.	`Dim oBusComp as BusComp`
		`Dim Return`
		`Return =`
		`oBusComp.InvokeMethod(`*`methodName`*
		`as String, `*`methodArgs`*` as String or StringArray)`

LastRecord Method	Moves to the last record in the business component.	`Dim oBusComp as BusComp`
		`Dim iReturn as Integer`
		`iReturn = oBusComp.LastRecord`

Name Method	Function that returns the name of the business component.	`Dim oBusComp as BusComp`
		`Dim sName as String`
		`sName = oBusComp.Name`

NewRecord Method	Adds a new record to the business component.	`Dim oBusComp as BusComp`
		`oBusComp.NewRecord(`*`whereIndicator`*
		`as Integer)`

NextRecord Method	Moves to the next record in the business component.	`Dim oBusComp as BusComp`
		`Dim iReturn as Integer`
		`iReturn = oBusComp.NextRecord`

NextSelected Method	Moves to the next record of the current multiple selection.	`Dim oBusComp as BusComp`
		`Dim iReturn as Integer`
		`iReturn = oBusComp.NextSelected`

ParentBusComp Method	Function that returns the parent business component.	`Dim oBusComp as BusComp`
		`Dim parentBusComp as BusComp`
		`Set parentBusComp =`
		`oBusComp.ParentBusComp`

Table 49. Business Component Methods Syntax Summary

Method	Description	Syntax

Pick Method	Places the currently selected record in a picklist business component into the appropriate fields of the parent business component.	`Dim oBusComp as BusComp`
		`oBusComp.Pick`

PreviousRecord Method	Moves to the previous record in the business component.	`Dim oBusComp as BusComp`
		`Dim iReturn as Integer`
		`iReturn = oBusComp.PreviousRecord`

RefineQuery Method	Refines a query after a query has been executed.	`Dim oBusComp as BusComp`
		`oBusComp.RefineQuery`

SetFieldValue Method	Assigns a new value to the named field for the current row of the business component.	`Dim oBusComp as BusComp`
		`oBusComp.SetFieldValue` *`FieldName`* `as String,` *`FieldValue`* `as String`

SetFormattedFieldValue Method	Accepts the field value in the current local format and assigns the new value to the named field for the current row of the business component.	`Dim oBusComp as BusComp`
		`oBusComp.SetFormattedFieldValue`
		`FieldName` `as String,` *`FieldValue`* `as String`

SetMultipleFieldValues Method	Assigns a new value to the fields specified in the property set for the current row of the business component.	`Dim oBusComp as BusComp`
		`oBusComp.SetMultipleFieldValues`
		`oPropSet` `as PropertySet`

SetNamedSearch Method	Sets a named search specification on the business component.	`Dim oBusComp as BusComp`
		`oBusComp.SetNamedSearch`
		`searchName` `as String,` *`searchSpec`* `as String`

SetSearchExpr Method	Sets the entire search expression for the business component.	`Dim oBusComp as BusComp`
		`oBusComp.SetSearchExpr` *`searchSpec`* `as String`

SetSearchSpec Method	Sets the search specification for the specified field.	`Dim oBusComp as BusComp`
		`oBusComp.SetSearchSpec` *`fieldName`* `as String,` *`searchSpec`* `as String )`

SetSortSpec Method	Sets the sort specification for a query.	`Dim oBusComp as BusComp`
		`oBusComp.SetSortSpec` *`sortSpec`* `as String`

SetUserProperty Method	Sets the value of the specified User Property.	`Dim oBusComp as BusComp`
		`oBusComp.SetUserProperty`
		`propertyName` `as String,` *`newValue`* `as String`

Table 49. Business Component Methods Syntax Summary

Method	Description	Syntax
SetViewMode Method	Sets the visibility type for the business component.	`Dim oBusComp as BusComp` `oBusComp.SetViewMode` *`viewMode`* `as Integer`
UndoRecord Method	Reverses any uncommitted changes made to the record.	`Dim oBusComp as BusComp` `oBusComp.UndoRecord`
WriteRecord Method	Commits to the database any changes made to the current record.	`Dim oBusComp as BusComp` `oBusComp.WriteRecord`

Table 50 lists a summary of the Business Components Events.

Table 50. Business Component Events Summary

Event	Description	Syntax
BusComp_Associate Event	Called after a record is added to a business component to create an association.	`BusComp_Associate`
BusComp_ChangeRecord Event	Called after the current row changes in the business component.	`BusComp_ChangeRecord`
BusComp_CopyRecord Event	Called after a new row is copied in the business component.	`BusComp_CopyRecord`
BusComp_DeleteRecord Event	Called after a row is deleted in the business component.	`BusComp_DeleteRecord`
BusComp_InvokeMethod Event	Called after a custom or specialized method is called on a business component.	`BusComp_InvokeMethod(`*`methodName`*` as String)`
BusComp_NewRecord Event	Called after a new row has been created and made active in the business component.	`BusComp_NewRecord`
BusComp_PreAssociate Event	Called before a record is added to a business component to create an association.	`BusComp_PreAssociate`
BusComp_PreCopyRecord Event	Called before a new row is copied in the business component.	`BusComp_PreCopyRecord`

Table 50. Business Component Events Summary

Event	Description	Syntax
BusComp_PreDeleteRecord Event	Called before a row is deleted in the business component.	`BusComp_PreDeleteRecord`
BusComp_PreGetFieldValue Event	Called when the value of a business component field is accessed.	`BusComp_PreGetFieldValue(`*`FieldName`*` as String, `*`FieldValue`*` as String)`
BusComp_PreInvokeMethod Event	Called before a specialized or custom method is invoked on a business component.	`BusComp_PreInvokeMethod(methodName as String)`
BusComp_PreNewRecord Event	Called before a new row is created in the business component.	`BusComp_PreNewRecord`
BusComp_PreQuery Event	Called before query execution.	`BusComp_PreQuery`
BusComp_PreSetFieldValue Event	Called when a value is pushed down into the business component from the user interface or through a call to SetFieldValue.	`BusComp_PreSetFieldValue(`*`FieldName`*` as String,`*`FieldValue`*` as String)`
BusComp_PreWriteRecord Event	Called before a row is written out to the database.	`BusComp_PreWriteRecord`
BusComp_Query Event	Called after the query is complete and every row has been retrieved, but before they have been displayed.	`BusComp_Query`
BusComp_SetFieldValue Event	Called after a value has been pushed down into the business component from the user interface or through a call to SetFieldValue.	`BusComp_SetFieldValue(`*`fieldName`*` as String)`
BusComp_WriteRecord Event	Called after a row is written to the database.	`BusComp_WriteRecord`

Business Object Methods for Siebel VB

Table 51 lists a summary of the Business Object methods' syntax.

Table 51. Business Object Methods Syntax Summary

Method	Description	Syntax

GetBusComp Method	Function that returns the specified business component.	`Dim oBusObject as BusObject`
		`Dim oBusComp as BusComp`
		`set oBusComp =`
		`BusObject.GetBusComp(`*`BusCompName`*` as`
		`String)`

Name Method	Function that returns the name of the business object.	`Dim oBusObject as BusObject`
		`Dim sName as String`
		`sName = oBusObject.Name`

Business Service Methods for Siebel VB

Table 52 lists a summary of the Business Service methods' syntax.

