



Agile Product Lifecycle Management

Agile PLM EC Web Services User Guide

v9.3.1.2

Part No. E23883-01

January 2012

Oracle Copyright

Copyright © 1995, 2012, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this software or related documentation is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS

Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications which may create a risk of personal injury. If you use this software in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy and other measures to ensure the safe use of this software. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software in dangerous applications.

Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

This software and documentation may provide access to or information on content, products and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third party content, products and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third party content, products or services. The RMW product includes software developed by the Visigoth Software Society.

CONTENTS

Oracle Copyright.....	ii
Chapter 1 Introduction	1
About Engineering Collaboration (EC) Services	1
Software Requirements.....	2
Target Audience	2
EC BPEL Services Source and Configuration files	2
Chapter 2 What is included	5
Chapter 3 EC BPEL Services	7
Configurations	7
Configuration for Local Access to SOA Suite	7
Configuration for Remote Access to SOA Suite	8
Compilation/Deployment of Processes	9
Resource Bundle Installation.....	9
Setting up Processes in JDeveloper	10
Troubleshooting.....	10
Chapter 4 EC Web Services - Object Calls.....	13
getDesignProperties	13
getItemPropertiesByDesign.....	23
searchSingleObject	31
retrieveDesignStructure.....	36
createUpdateDesignStructure	47
createBOM	62
getDesignWhereUsed	70
get DesignWhereAttached	76
getDesignRelationships.....	84
generateThumbnails.....	90
getUserPreferredLanguage.....	92
Chapter 5 EC Web Services - Orchestrated Calls	95
getDesignPropertiesAndRights	95
getDesignItemPropertiesAndRights	101
createUpdateThenReserve	107
reserveThenCreateUpdate.....	114
createUpdateThenRelate	127

retrieveDesignStructureAndMetadata	136
Chapter 6 EC Web Services Schema Types	161
AgileECCObjectRequestType.....	161
AgileECRequestExType	161
AgileECCObjectResponseType	162
AgileECResponseExtType	162
AgileECCClassType	162
getDesignPropertiesAndRightsResponse	163
getDesignItemPropertiesAndRightsResponse	163
createUpdateThenReserveResponse	164
reserveThenCreateUpdateResponse	165
createUpdateThenRelateResponse	165
retrieveDesignStructureAndMetadataResponse	166

Preface

Oracle's Agile PLM documentation set includes Adobe® Acrobat PDF files. The [Oracle Technology Network \(OTN\) Web site](http://www.oracle.com/technetwork/documentation/agile-085940.html) <http://www.oracle.com/technetwork/documentation/agile-085940.html> contains the latest versions of the Agile PLM PDF files. You can view or download these manuals from the Web site, or you can ask your Agile administrator if there is an Agile PLM Documentation folder available on your network from which you can access the Agile PLM documentation (PDF) files.

Note To read the PDF files, you must use the free Adobe Acrobat Reader version 9.0 or later. This program can be downloaded from the [Adobe Web site](http://www.adobe.com) <http://www.adobe.com>.

The [Oracle Technology Network \(OTN\) Web site](http://www.oracle.com/technetwork/documentation/agile-085940.html) <http://www.oracle.com/technetwork/documentation/agile-085940.html> can be accessed through **Help > Manuals** in both Agile Web Client and Agile Java Client. If you need additional assistance or information, please contact My Oracle Support (<https://support.oracle.com>) for assistance.

Note Before calling Oracle Support about a problem with an Agile PLM manual, please have the full part number, which is located on the title page.

TTY Access to Oracle Support Services

Oracle provides dedicated Text Telephone (TTY) access to Oracle Support Services within the United States of America 24 hours a day, 7 days a week. For TTY support, call 800.446.2398. Outside the United States, call +1.407.458.2479.

Readme

Any last-minute information about Agile PLM can be found in the Readme file on the [Oracle Technology Network \(OTN\) Web site](http://www.oracle.com/technetwork/documentation/agile-085940.html) <http://www.oracle.com/technetwork/documentation/agile-085940.html>.

Agile Training Aids

Go to the [Oracle University Web page](http://www.oracle.com/education/chooser/selectcountry_new.html) http://www.oracle.com/education/chooser/selectcountry_new.html for more information on Agile Training offerings.

Accessibility of Code Examples in Documentation

Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

This documentation may contain links to Web sites of other companies or organizations that Oracle does not own or control. Oracle neither evaluates nor makes any representations regarding the accessibility of these Web sites.

Introduction

About Engineering Collaboration (EC) Services

Agile PLM Engineering Collaboration (EC) Services are a set of Business Services that supplement PLM's Core Web Services for CAD use cases. They also offer a set of higher level BPEL orchestration services. Customers and partners can build next generation MCAD and ECAD connectors utilizing Agile PLM Web Services and Engineering Collaboration Services.

Some of the benefits are:

- Significantly improves WAN performance for CAD connectors because the bulk of the logic is deployed to the server
- Makes it easier for development partners and customers to implement CAD connectors

Customers and partners deploy the following out-of-the box BPEL services or modify them to meet their business needs:

EC BPEL Service	Description
getDesignPropertiesAndRights	Returns Design metadata and access rights. Orchestrates these calls: getTableMetaData, checkPrivilege
getDesignItemPropertiesAndRights	Returns Part metadata and access rights. Orchestrates these calls: getTableMetaData, checkPrivilege
createUpdateThenReserve	Creates or updates Design objects, and then checks them out. Orchestrates these calls: updateObject, getAutoNumbers, createObject, checkoutFF
reserveThenCreateUpdate	Checks out Design objects, and then updates them (and creates them if they don't exist). Orchestrates these calls: checkoutFF, updateObject, getAutoNumbers, createObject
createUpdateThenRelate	Creates or updates objects (Designs or Parts), and then relates them to Parts or Designs. Orchestrates these calls: updateObject, getAutoNumbers, createObject, addRows
retrieveDesignStructureAndMetadata	Retrieves all Design structure, file IDs, metadata, and access rights. Orchestrates these calls: retrieveDesignStructure, getTableMetaData, checkPrivilege

Software Requirements

- Oracle SOA Suite 10.1.3.4 (iAS 10.1.3.4)
- jDeveloper 10gR3
- Agile 9.3 EC BPEL Services

Target Audience

The intended audience for this guide are the Administrators who will deploy EC BPEL Services on Oracle SOA Suite.

Note To deploy Agile EC BPEL services, Oracle SOA Suite must be already installed and configured.

This guide provides necessary procedures to:

1. Configure build properties
2. Build EC BPEL services in jDeveloper
3. Deploy the EC services in Oracle SOA Suite

EC BPEL Services Source and Configuration Files

Agile EC BPEL sources and configuration files are available in a zip file, the **ecs-bpel.zip**. This file contains the following directory structure when extracted into a folder **bpel**. This location will now on be referred to as **<ec-bpel-root>**.

The Oracle Agile PLM Application Suite enables enterprises to accelerate product innovation and maximize product profitability by managing the information, processes, and decisions about their products throughout the product lifecycle. The Agile PLM product provides comprehensive support for the PLM business process through PC, PQM, PPM, PCM, PGC & EC.

Businesses are starting to realize the benefits of Service Oriented Architecture (SOA) and Web Services. Web Services are rapidly emerging as the standard solution to publish business services, both within corporate firewalls as well as externally to provide integration points with business partners. Customers are also adopting SOA and Web Services technologies to enable more composite applications and enterprise-wide data integrations. SOA is emerging as the premier integration and architecture framework in today's complex and heterogeneous computing environment. SOA can help organizations streamline processes so that they can do business more efficiently, and adapt to changing needs and competition, enabling the software as a service concept are the preferred standards-based way to realize SOA.

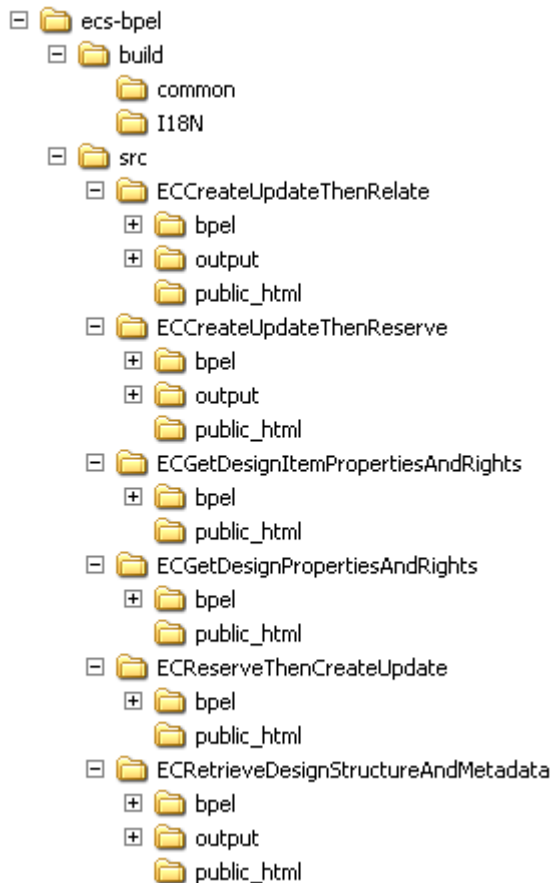
Web Services are designed to support interoperable machine-to-machine interaction over a network. This interoperability is gained through a set of XML-based open standards, such as WSDL, SOAP, and UDDI. These standards provide a common approach for defining, publishing,

and using web services.

What is included

The ecs-bpel.zip file contains the following directory structure when extracted to a folder “bpel”. This location will now on be referred to as <ec-bpel-root>.

Figure 1: Directory structure of ecs-bpel.zip



The “build” folder contains a “build.xml” and “build.properties” file. The build.properties file must be adapted before you can deploy the processes. The “build.xml” contains all the targets you need to perform the deployment. This will be described in the following sections. The “I18N” folder contains the language resource bundle. This needs to be manually deployed which will also be described later.

The bpel processes are found under the “src” folder. Each bpel folder has a “build.xml” and “build.properties” file. These are artifacts from JDeveloper and are not used. They are included anyway if anyone wishes to use them.

The “public_html” folder under each process contains a sample file that shows a sample request for each of the processes. This can be directly pasted in BPEL Console to directly invoke each process.

EC BPEL Services

This chapter includes the following:

▪ Configurations.....	7
▪ Compilation/Deployment of Processes.....	9
▪ Setting up Processes in JDeveloper.....	10
▪ Troubleshooting.....	10

Configurations

Configuration for Local Access to SOA Suite

To compile or deploy BPEL processes the following set of properties needs to be defined in build.properties file found under “<ec-bpel-root>/build” directory.

Table 2: Table of Properties for compilation/deployment and their function (BPEL Server on local machine)

List of properties (with actual / sample values)	Description
a9.server.hostname	The hostname of the machine where Agile 9 is deployed.
a9.server.port	The web context of Agile core web services, e.g. http://agileserver:8888/coreService/services/BusinessObject The above url points to the Agile 9 Business object services. The “coreService” is the web context for all these services.
todeploy.dir	The directory where compiled bpel processes will be placed ready for deployment, manually or via the deploy task included in script.
bpel.home=l:/product/10.1.3.4/Oracl eAS_1/bpel	The location of the bpel dir in the OAS app server installation. (Required)
bpel.process.rev=1.0	The revision of all the processes, this is required by the bpel server.
bpel.domain=default	The domain the bpel processes will get deployed to. This is a must by the bpel server. (Required)

List of properties (with actual / sample values)	Description
bpel.http.hostname=localhost	This is required
bpel.http.port=7777	This is required
bpel.admin.user	This is only required for http mode installation. (Optional)
bpel.admin.encrypted.password	This is required for http deploy. This is decrypted at build time automatically using oracle libraries and value is set in the property "bpel.admin.password". If clear text password is set for bpel.admin.password already than decryption is not done. Either of these 2 properties must be set for successful deploy. It can be found in "<bpel.home>/utilities/ant-orabpel.properties" file on the server install.
bpel.admin.password	This is used in http mode installation. This is not needed if "bpel.admin.encrypted.password" is supplied. Not recommended to set this, only the above mentioned property is recommended to be set. But if set it works during the http mode deployment. (Optional)
bpel.verbose=true	BPEL process compilation and deployment verbose flag. (Optional)
dummy.bpel.home	This is a special property not required to be set. It used to deploy from a machine that does not have SOA Suite locally installed on it. When set it must point to the libraries needed to compile and deploy the processes. If bpel.home is left unspecified than these libraries will be used to compile/deploy the processes. See section "Configurations for a non-SOA Suite machine" for more details on how to use this property.

Configuration for Remote Access to SOA Suite

In general, you can only compile and deploy the BPEL processes from a machine that has the Soa Suite installed locally on to it. Alternatively JDeveloper can be used to compile the BPEL suitcases and the BPEL console can be used to execute an http deploy. But it is sometimes convenient to be able to deploy all the processes from ANT in one go without manually executing these steps.

To alleviate this problem you need to copy the jar files listed below from your SOA server to your local machine. Your administrator can provide these files. These jars have to be copied over to folder called "lib". Then you must specify the "dummy.bpel.home" property to be the parent folder of this "lib" directory. The build script will than work transparently for you whether you have the Soa Suite installed locally for you or not. This is not a documented approach for Soa server and is given only for convenience. Following are the required jar files for this setting. They can be found under

"<SOA-suite-install-location>/bpel/lib" directory.

- orabpel.jar
- orabpel-ant.jar
- orabpel-boot.jar
- orabpel-common.jar
- orabpel-exts.jar
- orabpel-thirdparty.jar
- oracle_http_client.jar
- orawsdl.jar
- xmlparserv2.jar

Compilation/Deployment of Processes

The Oracle BPEL server must be installed as part of the SOA Suite installation (version 10.1.3.4.0). At least version 1.6.5 of Ant must be present. The recommended version of Java is the same as used by the SOA Suite (version 10.1.3.4). More details on this are present in the installation guides of the Oracle Application Server and are out of scope of this document.

The properties outlined in Table 2 must be filled with valid values. Then open command line in directory "<ec-bpel-root>/build". Then for deploying the BPEL processes execute the following ant command:

ant deploy-bpel-processes

To just compile and place the processes in the folder specified by property "todeploy.dir", execute on the command line in directory "<ec-bpel-root>/build":

ant compile-bpel-processes

Resource Bundle Installation

The folder under "<ec-bpel-root>/build/l18N" contains a "agileEcBpelResourceBundle.jar" file. This contains the language resource bundles for the bpel processes. The languages supported are the only ones that Agile PLM itself supports. The processes will not work without installing this jar file on the server.

The steps to manually install this jar file are as follows:

1. Copy the "agileEcBpelResourceBundle.jar" file to the "<SOA-suite-install-location>/bpel/lib" directory. Or alternatively you can copy it to some other location of your preference. Remember this path for later reference.
2. Go to the "<SOA-suite-install-location>/j2ee" directory. Next open the home directory in which the bpel server is installed. This is typically "oc4j_soa" for default installations.
 - Open the "/config/server.xml" file in the above directory.

3. Find the xml node below :

- `<shared-library name="oracle.bpel.common" version="10.1.3">`

4. Add the following line

```
<code-source path="<SOA-suite-install-location>/bpel/lib/agileEcBpelResourceBundle.jar"/>
```

where the string "<SOA-suite-install-location >" refers to the absolute path of your SOA Suite installation on your system.

Alternately, if you saved the "agileEcBpelResourceBundle.jar" to some other location, please provide the path to the same here.

Restart the SOA Suite server after this step for the changes to take effect. The bpel processes should now successfully run after this step.

Setting up Processes in JDeveloper

The properties outlined in Table 2 must be filled with valid values. Then for developing or viewing the processes in JDeveloper execute the following Ant command:

ant init-bpel

JDeveloper version 10g was used in development of these processes and is the recommended IDE to be used with SOA Suite 10.1.3.4.

Note Please don't use JDeveloper 11g as this might cause conflicts with the BPEL server.

Now the next step is to open the processes in JDeveloper for development. You can do it in 2 ways:

1. Navigate to the directory "<ec-bpel-root>/src". Double click the "ECS-BPEL-V1.jws" file there. If this extension is associated with JDeveloper it will automatically open the projects in JDeveloper.
2. Alternatively if *.jws files are not associated with JDeveloper, than you can use JDeveloper itself to open this file.
 - Click File->Open...
 - Navigate to the "<ec-bpel-root>/src" directory.
 - Select the "ECS-BPEL-V1.jws" file there in the open dialog box.
 - This will create the ECS-BPEL-V1 application for you with all the bpel processes added to it.

Troubleshooting

"get-wsdl" task failing

This is a core task for the complete script. Nothing will work as expected if this task fails. It uses the ant "get" task to download the required wsdl files from the Agile 9 server. Possible reasons for failure could be:

- False Agile 9 server hostname / port, this translates to a wrong url for downloading the wsdl

files.

- False setting of the “core.service.virtual.path” property, this translates to a wrong url for downloading the wsdl files.
- Agile 9 server is down.

Make sure that the Url's given in the “get” task of the “get-wsdl” target in the build script are valid and that you can access and download the wsdl files with a browser.

Another possible issue could be that you need to use a proxy server to get at the Agile 93 server. If this is the case, then please refer to the Ant “get” task manual. While using Ant 1.7 with Java 5 or later, the default proxy settings of OS are used. In other cases there is a <setproxy> task that you might need to write yourself.

Could not create task or type of type: validateTask

This is indicative of the fact that your “bpel.home” variable is not set properly. Please verify your SOA Suite installation directory and reset this variable to valid value that points to the bpel folder in your SOA Suite installation directory.

Timeout error on deployment

In some cases, especially in clustered application server environments, a timeout exception might be thrown either during deployment or while calling the BPEL services (error message contains: javax.transaction.RollbackException: Timed out).

Adjusting some configuration values in the SOA Suite installation will solve this issue. The placeholder “\${SOA_Oracle_Home}” should point to the installation location of the SOA Suite (usually the iAS install location).

1. In \${SOA_Oracle_Home}\j2ee\home\config\transaction-manager.xml, the value of transaction-timeout property should be set to 7200 at a minimum.
2. In \${SOA_Oracle_Home}\j2ee\home\application-deployments\orabpel\ejb_ob_engine\orion-ejb-jar.xml, the value of transaction-timeout property should be set to 3600 at a minimum.
3. In \${SOA_Oracle_Home}\bpel\domains\domain_name\config\domain.xml, the value of syncMaxWaitTime should be set to 240 at a minimum.