Table 52. Business Service Methods Syntax Summary

Method	Description	Syntax

GetFirstProperty Method	Retrieves the name of the first property of a business service.	`Dim oService as Service`
		`Dim sName as String`
		`sName = oService.GetFirstProperty()`

GetNextProperty Method	Once the name of the first property has been retrieved, retrieves the name of the next property of a business service.	`Dim oService as Service`
		`Dim sName as String`
		`sName = oService.GetNextProperty()`

GetProperty Method	Retrieves the value stored in the specified property.	`Dim oService as Service`
		`Dim sValue as String`
		`sValue = oService.GetProperty(`*`propName`*` as`
		`String)`

InvokeMethod Method	Calls a specialized method or a user-created method on the business service.	`Dim oService as Service`
		`Dim Return`
		`Return = oService.InvokeMethod(methodName`
		`as String, InputArguments as PropertySet,`
		`OutputArguments as PropertySet)`

Name Method	Returns the name of the business service.	`Dim oService as Service`
		`Dim sName as String`
		`sName = oService.Name`

Table 52. Business Service Methods Syntax Summary

Method	Description	Syntax

PropertyExists Method	Returns a Boolean value indicating whether the property specified in the argument exists.	`Dim oService as Service`
		`oService.PropertyExists(`*`propName`*` as String)`

RemoveProperty Method	Removes a property from a business service.	`Dim oService as Service`
		`oService.RemoveProperty `*`propName`*` as String`

SetProperty Method	Assigns a value to a property of a business service.	`Dim oService as Service`
		`oService.SetProperty `*`propName`*` as String, `*`propValue`*` as String`

Table 53 lists a summary of the Business Service Events.

Table 53. Business Service Events Syntax Summary

Method	Description	Syntax
Service_InvokeMethod Event	Called after the InvokeMethod method is called on a business service.	`Service_InvokeMethod(methodName as String)`
Service_PreCanInvokeMethod Event	Called before the PreInvokeMethod, allowing the developer to determine whether or not the user has the authority to invoke the business service method.	`Service_PreCanInvokeMethod(methodName as String, CanInvoke As String)`
Service_PreInvokeMethod Event	Called before a specialized or user-defined method is invoked on a business service.	`Service_PreInvokeMethod(methodName as String, Inputs as PropertySet, Outputs as PropertySet)`

Property Set Methods for Siebel VB

Table 54 lists a summary of the Property Set methods' syntax.

Table 54. Property Set Methods Syntax Summary

Method	Description	Syntax

AddChild Method	Adds subsidiary property sets to a property set.	`Dim oPropSet as PropertySet`
		`oPropSet.AddChild(`*`childObject`*` as Property Set)`

Copy Method	Returns a copy of a property set.	`Dim oPropSet1 as PropertySet`
		`Dim oPropSet2 as PropertySet`
		`set oPropSet2 = oPropSet1.Copy()`

GetChild Method	Returns a specified child property set of a property set.	`Dim oPropSet as PropertySet`
		`Dim childPropSet as SiebelPropertySet`
		`set childPropSet = oPropSet.GetChild(`*`index`*` as Long)`

GetChildCount Method	Returns the number of child property sets attached to a parent property set.	`Dim oPropSet as PropertySet`
		`Dim iCount as Integer`
		`iCount = oPropSet.GetChildCount()`

GetFirstProperty Method	Returns the name of the first property in a property set.	`Dim oPropSet as PropertySet`
		`Dim sPropName as String`
		`sPropName = oPropSet.GetFirstProperty()`

GetNextProperty Method	Returns the name of the next property in a property set.	`Dim oPropSet as PropertySet`
		`Dim sPropName as String`
		`sPropName = oPropSet.GetNextProperty()`

GetProperty Method	Returns the value of a property when given the property name.	`Dim oPropSet as PropertySet`
		`Dim sPropVal as String`
		`sPropVal = oPropSet.GetProperty(`*`propName`*` as String)`

GetPropertyCount Method	Returns the number of properties attached to a property set.	`Dim oPropSet as PropertySet`
		`Dim count as Long`
		`count = oPropSet.GetPropertyCount`

GetType Method	Returns the value stored in a type in a property set.	`Dim oPropSet as PropertySet`
		`Dim sTypeVal as String`
		`sTypeVal = oPropSet.GetType`

GetValue Method	Returns a value stored as part of a property set.	`Dim oPropSet as PropertySet`
		`Dim sValVal as String`
		`sValVal = oPropSet.GetValue`

InsertChildAt Method	Inserts a child property set into a parent property set at a specific location.	`Dim oPropSet as PropertySet`
		`oPropSet.InsertChildAt `*`childObject`*` as SiebelPropertySet, `*`index`*` as Integer`

Table 54. Property Set Methods Syntax Summary

Method	Description	Syntax

PropertyExists Method	Returns a Boolean value indicating whether the property specified in the argument exists.	`Dim oPropSet as PropertySet`
		`oPropSet.PropertyExists(`*propName* `as String)`

GetPropertyCount Method	Returns the number of properties attached to a property set.	`Dim oPropSet as PropertySet`
		`Dim count as Long`
		`count=oPropSet.GetPropertyCount`

RemoveChild Method	Removes a child property set as a specified index from a parent property set.	`Dim oPropSet as PropertySet`
		`oPropSet.RemoveChild` *index* `as Integer`

RemoveProperty Method	Removes the property specified in its argument from a property set.	`Dim oPropSet as PropertySet`
		`oPropSet.RemoveProperty` *propName* `as String`

Reset Method	Removes every property and child property set from a property set.	`Dim oPropSet as PropertySet`
		`oPropSet.Reset()`

SetProperty Method	Assigns a value to the property of a property set specified in its argument.	`Dim oPropSet as PropertySet`
		`oPropSet.SetProperty` *propName* `as String,`
		propValue `as String`

SetType Method	Assigns a data value to a type member of a property set.	`Dim oPropSet as PropertySet` `oPropSet.SetType` *value as String*

SetValue Method	Assigns a data value to a value member of a property set.	`Dim oPropSet as PropertySet`
		`oPropSet.SetValue` *value* `as String`

Miscellaneous Methods for Siebel VB

Table 55 lists a summary of the Miscellaneous methods’ syntax.

Table 55. Miscellaneous Methods Syntax Summary

Method	Description	Syntax
TheApplication Method	Global method that returns the unique object of type Application.	`TheApplication`

12 Browser Scripting

This chapter provides information about Browser Scripting and its available events and methods.

See Also

"Supported DOM Events for High Interactivity Mode" on page 389
"Supported DOM Events for Standard Interactivity Mode" on page 390

About Browser Script

Browser Script executes in and is interpreted by the browser. Browser Scripts are written in JavaScript and interact with the Document Object Model (DOM) as well as with the Siebel Object Model available in the browser through the Browser Interaction Manager. A developer can script the behavior of Siebel events as well as the browser events that are exposed through the DOM. The DOM for Internet Explorer and Netscape Navigator are different. Using Siebel Tools you can write scripts for the appropriate browser type by selecting the appropriate User Agent.

NOTE: Browser Script may only be used with applications which run in high interactivity mode, except when scripting Control events supported by the Browser Document Object Model. Refer to Table 67 and Table 68 for a list of supported DOM events.

Do not use browser scripts to manipulate the location of a frame or form in the Siebel application because this causes a new page to be loaded. The result is a permission denied error, as it is a violation of good security practices.

A high interactivity application can contain standard interactivity views (Home Page view and Dashboard view for example). Applet-level browser scripts cannot be used on applets in those views (the same as in standard interactivity applications). Instead the server script WebApplet_ShowControl that is not supported in high interactivity is triggered on the applets for those standard interactivity views.

For information on generating browser scripts, read *Siebel Developer's Reference*.

Applet Methods for Browser Script

Table 56 lists a summary of the Applet methods' syntax.

Table 56. Applet Methods Syntax Summary

Method	Description	Syntax

ActiveMode Method	Returns a string containing the name of the current Web Template mode.	`var oApplet;`
		`var mode = oApplet.ActiveMode();`

BusComp Method	Returns the business component that is associated with the applet.	`var oApplet;`
		`var busComp = oApplet.BusComp();`

BusObject Method	Returns the business object for the business component for the applet.	`var oApplet;`
		`var oBusObject = oApplet.BusObject();`

FindActiveXControl Method	Returns the ActiveX control whose name is specified in the argument.	`var oApplet;`
		`var oControl;`
		`oControl =`
		`oApplet.FindActiveXControl(`*`controlName`*`);`

FindControl Method	Returns the control whose name is specified in the argument.	`var oApplet;`
		`var oControl;`
		`oControl =`
		`oApplet.FindControl(`*`controlName`*`);`

InvokeMethod Method	Calls an argument-specified specialized method.	`var oApplet;`
		`var outPs =`
		`theApplication().NewPropertySet();`
		`outPs =`
		`oApplet.InvokeMethod(`*`MethodName`*`,`
		`inputPropSet``);`

Name Method	Returns the name of the applet.	`var oApplet;`
		`var name = oApplet.Name();`

Table 57 lists a summary of the Applet Events.

Table 57. Applet Events Summary

Event	Description	Syntax

Applet_ChangeFieldValue Event	Called when the user updates a field value in the browser.	`Applet_ChangeFieldValue`
		`(`*`field`*`, `*`value`*`)`

Applet_ChangeRecord Event	Called when the user moves to a different row or view.	`Applet_ChangeRecord()`

Table 57. Applet Events Summary

Event	Description	Syntax
Applet_InvokeMethod Event	Called after a specialized method or a user-defined method is invoked.	`Applet_InvokeMethod (`*`name`*`,` *`inputPropSet`*`)`
Applet_Load Event	Triggered after an applet has loaded and after data is displayed.	`Applet_Load()`
Applet_PreInvokeMethod Event	Called before a specialized method for the Web applet is invoked or a user-defined method is invoked through oWebApplet.InvokeMethod.	`Applet_PreInvokeMethod (`*`name`*`,` *`inputPropSet`*`)`

Application Methods for Browser Script

Table 58 lists a summary of the Application methods' syntax.

Table 58. Application Methods Syntax Summary

Method	Description	Syntax
ActiveApplet Method	Returns the name of the applet that has input focus.	`var applet; applet = TheApplication().ActiveApplet();`
ActiveBusComp Method	Returns the business component associated with the active applet.	`var busComp; busComp = theApplication().ActiveBusComp();`
ActiveBusObject Method	Returns the business object for the business component of the active applet.	`var busObject; busObject = theApplication().ActiveBusObject();`
ActiveViewName Method	Returns the name of the active view.	`var viewName; viewName = theApplication().ActiveViewName();`
FindApplet Method	Returns the applet object identified in the argument.	`var applet; applet = theApplication().FindApplet(`*`appletName`*`);`
GetProfileAttr Method	Returns the value of an attribute in a user profile.	`var sAttr; sAttr = theApplication().GetProfileAttr(`*`name`*`);`

Table 58. Application Methods Syntax Summary

Method	Description	Syntax

GetService Method	Instantiates and returns a new instance of the service specified in the argument.	`var svc;`
		`svc = theApplication().GetService(`*`serviceName`*`);`

InvokeMethod Method	Calls the named specialized method.	`var outPs;`
		`outPs = theApplication().InvokeMethod(`*`methodName`*`, `*`inputPropSet`*`);`

Name Method	Returns name of the application.	`var appName;`
		`appName = theApplication().Name();`

NewPropertySet Method	Constructs and returns a new property set object.	`var PropSet;`
		`PropSet = theApplication().NewPropertySet();`

SetProfileAttr Method	Used in personalization to assign values to attributes in a user profile.	`theApplication().SetProfileAttr(`*`name`*`, `*`value`*`);`
SWEAlert Method	Displays a modal dialog box containing a message to the user.	`theApplication().SWEAlert(message);`

Table 59 lists a summary of the Application Events syntax.

Table 59. Application Events Syntax Summary

Event	Description	Syntax
Application_InvokeMethod Event	Called after a specialized method is invoked.	`Application_InvokeMethod (`*`name`*`, `*`inputPropSet`*`)`
Application_PreInvokeMethod Event	Called before a specialized method is invoked.	`Application_PreInvokeMethod (`*`name`*`, `*`inputPropSet`*`)`

Business Component Methods for Browser Script

Table 60 lists a summary of the Business Component methods' syntax.

Table 60. Business Component Methods Syntax Summary

Method	Description	Syntax

BusObject Method	Returns the business object that contains the business component.	`var busComp;`
		`var busObject;`
		`busObject = busComp.BusObject();`

GetFieldValue Method	Returns a value for the field specified in the argument.	`var busComp;`
		`var value;`
		`value =`
		`busComp.GetFieldValue(`*`fieldName`*`)`
		`;`

GetFormattedFieldValue Method	Returns a formatted value for the field specified in the argument.	`var busComp;`
		`var sValue;`
		`sValue =`
		`busComp.GetFormattedFieldValue(`*`f`*
		`ieldName``);`

GetSearchExpr Method	Returns the current search expression.	`var busComp;`
		`var sExpr;`
		`sExpr = busComp.GetSearchExpr();`

GetSearchSpec Method	Returns the current search specification for the field specified in the argument.	`var busComp;`
		`var sSpec;`
		`sSpec =`
		`busComp.GetSearchSpec(`*`fieldName`*`)`
		`;`

Name Method	Returns the name of the business component.	`var busComp;`
		`var sName;`
		`sName = busComp.Name();`

SetFieldValue Method	Assigns a new value to the named field for the current row of the business component.	`var busComp;`
		`busComp.SetFieldValue(`*`fieldName`*`,`
		`fieldValue``);`

SetFormattedFieldValue Method	Accepts the field value in the current local format and assigns the new value to the named field for the current row of the business component.	`var busComp;`
		`busComp.SetFormattedFieldValue(`*`f`*
		`ieldName``, `*`fieldValue`*`);`

WriteRecord Method	Commits to the database any changes made to the current record.	`var busComp;`
		`busComp.WriteRecord();`

Table 61 lists a summary of the Business Component Events syntax.

Table 61. Business Component Events Syntax Summary

Event	Description	Syntax
BusComp_PreSetFieldValue Event	Called when a value is pushed down into the business component from the user interface. This Browser Script event is not invoked if the 'Immediate Post Changes' property of the Business Component field is set to TRUE.	`BusComp_PreSetFieldValue(`*`fieldName, value)`*`;`

Business Object Methods for Browser Script

Table 62 lists a summary of the Business Object methods' syntax.