EC Web Services - Object Calls

This chapter includes the following:

▪ getDesignProperties	13
▪ getItemPropertiesByDesign	23
▪ searchSingleObject	31
▪ retrieveDesignStructure	36
▪ createUpdateDesignStructure	47
▪ createBOM	62
▪ getDesignWhereUsed	70
▪ get DesignWhereAttached	76
▪ getDesignRelationships	84
▪ generateThumbnails	90
▪ getUserPreferredLanguage	92

The Core service covers most of the basic services, which can also be used in the EC services context. There are some of the services that the Core service does not cover as those are EC specific services. Those EC services will be described in the following sections in detail. The EC Services are designed as document/wrapped style and use consistent request response types which in turn use the types defined in the Core services data model or extend the one from the Core service data model.

getDesignProperties

Service To retrieve the metadata of the attributes available for the given subclass of Designs, including those in the Title Block, Page Two and Page Three tabs and optionally also the table pages, such as Files, Structure and Where Used.

Usage The request does not need to include any Agile objects, however, the following two parameters are allowed in the general parameters section: subclass-name and include-tables. The value of subclass-name is a subclass of a design for which the properties (Metadata) have to be retrieved. The value of the parameter include-tables is either "true" or "false". If set to "true", metadata for attributes in tables is included. The default value is "false".

The service reads the Metadata for the given Design subclass and checks if the subclass is of type Design and retrieves the metadata for all the object attributes, Auto number sources, subclass types and table metadata (if include-tables is set to "true"). Then the AgileECClass type is created and filled with the retrieved metadata.

Syntax

```
AgileECCResponseExtType getDesignPropertiesResponseType =
agileStub.getDesignProperties(getDesignPropertiesRequestType);
```

Special Handling**Exceptions:**

1. If the subclass-name specified is not of type Design
2. If there is no subclass of the given subclass type

Basic Steps

To retrieve the metadata of a Design subclass:

3. Create the request object AgileECRequestExtType for the getDesignProperties operation.
4. Create a general parameters list of the type PropertyListType.
5. Add the parameter 'subclass-name' to the list.
6. Optionally add the parameter 'include-tables' to the list.
7. Call the Web Service and review the metadata information returned.

Sample Code Java

```
try {
    setupServerLogin();
    Integer classId = getIntegerProperty(DSIGN CLASS ID);
    String subClass = getStringProperty(DSIGN SUBCLASS);
    String number = getStringProperty(DSIGN NUMBER);
    AgileECRequestExtType getDesignPropertiesRequestType = new
AgileECRequestExtType();
    PropertyListType[] generalParameters = new PropertyListType[2];
    generalParameters[0] = new PropertyListType();
    PropertyType[] props = new PropertyType[2];
    props[0] = new PropertyType("include-tables", "false");
    props[1] = new PropertyType("subclass-name", subClass);
    generalParameters[0].setProperty(props);
    getDesignPropertiesRequestType.setGeneralParameters(generalParameters);
    AgileECResponseExtType getDesignPropertiesResponseType =
agileStub.getDesignProperties(getDesignPropertiesRequestType);
    System.out.println("STATUS CODE: " +
getDesignPropertiesResponseType.getStatusCode());
    if
(!getDesignPropertiesResponseType.getStatusCode().toString().equals(ResponseStatus
Code.SUCCESS.getValue())) {
        AgileExceptionListType[] agileExceptionListType =
getDesignPropertiesResponseType.getExceptions();
        for (AgileExceptionType exceptionListType :
agileExceptionListType) {
            for (AgileExceptionType exception :
exceptionListType.getException()) {
                System.out.println(exception.getMessage());
            }
        }
    } else { // If the object, was successfully retrieved, then examine its
        AgileECClassType[] agileResponseObjects =
getDesignPropertiesResponseType.getAgileClass();
        if (agileResponseObjects != null) {
            for (AgileECClassType agileObject : agileResponseObjects) {
                System.out.println("Class API Name: " +
agileObject.getApiName());
                AdminNodeType[] autoNumbers = agileObject.getAutoNumber();
                for (AdminNodeType autoNumber : autoNumbers) {
                    System.out.println("AutoNumber API Name: " +
autoNumber.getApiName());
                    System.out.println("AutoNumber Display Name: " +
autoNumber.getDisplayName());
                }
                AttributeType[] attributeMetaData =
agileObject.getAttributeMetaData();
                for (AttributeType at : attributeMetaData) {
                    System.out.println("Meta Data Node ID: " + at.getNodeId());
                    System.out.println("Meta Data API Name: " + at.getApiName());
                    System.out.println("Meta Data Type: " + at.getType());
                }
            }
        }
    }
}
```

```

        System.out.println("MetaData Display Name: " +
        at.getDataType());
        System.out.println("MetaData Data Type: " +
        at.getSearchable());
        System.out.println("MetaData Searchable: " +
        System.out.println("MetaData Visible: " + at.getVisible());
        System.out.println("MetaData Required: " + at.getRequired());
        System.out.println("MetaData Max. Length: " +
        at.getMaxLength());
    }
} else {
    System.out.println("No results!");
}
}
}

```

Sample Code SOAP

```

==== Request ====
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Body>
    <getDesignProperties xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
      <req xmlns="">
        <generalParameters>
          <id xsi:nil="true" />
          <property>
            <propertyName>include-tables</propertyName>
            <propertyValue>>false</propertyValue>
          </property>
          <property>
            <propertyName>subclass-name</propertyName>
            <propertyValue>Design</propertyValue>
          </property>
        </generalParameters>
        <generalParameters xsi:nil="true" />
      </req>
    </getDesignProperties>
  </soapenv:Body>
</soapenv:Envelope>
==== Response ====
<?xml version="1.0" encoding="utf-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Body>
    <getDesignPropertiesResponse
      xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
      <res xmlns="">
        <messageId xsi:nil="true" />
        <messageName xsi:nil="true" />
        <statusCode>SUCCESS</statusCode>
        <AgileClass>
          <nodeId>2000008310</nodeId>
          <apiName>Design</apiName>
          <typeCLASS</type>
          <displayName>Design</displayName>
          <abstractClass>false</abstractClass>
          <autoNumber>
            <nodeId>2000008780</nodeId>
            <apiName>DesignsNumber</apiName>
            <typeAUTONUMBER</type>
            <displayName>Designs Number</displayName>
          </autoNumber>
          <attributeMetaData>
            <nodeId>6173</nodeId>
            <apiName>Number</apiName>
            <typeATTRIBUTE</type>
            <displayName>Number</displayName>
            <dataType>2</dataType>
            <searchable>true</searchable>
            <visible xsi:nil="true" />
            <required>true</required>
            <maxLength>50</maxLength>
          </attributeMetaData>
        </AgileClass>
      </res>
    </getDesignPropertiesResponse>
  </soapenv:Body>
</soapenv:Envelope>

```

```

</attributeMeta-data>
<attributeMeta-data>
  <nodeId>2000009487</nodeId>
  <apiName>itemChangeStatus</apiName>
  typeATTRIBUTE</type>
  <displayName>Item Change Status</displayName>
  <dataType>2</dataType>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>50</maxLength>
</attributeMeta-data>
<attributeMeta-data>
  <nodeId>6390</nodeId>
  <apiName>lifecyclePhase</apiName>
  typeATTRIBUTE</type>
  <displayName>Lifecycle Phase</displayName>
  <dataType>4</dataType>
  <possibleValues>
    <id xsi:nil="true" />
    <apiName xsi:nil="true" />
    <value xsi:nil="true" />
  </possibleValues>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMeta-data>
<attributeMeta-data>
  <nodeId>6174</nodeId>
  <apiName>Description</apiName>
  typeATTRIBUTE</type>
  <displayName>Description</displayName>
  <dataType>2</dataType>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>150</maxLength>
</attributeMeta-data>
<attributeMeta-data>
  <nodeId>6389</nodeId>
  <apiName>checkoutStatus</apiName>
  typeATTRIBUTE</type>
  <displayName>Checkout Status</displayName>
  <dataType>4</dataType>
  <possibleValues>
    <id xsi:nil="true" />
    <apiName xsi:nil="true" />
    <value xsi:nil="true" />
  </possibleValues>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMeta-data>
<attributeMeta-data>
  <nodeId>2000008317</nodeId>
  <apiName>componentType</apiName>
  typeATTRIBUTE</type>
  <displayName>Component Type</displayName>
  <dataType>4</dataType>
  <possibleValues>
    <id xsi:nil="true" />
    <apiName xsi:nil="true" />
    <value xsi:nil="true" />
  </possibleValues>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMeta-data>
<attributeMeta-data>
  <nodeId>6180</nodeId>
  <apiName>checkoutUser</apiName>
  typeATTRIBUTE</type>
  <displayName>Checkout User</displayName>
  <dataType>4</dataType>
  <possibleValues>
    <id xsi:nil="true" />
    <apiName>Users</apiName>
    typeSIMPLELIST</type>
  </possibleValues>

```

```

</possibleValues> "true" />
<searchable>true</searchable>
<visible xsi:nil="true" />
<required>false</required>
<maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>2000008717</nodeId>
  <apiName>checkinUser</apiName>
  typeATTRIBUTE</type>
  <displayName>Checkin User</displayName>
  <dataType>4</dataType>
  <possibleValues>
    <id xsi:nil="true" />
    <apiName>Users</apiName>
    typeSIMPLELIST</type>
    <value xsi:nil="true" />
  </possibleValues>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>2000008686</nodeId>
  <apiName>revisionDate</apiName>
  typeATTRIBUTE</type>
  <displayName>Revision Date</displayName>
  <dataType>3</dataType>
  <searchable>false</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>6184</nodeId>
  <apiName>checkoutDate</apiName>
  typeATTRIBUTE</type>
  <displayName>Checkout Date</displayName>
  <dataType>3</dataType>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>7951</nodeId>
  <apiName>Version</apiName>
  typeATTRIBUTE</type>
  <displayName>Version</displayName>
  <dataType>1</dataType>
  <searchable>false</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>2000009374</nodeId>
  <apiName>approvalStatus</apiName>
  typeATTRIBUTE</type>
  <displayName>Approval Status</displayName>
  <dataType>4</dataType>
  <possibleValues>
    <id xsi:nil="true" />
    <apiName xsi:nil="true" />
    <value xsi:nil="true" />
  </possibleValues>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>2000008554</nodeId>
  <apiName>Thumbnail</apiName>
  typeATTRIBUTE</type>
  <displayName>Thumbnail</displayName>
  <dataType>4</dataType>
  <possibleValues>
    <id xsi:nil="true" />

```

```

        <displayName>Thumbnail</displayName>
        typeSIMPLELIST</type>
        <value xsi:nil="true" />
    </possibleValues>
    <searchable>false</searchable>
    <visible xsi:nil="true" />
    <required>false</required>
    <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
    <nodeId>6175</nodeId>
    <apiName>Type</apiName>
    typeATTRIBUTE</type>
    <displayName>Type</displayName>
    <dataType>4</dataType>
    <possibleValues>
        <id xsi:nil="true" />
        <apiName xsi:nil="true" />
        <value xsi:nil="true" />
    </possibleValues>
    <searchable>true</searchable>
    <visible xsi:nil="true" />
    <required>true</required>
    <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
    <nodeId>2000008685</nodeId>
    <apiName>Revision</apiName>
    typeATTRIBUTE</type>
    <displayName>Revision</displayName>
    <dataType>2</dataType>
    <searchable>false</searchable>
    <visible xsi:nil="true" />
    <required>false</required>
    <maxLength>50</maxLength>
</attributeMetaData>
<attributeMetaData>
    <nodeId>6178</nodeId>
    <apiName>lastModifiedDate</apiName>
    typeATTRIBUTE</type>
    <displayName>Last Modified Date</displayName>
    <dataType>3</dataType>
    <searchable>true</searchable>
    <visible xsi:nil="true" />
    <required>false</required>
    <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
    <nodeId>6183</nodeId>
    <apiName>checkoutLocation</apiName>
    typeATTRIBUTE</type>
    <displayName>Checkout Location</displayName>
    <dataType>2</dataType>
    <searchable>true</searchable>
    <visible xsi:nil="true" />
    <required>false</required>
    <maxLength>150</maxLength>
</attributeMetaData>
<attributeMetaData>
    <nodeId>6388</nodeId>
    <apiName>checkinDate</apiName>
    typeATTRIBUTE</type>
    <displayName>Checkin Date</displayName>
    <dataType>3</dataType>
    <searchable>true</searchable>
    <visible xsi:nil="true" />
    <required>false</required>
    <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
    <nodeId>2000008316</nodeId>
    <apiName>Label</apiName>
    typeATTRIBUTE</type>
    <displayName>Label</displayName>
    <dataType>2</dataType>
    <searchable>true</searchable>
    <visible xsi:nil="true" />
    <required>false</required>
    <maxLength>50</maxLength>
</attributeMetaData>

```



```

<nodeId>6177</nodeId>
  <apiName>createDate</apiName>
  typeATTRIBUTE</type>
  <displayName>Create Date</displayName>
  <dataType>3</dataType>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>2018</nodeId>
  <apiName>CADOldFilename</apiName>
  typeATTRIBUTE</type>
  <displayName>CAD Old Filename</displayName>
  <dataType>2</dataType>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>150</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>1303</nodeId>
  <apiName>Text13</apiName>
  typeATTRIBUTE</type>
  <displayName>Text13</displayName>
  <dataType>2</dataType>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>50</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>2008</nodeId>
  <apiName>designSystemIdentifier</apiName>
  typeATTRIBUTE</type>
  <displayName>Design System Identifier</displayName>
  <dataType>2</dataType>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>50</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>1304</nodeId>
  <apiName>Text14</apiName>
  typeATTRIBUTE</type>
  <displayName>Text14</displayName>
  <dataType>2</dataType>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>50</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>1301</nodeId>
  <apiName>localFlag</apiName>
  typeATTRIBUTE</type>
  <displayName>Local Flag</displayName>
  <dataType>2</dataType>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>50</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>2017</nodeId>
  <apiName>CADFilename</apiName>
  typeATTRIBUTE</type>
  <displayName>CAD Filename</displayName>
  <dataType>2</dataType>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>150</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>1335</nodeId>
  <apiName>linkReference</apiName>
  typeATTRIBUTE</type>

```

Agile Product Lifecycle Management

```

</Name></Name>
typeATTRIBUTE</type>
<displayName>Drawn By</displayName>
<dataType>4</dataType>
<possibleValues>
  <id xsi:nil="true" />
  <apiName>Users</apiName>
  typeSIMPLELIST</type>
  <value xsi:nil="true" />
</possibleValues>
<searchable>true</searchable>
<visible xsi:nil="true" />
<required>false</required>
<maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>2021</nodeId>
  <apiName>checkedBy</apiName>
  typeATTRIBUTE</type>
  <displayName>Checked By</displayName>
  <dataType>4</dataType>
  <possibleValues>
    <id xsi:nil="true" />
    <apiName>Users</apiName>
    typeSIMPLELIST</type>
    <value xsi:nil="true" />
  </possibleValues>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>2023</nodeId>
  <apiName>List04</apiName>
  typeATTRIBUTE</type>
  <displayName>List04</displayName>
  <dataType>4</dataType>
  <possibleValues>
    <id xsi:nil="true" />
    <apiName>List04</apiName>
    <displayName>List04</displayName>
    typeSIMPLELIST</type>
    <value xsi:nil="true" />
  </possibleValues>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>2000008063</nodeId>
  <apiName>MultiList04</apiName>
  typeATTRIBUTE</type>
  <displayName>MultiList04</displayName>
  <dataType>5</dataType>
  <possibleValues>
    <id xsi:nil="true" />
    <apiName>MultiList04</apiName>
    <displayName>MultiList04</displayName>
    typeSIMPLELIST</type>
    <value xsi:nil="true" />
  </possibleValues>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>2011</nodeId>
  <apiName>Family</apiName>
  typeATTRIBUTE</type>
  <displayName>Family</displayName>
  <dataType>2</dataType>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>50</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>2014</nodeId>

```

```

</attributeMetaId>
<typeAttribute type="string"/>
<displayName>Frame ID</displayName>
<dataType>2</dataType>
<searchable>true</searchable>
<visible xsi:nil="true" />
<required>false</required>
<maxLength>50</maxLength>
</attributeMetaId>
<attributeMetaId>
<nodeId>2013</nodeId>
<apiName>drawingName</apiName>
<typeAttribute type="string"/>
<displayName>Drawing Name</displayName>
<dataType>2</dataType>
<searchable>true</searchable>
<visible xsi:nil="true" />
<required>false</required>
<maxLength>50</maxLength>
</attributeMetaId>
<attributeMetaId>
<nodeId>2090</nodeId>
<apiName>MultiList01</apiName>
<typeAttribute type="string"/>
<displayName>Customer</displayName>
<dataType>5</dataType>
<possibleValues>
<id xsi:nil="true" />
<apiName>Customers</apiName>
<typeSimpleList type="string"/>
<value xsi:nil="true" />
</possibleValues>
<searchable>true</searchable>
<visible xsi:nil="true" />
<required>false</required>
<maxLength>2147483647</maxLength>
</attributeMetaId>
<attributeMetaId>
<nodeId>1331</nodeId>
<apiName>oldFilePath</apiName>
<typeAttribute type="string"/>
<displayName>Old File Path</displayName>
<dataType>2</dataType>
<searchable>true</searchable>
<visible xsi:nil="true" />
<required>false</required>
<maxLength>150</maxLength>
</attributeMetaId>
<attributeMetaId>
<nodeId>2009</nodeId>
<apiName>Filetype</apiName>
<typeAttribute type="string"/>
<displayName>Filetype</displayName>
<dataType>2</dataType>
<searchable>true</searchable>
<visible xsi:nil="true" />
<required>false</required>
<maxLength>50</maxLength>
</attributeMetaId>
<attributeMetaId>
<nodeId>2016</nodeId>
<apiName>projectName</apiName>
<typeAttribute type="string"/>
<displayName>Project Name</displayName>
<dataType>2</dataType>
<searchable>true</searchable>
<visible xsi:nil="true" />
<required>true</required>
<maxLength>50</maxLength>
</attributeMetaId>
<attributeMetaId>
<nodeId>1333</nodeId>
<apiName>modelReference</apiName>
<typeAttribute type="string"/>
<displayName>Model Reference</displayName>
<dataType>2</dataType>
<searchable>true</searchable>
<visible xsi:nil="true" />
<required>false</required>
<maxLength>150</maxLength>
</attributeMetaId>

```

```

<!--/linkType-->
<nodeId>1334</nodeId>
<apiName>linkType</apiName>
typeATTRIBUTE</type>
<displayName>Link Type</displayName>
<dataType>2</dataType>
<searchable>true</searchable>
<visible xsi:nil="true" />
<required>false</required>
<maxLength>150</maxLength>
</attributeMetaData>
<attributeMetaData>
<nodeId>2012</nodeId>
<apiName>Variant</apiName>
typeATTRIBUTE</type>
<displayName>Variant</displayName>
<dataType>2</dataType>
<searchable>true</searchable>
<visible xsi:nil="true" />
<required>false</required>
<maxLength>50</maxLength>
</attributeMetaData>
<attributeMetaData>
<nodeId>1332</nodeId>
<apiName>modelType</apiName>
typeATTRIBUTE</type>
<displayName>Model Type</displayName>
<dataType>2</dataType>
<searchable>true</searchable>
<visible xsi:nil="true" />
<required>false</required>
<maxLength>150</maxLength>
</attributeMetaData>
<attributeMetaData>
<nodeId>2007</nodeId>
<apiName>designSystem</apiName>
typeATTRIBUTE</type>
<displayName>Design System</displayName>
<dataType>2</dataType>
<searchable>true</searchable>
<visible xsi:nil="true" />
<required>false</required>
<maxLength>50</maxLength>
</attributeMetaData>
<attributeMetaData>
<nodeId>2010</nodeId>
<apiName>Subtype</apiName>
typeATTRIBUTE</type>
<displayName>Subtype</displayName>
<dataType>2</dataType>
<searchable>true</searchable>
<visible xsi:nil="true" />
<required>false</required>
<maxLength>50</maxLength>
</attributeMetaData>
</AgileClass>
</res>
</getDesignPropertiesResponse>
</soapenv:Body>
</soapenv:Envelope>

```

getItemPropertiesByDesign

Service To retrieve the metadata of the attributes available for the subclass of the Part to which the given Design object is attached. Returns a FAILURE if the given Design is not attached to a Part object.