Table 62. Business Object Methods Syntax Summary

Method	Description	Syntax

GetBusComp Method	Returns the specified business component.	`var busObject;`
		`var Comp;`
		`busComp =`
		`busObject.GetBusComp(`*`busCompName`*`);`

Name Method	Returns the name of the business object.	`Var sName;`
		`var busObject;`
		`sName = budObject.Name();`

Business Service Methods for Browser Script

Table 63 lists a summary of the Business Service methods' syntax.

Table 63. Business Service Methods Syntax Summary

Method	Description	Syntax

GetFirstProperty Method	Retrieves the name of the first property of a business service.	`var svc;`
		`var sName = svc.GetFirstProperty();`

GetNextProperty Method	Once the name of the first property has been retrieved, retrieves the name of the next property of a business service.	`var svc;`
		`var sName = svc.GetNextProperty();`

GetProperty Method	Retrieves the value stored in the specified property.	`var svc;`
		`var value;`
		`value = svc.GetProperty(`*`name`*`);`

InvokeMethod Method	Calls a specialized method or a user-created method on the business service.	`var svc;`
		`var oPropSet =theApplication().NewPropertySet();`
		`oPropSet = svc.InvokeMethod(`*`methodName`*`,` *`inputPropSet`*`);`

Name Method	Returns the name of the business service.	`var svc;`
		`var name;`
		`name = svc.Name();`

PropertyExists Method	Returns a Boolean value indicating whether the property specified in the argument exists.	`var svc;`
		`var bool;`
		`bool = svc.PropertyExists(`*`name`*`);`

RemoveProperty Method	Removes a property from a business service.	`var svc;`
		`svc.RemoveProperty(`*`name`*`);`

SetProperty Method	Assigns a value to a property of a business service.	`var svc;`
		`svc.SetProperty(`*`name`*`,` *`value`*`);`

Table 64 lists a summary of the Business Service Events syntax.

Table 64. Business Service Events Syntax Summary

Method	Description	Syntax
Service_InvokeMethod Event	Called when a business service is accessed.	`Service_InvokeMethod(`*`methodName`*`,`*`input`*`, `*`output`*`);`
Service_PreCanInvokeMethod Event	Called before the PreInvokeMethod, allowing the developer to determine whether or not the user has the authority to invoke the business service method.	`Service_PreCanInvokeMethod (`*`methodName`*`);`
Service_PreInvokeMethod Event	Called before a specialized method is invoked on a business service.	`Service_PreInvokeMethod(`*`methodName`*`, `*`inputPropSet`*`,`*`outputPropSet`*`);`

PropertySet Methods for Browser Script

Table 65 lists a summary of the PropertySet methods' syntax.

Table 65. PropertySet Methods Syntax Summary

Method	Description	Syntax

AddChild Method	Adds subsidiary property sets to a property set.	`var oPropSet;`
		`var iIndex;`
		`iIndex = oPropSet.AddChild(`*`childObject`*`);`

Copy Method	Returns a copy of a property set.	`var oPropSet1;`
		`var oPropSet2;`
		`oPropSet2 = oPropSet1.Copy();`

GetChild Method	Returns a specified child property set of a property set.	`var oPropSet;`
		`var oChildPropSet;`
		`oChildPropSet = oPropSet.GetChild(`*`index`*`);`

GetChildCount Method	Returns the number of child property sets attached to a parent property set.	`var oPropSet;`
		`var iCount;`
		`iCount = oPropSet.GetChildCount();`

GetFirstProperty Method	Returns the name of the first property in a property set.	`var oPropSet;`
		`var sPropName;`
		`sPropName = oPropSet.GetFirstProperty();`

Table 65. PropertySet Methods Syntax Summary

Method	Description	Syntax

GetNextProperty Method	Returns the name of the next property in a property set.	`var oPropSet;`
		`var sPropName;`
		`sPropName = oPropSet.GetNextProperty();`

GetProperty Method	Returns the value of a property when given the property name.	`var oPropSet;`
		`var sValue;`
		`sValue = oPropSet.GetProperty(`*propName*`);`

GetPropertyCount Method	Returns the number of properties attached to a property set.	`var oPropSet;`
		`var iCount;`
		`iCount = oPropSet.GetPropertyCount();`

GetType Method	Returns the value stored in a type in a property set.	`var oPropSet;`
		`var type;`
		`type = oPropSet.GetType();`

GetValue Method	Returns a value stored as part of a property set.	`var oPropSet;`
		`var sValue;`
		`sValue = oPropSet.GetValue();`

InsertChildAt Method	Inserts a child property set into a parent property set at a specific location.	`var oPropSet;`
		`oPropSet.InsertChildAt(`*childObject*`,`
		index`);`

PropertyExists Method	Returns a Boolean value indicating whether the property specified in the argument exists.	`var oPropSet;`
		`var bool;`
		`bool =`
		`oPropSet.PropertyExists(propName);`

RemoveChild Method	Removes a child property set as a specified index from a parent property set.	`var oPropSet;`
		`oPropSet.RemoveChild(`*index*`);`

RemoveProperty Method	Removes the property specified in its argument from a property set.	`var oPropSet;`
		`oPropSet.RemoveProperty(`*propName*`);`

Reset Method	Removes every property and child property set from a property set.	`var oPropSet;`
		`oPropSet.Reset();`

SetProperty Method	Assigns a value to the property of a property set specified in its argument.	`var oPropSet;`
		`oPropSet.SetProperty(`*propName*`,`
		propValue`);`

Table 65. PropertySet Methods Syntax Summary

Method	Description	Syntax

SetType Method	Assigns a data value to a type member of a property set.	`var oPropSet;`
		`oPropSet.SetType(`*`value`*`);`

SetValue Method	Assigns a data value to a value member of a property set.	`var oPropSet;`
		`oPropSet.SetValue(`*`value`*`);`

Control Methods for Browser Script

Table 66 lists a summary of the Control methods' syntax.

Table 66. Control Methods Syntax Summary

Method	Description	Syntax

Applet Method	Returns the parent applet for the control.	`var oControl;`
		`var oApplet;`
		`oApplet = oControl.Applet();`

BusComp Method	Returns the corresponding business component for the control.	`var oControl;`
		`var busComp;`
		`busComp = oControl.Buscomp();`

GetProperty Method	Returns the value of the property of a control.	`var oControl;`
		`var propVal;`
		`propVal = oControl.GetProperty(`
		`propName``);`

GetValue Method	Returns the value of a control.	`var oControl;`
		`var sValue;`
		`sValue = oControl.GetValue();`

Name Method	Returns the name of the control.	`var oControl;`
		`var sName;`
		`sName = oControl.Name();`

SetProperty Method	Sets the visual properties of a control.	`var oControl;`
		`oControl.SetProperty(`*`propName`*`,`
		`propValue``);`

SetValue Method	Sets the contents of the control to the indicated value.	`var oControl;`
		`oControl.SetValue(`*`value`*`);`

Supported DOM Events for High Interactivity Mode

Table 67 lists the supported DOM Events for high interactivity mode.