Usage The request does not need to include any agile objects, however, the following two parameters should be used in first set of general parameters: 'design-id' and 'include-tables'. 'design-id' is a required parameter and should contain the number of the Design object to search for. 'include-tables' is optional and may be set to 'true' or 'false'. If set to 'true', then metadata for the attributes in the table pages of the Parts subclass will be included in the response. The default value for include-tables is "false".

The service returns an array of AgileECClassType for the Parts subclass filled in the response object.

Syntax `AgileECResponseExtType getItemPropertiesByDesignResponseType = agileStub.getItemPropertiesByDesign(getItemPropertiesByDesignRequestType)`

Special Handling **Exceptions:**

1. If the object is not found for the given ID
2. If the object found is not of type Design

Basic Steps

1. Create the request object AgileECRequestExtType for the getItemPropertiesByDesign operation.
2. Create a general parameters list of type PropertyListType
3. Add the parameter 'design-id' to the list.
4. Optionally add the parameter 'include-tables' to the list.
5. Call the WebService and review the metadata information returned.

Sample Code Java

```
try {
    setupServerLogin();
    Integer classId = getIntegerProperty(DSIGN CLASS ID);
    String subClass = getStringProperty(DSIGN SUBCLASS);
    String number = getStringProperty(DSIGN NUMBER);
    String version = getStringProperty(DSIGN VERSION);
    AgileECRequestExtType getItemPropertiesByDesignRequestType = new
AgileECRequestExtType();
    PropertyListType[] generalParameters = new PropertyListType[2];
    generalParameters[0] = new PropertyListType();
    PropertyType[] props = new PropertyType[2];
    props[0] = new PropertyType("include-tables", "false");
    props[1] = new PropertyType("design-id", number);
    generalParameters[0].setProperty(props);

    getItemPropertiesByDesignRequestType.setGeneralParameters(generalParameters);
    AgileECResponseExtType getItemPropertiesByDesignResponseType = agileStub
.getItemPropertiesByDesign(getItemPropertiesByDesignRequestType);
    System.out.println("STATUS CODE: " +
getItemPropertiesByDesignResponseType.getStatusCode());
    if
(!getItemPropertiesByDesignResponseType.getStatusCode().toString().equals(Response
StatusCode.SUCCESS.getValue())) {
        AgileExceptionListType[] agileExceptionListType =
getItemPropertiesByDesignResponseType.getExceptions();
        for (AgileExceptionListType exceptionListType :
agileExceptionListType) {
            for (AgileExceptionType exception :
exceptionListType.getException()) {
```

```

    }
    } else { // If the object, was successfully retrieved, then examine its
        AgileECClassType[] agileResponseObjects =
        getItemPropertiesByDesignResponseType.getAgileClass();
        if (agileResponseObjects != null) {
            for (AgileECClassType agileObject : agileResponseObjects) {
                System.out.println("Class API Name: " +
                agileObject.getApiName());
                AdminNodeType[] autoNumbers = agileObject.getAutoNumber();
                for (AdminNodeType autoNumber : autoNumbers) {
                    System.out.println("AutoNumber API Name: " +
                    autoNumber.getApiName());
                    System.out.println("AutoNumber Display Name: " +
                    autoNumber.getDisplayName());
                }
                AttributeType[] attributeMetaData =
                agileObject.getAttributeMetaData();
                for (AttributeType at : attributeMetaData) {
                    System.out.println("MetaData Node ID: " + at.getNodeId());
                    System.out.println("MetaData API Name: " + at.getApiName());
                    System.out.println("MetaData Type: " + at.getType());
                    System.out.println("MetaData Display Name: " +
                    at.getDisplayName());
                    System.out.println("MetaData Data Type: " +
                    at.getDataType());
                    System.out.println("MetaData Searchable: " +
                    at.getSearchable());
                    System.out.println("MetaData Visible: " + at.getVisible());
                    System.out.println("MetaData Required: " + at.getRequired());
                    System.out.println("MetaData Max. Length: " +
                    at.getMaxLength());
                }
            }
        } else {
            System.out.println("No results!");
        }
    }
}

```

Sample Code SOAP

```

==== Request ====
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Body>
    <getItemPropertiesByDesign
      xmlns="http://xmlns.oracle.com/AgileObjects/ECS/v1">
      <req xmlns="">
        <generalParameters>
          <id xsi:nil="true" />
          <property>
            <propertyName>include-tables</propertyName>
            <propertyValue>>false</propertyValue>
          </property>
          <property>
            <propertyName>design-id</propertyName>
            <propertyValue>DESIGN09483.SLDASM</propertyValue>
          </property>
        </generalParameters>
        <generalParameters xsi:nil="true" />
      </req>
    </getItemPropertiesByDesign>
  </soapenv:Body>
</soapenv:Envelope>
==== Response ====
<?xml version="1.0" encoding="utf-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Body>
    <getItemPropertiesByDesignResponse
      xmlns="http://xmlns.oracle.com/AgileObjects/ECS/v1">
      <res xmlns="">
        <messageId xsi:nil="true" />

```

```

</statusCode>SUCCESS</statusCode>
<AgileClass>
  <nodeId>10141</nodeId>
  <apiName>Part</apiName>
  typeCLASS</type>
  <displayName>Part</displayName>
  <abstractClass>false</abstractClass>
  <autoNumber>
    <nodeId>12416</nodeId>
    <apiName>PartNumber</apiName>
    typeAUTONUMBER</type>
    <displayName>Part Number</displayName>
  </autoNumber>
  <attributeMetaData>
    <nodeId>1014</nodeId>
    <apiName>Rev</apiName>
    typeATTRIBUTE</type>
    <displayName>Rev</displayName>
    <dataType>4</dataType>
    <possibleValues>
      <id xsi:nil="true" />
      <apiName>Rev</apiName>
      <displayName>Rev</displayName>
      typeSIMPLELIST</type>
      <value xsi:nil="true" />
    </possibleValues>
    <searchable>false</searchable>
    <visible xsi:nil="true" />
    <required>false</required>
    <maxLength>2147483647</maxLength>
  </attributeMetaData>
  <attributeMetaData>
    <nodeId>1004</nodeId>
    <apiName>productLineS</apiName>
    typeATTRIBUTE</type>
    <displayName>Product Line(s)</displayName>
    <dataType>5</dataType>
    <possibleValues>
      <id xsi:nil="true" />
      <apiName xsi:nil="true" />
      <value xsi:nil="true" />
    </possibleValues>
    <searchable>true</searchable>
    <visible xsi:nil="true" />
    <required>false</required>
    <maxLength>2147483647</maxLength>
  </attributeMetaData>
  <attributeMetaData>
    <nodeId>2000008549</nodeId>
    <apiName>Thumbnail</apiName>
    typeATTRIBUTE</type>
    <displayName>Thumbnail</displayName>
    <dataType>4</dataType>
    <possibleValues>
      <id xsi:nil="true" />
      <apiName>Thumbnail</apiName>
      <displayName>Thumbnail</displayName>
      typeSIMPLELIST</type>
      <value xsi:nil="true" />
    </possibleValues>
    <searchable>false</searchable>
    <visible xsi:nil="true" />
    <required>false</required>
    <maxLength>2147483647</maxLength>
  </attributeMetaData>
  <attributeMetaData>
    <nodeId>2000009494</nodeId>
    <apiName>ModelRef</apiName>
    typeATTRIBUTE</type>
    <displayName>Base Model</displayName>
    <dataType>2</dataType>
    <searchable>false</searchable>
    <visible xsi:nil="true" />
    <required>false</required>
    <maxLength>20</maxLength>
  </attributeMetaData>
  <attributeMetaData>
    <nodeId>1084</nodeId>
    <apiName>lifecyclePhase</apiName>
    typeATTRIBUTE</type>

```



```

<dataName>4</dataName>
<dataName>4</dataName>
<possibleValues>
  <id xsi:nil="true" />
  <apiName xsi:nil="true" />
  <value xsi:nil="true" />
</possibleValues>
<searchable>true</searchable>
<visible xsi:nil="true" />
<required>false</required>
<maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>2000008520</nodeId>
  <apiName>itemGroupS</apiName>
  typeATTRIBUTE</type>
  <displayName>Item Group(s)</displayName>
  <dataName>5</dataName>
  <possibleValues>
    <id xsi:nil="true" />
    <apiName>Item Groups</apiName>
    typeSIMPLELIST</type>
    <value xsi:nil="true" />
  </possibleValues>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>1081</nodeId>
  <apiName>partType</apiName>
  typeATTRIBUTE</type>
  <displayName>Part Type</displayName>
  <dataName>4</dataName>
  <possibleValues>
    <id xsi:nil="true" />
    <apiName xsi:nil="true" />
    <value xsi:nil="true" />
  </possibleValues>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>true</required>
  <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>2000002859</nodeId>
  <apiName>excludeFromRollup</apiName>
  typeATTRIBUTE</type>
  <displayName>Exclude from Rollup</displayName>
  <dataName>4</dataName>
  <possibleValues>
    <id xsi:nil="true" />
    <apiName xsi:nil="true" />
    <value xsi:nil="true" />
  </possibleValues>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>2000004416</nodeId>
  <apiName>partFamily</apiName>
  typeATTRIBUTE</type>
  <displayName>Part Family</displayName>
  <dataName>4</dataName>
  <possibleValues>
    <id xsi:nil="true" />
    <apiName>Part Families</apiName>
    typeSIMPLELIST</type>
    <value xsi:nil="true" />
  </possibleValues>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>2000009468</nodeId>
  <apiName>partSubtype</apiName>

```

```

</attributeMetaDatum>
<displayName>Part Subtype</displayName>
<dataType>4</dataType>
<possibleValues>
  <id xsi:nil="true" />
  <apiName xsi:nil="true" />
  <value xsi:nil="true" />
</possibleValues>
<searchable>true</searchable>
<visible xsi:nil="true" />
<required>false</required>
<maxLength>2147483647</maxLength>
</attributeMetaDatum>
<attributeMetaDatum>
  <nodeId>2000002781</nodeId>
  <apiName>shippableItem</apiName>
  typeATTRIBUTE</type>
  <displayName>Shippable Item</displayName>
  <dataType>4</dataType>
  <possibleValues>
    <id xsi:nil="true" />
    <apiName xsi:nil="true" />
    <value xsi:nil="true" />
  </possibleValues>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaDatum>
<attributeMetaDatum>
  <nodeId>1002</nodeId>
  <apiName>Description</apiName>
  typeATTRIBUTE</type>
  <displayName>Description</displayName>
  <dataType>2</dataType>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>240</maxLength>
</attributeMetaDatum>
<attributeMetaDatum>
  <nodeId>1082</nodeId>
  <apiName>partCategory</apiName>
  typeATTRIBUTE</type>
  <displayName>Part Category</displayName>
  <dataType>4</dataType>
  <possibleValues>
    <id xsi:nil="true" />
    <apiName xsi:nil="true" />
    <value xsi:nil="true" />
  </possibleValues>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaDatum>
<attributeMetaDatum>
  <nodeId>1016</nodeId>
  <apiName>revReleaseDate</apiName>
  typeATTRIBUTE</type>
  <displayName>Rev Release Date</displayName>
  <dataType>3</dataType>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaDatum>
<attributeMetaDatum>
  <nodeId>2000004143</nodeId>
  <apiName>complianceCalculatedDate</apiName>
  typeATTRIBUTE</type>
  <displayName>Compliance Calculated Date</displayName>
  <dataType>3</dataType>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaDatum>
<attributeMetaDatum>
  <nodeId>1017</nodeId>
  <apiName>revIncorpDate</apiName>

```

```

<displayName>Rev Incorpor Date</displayName>
<dataType>3</dataType>
<searchable>true</searchable>
<visible xsi:nil="true" />
<required>false</required>
<maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>2000004612</nodeId>
  <apiName>Mass</apiName>
  typeATTRIBUTE</type>
  <displayName>Mass</displayName>
  <dataType>11</dataType>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>2000004891</nodeId>
  <apiName>overallCompliance</apiName>
  typeATTRIBUTE</type>
  <displayName>Overall Compliance</displayName>
  <dataType>4</dataType>
  <possibleValues>
    <id xsi:nil="true" />
    <apiName xsi:nil="true" />
    <value xsi:nil="true" />
  </possibleValues>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>1001</nodeId>
  <apiName>Number</apiName>
  typeATTRIBUTE</type>
  <displayName>Number</displayName>
  <dataType>2</dataType>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>true</required>
  <maxLength>30</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>1068</nodeId>
  <apiName>Size</apiName>
  typeATTRIBUTE</type>
  <displayName>Size</displayName>
  <dataType>4</dataType>
  <possibleValues>
    <id xsi:nil="true" />
    <apiName xsi:nil="true" />
    <value xsi:nil="true" />
  </possibleValues>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>12089</nodeId>
  <apiName>effectivityDate</apiName>
  typeATTRIBUTE</type>
  <displayName>Effectivity Date</displayName>
  <dataType>3</dataType>
  <searchable>true</searchable>
  <visible xsi:nil="true" />
  <required>false</required>
  <maxLength>2147483647</maxLength>
</attributeMetaData>
<attributeMetaData>
  <nodeId>2008</nodeId>
  <apiName>Text02</apiName>
  typeATTRIBUTE</type>
  <displayName>CAD Model Configuration</displayName>
  <dataType>2</dataType>
  <searchable>true</searchable>
  <visible xsi:nil="true" />

```

```

        <maxLength>50</maxLength>
      </attributeMetaData>
      <attributeMetaData>
        <nodeId>1301</nodeId>
        <apiName>Text11</apiName>
        typeATTRIBUTE</type>
        <displayName>CAD System</displayName>
        <dataType>2</dataType>
        <searchable>true</searchable>
        <visible xsi:nil="true" />
        <required>false</required>
        <maxLength>50</maxLength>
      </attributeMetaData>
      <attributeMetaData>
        <nodeId>1306</nodeId>
        <apiName>Text16</apiName>
        typeATTRIBUTE</type>
        <displayName>CAD Subtype</displayName>
        <dataType>2</dataType>
        <searchable>true</searchable>
        <visible xsi:nil="true" />
        <required>false</required>
        <maxLength>50</maxLength>
      </attributeMetaData>
      <attributeMetaData>
        <nodeId>1313</nodeId>
        <apiName>Text23</apiName>
        typeATTRIBUTE</type>
        <displayName>Published from</displayName>
        <dataType>2</dataType>
        <searchable>true</searchable>
        <visible xsi:nil="true" />
        <required>false</required>
        <maxLength>50</maxLength>
      </attributeMetaData>
      <attributeMetaData>
        <nodeId>1308</nodeId>
        <apiName>Text18</apiName>
        typeATTRIBUTE</type>
        <displayName>CAD Variant</displayName>
        <dataType>2</dataType>
        <searchable>true</searchable>
        <visible xsi:nil="true" />
        <required>false</required>
        <maxLength>50</maxLength>
      </attributeMetaData>
      <attributeMetaData>
        <nodeId>1302</nodeId>
        <apiName>Text12</apiName>
        typeATTRIBUTE</type>
        <displayName>CAD Filename</displayName>
        <dataType>2</dataType>
        <searchable>true</searchable>
        <visible xsi:nil="true" />
        <required>false</required>
        <maxLength>50</maxLength>
      </attributeMetaData>
      <attributeMetaData>
        <nodeId>2023</nodeId>
        <apiName>List04</apiName>
        typeATTRIBUTE</type>
        <displayName>List04</displayName>
        <dataType>4</dataType>
        <possibleValues>
          <id xsi:nil="true" />
          <apiName>List04</apiName>
          <displayName>List04</displayName>
          typeSIMPLELIST</type>
          <value xsi:nil="true" />
        </possibleValues>
        <searchable>true</searchable>
        <visible xsi:nil="true" />
        <required>false</required>
        <maxLength>2147483647</maxLength>
      </attributeMetaData>
      <attributeMetaData>
        <nodeId>1305</nodeId>
        <apiName>Text15</apiName>
        typeATTRIBUTE</type>
        <displayName>CAD Type</displayName>

```

```

        <searchable>true</searchable>
        <visible xsi:nil="true" />
        <required>false</required>
        <maxLength>50</maxLength>
    </attributeMetaData>
    <attributeMetaData>
        <nodeId>2623310</nodeId>
        <apiName>myPublishedFrom</apiName>
        typeATTRIBUTE</type>
        <displayName>My Published From</displayName>
        <dataType>2</dataType>
        <searchable>true</searchable>
        <visible xsi:nil="true" />
        <required>false</required>
        <maxLength>50</maxLength>
    </attributeMetaData>
    <attributeMetaData>
        <nodeId>2007</nodeId>
        <apiName>Text01</apiName>
        typeATTRIBUTE</type>
        <displayName>CAD Model</displayName>
        <dataType>2</dataType>
        <searchable>true</searchable>
        <visible xsi:nil="true" />
        <required>false</required>
        <maxLength>50</maxLength>
    </attributeMetaData>
</AgileClass>
</res>
</getItemPropertiesByDesignResponse>
</soapenv:Body>
</soapenv:Envelope>

```

searchSingleObject

- Service** To search for a Design object based on the file name of the file attached to id, optionally refining the search to the given file category and/or Design subclass.
- Usage** The request does not need to include any agile objects, however, the following three parameters should be used in the first set of general parameters: 'file-name', 'subclass-name' and 'file-category'.
- 'file-name' is required and should be set to the name of the file to search for. 'subclass-name' is optional and may be used to limit the search to the given subclass of Designs and 'file-category' is also optional and may be used to limit the search based on the value of the File Category attribute in the FILES table of the Design.
- The service returns an AgileBusinessObjectType in the response object, representing the first Design found through the search. If no Design is found to match the search, then a response with no AgileBusinessObjectType elements will be returned.