Table 67. Supported DOM Events for High Interactivity Mode

Control	Siebel Control Type	Supported Events	Comments
Button	Native	OnFocus OnBlur	
CheckBox	Native	OnFocus OnBlur	Rendered as Input Type=CHECKBOX.
Link	Native	OnFocus OnBlur	Rendered through paired anchor tags or as INPUT TYPE = TEXT in edit mode.
List Column	Native	This control does not expose any scriptable events.	
Mailto	Native	OnFocus OnBlur	Rendered as anchor tags with HREF=mailto or as INPUT TYPE=TEXT in Edit mode.
MiniButton	Native	OnFocus OnBlur	
Password	Native	OnFocus OnBlur	Rendered as Input Type = password.
Text	Native	OnFocus OnBlur	Rendered as INPUT TYPE = TEXT or as SELECT when attached to a pick list. If there is a pop-up window, it renders as an editbox plus a button.
TextArea	Native	OnFocus OnBlur	Rendered as TEXTAREA.
Tree	Native	Tree applets and controls do not expose any scriptable events.	
URL	Native	OnFocus OnBlur	Rendered through paired anchor tags with an HREF = underlying field value or as INPUT TYPE = TEXT in edit mode.

NOTE: Siebel objects (business components, applets, and so on.) cannot be accessed from DOM events.

Usually in scripting you can call routines in the General section from anywhere in the object. However you cannot call routines written in the General section from the DOM events.

To associate a script with the control_OnClick event (high interactivity mode only), use the Applet_PreInvokeMethod event associated with the applet. For additional information and example, read Chapter 14, “Invoking Custom Methods with MiniButtons.”

Supported DOM Events for Standard Interactivity Mode

Table 68 lists the supported DOM Events and template modes for standard interactivity mode.

Table 68. Supported DOM Events and Template Modes for Standard Interactivity Mode

Control	Siebel Control Type	Supported Events	Comments
Button	Native	OnFocus (Base/Edit) OnBlur (Base/Edit) OnMouseOut (Base/ Edit) OnMouseOver (Base/ Edit)	
CheckBox	Native	OnBlur (Base/Edit) OnFocus (Edit) OnChange (Edit) OnMouseOut (Edit) OnMouseOver(Edit)	In Base mode, a CheckBox appears as a Y or N text value. In Edit mode, a CheckBox is rendered as Input Type=CHECKBOX.
Link	Native	OnFocus (Base/Edit) OnBlur (Base/Edit) OnMouseOut (Base/ Edit) OnMouseOver (Base/ Edit) OnClick (Base/Edit)	Rendered through paired anchor tags or as INPUT TYPE = TEXT in Edit mode.
List Column	Native	List Columns currently do not expose any scriptable events.	

Table 68. Supported DOM Events and Template Modes for Standard Interactivity Mode

Control	Siebel Control Type	Supported Events	Comments
Mailto	Native	OnChange (Edit) OnFocus (Base/Edit) OnBlur (Base/Edit) OnMouseOut (Base/Edit) OnMouseOver (Base/Edit)	Rendered as anchor tags with HREF=mailto or as INPUT TYPE=TEXT in Edit mode.
MiniButton	Native	OnFocus (Base/Edit) OnBlur (Base/Edit) OnMouseOut (Base/Edit) OnMouseOver (Base/Edit) OnClick (Base/Edit)	
Password	Native	OnChange (Edit) OnFocus (Edit) OnBlur (Edit) OnMouseOut (Edit) OnMouseOver (Edit)	In Edit mode, a Password control is rendered as Input type = password.
Text	Native	OnChange (Edit) OnFocus (Edit) OnBlur (Edit) OnMouseOut (Edit) OnMouseOver (Edit)	In base mode, a text control is rendered as plain text, unless there is a pop-up window associated with it. In Edit mode, a TEXT control is rendered as INPUT TYPE = TEXT or as SELECT when attached to a pick list.
TextArea	Native	OnChange (Edit) OnFocus (Edit) OnBlur (Edit) OnMouseOut (Base/Edit) OnMouseOver (Edit)	In base mode, a TEXTAREA control is rendered as plain text, unless there is a pop-up window associated with it. In Edit mode, a TEXTAREA is rendered as INPUT TYPE = TEXTAREA.

Table 68. Supported DOM Events and Template Modes for Standard Interactivity Mode

Control	Siebel Control Type	Supported Events	Comments
Tree	Native	At this time, tree applets and controls do not expose any scriptable events.	
URL	Native	OnChange (Edit) OnFocus (Base/Edit) OnBlur (Base/Edit) OnMouseOut (Base/Edit) OnMouseOver (Base/Edit)	Rendered through paired anchor tags with an HREF = underlying field value or as INPUT TYPE = TEXT in Edit mode.

13 eScript Quick Reference

This quick reference has the following topics:

Applet Methods for eScript

Table 69 lists a summary of the Applet methods’ syntax.

Table 69. Applet Methods Syntax Summary

Method	Description	Syntax

BusComp Method	Returns the business component that is associated with the applet.	`var applet;`
		`var myBusComp;`
		`myBusComp = applet.BusComp();`

BusObject Method	Returns the business object for the business component for the applet.	`var applet;`
		`var busObject;`
		`busObject = applet.BusObject();`

InvokeMethod Method	Calls an argument-specified specialized method.	`var applet;`
		`applet.InvokeMethod(`*methodName, methodArg1, methodArg2, …, methodArgn*`);`

Name Method	Returns the name of the applet.	`var applet;`
		`var sApplet;`
		`sApplet = applet.Name();`

Table 70 lists a summary of the WebApplet Events.

Table 70. WebApplet Events Summary

Event	Description	Syntax
WebApplet_InvokeMethod Event	Called after a specialized method or a user-defined method on the Web applet has been executed.	`WebApplet_InvokeMethod(`*`MethodName`*`);`
WebApplet_Load Event	Called just after the Web applet is loaded.	`WebApplet_Load`
WebApplet_PreCanInvokeMethod Event	Called before the PreInvokeMethod, allowing the developer to determine whether the user has the authority to invoke the applet method.	`WebApplet_PreCanInvokeMethod(`*`MethodName`*`, &`*`CanInvoke`*`);`
WebApplet_PreInvokeMethod Event	Called before a specialized method for the Web applet is invoked or a user-defined method is invoked through oWebApplet.InvokeMethod.	`WebApplet_PreInvokeMethod(`*`MethodName`*`);`
WebApplet_ShowControl Event	Allows scripts to modify the HTML generated by the Siebel Web Engine to render a control on a Web page in a Standard Activity application.	`WebApplet_ShowControl (`*`controlName`*`, `*`property`*`, `*`mode`*`, &`*`HTML`*`);`
WebApplet_ShowListColumn Event	Allows scripts to modify the HTML generated by the Siebel Web Engine to render a list column on a Web page in a Standard Activity application.	`WebApplet_ShowListColumn (`*`columnName`*`, `*`property`*`, `*`mode`*`, &`*`HTML`*`);`

Application Methods for eScript

Table 71 lists a summary of the Application methods' syntax.