Syntax

```

AgileECResponseExtType searchSingleObjectResponseType =
agileStub.searchSingleObject (searchSingleObjectRequestType);

```

Special Handling Exceptions:

1. If the object is not found for the given ID
2. If the object found is not of type Design

Basic Steps

1. Create the request object `AgileECRequestExtType` for the `searchSingleObject` operation.
2. Create a general parameters list of type `PropertyListType`
3. Add the parameter 'file-name' to the list.
4. Optionally add the parameters 'file-category' and 'subclass-name' to the list.
5. Call the `WebService` and check if an `AgileBusinessObjectType` is included in the response.

Sample Code Java

```
try {
    setupServerLogin();
    String fileName = getStringProperty(DSIGN FILE NAME);
    String fileCategory = getStringProperty(DSIGN FILE CATEGORY);
    String subClass = getStringProperty(DSIGN SUBCLASS);
    AgileECRequestExtType searchSingleObjectRequestType = new
AgileECRequestExtType();
    PropertyListType[] generalParameters = new PropertyListType[2];
    generalParameters[0] = new PropertyListType();
    PropertyType[] props = new PropertyType[3];
    props[0] = new PropertyType("file-name", fileName);
    props[1] = new PropertyType("file-category", fileCategory);
    props[2] = new PropertyType("subclass-name", subClass);
    generalParameters[0].setProperty(props);
    searchSingleObjectRequestType.setGeneralParameters(generalParameters);
    AgileECResponseExtType searchSingleObjectResponseType =
agileStub.searchSingleObject(searchSingleObjectRequestType);
    System.out.println("STATUS CODE: " +
searchSingleObjectResponseType.getStatusCode());
    if
(!searchSingleObjectResponseType.getStatusCode().toString().equals(ResponseStatusC
ode.SUCCESS.getValue())) {
        AgileExceptionListType[] agileExceptionListType =
searchSingleObjectResponseType.getExceptions();
        for (AgileExceptionListType exceptionListType :
agileExceptionListType) {
            for (AgileExceptionType exception :
exceptionListType.getException()) {
                System.out.println(exception.getMessage());
            }
        }
    } else { // If the object, was successfully retrieved, then examine its
        AgileBusinessObjectType[] agileResponseObjects =
searchSingleObjectResponseType.getAgileObject();
        if (agileResponseObjects != null) {
            for (AgileBusinessObjectType agileObject : agileResponseObjects) {
                ObjectIdentifierType objectIdentifier =
agileObject.getObjectIdentifier();
                System.out.println("Agile Object Class ID: " +
objectIdentifier.getClassId());
                System.out.println("Agile Object Class Name: " +
objectIdentifier.getClassName());
                System.out.println("Agile Object Class Display Name: " +
objectIdentifier.getClassDisplayName());
                System.out.println("Agile Object Object ID: " +
objectIdentifier.getObjectId());
                System.out.println("Agile Object Object Name: " +
objectIdentifier.getObjectName());
                PropertyListType options = agileObject.getOptions();
                for (PropertyType property : options.getProperty()) {
                    System.out.println("Option Property Name: " +
property.getPropertyName());
                    System.out.println("Option Property Value: " +
property.getPropertyValue());
                }
                for (MessageElement node : agileObject.get any()) {
                    System.out.println("Agile Object " + node.getLocalName() + ":
" + node.getValue());
                }
            }
        }
    }
}
```

```

        Iterator<Node> nodeIt = (Iterator<Node>)
        while (nodeIt.hasNext()) {
            Node selectionNode = nodeIt.next();
            if (selectionNode instanceof MessageElement) {
                MessageElement element = (MessageElement)
                selectionNode;
                Iterator<MessageElement> subNodeIt =
                (Iterator<MessageElement>) element.getChildElements();
                while (subNodeIt.hasNext()) {
                    MessageElement subNode = subNodeIt.next();
                    System.out.println("*** Selection " +
                    subNode.getLocalName() + ": " + subNode.getValue());
                }
            }
        }
    } else {
        System.out.println("No results!");
    }
}
}

```

Sample Code SOAP

```

==== Request ====
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<soapenv:Body>
    <searchSingleObject xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
        <req xmlns="">
            <generalParameters>
                <id xsi:nil="true" />
                <property>
                    <propertyName>file-name</propertyName>
                    <propertyValue>512-00011-
000.SLDASM</propertyValue>
                </property>
                <property>
                    <propertyName>file-category</propertyName>
                    <propertyValue>Source</propertyValue>
                </property>
                <property>
                    <propertyName>subclass-name</propertyName>
                    <propertyValue>Design</propertyValue>
                </property>
            </generalParameters>
            <generalParameters xsi:nil="true" />
        </req>
    </searchSingleObject>
</soapenv:Body>
</soapenv:Envelope>
==== Response ====
<?xml version="1.0" encoding="utf-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<soapenv:Body>
    <searchSingleObjectResponse
xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
        <res xmlns="">
            <messageId xsi:nil="true" />
            <messageName xsi:nil="true" />
            <statusCode>SUCCESS</statusCode>
            <AgileObject>
                <objectIdentifier>
                    <classId>2000008310</classId>
                    <className>Design</className>
                </objectIdentifier>
                <classDisplayName>Design</classDisplayName>
                <objectId>6103035</objectId>
                <objectName>DESIGN00001</objectName>
            </AgileObject>
            <options>
                <id xsi:nil="true" />
            </options>
        </res>
    </searchSingleObjectResponse>
</soapenv:Body>
</soapenv:Envelope>

```

```

        </property>
    </options>
    <Version xsi:type="xs:integer"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="7951">2</Version>
    <Number xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="6173">DESIGN00001</Number>
    <Type xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="6175">
        <selection>
            <id>2000008310</id>
            <apiName>DESIGN</apiName>
            <value>Design</value>
        </selection>
        </Type>
    <lifecyclePhase
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="6390" />
        <Description xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6174"></Description>
        <lastModifiedDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6178">2010-08-
11T11:53:17.000Z
        </lastModifiedDate>
        <checkoutStatus
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="6389">
        <selection>
            <id>1</id>
            <apiName>CHECKED IN</apiName>
            <value>Checked In</value>
        </selection>
        </checkoutStatus>
        <checkoutUser xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="6180" />
        <checkoutDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6184" />
        <checkoutLocation xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6183"></checkoutLocation>
        <checkinDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6388">2009-01-
20T15:44:59.000Z
        </checkinDate>
    </property>
</property>
<propertyName>OPTION HAS SEND PRIVILEGE</propertyName>
<propertyValue>>false</propertyValue>
</property>
<property>
<propertyName>OPTION HAS COMMENT PRIVELEGE</propertyName>
<propertyValue>>true</propertyValue>
</property>
<property>
<propertyName>OPTION APPROVE REJECT PRIVELEGE</propertyName>
<propertyValue>>true</propertyValue>
</property>
</options>
</Version xsi:type="xs:integer"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="7951">2</Version>
<Number xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="6173">DESIGN00001</Number>
<Type xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="6175">
        <selection>
            <id>2000008310</id>
            <apiName>DESIGN</apiName>
            <value>Design</value>
        </selection>
        </Type>
    <lifecyclePhase
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="6390" />
        <Description xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6174"></Description>
        <lastModifiedDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6178">2010-08-
11T11:53:17.000Z
        </lastModifiedDate>
        <checkoutStatus
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="6389">
        <selection>
            <id>1</id>
            <apiName>CHECKED IN</apiName>
            <value>Checked In</value>
        </selection>
        </checkoutStatus>
        <checkoutUser xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="6180" />
        <checkoutDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6184" />
        <checkoutLocation xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6183"></checkoutLocation>
        <checkinDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6388">2009-01-
20T15:44:59.000Z
        </checkinDate>
    </property>
</property>

```



```

        <createDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6177">2009-01-
20T14:26:59.000Z</createDate>
        <Label xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000008316"></Label>
        <componentType
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008317" />
        <Thumbnail xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008554" />
        <Revision xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000008685"></Revision>
        <revisionDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000008686" />
        <checkinUser xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008717">
        <selection>
        <id>704</id>
        <apiName xsi:nil="true" />
        <value>Administrator, Admin
(admin)</value>
        </selection>
        </checkinUser>
        <itemChangeStatus xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000009487"></itemChangeStatus>
        <createUser xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="1420">
        <selection>
        <id>704</id>
        <apiName xsi:nil="true" />
        <value>Administrator, Admin
(admin)</value>
        </selection>
        </createUser>
        <drawnBy xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2020" />
        <checkedBy xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2021" />
        <designSystem xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2007"></designSystem>
        <CADFilename xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2017"></CADFilename>
        <CADOldFilename xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2018"></CADOldFilename>
        <designSystemIdentifier xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2008"></designSystemIdentifier>
        <Filetype xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2009"></Filetype>
        <Subtype xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2010"></Subtype>
        <Family xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2011"></Family>
        <Variant xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2012"></Variant>

```

```

        <drawingName xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2013"></drawingName>
        <frameID xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2014"></frameID>
        <nameFormat xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2015"></nameFormat>
        <projectName xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2016"></projectName>
        <localFlag xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1301"></localFlag>
        <partNumber xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1302"></partNumber>
        <filePath xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2019"></filePath>
        <oldFilePath xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1331"></oldFilePath>
        <modelType xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1332"></modelType>
        <modelReference xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1333"></modelReference>
        <linkType xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1334"></linkType>
        <linkReference xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1335"></linkReference>
        <TDMVersion xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1307"></TDMVersion>
        <TDMRevision xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1308"></TDMRevision>
        <MultiList01 xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2090" />
    </AgileObject>
</res>
</searchSingleObjectResponse>
</soapenv:Body>
</soapenv:Envelope>

```

retrieveDesignStructure

Service	To read the data about a given Design object, including the contents of the Files, Structure and Where Used tables.
Usage	<p>The request should contain one AgileObject for which to retrieve the complete structure. The object will be identified by the subclass and number provided in the ObjectIdentified and, optionally, a Version element to specify a version other than the latest one.</p> <p>The service returns an AgileBusinessObjectType for Design in the response object.</p>
Syntax	<pre> AgileECResponseExtType retrieveDesignStructureResponseType = agileStub.retrieveDesignStructure(retrieveDesignStructureRequestType) </pre>

Special Handling**Exceptions:**

1. If the object is not found for the given ID
2. If the object found is not of type Design
3. If the object has no Object identifier

Basic Steps

1. Create the request object `AgileECRequestExtType` for the `retrieveDesignStructure` operation.
2. Create an array of `AgileBusinessObjectType` elements
3. Create an instance of an `AgileBusinessObjectType` and set it as the first element in the array.
4. Set the object identifier to contain the appropriate `classId`, subclass and number.
5. Optionally add a Version element with an attribute called "attributeId" with value "7951", which corresponds to the `BaseID` of the `TitleBlock.Version` attribute for Designs.
6. Set the value of this element to the desired Design version.
7. Call the `WebService` and check if an `AgileBusinessObjectType` is included in the response, scan through its contents.

Sample Code Java

```

try {
    setupServerLogin();
    Integer classId = getIntegerProperty(DSIGN CLASS ID);
    String subClass = getStringProperty(DSIGN SUBCLASS);
    String number = getStringProperty(DSIGN NUMBER);
    String version = getStringProperty(DSIGN VERSION);
    AgileECRequestExtType retrieveDesignStructureRequestType = new
AgileECRequestExtType();
    AgileBusinessObjectType[] agileRequestObjects = new
AgileBusinessObjectType[1];
    agileRequestObjects[0] = new AgileBusinessObjectType();
    agileRequestObjects[0].setObjectIdentifier(new
ObjectIdentifierType(classId, subClass, null, null, number, version));
    // Add the version as an additional element MessageElement[] anyElement =
new MessageElement[1];
    anyElement[0] = new MessageElement();
    anyElement[0].setName("Version");
    anyElement[0].addAttribute(null, "attributeId", "7951"); //
FileFolderConstants.ATT TITLE BLOCK VERSION
    anyElement[0].setValue(version);
    agileRequestObjects[0].set any(anyElement);
    retrieveDesignStructureRequestType.setAgileObject(agileRequestObjects);
    AgileECResponseExtType retrieveDesignStructureResponseType =
agileStub.retrieveDesignStructure(retrieveDesignStructureRequestType);
    System.out.println("STATUS CODE: " +
retrieveDesignStructureResponseType.getStatusCode());
    if
(!retrieveDesignStructureResponseType.getStatusCode().toString().equals(ResponseSt
atusCode.SUCCESS.getValue())) {
        AgileExceptionListType[] agileExceptionListType =
retrieveDesignStructureResponseType.getExceptions();
        for (AgileExceptionListType exceptionListType :
agileExceptionListType) {
            for (AgileExceptionType exception :
exceptionListType.getException()) {
                System.out.println(exception.getMessage());
            }
        }
    }
}

```

```

    }
} else { // If the object, was successfully retrieved, then examine its
content
    AgileBusinessObjectType[] agileResponseObjects =
retrieveDesignStructureResponseType.getAgileObject();
    if (agileResponseObjects != null) {
        for (AgileBusinessObjectType agileObject : agileResponseObjects) {
            ObjectIdentifierType objectIdentifier =
agileObject.getObjectIdentifier();
            System.out.println("Agile Object Class ID: " +
objectIdentifier.getClassId());
            System.out.println("Agile Object Class Name: " +
objectIdentifier.getClassName());
            System.out.println("Agile Object Class Display Name: " +
objectIdentifier.getClassDisplayName());
            System.out.println("Agile Object Object ID: " +
objectIdentifier.getObjectId());
            System.out.println("Agile Object Object Name: " +
objectIdentifier.getObjectName());
            PropertyListType options = agileObject.getOptions();
            if (options != null) {
                for (PropertyType property : options.getProperty()) {
                    System.out.println("Option Property Name: " +
property.getPropertyName());
                    System.out.println("Option Property Value: " +
property.getPropertyValue());
                }
            }
            AgileTableType[] tables = agileObject.getTable();
            for (AgileTableType table : tables) {
                System.out.println("Table Name: " +
table.getTableIdentifier().getTableName());
                AgileRowType[] rows = table.getRow();
                int rowNo = 0;
                if (rows != null) {
                    for (AgileRowType row : rows) {
                        System.out.println("Table Row Number " + rowNo++);
                        for (MessageElement node : row.get any()) {
                            System.out.println("* " + node.getLocalName() + ": " +
node.getValue());
                            Iterator<Node> nodeIt = (Iterator<Node>)
node.getChildElements();
                            while (nodeIt.hasNext()) {
                                Node selectionNode = nodeIt.next();
                                if (selectionNode instanceof MessageElement) {
                                    MessageElement element = (MessageElement)
selectionNode;
                                    Iterator<MessageElement> subNodeIt =
(Iterator<MessageElement>) element.getChildElements();
                                    while (subNodeIt.hasNext()) {
                                        MessageElement subNode = subNodeIt.next();
                                        System.out.println("*** Selection " +
subNode.getLocalName() + ": " + subNode.getValue());
                                    }
                                }
                            }
                        }
                    }
                }
                for (MessageElement node : agileObject.get any()) {
                    System.out.println("Agile Object " + node.getLocalName() + ":
" + node.getValue());
                    Iterator<Node> nodeIt = (Iterator<Node>)
node.getChildElements();
                    while (nodeIt.hasNext()) {
                        Node selectionNode = nodeIt.next();
                        if (selectionNode instanceof MessageElement) {
                            MessageElement element = (MessageElement)
selectionNode;
                            Iterator<MessageElement> subNodeIt =
(Iterator<MessageElement>) element.getChildElements();
                            while (subNodeIt.hasNext()) {
                                MessageElement subNode = subNodeIt.next();
                                System.out.println("*** Selection " +
subNode.getLocalName() + ": " + subNode.getValue());
                            }
                        }
                    }
                }
            }
        }
    }
}

```

```

    } else {
        System.out.println("No results!");
    }
}
}

```

Sample Code SOAP

```

==== Request ====
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Body>
    <retrieveDesignStructure
      xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
      <req xmlns="">
        <AgileObject>
          <objectIdentifier>
            <classId>2000008310</classId>
            <className>Design</className>
            <objectId xsi:nil="true" />
          </objectIdentifier>
          <objectName>DESIGN09483.SLDASM</objectName>
          <version>1</version>
        </AgileObject>
      </req>
    </retrieveDesignStructure>
  </soapenv:Body>
</soapenv:Envelope>
==== Response ====
<?xml version="1.0" encoding="utf-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Body>
    <retrieveDesignStructureResponse
      xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
      <res xmlns="">
        <messageId xsi:nil="true" />
        <messageName xsi:nil="true" />
        <statusCode>SUCCESS</statusCode>
        <AgileObject>
          <objectIdentifier>
            <classId>2000008310</classId>
            <className>Design</className>
            <classDisplayName>Design</classDisplayName>
            <objectId>6288483</objectId>
            <objectName>DESIGN09483.SLDASM</objectName>
          </objectIdentifier>
          <table>
            <tableIdentifier>
              <tableId>6150</tableId>
              <tableName>Files</tableName>
            </tableIdentifier>
            <row rowId="0">
              <Thumbnail xsi:type="common:AgileListEntryType"
                xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
                attributeId="2000008555" />
              <fileName xsi:type="xs:string"
                xmlns:xs="http://www.w3.org/2001/XMLSchema"
                attributeId="6303">botthsq trough 678901234567.SLDASM</fileName>
              <fileDescription xsi:type="xs:string"
                xmlns:xs="http://www.w3.org/2001/XMLSchema"
                attributeId="6181"></fileDescription>
              <fileSize xsi:type="xs:double"
                xmlns:xs="http://www.w3.org/2001/XMLSchema"
                attributeId="6148">362496.0</fileSize>
              <fileType xsi:type="xs:string"
                xmlns:xs="http://www.w3.org/2001/XMLSchema"
                attributeId="6305">SLDASM</fileType>
              <filePath xsi:type="xs:string"
                xmlns:xs="http://www.w3.org/2001/XMLSchema"

```

```

        <lastViewDate xsi:type="xs:date"
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6176">2010-08-11T11:38:44.000Z
        </lastViewDate>
        <fileCategory xsi:type="common:AgileListEntryType"

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008509">
        <selection>
        <id>1</id>
        <apiName>SOURCE</apiName>
        <value>Source</value>
        </selection>
        </fileCategory>
        <documentText xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="4684"></documentText>
        <checkoutLocation xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000007045"></checkoutLocation>
        <masterThumbnail xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008560"> />
        <FileID xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
        displayName="FileID">6288108</FileID>
        </row>
    </table>
    <table>
        <tableIdentifier>
        <tableId>2000008318</tableId>
        <tableName>Structure</tableName>
        <tableDisplayName>Structure</tableDisplayName>
        </tableIdentifier>
        <row rowId="0">
        <Attachments xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008326">true
        </Attachments>
        <Linked xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008327">false</Linked>
        <checkedOut xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008328">true
        </checkedOut>
        <Thumbnail xsi:type="common:AgileListEntryType"

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008556"> />
        <designType xsi:type="common:AgileListEntryType"

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008319">
        <selection>
        <id>2000008310</id>
        <apiName>DESIGN</apiName>
        <value>Design</value>
        </selection>
        </designType>
        <Number xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008320">DESIGN09475.SLDASM</Number>
        <Description xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008321"></Description>
        <lifeCyclePhase xsi:type="common:AgileListEntryType"

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008322"> />
        <Version xsi:type="xs:integer"
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008323">1</Version>
        <findNum xsi:type="xs:double"
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008324">0.0</findNum>
        <Quantity xsi:type="xs:double"
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008325">1.0</Quantity>

```

```

<Label xsi:type="xs:string"
attributeId="2000008329"></Label>
<componentType xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="2000008330" />
<structureMultiText01 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008365"></structureMultiText01>
<modelName xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008376">C:\AgilePLM\SW-Assembly-
01\asm0001.sldasm
</modelName>
<Identifier xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008377">CAX-SW
</Identifier>
<Component xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008378"></Component>
<Reference xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008379"></Reference>
<Configuration xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008380">Default
</Configuration>
<revision xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000009479"></revision>
<revisionDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000009480" />
</row>
<row rowId="0">
<Attachments xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008326">true
</Attachments>
<Linked xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008327">false</Linked>
<checkedOut xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008328">true
</checkedOut>
<Thumbnail xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="2000008556" />
<designType xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="2000008319">
<selection>
<id>2000008310</id>
<apiName>DESIGN</apiName>
<value>Design</value>
</selection>
</designType>
<Number xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008320">DESIGN09480.SLDASM</Number>
<Description xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008321"></Description>
<lifeCyclePhase xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="2000008322" />
<Version xsi:type="xs:integer"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008323">1</Version>
<findNum xsi:type="xs:double"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008324">0.0</findNum>
<Quantity xsi:type="xs:double"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008325">1.0</Quantity>

```

```

<Label xsi:type="xs:string"
attributeId="2000008329"></Label>
<componentType xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="2000008330" />
<structureMultiText01 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008365"></structureMultiText01>
<modelName xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008376">C:\AgilePLM\SW-Assembly-
01\mot bkt assy.sldasm
</modelName>
<Identifier xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008377">CAX-SW
</Identifier>
<Component xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008378"></Component>
<Reference xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008379"></Reference>
<Configuration xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008380">Default
</Configuration>
<revision xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000009479"></revision>
<revisionDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000009480" />
</row>
<row rowId="0">
<Attachments xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008326">true
</Attachments>
<Linked xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008327">false</Linked>
<checkedOut xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008328">true
</checkedOut>
<Thumbnail xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="2000008556">
<selection>
<id>8154</id>
<apiName>48366SLDPRT</apiName>
</selection>
<value>com.agile.api.pc.attachment.ThumbnailID@16546ce</value>
</Thumbnail>
<designType xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="2000008319">
<selection>
<id>2000008310</id>
<apiName>DESIGN</apiName>
<value>Design</value>
</selection>
</designType>
<Number xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008320">DESIGN09481.SLDPRT</Number>
<Description xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008321"></Description>
<lifeCyclePhase xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="2000008322" />
<Version xsi:type="xs:integer"
xmlns:xs="http://www.w3.org/2001/XMLSchema"

```



```

        <findNum xsi:type="xs:double"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008324">0.0</findNum>
        <Quantity xsi:type="xs:double"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008325">1.0</Quantity>
        <Label xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008329"></Label>
        <componentType xsi:type="common:AgileListEntryType"

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008330" />
        <structureMultiText01 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008365"></structureMultiText01>
        <modelName xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008376">C:\AgilePLM\SW-Assembly-
01\48366.sldprt
        </modelName>
        <Identifier xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008377">CAX-SW
        </Identifier>
        <Component xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008378"></Component>
        <Reference xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008379"></Reference>
        <Configuration xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008380">Default
        </Configuration>
        <revision xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000009479"></revision>
        <revisionDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000009480" />
    </row>
    <row rowId="0">
        <Attachments xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008326">true
        </Attachments>
        <Linked xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008327">false</Linked>
        <checkedOut xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008328">true
        </checkedOut>
        <Thumbnail xsi:type="common:AgileListEntryType"

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008556">
            <selection>
                <id>8157</id>
                <apiName>48364SLDPRT</apiName>

<value>com.agile.api.pc.attachment.ThumbnailID@73f7ac</value>
            </selection>
        </Thumbnail>
        <designType xsi:type="common:AgileListEntryType"

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008319">
            <selection>
                <id>2000008310</id>
                <apiName>DESIGN</apiName>
                <value>Design</value>
            </selection>
        </designType>
        <Number xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008320">DESIGN09482.SLDPR</Number>
        <Description xsi:type="xs:string"

```

```

xmlns:xs="http://www.w3.org/2001/XMLSchema"
<lifeCyclePhase xsi:type="common:AgileListEntryType"

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
  attributeId="2000008322" />
  <Version xsi:type="xs:integer"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000008323">1</Version>
  <findNum xsi:type="xs:double"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000008324">0.0</findNum>
  <Quantity xsi:type="xs:double"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000008325">1.0</Quantity>
  <Label xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000008329"></Label>
  <componentType xsi:type="common:AgileListEntryType"

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
  attributeId="2000008330" />
  <structureMultiText01 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000008365"></structureMultiText01>
  <modelName xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000008376">C:\AgilePLM\SW-Assembly-
01\48364.sldprt
  </modelName>
  <Identifier xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000008377">CAX-SW
  </Identifier>
  <Component xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000008378"></Component>
  <Reference xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000008379"></Reference>
  <Configuration xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000008380">Default
  </Configuration>
  <revision xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000009479"></revision>
  <revisionDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000009480" />
  </row>
</table>
<table>
  <tableIdentifier>
    <tableId>2000008495</tableId>
    <tableName>Where Used - Design</tableName>
    <tableDisplayName>Where Used - Design</tableDisplayName>
  </tableIdentifier>
</table>
<table>
  <tableIdentifier>
    <tableId>6149</tableId>
    <tableName>Where Used - Attachment</tableName>
    <tableDisplayName>Where Used - Attachment</tableDisplayName>
  </tableIdentifier>
  <row rowId="0">
    <Thumbnail xsi:type="common:AgileListEntryType"

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
  attributeId="2000008557" />
  <Type xsi:type="common:AgileListEntryType"

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
  attributeId="6310">
    <selection>
      <id>10141</id>
      <apiName>PART</apiName>
      <value>Part</value>
    </selection>
  </Type>
  <numberName xsi:type="xs:string"

```

```

xmlns:xs="http://www.w3.org/2001/XMLSchema"
</numberName>
<Rev xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6302">Introductory</Rev>
<Description xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6300"></Description>
<lifecycleStatus xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="6301">
<selection>
<id>976</id>
<apiName>PRELIMINARY</apiName>
<value>Preliminary</value>
</selection>
</lifecycleStatus>
</row>
</table>
<Number xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6173">DESIGN09483.SLDASM</Number>
<Type xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="6175">
<selection>
<id>2000008310</id>
<apiName>DESIGN</apiName>
<value>Design</value>
</selection>
</Type>
<lifecyclePhase xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="6390" />
<Description xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6174"></Description>
<Version xsi:type="xs:integer"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="7951">1</Version>
<lastModifiedDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6178">2010-08-18T13:52:58.000Z
</lastModifiedDate>
<checkoutStatus xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="6389">
<selection>
<id>1</id>
<apiName>CHECKED IN</apiName>
<value>Checked In</value>
</selection>
</checkoutStatus>
<checkoutUser xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="6180" />
<checkoutDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6184"
/>
<checkoutLocation xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6183"></checkoutLocation>
<checkinDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6388">2010-08-11T11:38:54.000Z
</checkinDate>
<createDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6177">2010-08-11T08:44:43.000Z</createDate>
<Label xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008316"></Label>
<componentType xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"

```

```

        <Thumbnail xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008554" />
        <Revision xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008685">- 1</Revision>
        <revisionDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008686" />
        <checkinUser xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008717">
        <selection>
            <id>704</id>
            <apiName xsi:nil="true" />
            <value>Administrator, Admin (admin)</value>
        </selection>
        </checkinUser>
        <itemChangeStatus xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000009487"></itemChangeStatus>
        <createUser xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="1420">
        <selection>
            <id>704</id>
            <apiName xsi:nil="true" />
            <value>Administrator, Admin (admin)</value>
        </selection>
        </createUser>
        <drawnBy xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2020" />
        <checkedBy xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2021" />
        <designSystem xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2007">SW2009
        </designSystem>
        <CADFilename xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2017">botthsg trough 678901234567.SLDASM
        </CADFilename>
        <CADOldFilename xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2018"></CADOldFilename>
        <designSystemIdentifier xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2008"></designSystemIdentifier>
        <Filetype xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2009">SLDASM</Filetype>
        <Subtype xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2010"></Subtype>
        <Family xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2011"></Family>
        <Variant xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2012"></Variant>
        <drawingName xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2013"></drawingName>
        <frameID xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2014"></frameID>
        <nameFormat xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2015"></nameFormat>
        <projectName xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2016"></projectName>

```

```

<localFlag xsi:type="xs:string"
  attributeId="1301"></localFlag>
<partNumber xsi:type="xs:string"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  attributeId="1302">DESIGN09483</partNumber>
<filePath xsi:type="xs:string"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  attributeId="2019"></filePath>
<oldFilePath xsi:type="xs:string"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  attributeId="1331"></oldFilePath>
<modelType xsi:type="xs:string"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  attributeId="1332"></modelType>
<modelReference xsi:type="xs:string"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  attributeId="1333"></modelReference>
<linkType xsi:type="xs:string"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  attributeId="1334"></linkType>
<linkReference xsi:type="xs:string"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  attributeId="1335"></linkReference>
<TDMVersion xsi:type="xs:string"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  attributeId="1307"></TDMVersion>
<TDMRevision xsi:type="xs:string"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  attributeId="1308"></TDMRevision>
<MultiList01 xsi:type="common:AgileListEntryType"
  xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
  attributeId="2090" />
</AgileObject>
</res>
</retrieveDesignStructureResponse>
</soapenv:Body>
</soapenv:Envelope>

```

createUpdateDesignStructure

Service	To create structure relationships between Design objects that already exist in the PLM system.
Usage	<p>The request should consist of at least one Agile Object, which would be the top level object of an assembly structure. More than one Agile Object may be present in the request to allow the creation of a multi-level structure, however, when this is the case, the first object in the request should be the only top-level assembly and all other Agile Objects present in the request should be sub-assemblies of its structure.</p> <p>The structure relation between two Design objects is represented in the request by row elements in the structure table inside the parent AgileObject. This is the table identified with the id 2000008318.</p> <p>The service returns an array of AgileBusinessObjectType of type Design in the response object.</p>
Syntax	<pre> AgileECResponseExtType createUpdateDesignStructureResponseType = agileStub.createUpdateDesignStructure(createUpdateDesignStructureReq uestType) </pre>
Special Handling	Exceptions:

1. If the object is not found for the object in request
2. If the object found is not of type Design

Basic Steps

1. Create the request object `AgileECRequestExtType` for the `createUpdateDesignStructure` operation.
2. Create an array of `AgileBusinessObjectType` elements
3. Create an instance of an `AgileBusinessObjectType` and set it as the first element in the array.
4. Set the object identifier to contain the appropriate `classId`, subclass and number.
5. Optionally add a Version element with an attribute called "attributeId" with value "7951", which corresponds to the `BaseID` of the `TitleBlock.Version` attribute for Designs.
6. Set the value of this element to the desired Design version.
7. Create an array of `AgileTableType` elements and set it as the tables element of the Agile business object created above.
8. Set the table identifier to contain the table id of the Structure table (2000008318).
9. Create an array of `AgileRowType` elements and set it as the rows of the table
10. Create as many row elements in the array as components of the agile object need to be created or updated.
11. Set the any elements of the row to an array of `MessageElements` containing at least elements to represent the fields Structure Number and Structure Version, repeat this step for all components of the Design.
12. Call the `WebService` and check if an `AgileBusinessObjectType` is included in the response, scan through its contents.

Sample Code Java

```
try {
    setupServerLogin();
    Integer classId = getIntegerProperty(DESIGN CLASS ID);
    String subClass = getStringProperty(DESIGN SUBCLASS);
    String parentNumber = getStringProperty(DESIGN NUMBER);
    String parentVersion = getStringProperty(DESIGN VERSION);
    String firstChildNumber = getStringProperty(FIRST CHILD DESIGN NUMBER);
    String firstChildVersion = getStringProperty(FIRST CHILD DESIGN VERSION);
    String secondChildNumber = getStringProperty(SECOND CHILD DESIGN NUMBER);
    String secondChildVersion =
getStringProperty(SECOND CHILD DESIGN VERSION);
    AgileECRequestExtType createUpdateDesignStructureRequestType = new
AgileECRequestExtType();
    AgileBusinessObjectType[] agileRequestObjects = new
AgileBusinessObjectType[1];
    agileRequestObjects[0] = new AgileBusinessObjectType();
    agileRequestObjects[0].setObjectIdentifier(new
ObjectIdentifierType(classId, subClass, null, null, parentNumber, null));
    // Add the version for the parent object
    MessageElement[] anyElement = new MessageElement[1];
    anyElement[0] = new MessageElement();
    anyElement[0].setName("Version");
}
```

```

        anyElement[0].addAttribute(null, "attributeId", "7951"); //
        anyElement[0].setValue(parentVersion);
        agileRequestObjects[0].set any(anyElement);
        // Define the structure table
        AgileTableType[] parentTables = new AgileTableType[1];
        parentTables[0] = new AgileTableType();
        TableIdentifierType tableIdentifier = new TableIdentifierType();
        tableIdentifier.setTableId(new Integer(2000008318));
        parentTables[0].setTableIdentifier(tableIdentifier);
        // Create two rows of components
        AgileRowType[] rows = new AgileRowType[2];
        // First row
        rows[0] = new AgileRowType();
        MessageElement[] anyElementFirstRow = new MessageElement[2];
        anyElementFirstRow[0] = new MessageElement();
        anyElementFirstRow[0].setName("Number");
        anyElementFirstRow[0].addAttribute(null, "attributeId", "2000008320"); //
        FileFolderConstants.ATT STRUCTURE NUMBER
        anyElementFirstRow[0].setValue(firstChildNumber);
        anyElementFirstRow[1] = new MessageElement();
        anyElementFirstRow[1].setName("Version");
        anyElementFirstRow[1].addAttribute(null, "attributeId", "2000008323"); //
        FileFolderConstants.ATT STRUCTURE VERSION
        anyElementFirstRow[1].setValue(firstChildVersion);
        rows[0].set any(anyElementFirstRow);
        // Second row
        rows[1] = new AgileRowType();
        MessageElement[] anyElementSecondRow = new MessageElement[2];
        anyElementSecondRow[0] = new MessageElement();
        anyElementSecondRow[0].setName("Number");
        anyElementSecondRow[0].addAttribute(null, "attributeId", "2000008320");
        // FileFolderConstants.ATT STRUCTURE NUMBER
        anyElementSecondRow[0].setValue(secondChildNumber);
        anyElementSecondRow[1] = new MessageElement();
        anyElementSecondRow[1].setName("Version");
        anyElementSecondRow[1].addAttribute(null, "attributeId", "2000008323");
        // FileFolderConstants.ATT STRUCTURE VERSION
        anyElementSecondRow[1].setValue(secondChildVersion);
        rows[1].set any(anyElementSecondRow);
        parentTables[0].setRow(rows);
        agileRequestObjects[0].setTable(parentTables);

        createUpdateDesignStructureRequestType.setAgileObject(agileRequestObjects);
        AgileECResponseExtType createUpdateDesignStructureResponseType =
        agileStub.createUpdateDesignStructure(createUpdateDesignStructureRequestType);
        System.out.println("STATUS CODE: " +
        createUpdateDesignStructureResponseType.getStatusCode());
        if
        (!createUpdateDesignStructureResponseType.getStatusCode().toString().equals(Response
        seStatusCode.SUCCESS.getValue())) {
            AgileExceptionListType[] agileExceptionListType =
            createUpdateDesignStructureResponseType.getExceptions();
            for (AgileExceptionListType exceptionListType :
            agileExceptionListType) {
                for (AgileExceptionType exception :
                exceptionListType.getException()) {
                    System.out.println(exception.getMessage());
                }
            }
        } else { // If the object, was successfully retrieved, then examine its
            AgileBusinessObjectType[] agileResponseObjects =
            createUpdateDesignStructureResponseType.getAgileObject();
            if (agileResponseObjects != null) {
                for (AgileBusinessObjectType agileObject : agileResponseObjects) {
                    ObjectIdentifierType objectIdentifier =
                    agileObject.getObjectIdentifier();
                    System.out.println("Agile Object Class ID: " +
                    objectIdentifier.getClassId());
                    System.out.println("Agile Object Class Name: " +
                    objectIdentifier.getClassName());
                    System.out.println("Agile Object Class Display Name: " +
                    objectIdentifier.getClassDisplayName());
                    System.out.println("Agile Object Object ID: " +
                    objectIdentifier.getObjectId());
                    System.out.println("Agile Object Object Name: " +
                    objectIdentifier.getObjectName());
                    PropertyListType options = agileObject.getOptions();
                    if (options != null) {
                        for (PropertyType property : options.getProperty()) {