Table 71. Application Methods Syntax Summary

Method	Description	Syntax
ActiveBusObject Method	Returns the business object for the business component for the active applet.	`var busObject;` `busObject = TheApplication().ActiveBusObject();`
ActiveViewName Method	Returns the name of the active view.	`var sView;` `sView = TheApplication().ActiveViewName();`
CurrencyCode Method	Returns the three-letter operating currency code.	`var sCur;` `sCur = TheApplication().CurrencyCode();`
GetBusObject Method	Instantiates and returns a new instance of the business object specified in the argument.	`var myBusObject;` `myBusObject = TheApplication().GetBusObject(` *`BusObjectName`*`);`
Name Method	Returns the name of the application.	`var name;` `name = TheApplication().Name();`
GetService Method	Instantiates and returns a new instance of the service specified in the argument.	`var Service;` `Service = TheApplication().GetService(`*`serviceName`*`);`
GetSharedGlobal Method	Gets the shared user-defined global variables.	`var sName;` `sName = TheApplication().GetSharedGlobal(`*`varName`*`);`
GotoView Method	Activates the named view and its business object.	`TheApplication().GotoView(` *`viewName`*`,[BusinessObject]);`
InvokeMethod Method	Calls the named specialized method.	`TheApplication().InvokeMethod(` *`methodName`*`, methodArg1, methodArg2,..., methodArgn);`
LoginId Method	Returns the login ID of the user who started the Siebel application.	`var sID;` `sID = TheApplication().LoginId();`
LoginName Method	Returns the login name of the user who started the Siebel application.	`var sUser;` `sUser = TheApplication().LoginName();`
NewPropertySet Method	Constructs and returns a new property set object.	`var oPropSet;` `oPropSet = TheApplication().NewPropertySet();`

Table 71. Application Methods Syntax Summary

Method	Description	Syntax

PositionId Method	Returns the position ID that describes the user's current position.	`var sRow;`
		`sRow =`
		`TheApplication().PositionId();`

PositionName Method	Returns the position name of the user's current position.	`var sPosition;`
		`sPosition =`
		`TheApplication().PositionName();`

RaiseError Method	Raises a scripting error message to the browser. The error code is a canonical number.	`var keyVal;`
		`var arg1 ...;`
		`TheApplication().RaiseError(keyVal, arg1, …);`

RaiseErrorText Method	Raises a scripting error message to the browser. The error text is the specified literal string.	`var message;`
		`TheApplication().RaiseErrorText(message);`

SetPositionId Method	Sets the active position to the position ID specified in the argument.	`var success;`
		`success =`
		`TheApplication().SetPositionId(posId);`

SetPositionName Method	Sets the active position to the position name specified in the argument. Returns a Boolean value indicating whether the method succeeded.	`var success;`
		`success =`
		`TheApplication().SetPositionName(posName);`

SetProfileAttr Method	Used in personalization to assign values to attributes in a user profile.	TheApplication().SetProfileAttr(*name, value*);
SetSharedGlobal Method	Sets a shared user-defined global variable.	TheApplication().SetSharedGlobal(*varName, value*);
Trace Method	Appends a message to the trace file.	TheApplication().Trace(*message*);
TraceOff Method	Turns off the tracing started by TraceOn.	`TheApplication().TraceOff();`
TraceOn Method	Turns tracing on.	TheApplication().TraceOn(*filename, type, selection*);

Table 72 lists a summary of the Application Events syntax.

Table 72. Application Events Syntax Summary

Event	Description	Syntax
Application_Close Event	Called before the application exits.	`Application_Close();`
Application_InvokeMethod Event	Called after a specialized method is invoked.	Application_InvokeMethod(*methodName*);
Application_Navigate Event	Called after the client has navigated to a view.	`Application_Navigate()`
Application_PreInvokeMethod Event	Called before a specialized method is invoked.	Application_PreInvokeMethod(*methodName);*
Application_PreNavigate Event	Called before the client has navigated from one view to the next.	Application_PreNavigate (*DestViewName*, *DestBusObjName*)
Application_Start Event	Called when the client starts.	Application_Start(*commandLine*);

Business Component Methods for eScript

Table 73 lists a summary of the Business Component methods' syntax.

Table 73. Business Component Methods Syntax Summary

Method	Description	Syntax
ActivateField Method	Allows queries to retrieve data for the specified field.	`var myBusComp;` `myBusComp.ActivateField(fieldName);`
ActivateMultipleFields Method	Allows queries to retrieve data for the fields specified in the property set.	`var myBusComp;` `myBusComp.ActivateMultipleFields(oPropSet);`
Associate Method	Creates a new many-to-many relationship for the parent object through an association business component.	`var myBusComp;` myBusComp.Associate(*whereIndicator*);

Table 73. Business Component Methods Syntax Summary

Method	Description	Syntax

BusObject Method	Returns the business object that contains the business component.	`var myBusComp;`
		`var busObject;`
		`busObject = myBusComp.BusObject();`

ClearToQuery Method	Clears the current query and sort specifications on the business component.	`var myBusComp;`
		`myBusComp.ClearToQuery();`

DeactivateFields Method	Deactivates every currently activated field.	`var myBusComp;`
		`myBusComp.DeactivateFields();`

DeleteRecord Method	Removes the current record from the business component.	`var myBusComp;`
		`myBusComp.DeleteRecord();`

ExecuteQuery Method	Retrieves a set of BusComp records.	`var myBusComp;`
		`myBusComp.ExecuteQuery(`*`cursorMode`*`);`

ExecuteQuery2 Method	Retrieves a set of BusComp records.	`var myBusComp;`
		`myBusComp.ExecuteQuery2(`*`cursorMode, ignoreMaxCursorSize`*`);`

FirstRecord Method	Moves to the first record in the business component.	`var myBusComp;`
		`var bIsRecord;`
		`bIsRecord = myBusComp.FirstRecord();`

FirstSelected Method	Moves to the first record of the multiple selection in the business component.	`var myBusComp;`
		`var bIsMultipleSelection;`
		`bIsMultipleSelection =`
		`myBusComp.FirstSelected();`

GetAssocBusComp Method	Returns the association business component.	`var myBusComp;`
		`var AssocBusComp;`
		`AssocBusComp =`
		`myBusComp.GetAssocBusComp();`

GetFieldValue Method	Returns a value for the field specified in the argument.	`var myBusComp;`
		`var sValue;`
		`sValue =`
		`myBusComp.GetFieldValue(`*`FieldName`*`);`

GetFormattedFieldValue Method	Returns a formatted value for the field specified in the argument.	`var myBusComp;`
		`var sValue;`
		`sValue =`
		`myBusComp.GetFormattedFieldValue(`*`FieldName`*`);`

GetMultipleFieldValues Method	Returns a value for the fields specified in the property set.	`var myBusComp;`
		`myBusComp.GetMultipleFieldValues(oFields, oValues );`

Table 73. Business Component Methods Syntax Summary

Method	Description	Syntax

GetMVGBusComp Method	Returns the MVG business component associated with the field specified in the argument.	`var myBusComp;`
		`var MvgBusComp;`
		`MvgBusComp=`
		`myBusComp.GetMVGBusComp(`*`FieldName`*`);`

GetNamedSearch Method	Returns the named search specification specified in the argument.	`var myBusComp;`
		`var sValue;`
		`sValue =`
		`myBusComp.GetNamedSearch(`*`SearchName`*`)`
		`;`

GetPicklistBusComp Method	Returns the pick business component associated with the field specified in the argument.	`var myBusComp;`
		`var pickBusComp;`
		`pickBusComp =`
		`myBusComp.GetPicklistBusComp(`*`FieldNa`*
		`me``);`