```

```

        System.out.println("Option Property Name: " +
        .....
        System.out.println("Option Property Value: " +
        property.getPropertyValue());
    }
}
AgileTableType[] tables = agileObject.getTable();
if (tables != null) {
    for (AgileTableType table : tables) {
        System.out.println("Table Name: " +
        table.getTableIdentifier().getTableName());
        rows = table.getRow();
        int rowNo = 0;
        if (rows != null) {
            for (AgileRowType row : rows) {
                System.out.println("Table Row Number " + rowNo++);
                for (MessageElement node : row.get any()) {
                    System.out.println(" * " + node.getLocalName() +
                    ": " + node.getValue());
                    Iterator<Node> nodeIt = (Iterator<Node>)
                    node.getChildElements();
                    while (nodeIt.hasNext()) {
                        Node selectionNode = nodeIt.next();
                        if (selectionNode instanceof MessageElement) {
                            MessageElement element = (MessageElement)
                            selectionNode;
                            Iterator<MessageElement> subNodeIt =
                            (Iterator<MessageElement>) element.getChildElements();
                            while (subNodeIt.hasNext()) {
                                MessageElement subNode =
                                subNodeIt.next();
                                System.out.println(" *** Selection " +
                                subNode.getLocalName() + ": " + subNode.getValue());
                            }
                        }
                    }
                }
            }
        }
        for (MessageElement node : agileObject.get any()) {
            System.out.println("Agile Object " + node.getLocalName() + ":
            " + node.getValue());
            Iterator<Node> nodeIt = (Iterator<Node>)
            node.getChildElements();
            while (nodeIt.hasNext()) {
                Node selectionNode = nodeIt.next();
                if (selectionNode instanceof MessageElement) {
                    MessageElement element = (MessageElement)
                    selectionNode;
                    Iterator<MessageElement> subNodeIt =
                    (Iterator<MessageElement>) element.getChildElements();
                    while (subNodeIt.hasNext()) {
                        MessageElement subNode = subNodeIt.next();
                        System.out.println(" *** Selection " +
                        subNode.getLocalName() + ": " + subNode.getValue());
                    }
                }
            }
        }
    }
} else {
    System.out.println("No results!");
}
}
}

```

Sample Code SOAP

```

==== Request ====
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Body>
    <createUpdateDesignStructure
      xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">

```



```

        <AgileObject>
            <objectIdentifier>
                <classId>2000008310</classId>
                <className>Design</className>
                <objectId xsi:nil="true" />
                <objectName>DESIGN09496</objectName>
            </objectIdentifier>
            <table>
                <tableIdentifier>
                    <tableId>2000008318</tableId>
                    <tableName xsi:nil="true" />
                </tableIdentifier>
                <row rowId="0">
                    <Number>
                        attributeId="2000008320">DESIGN09497</Number>
                    </Number>
                    <Version>
                        attributeId="2000008323">1</Version>
                    </Version>
                </row>
                <row rowId="0">
                    <Number>
                        attributeId="2000008320">DESIGN09498</Number>
                    </Number>
                    <Version>
                        attributeId="2000008323">1</Version>
                    </Version>
                </row>
            </table>
            <Version attributeId="7951">1</Version>
        </AgileObject>
    </req>
</createUpdateDesignStructure>
</soapenv:Body>
</soapenv:Envelope>
==== Response ====
<?xml version="1.0" encoding="utf-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <soapenv:Body>
        <createUpdateDesignStructureResponse
            xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
            <res xmlns="">
                <messageId xsi:nil="true" />
                <messageName xsi:nil="true" />
                <statusCode>SUCCESS</statusCode>
                <AgileObject>
                    <objectIdentifier>
                        <classId>2000008310</classId>
                        <className>Design</className>
                    </objectIdentifier>
                    <classDisplayName>Design</classDisplayName>
                    <objectId>6289448</objectId>
                    <objectName>DESIGN09497</objectName>
                </objectIdentifier>
                <options>
                    <id xsi:nil="true" />
                    <property>
                        <propertyName>OPTION IS PENDING</propertyName>
                        <propertyValue>>false</propertyValue>
                    </property>
                    <property>
                        <propertyName>OPTION HAS SEND PRIVILEGE</propertyName>
                        <propertyValue>>false</propertyValue>
                    </property>
                    <property>
                        <propertyName>OPTION HAS COMMENT PRIVELEGE</propertyName>
                        <propertyValue>>true</propertyValue>
                    </property>
                    <property>
                        <propertyName>OPTION APPROVE REJECT PRIVELEGE</propertyName>
                        <propertyValue>>true</propertyValue>
                    </property>
                </options>
            </res>
        </createUpdateDesignStructureResponse>
    </soapenv:Body>
</soapenv:Envelope>

```

```

        <Version xsi:type="xs:integer"
        attributeId="7951">1</Version>
        <Number xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="6173">DESIGN09497</Number>
        <Type xsi:type="common:AgileListEntryType"
        xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="6175">
        <selection>
        <id>2000008310</id>
        <apiName>DESIGN</apiName>
        <value>Design</value>
        </selection>
        </Type>
        <lifecyclePhase
        xsi:type="common:AgileListEntryType"
        xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="6390" />
        <Description xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6174"></Description>
        <lastModifiedDate xsi:type="xs:date"
        xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6178">2010-08-
        19T08:21:55.000Z
        </lastModifiedDate>
        <checkoutStatus
        xsi:type="common:AgileListEntryType"
        xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="6389">
        <selection>
        <id>0</id>
        <apiName>CHECKED OUT</apiName>
        <value>Checked Out</value>
        </selection>
        </checkoutStatus>
        <checkoutUser xsi:type="common:AgileListEntryType"
        xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="6180">
        <selection>
        <id>704</id>
        <apiName xsi:nil="true" />
        <value>Administrator, Admin
        (admin)</value>
        </selection>
        </checkoutUser>
        <checkoutDate xsi:type="xs:date"
        xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6184">2010-08-
        19T11:19:19.000Z
        </checkoutDate>
        <checkoutLocation xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6183"></checkoutLocation>
        <checkinDate xsi:type="xs:date"
        xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6388">2010-08-
        19T08:21:55.000Z
        </checkinDate>
        <createDate xsi:type="xs:date"
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="6177">2010-08-
        19T08:21:55.000Z</createDate>
        <Label xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008316"></Label>
        <componentType
        xsi:type="common:AgileListEntryType"
        xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008317" />
        <Thumbnail xsi:type="common:AgileListEntryType"
        xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008554" />

```

```

        <Revision xsi:type="xs:string"
        attributeId="2000008685"></Revision>
        <revisionDate xsi:type="xs:date"

xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000008686" />
        <checkinUser xsi:type="common:AgileListEntryType"

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008717" />
        <itemChangeStatus xsi:type="xs:string"

xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000009487"></itemChangeStatus>
        <createUser xsi:type="common:AgileListEntryType"

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="1420">
        <selection>
        <id>704</id>
        <apiName xsi:nil="true" />
        <value>Administrator, Admin
(admin)</value>
        </selection>
        </createUser>
        <drawnBy xsi:type="common:AgileListEntryType"

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2020" />
        <checkedBy xsi:type="common:AgileListEntryType"

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2021" />
        <designSystem xsi:type="xs:string"

xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2007"></designSystem>
        <CADFilename xsi:type="xs:string"

xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2017"></CADFilename>
        <CADOldFilename xsi:type="xs:string"

xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2018"></CADOldFilename>
        <designSystemIdentifier xsi:type="xs:string"

xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2008"></designSystemIdentifier>
        <Filetype xsi:type="xs:string"

xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2009"></Filetype>
        <Subtype xsi:type="xs:string"

xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2010"></Subtype>
        <Family xsi:type="xs:string"

xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2011"></Family>
        <Variant xsi:type="xs:string"

xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2012"></Variant>
        <drawingName xsi:type="xs:string"

xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2013"></drawingName>
        <frameID xsi:type="xs:string"

xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2014"></frameID>
        <nameFormat xsi:type="xs:string"

xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2015"></nameFormat>
        <projectName xsi:type="xs:string"

xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2016">WebServices
        Docu</projectName>
        <localFlag xsi:type="xs:string"

xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1301"></localFlag>
        <partNumber xsi:type="xs:string"

xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1302"></partNumber>
        <filePath xsi:type="xs:string"

xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2019"></filePath>
        <oldFilePath xsi:type="xs:string"

```

```

xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1332"></modelType>
<modelReference xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1332"></modelReference>
<linkType xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1333"></linkType>
<linkReference xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1334"></linkReference>
<TDMVersion xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1307"></TDMVersion>
<TDMRevision xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1308"></TDMRevision>
<MultiList01 xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="2090" />
</AgileObject>
<AgileObject>
<objectIdentifier>
<classId>2000008310</classId>
<className>Design</className>
<classDisplayName>Design</classDisplayName>
<objectId>6289454</objectId>
<objectName>DESIGN09498</objectName>
</objectIdentifier>
<options>
<id xsi:nil="true" />
<property>
<propertyName>OPTION IS PENDING</propertyName>
<propertyValue>>false</propertyValue>
</property>
<property>
<propertyName>OPTION HAS SEND PRIVILEGE</propertyName>
<propertyValue>>false</propertyValue>
</property>
<property>
<propertyName>OPTION HAS COMMENT PRIVELEGE</propertyName>
<propertyValue>>true</propertyValue>
</property>
<property>
<propertyName>OPTION APPROVE REJECT PRIVELEGE</propertyName>
<propertyValue>>true</propertyValue>
</property>
</options>
<Version xsi:type="xs:integer"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="7951">1</Version>
<Number xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6173">DESIGN09498</Number>
<Type xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="6175">
<selection>
<id>2000008310</id>
<apiName>DESIGN</apiName>
<value>Design</value>
</selection>
</Type>
<lifecyclePhase
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"

```

```

        <Description xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6174"></Description>
        <lastModifiedDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6178">2010-08-
19T08:22:12.000Z
        </lastModifiedDate>
        <checkoutStatus
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="6389">
        <selection>
        <id>0</id>
        <apiName>CHECKED OUT</apiName>
        <value>Checked Out</value>
        </selection>
        </checkoutStatus>
        <checkoutUser xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="6180">
        <selection>
        <id>704</id>
        <apiName xsi:nil="true" />
        <value>Administrator, Admin
(admin)</value>
        </selection>
        </checkoutUser>
        <checkoutDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6184">2010-08-
19T11:19:35.000Z
        </checkoutDate>
        <checkoutLocation xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6183"></checkoutLocation>
        <checkinDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6388">2010-08-
19T08:22:12.000Z
        </checkinDate>
        <createDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="6177">2010-08-
19T08:22:12.000Z</createDate>
        <Label xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008316"></Label>
        <componentType
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008317" />
        <Thumbnail xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008554" />
        <Revision xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008685"></Revision>
        <revisionDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000008686" />
        <checkinUser xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008717" />
        <itemChangeStatus xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000009487"></itemChangeStatus>
        <createUser xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="1420">
        <selection>
        <id>704</id>
        <apiName xsi:nil="true" />

```

```

                                <value>Administrator, Admin
                                </selection>
                                </createUser>
                                <drawnBy xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
                                attributeId="2020" />
                                <checkedBy xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
                                attributeId="2021" />
                                <designSystem xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2007"></designSystem>
                                <CADFilename xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2017"></CADFilename>
                                <CADOldFilename xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2018"></CADOldFilename>
                                <designSystemIdentifier xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2008"></designSystemIdentifier>
                                <Filetype xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2009"></Filetype>
                                <Subtype xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2010"></Subtype>
                                <Family xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2011"></Family>
                                <Variant xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2012"></Variant>
                                <drawingName xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2013"></drawingName>
                                <frameID xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2014"></frameID>
                                <nameFormat xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2015"></nameFormat>
                                <projectName xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2016">WebServices
                                Docu</projectName>
                                <localFlag xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="1301"></localFlag>
                                <partNumber xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="1302"></partNumber>
                                <filePath xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2019"></filePath>
                                <oldFilePath xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1331"></oldFilePath>
                                <modelType xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="1332"></modelType>
                                <modelReference xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1333"></modelReference>
                                <linkType xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="1334"></linkType>
                                <linkReference xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1335"></linkReference>
                                <TDMVersion xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="1307"></TDMVersion>
                                <TDMRevision xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1308"></TDMRevision>
                                <MultiList01 xsi:type="common:AgileListEntryType"

```

```

    attributeId="2090" />
  </AgileObject>
  <AgileObject>
    <objectIdentifier>
      <classId>2000008310</classId>
      <className>Design</className>
      <objectId xsi:nil="true" />
      <objectName>DESIGN09496</objectName>
    </objectIdentifier>
    <table>
      <tableIdentifier>
        <tableId>2000008318</tableId>
        <tableName xsi:nil="true" />
      </tableIdentifier>
      <row rowId="0">
        <Number xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008320">DESIGN09497</Number>
        <Version xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008323">1</Version>
        <Attachments xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000008326">false
        </Attachments>
        <Linked xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008327">false</Linked>
        <checkedOut xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000008328">true
        </checkedOut>
        <Thumbnail
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008556"
        />
        <designType
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008319">
          <selection>
            <id>2000008310</id>
            <apiName>DESIGN</apiName>
            <value>Design</value>
          </selection>
        </designType>
        <Description xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008321"></Description>
        <lifeCyclePhase
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008322"
        />
        <findNum xsi:type="xs:double"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008324">0.0</findNum>
        <Quantity xsi:type="xs:double"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008325">1.0</Quantity>
        <Label xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008329"></Label>
        <componentType
xsi:type="common:AgileListEntryType"

```

```

        xmlns:xsi="http://www.w3.org/2001/XMLSchema" attributeId="2000008330"
    />
    xsi:type="xs:string"
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000008365"></structureMultiText01>
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000008376"></modelName>
    xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000008377"></Identifier>
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000008378"></Component>
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000008379"></Reference>
    xsi:type="xs:string"
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000008380"></Configuration>
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000009479"></revision>
    xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000009480" />
    </row>
    <row rowId="0">
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000008320">DESIGN09498</Number>
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000008323">1</Version>
    xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000008326">false
    </Attachments>
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2000008327">false</Linked>
    xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000008328">true
    </checkedOut>
    xsi:type="common:AgileListEntryType"
    xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
    attributeId="2000008556"
    />
    xsi:type="common:AgileListEntryType"
    xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
    attributeId="2000008319">
    <selection>
    <id>2000008310</id>
    <apiName>DESIGN</apiName>
    <value>Design</value>
    </selection>
    </designType>
    <Description xsi:type="xs:string"

```



```

xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008322"></lifeCyclePhase
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="2000008322"
/>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008324">0.0</findNum>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008325">1.0</Quantity>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008329"></Label>
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="2000008330"
/>
xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008365"></structureMultiText01>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008376"></modelName>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008377"></Identifier>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008378"></Component>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008379"></Reference>
xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008380"></Configuration>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000009479"></revision>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000009480" />
</table>
<options>
  <id xsi:nil="true" />
  <property>
    <propertyName>OPTION IS PENDING</propertyName>
    <propertyValue>>false</propertyValue>
  </property>
  <property>
    <propertyName>OPTION HAS SEND PRIVILEGE</propertyName>
    <propertyValue>>false</propertyValue>
  </property>
  <property>
    <propertyName>OPTION HAS COMMENT PRIVELEGE</propertyName>
    <propertyValue>>true</propertyValue>
  </property>

```

```

<propertyName>OPTION APPROVE REJECT PRIVELEGE</propertyName>
<propertyValue>true</propertyValue>
</options>
</property>
</options>
<Version xsi:type="xs:integer"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="7951">1</Version>
<Number xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6173">DESIGN09496</Number>
<Type xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="6175">
<selection>
<id>2000008310</id>
<apiName>DESIGN</apiName>
<value>Design</value>
</selection>
</Type>
<lifecyclePhase
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="6390" />
<Description xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6174"></Description>
<lastModifiedDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6178">2010-08-
19T08:21:35.000Z
</lastModifiedDate>
<checkoutStatus
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="6389">
<selection>
<id>0</id>
<apiName>CHECKED OUT</apiName>
<value>Checked Out</value>
</selection>
</checkoutStatus>
<checkoutUser xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="6180">
<selection>
<id>704</id>
<apiName xsi:nil="true" />
<value>Administrator, Admin
(admin)</value>
</selection>
</checkoutUser>
<checkoutDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6184">2010-08-
19T11:18:58.000Z
</checkoutDate>
<checkoutLocation xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6183"></checkoutLocation>
<checkinDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6388">2010-08-
19T08:21:34.000Z
</checkinDate>
<createDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6177">2010-08-
19T08:21:31.000Z</createDate>
<Label xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008316"></Label>
<componentType
xsi:type="common:AgileListEntryType"

```

```

        attributeId="2000008317" />
        <Thumbnail xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008554" />
        <Revision xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008685"></Revision>
        <revisionDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000008686" />
        <checkinUser xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008717" />
        <itemChangeStatus xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000009487"></itemChangeStatus>
        <createUser xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="1420">
        <selection>
        <id>704</id>
        <apiName xsi:nil="true" />
        <value>Administrator, Admin
(admin)</value>
        </selection>
        </createUser>
        <drawnBy xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2020" />
        <checkedBy xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2021" />
        <designSystem xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2007"></designSystem>
        <CADFilename xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2017"></CADFilename>
        <CADOldFilename xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2018"></CADOldFilename>
        <designSystemIdentifier xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2008"></designSystemIdentifier>
        <Filetype xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2009"></Filetype>
        <Subtype xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2010"></Subtype>
        <Family xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2011"></Family>
        <Variant xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2012"></Variant>
        <drawingName xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2013"></drawingName>
        <frameID xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2014"></frameID>
        <nameFormat xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2015"></nameFormat>
        <projectName xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2016">WebServices
Docu</projectName>
        <localFlag xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1301"></localFlag>

```

```

        <partNumber xsi:type="xs:string"
        attributeId="1302"></partNumber>
        <filePath xsi:type="xs:string"
        attributeId="2019"></filePath>
        <oldFilePath xsi:type="xs:string"
        attributeId="1331"></oldFilePath>
        <modelType xsi:type="xs:string"
        attributeId="1332"></modelType>
        <modelReference xsi:type="xs:string"
        attributeId="1333"></modelReference>
        <linkType xsi:type="xs:string"
        attributeId="1334"></linkType>
        <linkReference xsi:type="xs:string"
        attributeId="1335"></linkReference>
        <TDMVersion xsi:type="xs:string"
        attributeId="1307"></TDMVersion>
        <TDMRevision xsi:type="xs:string"
        attributeId="1308"></TDMRevision>
        <MultiList01 xsi:type="common:AgileListEntryType"
        attributeId="2090" />
    </AgileObject>
</res>
</createUpdateDesignStructureResponse>
</soapenv:Body>
</soapenv:Envelope>

```

createBOM

- Service** To create BOM relationships between Part objects that already exist in the PLM system.
- Usage** The request should consist of at least one Agile Object, which would be the top level object of a Part assembly structure. More than one Agile Object may be present in the request to allow the creation of a multi-level structure, however, when this is the case, the first object in the request should be the only top-level assembly and all other Agile Objects present in the request should be sub-assemblies of its structure.
- The BOM relation between two Part objects is represented in the request by row elements in the BOM table inside the parent AgileObject. This is the table identified with the id 803.
- The service returns an array of AgileBusinessObjectType of type Part in the response object.

Syntax AgileECResponseExtType createBOMResponseType =
 agileStub.createBOM(createBOMRequestType)

Special Handling Exceptions:

1. If the object is not found for the given ID
2. If the object found is not of type Part

Basic Steps

1. Create the request object AgileECRequestExtType for the createBOM operation.
2. Create an array of AgileBusinessObjectType elements
3. Create an instance of an AgileBusinessObjectType and set it as the first element in the array.
4. Set the object identifier to contain the appropriate classId, subclass and number.
5. Create an array of AgileTableType elements and set it as the tables element of the Agile business object created above.
6. Set the table identifier to contain the table id of the BOM table (803).
7. Create an array of AgileRowType elements and set it as the rows of the table
8. Create as many row elements in the array as components of the agile object need to be created or updated.
9. Set the any elements of the row to an array of MessageElements containing at least one element to represent the field 'BOM.Item Number', repeat this step for all components of the Part.
10. Call the WebService and check if an AgileBusinessObjectType is included in the response, scan through its contents.

Sample Code Java

```

try {
    setupServerLogin();
    Integer classId = getIntegerProperty(PART CLASS ID);
    String subClass = getStringProperty(PART SUBCLASS);
    String parentNumber = getStringProperty(PART NUMBER);
    String firstChildNumber = getStringProperty(FIRST CHILD PART NUMBER);
    String secondChildNumber = getStringProperty(SECOND CHILD PART NUMBER);
    AgileECRequestExtType createBOMRequestType = new AgileECRequestExtType();
    AgileBusinessObjectType[] agileRequestObjects = new
AgileBusinessObjectType[1];
    agileRequestObjects[0] = new AgileBusinessObjectType();
    agileRequestObjects[0].setObjectIdentifier(new
ObjectIdentifierType(classId, subClass, null, null, parentNumber, null));
    // Define the BOM table
    AgileTableType[] parentTables = new AgileTableType[1];
    parentTables[0] = new AgileTableType();
    TableIdentifierType tableIdentifier = new TableIdentifierType();
    tableIdentifier.setTableId(new Integer(803));
    parentTables[0].setTableIdentifier(tableIdentifier);
    // Create two rows of components
    AgileRowType[] rows = new AgileRowType[2];
    // First row
    rows[0] = new AgileRowType();
    MessageElement[] anyElementFirstRow = new MessageElement[1];
    anyElementFirstRow[0] = new MessageElement();
    anyElementFirstRow[0].setName("Number");
    anyElementFirstRow[0].addAttribute(null, "attributeId", "1011"); //
ItemConstants.ATT_BOM_ITEM_NUMBER
    anyElementFirstRow[0].setValue(firstChildNumber);
    rows[0].setAny(anyElementFirstRow);
    // Second row
    rows[1] = new AgileRowType();
    MessageElement[] anyElementSecondRow = new MessageElement[1];
    anyElementSecondRow[0] = new MessageElement();
    anyElementSecondRow[0].setName("Number");
    anyElementSecondRow[0].addAttribute(null, "attributeId", "1011"); //
ItemConstants.ATT_BOM_ITEM_NUMBER

```

```

        rows[1].setAny(anyElementSecondRow);
        parentTables[0].setRow(rows);
        agileRequestObjects[0].setTable(parentTables);
        createBOMRequestType.setAgileObject(agileRequestObjects);
        AgileECResponseExtType createBOMResponseType =
        agileStub.createBOM(createBOMRequestType);
        System.out.println("STATUS CODE: " +
        createBOMResponseType.getStatusCode());
        if
        (!createBOMResponseType.getStatusCode().toString().equals(ResponseStatusCode.SUCCE
        SS.getValue())) {
            AgileExceptionListType[] agileExceptionListType =
            createBOMResponseType.getExceptions();
            for (AgileExceptionListType exceptionListType :
            agileExceptionListType) {
                for (AgileExceptionType exception :
            exceptionListType.getException()) {
                    System.out.println(exception.getMessage());
                }
            }
        } else { // If the object, was successfully retrieved, then examine its
            AgileBusinessObjectType[] agileResponseObjects =
            createBOMResponseType.getAgileObject();
            if (agileResponseObjects != null) {
                for (AgileBusinessObjectType agileObject : agileResponseObjects) {
                    ObjectIdentifierType objectIdentifier =
            agileObject.getObjectIdentifier();
                    if (objectIdentifier == null) {
                        continue;
                    }
                    System.out.println("Agile Object Class ID: " +
            objectIdentifier.getClassId());
                    System.out.println("Agile Object Class Name: " +
            objectIdentifier.getClassName());
                    System.out.println("Agile Object Class Display Name: " +
            objectIdentifier.getClassDisplayName());
                    System.out.println("Agile Object Object ID: " +
            objectIdentifier.getObjectId());
                    System.out.println("Agile Object Object Name: " +
            objectIdentifier.getObjectName());
                    PropertyListType options = agileObject.getOptions();
                    if (options != null) {
                        for (PropertyType property : options.getProperty()) {
                            System.out.println("Option Property Name: " +
            property.getPropertyName());
                            System.out.println("Option Property Value: " +
            property.getPropertyValue());
                        }
                    }
                    AgileTableType[] tables = agileObject.getTable();
                    if (tables != null) {
                        for (AgileTableType table : tables) {
                            System.out.println("Table Name: " +
            table.getTableIdentifier().getTableName());
                            rows = table.getRow();
                            int rowNo = 0;
                            if (rows != null) {
                                for (AgileRowType row : rows) {
                                    System.out.println("Table Row Number " + rowNo++);
                                    for (MessageElement node : row.getAny()) {
                                        System.out.println("* " + node.getLocalName() +
            ": " + node.getValue());
                                    }
                                    Iterator<Node> nodeIt = (Iterator<Node>)
            node.getChildElements();
                                    while (nodeIt.hasNext()) {
                                        Node selectionNode = nodeIt.next();
                                        if (selectionNode instanceof MessageElement) {
                                            MessageElement element = (MessageElement)
            selectionNode;
                                            Iterator<MessageElement> subNodeIt =
            (Iterator<MessageElement>) element.getChildElements();
                                            while (subNodeIt.hasNext()) {
                                                MessageElement subNode =
            subNodeIt.next();
                                                System.out.println("*** Selection " +
            subNode.getLocalName() + ": " + subNode.getValue());
                                            }
                                        }
                                    }
                                }
                            }
                        }
                    }
                }
            }
        }
    }
}

```

```

        }
    }
    }
    for (MessageElement node : agileObject.get any()) {
        System.out.println("Agile Object " + node.getLocalName() + ": " +
            " + node.getValue());
        Iterator<Node> nodeIt = (Iterator<Node>)
node.getChildElements();
        while (nodeIt.hasNext()) {
            Node selectionNode = nodeIt.next();
            if (selectionNode instanceof MessageElement) {
                MessageElement element = (MessageElement)
selectionNode;
                Iterator<MessageElement> subNodeIt =
(Iterator<MessageElement>) element.getChildElements();
                while (subNodeIt.hasNext()) {
                    MessageElement subNode = subNodeIt.next();
                    System.out.println("*** Selection " +
subNode.getLocalName() + ": " + subNode.getValue());
                }
            }
        }
    }
    } else {
        System.out.println("No results!");
    }
}
}

```

Sample Code SOAP

```

==== Request ====
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<soapenv:Body>
    <createBOM xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
        <req xmlns="">
            <AgileObject>
                <objectIdentifier>
                    <classId>10141</classId>
                    <className>Part</className>
                    <objectId xsi:nil="true" />
                    <objectName>P00776</objectName>
                </objectIdentifier>
                <table>
                    <tableIdentifier>
                        <tableId>803</tableId>
                        <tableName xsi:nil="true" />
                    </tableIdentifier>
                    <row rowId="0">
                        <Number
attributeId="1011">P00777</Number>
                    </row>
                    <row rowId="0">
                        <Number
attributeId="1011">P00778</Number>
                    </row>
                </table>
            </AgileObject>
        </req>
    </createBOM>
</soapenv:Body>
</soapenv:Envelope>
==== Response ====
<?xml version="1.0" encoding="utf-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<soapenv:Body>
    <createBOMResponse xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
        <res xmlns="">
            <messageId xsi:nil="true" />
            <messageName xsi:nil="true" />
            <statusCode>SUCCESS</statusCode>
        </res>
    </createBOMResponse>
</soapenv:Body>
</soapenv:Envelope>

```

```

        <AgileObject xsi:nil="true" />
        <AgileObject>
            <objectIdentifier>
                <classId>10141</classId>
                <className>Part</className>
                <objectId xsi:nil="true" />
                <objectName>P00776</objectName>
            </objectIdentifier>
            <table>
                <tableIdentifier xsi:nil="true" />
                <row rowId="0">
                    <Number xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="1011">P00777</Number>
                    <attachmentsImage
xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="12630">>false
                    </attachmentsImage>
                    <manufacturerImage
xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="12631">>false
                    </manufacturerImage>
                    <pendingChangesImage
xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="12632">>false
                    </pendingChangesImage>
                    <hasQualityImage
xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="7954">>false
                    </hasQualityImage>
                    <priceImage xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000007815">>false
                    </priceImage>
                    <pendingDeclarationsImage
xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000011130">>false
                    </pendingDeclarationsImage>
                    <Thumbnail
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
                    attributeId="2000008550"
/>
                    <itemDescription
xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1020"></itemDescription>
                    <itemRev xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                    attributeId="1021">
                    </itemRev>
                    <Qty xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                    attributeId="1035">1</Qty>
                    <findNum xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                    attributeId="1012">0</findNum>
                    <refDes xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                    attributeId="1019" />
                    <Sites
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
                    attributeId="12205" />
                    <BOMNotes xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                    attributeId="1036"></BOMNotes>
                    <summaryCompliance
xsi:type="common:AgileListEntryType"

```



```

        attributeId="2000011100"
    />
    xsi:type="xs:string"
    xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1341"></BOMMultiText30>
    xsi:type="xs:string"
    xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1342"></BOMMultiText31>
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2175"></BOMText01>
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2176"></BOMText02>
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2177"></BOMText03>
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2178"></BOMText04>
    </row>
    <row rowId="0">
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="1011">P00778</Number>
    xsi:type="xs:string"
    xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="12630">>false
    xsi:type="xs:string"
    xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="12631">>false
    xsi:type="xs:string"
    xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="12632">>false
    xsi:type="xs:string"
    xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="7954">>false
    xsi:type="xs:string"
    xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000007815">>false
    xsi:type="xs:string"
    xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000011130">>false
    xsi:type="common:AgileListEntryType"
    xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
    attributeId="2000008550"
    />
    xsi:type="xs:string"
    xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1020"></itemDescription>
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="1021">
    </itemRev>
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="1035">1</Qty>

```

```

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" attributeId="1012">0</findNum>
xmlns:xs="http://www.w3.org/2001/XMLSchema-instance" attributeId="1019" />
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1" attributeId="12205" />
xmlns:xs="http://www.w3.org/2001/XMLSchema-instance" attributeId="1036"></BOMNotes>
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1" attributeId="2000011100" />
xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema-instance" attributeId="1341"></BOMMultiText30>
xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema-instance" attributeId="1342"></BOMMultiText31>
xmlns:xs="http://www.w3.org/2001/XMLSchema-instance" attributeId="2175"></BOMText01>
xmlns:xs="http://www.w3.org/2001/XMLSchema-instance" attributeId="2176"></BOMText02>
xmlns:xs="http://www.w3.org/2001/XMLSchema-instance" attributeId="2177"></BOMText03>
xmlns:xs="http://www.w3.org/2001/XMLSchema-instance" attributeId="2178"></BOMText04>
</row>
</table>
<Rev xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1" attributeId="1014">
  <selection>
    <id>0</id>
    <apiName>Rev</apiName>
    <value>Introductory</value>
  </selection>
</Rev>
  <Number xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema-instance" attributeId="1001">P00776</Number>
  <partType xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1" attributeId="1081">
    <selection>
      <id>10141</id>
      <apiName>PART</apiName>
      <value>Part</value>
    </selection>
  </partType>
  <lifecyclePhase
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1" attributeId="1084">
    <selection>
      <id>976</id>
      <apiName>PRELIMINARY</apiName>
      <value>Preliminary</value>
    </selection>
  </lifecyclePhase>
</AgileListEntryType>

```

```

        </Description xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1002"></Description>
        <partCategory xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="1082" />
        <Size xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="1068" />
        <productLineS xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="1004" />
        <revIncorpDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1017" />
        <revReleaseDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1016" />
        <effectivityDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="12089" />
        <shippableItem
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000002781">
            <selection>
                <id>0</id>
                <apiName>NO</apiName>
                <value>No</value>
            </selection>
        </shippableItem>
        <excludeFromRollup
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000002859">
            <selection>
                <id>0</id>
                <apiName>NO</apiName>
                <value>No</value>
            </selection>
        </excludeFromRollup>
        <complianceCalculatedDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000004143" />
        <partFamily xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000004416" />
        <Mass xsi:type="common:AgileUnitOfMeasureType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000004612" />
        <overallCompliance
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000004891" />
        <Thumbnail xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008549" />
        <ModelRef xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000009494"></ModelRef>
        <Text11 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1301"></Text11>
        <Text12 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1302"></Text12>
        <Text15 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1305"></Text15>
        <Text16 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"

```

```

                                <Text18 xsi:type="xs:string" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="1308"></Text18>
                                <Text23 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="1313"></Text23>
                                <Text01 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2007"></Text01>
                                <Text02 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2008"></Text02>
                                <List04 xsi:type="common:AgileListEntryType"

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
                                attributeId="2023" />
                                <myPublishedFrom xsi:type="xs:string"

xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2623310"></myPublishedFrom>
                                </AgileObject>
                                </res>
                                </createBOMResponse>
</soapenv:Body>
</soapenv:Envelope>
```

getDesignWhereUsed

Service To retrieve the Where Used in Design information of a given Design object.

Usage The request must contain a single Agile Object to represent the Design for which the where used in Design information should be retrieved. All the data to identify the Design object should be present in the ObjectIdentifier, including class-id, subclass, number and version. The service will additionally support two properties in the first set of general parameters: TARGET-DESIGN-VERSION and WHERE-USED-DESIGN-VERSION. The property TARGET-DESIGN-VERSION may have the values "LATEST", "SPECIFIED" or "ALL", whereas the property WHERE-USED-DESIGN-VERSION may have the values "LATEST" or "ALL"

The property TARGET-DESIGN-VERSION refers to the given Design in the request, and indicates whether the Where Used information should be gathered for the given version (SPECIFIED), for the latest version (LATEST) or for all the versions of the Design object (ALL). Note that when using LATEST or ALL, any given version in the AgileObject in the request is ignored.

The property WHERE-USED-DESIGN-VERSION refers to the version of the Design objects found in the Where Used table of the target design and indicates that only the latest version of the Design found, where the target Design is used should be returned, or all the versions of the Design found, in which the target Design is used should be returned.

The service returns an array of AgileBusinessObjectType of type Design in the response object.

Syntax `AgileECResponseExtType getDesignWhereUsedResponseType =
agileStub.getDesignWhereUsed(getDesignWhereUsedRequestType)`

Special Handling **Exceptions:**

1. If the object is not found for the given ID
2. If the object found is not of type Design
3. If the object has no object identifier

Basic Steps

1. Create the request object `AgileECRequestExtType` for the `getDesignWhereUsed` operation.
2. Create an array of `AgileBusinessObjectType` elements
3. Create an instance of an `AgileBusinessObjectType` and set it as the first element in the array.
4. Set the object identifier to contain the appropriate `classId`, `subclass`, `number` and `version`.
5. Optionally define an array of `PropertyListType` and set the request's general parameters to this list.
6. In the list, define `PropertyType` elements for the optional properties "TARGET-DESIGN-VERSION" and "WHERE-USED-DESIGN-VERSION".
7. Call the `WebService` and check if an `AgileBusinessObjectType` is included in the response, scan through its contents.