GetSearchExpr Method	Returns the current search expression.	`var myBusComp;`
		`var sExpr;`
		`sExpr = myBusComp.GetSearchExpr();`

GetSearchSpec Method	Returns the current search specification for the field specified in the argument.	`var myBusComp;`
		`var sSpec;`
		`sSpec =`
		`myBusComp.GetSearchSpec(`*`FieldName`*`);`

GetUserProperty Method	Returns the value for a property name specified in the argument.	`var myBusComp;`
		`var sValue;`
		`sValue =`
		`myBusComp.GetUserProperty(`*`propertyNa`*
		`me``);`

GetViewMode Method	Returns the visibility mode for the business component.	`var myBusComp;`
		`var iMode;`
		`iMode = myBusComp.GetViewMode();`

InvokeMethod Method	Calls the specialized method named in the argument.	`var myBusComp;`
		`var sReturn;`
		`sReturn =`
		`myBusComp.InvokeMethod(`*`methodName,`*
		`methodArg1, methodArg2,...,`
		`methodArgn``);`

LastRecord Method	Moves to the last record in the business component.	`var myBusComp;`
		`var iReturn;`
		`iReturn = myBusComp.LastRecord();`

Name Method	Returns the name of the business component.	`var myBusComp;`
		`var sName;`
		`sName = myBusComp.Name();`

Table 73. Business Component Methods Syntax Summary

Method	Description	Syntax

NewRecord Method	Adds a new record to the business component.	`var myBusComp;`
		`myBusComp.NewRecord(`*`whereIndicator`*`);`

NextRecord Method	Moves to the next record in the business component.	`var myBusComp;`
		`var bFound;`
		`bFound = myBusComp.NextRecord();`

NextSelected Method	Moves to the next record of the current multiple selection.	`var myBusComp;`
		`var iReturn;`
		`iReturn = myBusComp.NextSelected();`

ParentBusComp Method	Returns the parent business component.	`var myBusComp;`
		`var parentBusComp;`
		`parentBusComp =`
		`myBusComp.ParentBusComp();`

Pick Method	Places the currently selected record in a picklist business component into the appropriate fields of the parent business component.	`var myBusComp;`
		`myBusComp.Pick();`

PreviousRecord Method	Moves to the previous record in the business component.	`var myBusComp;`
		`var iReturn;`
		`iReturn = myBusComp.PreviousRecord();`

RefineQuery Method	Refines a query after a query has been executed.	`var myBusComp;`
		`myBusComp.RefineQuery();`

SetFieldValue Method	Assigns a new value to the named field for the current row of the business component.	`var myBusComp;`
		`myBusComp.SetFieldValue(`*`FieldName,`*
		`FieldValue``);`

SetFormattedFieldValue Method	Accepts the field value in the current local format and assigns the new value to the named field for the current row of the business component.	`var myBusComp;`
		`myBusComp.SetFormattedFieldValue(`*`Fie`*
		`ldName, FieldValue``);`

SetMultipleFieldValues Method	Assigns a new value to the fields specified in the property set for the current row of the business component.	`var myBusComp;`
		`myBusComp.SetMultipleFieldValues(oPr`
		`opSet);`

Table 73. Business Component Methods Syntax Summary

Method	Description	Syntax
SetNamedSearch Method	Sets a named search specification on the business component.	`var myBusComp;` `myBusComp.SetNamedSearch(`*`searchName, searchSpec`*`);`
SetSearchExpr Method	Sets the search specification for the business component.	`var myBusComp;` `myBusComp.SetSearchExpr(`*`searchSpec`*`);`
SetSearchSpec Method	Sets the search specification for the specified field.	`var myBusComp;` `myBusComp.SetSearchSpec(`*`FieldName, searchSpec`*`);`
SetSortSpec Method	Sets the sort specification for a query.	`var myBusComp;` `myBusComp.SetSortSpec(`*`sortSpec`*`);`
SetUserProperty Method	Sets the value of the specified User Property.	`var myBusComp;` `myBusComp.SetUserProperty(`*`propertyName, newValue`*`);`
SetViewMode Method	Sets the visibility type for the business component.	`var myBusComp;` `myBusComp.SetViewMode(viewMode);`
UndoRecord Method	Reverses any uncommitted changes made to the record.	`var myBusComp;` `myBusComp.UndoRecord();`
WriteRecord Method	Commits to the database any changes made to the current record.	`var myBusComp;` `myBusComp.WriteRecord();`

Table 74 lists a summary of the Business Components Events syntax.

Table 74. Business Component Events Syntax Summary

Event	Description	Syntax
BusComp_Associate Event	Called after a record is added to a business component to create an association.	`BusComp_Associate();`
BusComp_ChangeRecord Event	Called after the current row changes in the business component.	`BusComp_ChangeRecord();`
BusComp_CopyRecord Event	Called after a new row is copied in the business component.	`BusComp_CopyRecord();`

Table 74. Business Component Events Syntax Summary

Event	Description	Syntax
BusComp_DeleteRecord Event	Called after a row is deleted in the business component.	`BusComp_DeleteRecord();`
BusComp_InvokeMethod Event	Called after a specialized method is invoked in the business component.	`BusComp_InvokeMethod(`*`methodName`*`);`
BusComp_NewRecord Event	Called after a new row has been created and made active in the business component.	`BusComp_NewRecord();`
BusComp_PreAssociate Event	Called before a record is added to a business component to create an association.	`BusComp_PreAssociate();`
BusComp_PreCopyRecord Event	Called before a new row is copied in the business component.	`BusComp_PreCopyRecord();`
BusComp_PreDeleteRecord Event	Called before a row is deleted in the business component.	`BusComp_PreDeleteRecord();`
BusComp_PreGetFieldValue Event	Called when the value of the business component field is accessed.	`BusComp_PreGetFieldValue(`*`FieldName, &FieldValue`*`);`
BusComp_PreInvokeMethod Event	Called before a specialized method is invoked on a business component.	`BusComp_PreInvokeMethod(`*`methodName`*`);`
BusComp_PreNewRecord Event	Called before a new row is created in the business component.	`BusComp_PreNewRecord();`
BusComp_PreQuery Event	Called before query execution.	`BusComp_PreQuery();`
BusComp_PreSetFieldValue Event	Called before a value is pushed down into the business component from the user interface.	`BusComp_PreSetFieldValue(`*`FieldName, FieldValue);`*
BusComp_PreWriteRecord Event	Called before a row is written out to the database.	`BusComp_PreWriteRecord();`

Table 74. Business Component Events Syntax Summary

Event	Description	Syntax
BusComp_Query Event	Called after the query is complete and every row has been retrieved, but before they have been displayed.	`BusComp_Query();`
BusComp_SetFieldValue Event	Called after a value has been pushed down into the business component from the user interface.	BusComp_SetFieldValue(*FieldName*) ;
BusComp_WriteRecord Event	Called after a row is written to the database.	`BusComp_WriteRecord();`

Business Object Methods for eScript

Table 75 lists a summary of the Business Object methods' syntax.

Table 75. Business Object Methods Syntax Summary

Method	Description	Syntax

GetBusComp Method	Returns the specified business component.	var myBusObject;
		var myBusComp;
		myBusComp =
		myBusObject.GetBusComp(*BusCompName*);

Name Method	Returns the name of the business object.	var myBusObject as BusObject;
		var sName;
		sName = myBusObject.Name();

Business Service Methods for eScript

Table 76 lists a summary of the Business Service methods' syntax.

Table 76. Business Service Methods Syntax Summary

Method	Description	Syntax

GetFirstProperty Method	Retrieves the name of the first property of a business service.	`var oService;`
		`var sName;sName =`
		`oService.GetFirstProperty();`

GetNextProperty Method	Once the name of the first property has been retrieved, retrieves the name of the next property of a business service.	`var oService;`
		`var sName;`
		`sName = oService.GetNextProperty();`

GetProperty Method	Retrieves the value stored in the specified property.	`var oService;`
		`var sValue;`
		`sValue =`
		`oService.GetProperty(`*propName*`);`

Name Method	Returns the name of the business service.	`var oService;`
		`var sName;`
		`sName = oService.Name();`

InvokeMethod Method	Calls a specialized method or a user-created method on the business service.	`var oService;`
		`oService.InvokeMethod(methodName,`
		`InputArguments, OutputArguments);`

PropertyExists Method	Returns a Boolean value indicating whether the property specified in the argument exists.	`var oService;`
		`var propExists;`
		`propExists =`
		`oService.PropertyExists(` *propName*`);`

RemoveProperty Method	Removes a property from a business service.	`var oService;`
		`oService.RemoveProperty(`*propName*`);`

SetProperty Method	Assigns a value to a property of a business service	`var oService;`
		`oService.SetProperty(`*propName*`,`
		propValue`);`

Table 77 lists a summary of the Business Service Events syntax.

Table 77. Business Service Events Syntax Summary

Method	Description	Syntax
Service_InvokeMethod Event	Called after a method is invoked in a business service.	`Service_InvokeMethod(methodName );`
Service_PreCanInvokeMethod Event	Called before the PreInvokeMethod, allowing the developer to determine whether or not the user has the authority to invoke the business service method.	`Service_PreCanInvokeMethod (MethodName, &CanInvoke)`
Service_PreInvokeMethod Event	Called before a specialized method is invoked on a business service.	`Service_PreInvokeMethod(methodN ame, Inputs, Outputs);`

PropertySet Methods for eScript

Table 78 lists a summary of the PropertySet methods' syntax.

Table 78. PropertySet Methods Syntax Summary

Method	Description	Syntax

AddChild Method	Adds subsidiary property sets to a property set.	`var oPropSet;`
		`var iIndex;`
		`iIndex = oPropSet.AddChild(`
		`childObject);`

Copy Method	Returns a copy of a property set.	`var oPropSet1;`
		`var oPropSet2;`
		`oPropSet2 = oPropSet1.Copy();`

GetChild Method	Returns a specified child property set of a property set.	`var oPropSet;`
		`var sPropVal;`
		`sPropVal =`
		`oPropSet.GetChild(`*index*`);`

GetChildCount Method	Returns the number of child property sets attached to a parent property set.	`var oPropSet;`
		`var iCount;`
		`iCount = oPropSet.GetChildCount();`

Table 78. PropertySet Methods Syntax Summary

Method	Description	Syntax

GetFirstProperty Method	Returns the name of the first property in a property set.	`var oPropSet;`
		`var sPropName;`
		`sPropName =`
		`oPropSet.GetFirstProperty();`

GetNextProperty Method	Returns the name of the next property in a property set.	`var oPropSet;`
		`var sPropName`
		`sPropName =`
		`oPropSet.GetNextProperty();`

GetProperty Method	Returns the value of a property when given the property name.	`var oPropSet;`
		`var sPropVal`
		`sPropVal =`
		`oPropSet.GetProperty(`*propName*`);`

GetPropertyCount Method	Returns the number of properties attached to a property set.	`var count;`
		`count =`
		`oPropSet.GetPropertyCount();`

GetType Method	Returns the value stored in a type in a property set.	`var oPropSet;`
		`var sTypeVal`
		`sTypeVal = oPropSet.GetType(`*value*`);`

GetValue Method	Returns a value stored as part of a property set.	`var oPropSet;`
		`var sValVal;`
		`sValVal = oPropSet.GetValue(`*value*`);`

InsertChildAt Method	Inserts a child property set into a parent property set at a specific location.	`var oPropSet;`
		`oPropSet.InsertChildAt(`*childObject*`,`
		index`);`

PropertyExists Method	Returns a Boolean value indicating whether the property specified in the argument exists.	`Dim oService as SiebelService`
		`Dim propExists as Boolean`
		`propExists =`
		`oService.PropertyExists(`*propName* `as`
		`String)`

RemoveChild Method	Removes a child property set as a specified index from a parent property set.	`var oPropSet;`
		`oPropSet.RemoveChild(`*index*`);`

RemoveProperty Method	Removes the property specified in its argument from a property set.	`var oPropSet;`
		`oPropSet.RemoveProperty(`*propName*`);`

Reset Method	Removes every property and child property set from a property set.	`var oPropSet;`
		`oPropSet.Reset();`

SetProperty Method	Assigns a value to the property of a property set specified in its argument.	`var oPropSet;`
		`oPropSet.SetProperty (`*propName*`,`
		propValue`);`

Table 78. PropertySet Methods Syntax Summary

Method	Description	Syntax

SetType Method	Assigns a data value to a type member of a property set.	`var oPropSet;`
		`oPropSet.SetType(`*`value`*`);`

SetValue Method	Assigns a data value to a value member of a property set.	`var oPropSet;`
		`oPropSet.SetValue(`*`value`*`);`

Miscellaneous Methods for eScript

Table 79 lists a summary of the Miscellaneous Method syntax.

Table 79. Miscellaneous Method Syntax Summary

Method	Description	Syntax
TheApplication Method	Global method that returns the unique object of type Application.	`TheApplication().`*`Application_method;`*

14 Invoking Custom Methods with MiniButtons

This chapter provides a procedure to invoke a custom method with a MiniButton.

- "Invoking Custom Methods with MiniButtons" on page 409

Invoking Custom Methods with MiniButtons

Be sure to set up Tools for the appropriate Target Browser Group.

To invoke a custom method with a MiniButton

1. Choose an applet (for example, Account List Applet) and create a control with the following properties:

   ```
   Name = ButtonTest
   Caption = Test
   HTML Type = MiniButton
   Method Invoked = MyTest
   ```

2. Right click the Applet and choose Edit Web Layout.

   The Web layout editor appears.

3. Change the template mode on the Web Controls toolbar to 3: Edit List.

   A window opens with the available controls, including the one you just created.

4. Drag and drop the control the ButtonTest control onto an available location. When you release the mouse button, the button appears.

5. Click Save and then choose File > Close.

6. To add a server script to the applet that enables the button, right-click the applet and choose Edit Server Scripts. Add the following script to the WebApplet_PreCanInvokeMethod() function.

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

7. Add the following browser script to the applet you are using (for example, the Account List Applet).

```
function Applet_PreInvokeMethod (name, inputPropSet)
{
   switch (name) {
      case "MyTest":
         alert( "Siebel 7 browser script!" );
         return("CancelOperation");
      break;
   }
   return ("ContinueOperation");
}
```

8 Run any application that has access to accounts, and go to the Accounts screen.

The new button should appear.

9 Click Test.

The Browser Script should display an alert box indicating “Siebel 7 Browser Script!”

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