Sample Code Java

```

try {
    setupServerLogin();
    Integer classId = getIntegerProperty(DSIGN CLASS ID);
    String subClass = getStringProperty(DSIGN SUBCLASS);
    String number = getStringProperty(DSIGN NUMBER);
    String version = getStringProperty(DSIGN VERSION);
    AgileECRequestExtType getDesignWhereUsedRequestType = new
AgileECRequestExtType();
    PropertyListType[] generalParameters = new PropertyListType[2];
    generalParameters[0] = new PropertyListType();
    PropertyType[] props = new PropertyType[2];
    props[0] = new PropertyType("TARGET-DESIGN-VERSION", "SPECIFIED");
    props[1] = new PropertyType("WHERE-USED-DESIGN-VERSION", "ALL");
    generalParameters[0].setProperty(props);
    getDesignWhereUsedRequestType.setGeneralParameters(generalParameters);
    AgileBusinessObjectType[] agileRequestObjects = new
AgileBusinessObjectType[1];
    agileRequestObjects[0] = new AgileBusinessObjectType();
    agileRequestObjects[0].setObjectIdentifier(new
ObjectIdentifierType(classId, subClass, null, null, number, version));
    getDesignWhereUsedRequestType.setAgileObject(agileRequestObjects);
    AgileECResponseExtType getDesignWhereUsedResponseType =
agileStub.getDesignWhereUsed(getDesignWhereUsedRequestType);
    System.out.println("STATUS CODE: " +
getDesignWhereUsedResponseType.getStatusCode());
    if
(!getDesignWhereUsedResponseType.getStatusCode().toString().equals(ResponseStatusC
ode.SUCCESS.getValue())) {
        AgileExceptionListType[] agileExceptionListType =
getDesignWhereUsedResponseType.getExceptions();
        for (AgileExceptionListType exceptionListType :
agileExceptionListType) {
            for (AgileExceptionType exception :
exceptionListType.getException()) {
                System.out.println(exception.getMessage());
            }
        }
    } else {
        AgileBusinessObjectType[] agileResponseObjects =
getDesignWhereUsedResponseType.getAgileObject();
    }
}

```

```

        for (AgileBusinessObjectType agileObject : agileResponseObjects) {
            ObjectIdentifierType objectIdentifier =
            agileObject.getObjectIdentifier();
            System.out.println("Agile Object Class ID: " +
            objectIdentifier.getClassId());
            System.out.println("Agile Object Class Name: " +
            objectIdentifier.getClassName());
            System.out.println("Agile Object Class Display Name: " +
            objectIdentifier.getClassDisplayName());
            System.out.println("Agile Object Object ID: " +
            objectIdentifier.getObjectId());
            System.out.println("Agile Object Object Name: " +
            objectIdentifier.getObjectName());
            PropertyListType options = agileObject.getOptions();
            if (options != null) {
                for (PropertyType property : options.getProperty()) {
                    System.out.println("Option Property Name: " +
                    property.getPropertyName());
                    System.out.println("Option Property Value: " +
                    property.getPropertyValue());
                }
            }
            AgileTableType[] tables = agileObject.getTable();
            if (tables != null) {
                for (AgileTableType table : tables) {
                    System.out.println("Table Name: " +
                    table.getTableIdentifier().getTableName());
                    AgileRowType[] rows = table.getRow();
                    int rowNo = 0;
                    if (rows != null) {
                        for (AgileRowType row : rows) {
                            System.out.println("Table Row Number " + rowNo++);
                            for (MessageElement node : row.get any()) {
                                System.out.println("** " + node.getLocalName()
                                + ": " + node.getValue());
                                Iterator<Node> nodeIt = (Iterator<Node>)
                                node.getChildElements();
                                while (nodeIt.hasNext()) {
                                    Node selectionNode = nodeIt.next();
                                    if (selectionNode instanceof
                                    MessageElement) {
                                        MessageElement element =
                                        (MessageElement) selectionNode;
                                        Iterator<MessageElement> subNodeIt =
                                        (Iterator<MessageElement>) element.getChildElements();
                                        while (subNodeIt.hasNext()) {
                                            MessageElement subNode =
                                            subNodeIt.next();
                                            System.out.println("*** Selection "
                                            + subNode.getLocalName() + ": " + subNode.getValue());
                                        }
                                    }
                                }
                            }
                        }
                    }
                    for (MessageElement node : agileObject.get any()) {
                        System.out.println("Agile Object " + node.getLocalName() +
                        ": " + node.getValue());
                        Iterator<Node> nodeIt = (Iterator<Node>)
                        node.getChildElements();
                        while (nodeIt.hasNext()) {
                            Node selectionNode = nodeIt.next();
                            if (selectionNode instanceof MessageElement) {
                                MessageElement element = (MessageElement)
                                selectionNode;
                                Iterator<MessageElement> subNodeIt =
                                (Iterator<MessageElement>) element.getChildElements();
                                while (subNodeIt.hasNext()) {
                                    MessageElement subNode = subNodeIt.next();
                                    System.out.println("*** Selection " +
                                    subNode.getLocalName() + ": " + subNode.getValue());
                                }
                            }
                        }
                    }
                }
            }
        }
    } else {

```

```

    }
    }
}

```

Sample Code SOAP

```

==== Request ====
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<soapenv:Body>
  <getDesignWhereUsed xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
    <req xmlns="">
      <generalParameters>
        <id xsi:nil="true" />
        <property>
          <propertyName>TARGET-DESIGN-
VERSION</propertyName>
          <propertyValue>SPECIFIED</propertyValue>
        </property>
        <property>
          <propertyName>WHERE-USED-DESIGN-
VERSION</propertyName>
          <propertyValue>ALL</propertyValue>
        </property>
      </generalParameters>
      <generalParameters xsi:nil="true" />
      <AgileObject>
        <objectIdentifier>
          <classId>2000008310</classId>
          <className>Design</className>
          <objectId xsi:nil="true" />
        </objectIdentifier>
        <objectName>DESIGN09435.SLDPRT</objectName>
        <version>2</version>
      </AgileObject>
    </req>
  </getDesignWhereUsed>
</soapenv:Body>
</soapenv:Envelope>
==== Response ====
<?xml version="1.0" encoding="utf-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<soapenv:Body>
  <getDesignWhereUsedResponse
xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
    <res xmlns="">
      <messageId xsi:nil="true" />
      <messageName xsi:nil="true" />
      <statusCode>SUCCESS</statusCode>
      <AgileObject>
        <objectIdentifier>
          <classId>2000008310</classId>
          <className>Design</className>
        </objectIdentifier>
        <classDisplayName>Design</classDisplayName>
        <objectId>6286231</objectId>
        <objectName>DESIGN09436.SLDASM</objectName>
        </objectIdentifier>
        <options>
          <id xsi:nil="true" />
          <property>
            <propertyName>OPTION IS PENDING</propertyName>
            <propertyValue>false</propertyValue>
          </property>
          <property>
            <propertyName>OPTION HAS SEND PRIVILEGE</propertyName>
            <propertyValue>false</propertyValue>
          </property>
        </options>
      </AgileObject>
    </res>
  </getDesignWhereUsedResponse>
</soapenv:Body>
</soapenv:Envelope>

```

```

</property>
<property>
  <propertyName>OPTION HAS COMMENT PRIVELEGE</propertyName>
  <propertyValue>true</propertyValue>
</property>
</property>

<property>
  <propertyName>OPTION APPROVE REJECT PRIVELEGE</propertyName>
  <propertyValue>true</propertyValue>
</property>
</options>
</Version xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
  attributeId="7951"
  displayName="Version">2</Version>
  <Number xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="6173">DESIGN09436.SLDASM</Number>
    <Type xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
      attributeId="6175">
      <selection>
        <id>2000008310</id>
        <apiName>DESIGN</apiName>
        <value>Design</value>
      </selection>
    </Type>
    <lifecyclePhase
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
      attributeId="6390" />
      <Description xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6174"></Description>
      <lastModifiedDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6178">2010-07-
06T10:33:09.000Z
      </lastModifiedDate>
      <checkoutStatus
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
      attributeId="6389">
      <selection>
        <id>1</id>
        <apiName>CHECKED IN</apiName>
        <value>Checked In</value>
      </selection>
      </checkoutStatus>
      <checkoutUser xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
      attributeId="6180" />
      <checkoutDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6184" />
      <checkoutLocation xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6183"></checkoutLocation>
      <checkinDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6388">2010-07-
06T13:11:39.000Z
      </checkinDate>
      <createDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
      attributeId="6177">2010-07-
06T09:41:04.000Z</createDate>
      <Label xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
      attributeId="2000008316"></Label>
      <componentType
xsi:type="common:AgileListEntryType"

```



```

        attributeId="2000008317" />
        <Thumbnail xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008554" />
        <Revision xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000008685">(A) -
C00115foeiufgoewtureo1</Revision>
        <revisionDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000008686" />
        <checkinUser xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008717">
        <selection>
            <id>704</id>
            <apiName xsi:nil="true" />
            <value>Administrator, Admin
(admin)</value>
        </selection>
        </checkinUser>
        <itemChangeStatus xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000009487"></itemChangeStatus>
        <createUser xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="1420">
        <selection>
            <id>704</id>
            <apiName xsi:nil="true" />
            <value>Administrator, Admin
(admin)</value>
        </selection>
        </createUser>
        <drawnBy xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2020" />
        <checkedBy xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2021" />
        <designSystem xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2007">SW2009
        </designSystem>
        <CADFilename xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2017">asm0001.sldasm
        </CADFilename>
        <CADOldFilename xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2018"></CADOldFilename>
        <designSystemIdentifier xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2008"></designSystemIdentifier>
        <Filetype xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2009">SLDASM</Filetype>
        <Subtype xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2010"></Subtype>
        <Family xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2011"></Family>
        <Variant xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2012"></Variant>
        <drawingName xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2013"></drawingName>
        <frameID xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2014"></frameID>

```

```

        <nameFormat xsi:type="xs:string"
        attributeId="2015"></nameFormat>
        <projectName xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2016"></projectName>
        <localFlag xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1301"></localFlag>
        <partNumber xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1302"></partNumber>
        <filePath xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2019"></filePath>
        <oldFilePath xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1331"></oldFilePath>
        <modelType xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1332"></modelType>
        <modelReference xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1333"></modelReference>
        <linkType xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1334"></linkType>
        <linkReference xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1335"></linkReference>
        <TDMVersion xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1307"></TDMVersion>
        <TDMRevision xsi:type="xs:string"
        xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1308"></TDMRevision>
        <MultiList01 xsi:type="common:AgileListEntryType"
        xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2090" />
    </AgileObject>
</res>
</getDesignWhereUsedResponse>
</soapenv:Body>
</soapenv:Envelope>

```

get DesignWhereAttached

Service To retrieve the Where Used as Attachment information of a given Design object.

Usage The request must contain a single Agile Object to represent the Design for which the where used as attachment information should be retrieved. All the data to identify the Design object should be present in the ObjectIdentifier, including class-id, subclass, number and version. The service will additionally support two properties in the first set of general parameters: TARGET-DESIGN-VERSION and WHERE-USED-ITEM-REVISION. The property TARGET-DESIGN-VERSION may have the values "LATEST", "SPECIFIED" or "ALL", whereas the property WHERE-USED-ITEM-REVISION may have the values "LATEST" or "ALL".

The property TARGET-DESIGN-VERSION refers to the given Design in the request, and indicates whether the Where Used information should be gathered for the given version (SPECIFIED), for the latest version (LATEST) or for all the versions of the Design object (ALL). Note that when using LATEST or ALL, any given version in the AgileObject in the request is ignored.

The property WHERE-USED-ITEM-REVISION refers to the revision of the Part objects found in the Where Attached table of the target design and indicates that only the latest revision of the Part found, to which the target Design is attached should be returned, or all the revisions of the Part found, to which the target Design is attached should be returned.

The service returns an array of AgileBusinessObjectType of type Part in the response object.

Syntax

```
AgileECResponseExtType getDesignWhereAttachedResponseType =
agileStub.getDesignWhereAttached(getDesignWhereAttachedRequestType)
```

Special Handling**Exceptions:**

1. If the object is not found for the given ID
2. If the object found is not of type Design
3. If the object has no object identifier

Basic Steps

1. Create the request object AgileECRequestExtType for the getDesignWhereUsed operation.
2. Create an array of AgileBusinessObjectType elements
3. Create an instance of an AgileBusinessObjectType and set it as the first element in the array.
4. Set the object identifier to contain the appropriate classId, subclass, number and version.
5. Optionally define an array of PropertyListType and set the request's general parameters to this list.
6. In the list, define PropertyType elements for the optional properties "TARGET-DESIGN-VERSION" and "WHERE-USED-ITEM-REVISION".
7. Call the WebService and check if an AgileBusinessObjectType is included in the response, scan through its contents.

Sample Code Java

```
try {
    setupServerLogin();
    Integer classId = getIntegerProperty(DSIGN CLASS ID);
    String subClass = getStringProperty(DSIGN SUBCLASS);
    String number = getStringProperty(DSIGN NUMBER);
    String version = getStringProperty(DSIGN VERSION);
    AgileECRequestExtType getDesignWhereAttachedRequestType = new
AgileECRequestExtType();
    PropertyListType[] generalParameters = new PropertyListType[2];
    generalParameters[0] = new PropertyListType();
    PropertyType[] props = new PropertyType[2];
    props[0] = new PropertyType("TARGET-DESIGN-VERSION", "SPECIFIED");
    props[1] = new PropertyType("WHERE-USED-ITEM-REVISION", "ALL");
    generalParameters[0].setProperty(props);

    getDesignWhereAttachedRequestType.setGeneralParameters(generalParameters);
    AgileBusinessObjectType[] agileRequestObjects = new
AgileBusinessObjectType[1];
    agileRequestObjects[0] = new AgileBusinessObjectType();
```

```

        agileRequestObjects[0].setObjectIdentifier(new
getDesignWhereAttachedRequestType.setAgileObject(agileRequestObjects);
        AgileECResponseExtType getDesignWhereAttachedResponseType =
agileStub.getDesignWhereAttached(getDesignWhereAttachedRequestType);
        System.out.println("STATUS CODE: " +
getDesignWhereAttachedResponseType.getStatusCode());
        if
(!getDesignWhereAttachedResponseType.getStatusCode().toString().equals(ResponseSta
tusCode.SUCCESS.getValue())) {
            AgileExceptionListType[] agileExceptionListType =
getDesignWhereAttachedResponseType.getExceptions();
            for (AgileExceptionListType exceptionListType :
agileExceptionListType) {
                for (AgileExceptionType exception :
exceptionListType.getException()) {
                    System.out.println(exception.getMessage());
                }
            }
        } else {
            AgileBusinessObjectType[] agileResponseObjects =
getDesignWhereAttachedResponseType.getAgileObject();
            if (agileResponseObjects != null) {
                for (AgileBusinessObjectType agileObject : agileResponseObjects) {
                    ObjectIdentifierType objectIdentifier =
agileObject.getObjectIdentifier();
                    System.out.println("Agile Object Class ID: " +
objectIdentifier.getClassId());
                    System.out.println("Agile Object Class Name: " +
objectIdentifier.getClassName());
                    System.out.println("Agile Object Class Display Name: " +
objectIdentifier.getClassDisplayName());
                    System.out.println("Agile Object Object ID: " +
objectIdentifier.getObjectId());
                    System.out.println("Agile Object Object Name: " +
objectIdentifier.getObjectName());
                    PropertyListType options = agileObject.getOptions();
                    if (options != null) {
                        for (PropertyType property : options.getProperty()) {
                            System.out.println("Option Property Name: " +
property.getPropertyName());
                            System.out.println("Option Property Value: " +
property.getPropertyValue());
                        }
                    }
                    AgileTableType[] tables = agileObject.getTable();
                    if (tables != null) {
                        for (AgileTableType table : tables) {
                            System.out.println("Table Name: " +
table.getTableIdentifier().getTableName());
                            AgileRowType[] rows = table.getRow();
                            int rowNo = 0;
                            if (rows != null) {
                                for (AgileRowType row : rows) {
                                    System.out.println("Table Row Number " + rowNo++);
                                    for (MessageElement node : row.get any()) {
                                        System.out.println("** " + node.getLocalName()
+ ": " + node.getValue());
                                        Iterator<Node> nodeIt = (Iterator<Node>)
node.getChildElements();
                                        while (nodeIt.hasNext()) {
                                            Node selectionNode = nodeIt.next();
                                            if (selectionNode instanceof
MessageElement) {
                                                MessageElement element =
(MessageElement) selectionNode;
                                                Iterator<MessageElement> subNodeIt =
(Iterator<MessageElement>) element.getChildElements();
                                                while (subNodeIt.hasNext()) {
                                                    MessageElement subNode =
subNodeIt.next();
                                                    System.out.println("*** Selection "
+ subNode.getLocalName() + ": " + subNode.getValue());
                                                }
                                            }
                                        }
                                    }
                                }
                            }
                        }
                    }
                }
            }
        }
    }
}

```

```

        System.out.println("Agile Object " + node.getLocalName() +
": " + node.getValue());
        Iterator<Node> nodeIt = (Iterator<Node>)
node.getChildElements();
        while (nodeIt.hasNext()) {
            Node selectionNode = nodeIt.next();
            if (selectionNode instanceof MessageElement) {
                MessageElement element = (MessageElement)
selectionNode;
                Iterator<MessageElement> subNodeIt =
(Iterator<MessageElement>) element.getChildElements();
                while (subNodeIt.hasNext()) {
                    MessageElement subNode = subNodeIt.next();
                    System.out.println("*** Selection " +
subNode.getLocalName() + ": " + subNode.getValue());
                }
            }
        }
    } else {
        System.out.println("No results!");
    }
}
}

```

Sample Code SOAP

```

==== Request ====
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Body>
    <getDesignWhereAttached
xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
      <req xmlns="">
        <generalParameters>
          <id xsi:nil="true" />
          <property>
            <propertyName>TARGET-DESIGN-
VERSION</propertyName>
            <propertyValue>SPECIFIED</propertyValue>
          </property>
          <property>
            <propertyName>WHERE-USED-ITEM-
REVISION</propertyName>
            <propertyValue>ALL</propertyValue>
          </property>
        </generalParameters>
        <generalParameters xsi:nil="true" />
        <AgileObject>
          <objectIdentifier>
            <classId>2000008310</classId>
            <className>Design</className>
            <objectId xsi:nil="true" />
          </objectIdentifier>
          <objectName>DESIGN09435.SLDPRT</objectName>
          <version>1</version>
        </objectIdentifier>
      </req>
    </getDesignWhereAttached>
  </soapenv:Body>
</soapenv:Envelope>
==== Response ====
<?xml version="1.0" encoding="utf-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Body>
    <getDesignWhereAttachedResponse
xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
      <res xmlns="">
        <messageId xsi:nil="true" />
        <messageName xsi:nil="true" />
        <statusCode>SUCCESS</statusCode>
      </res>
    </getDesignWhereAttachedResponse>
  </soapenv:Body>
</soapenv:Envelope>

```

```

        <objectIdentifier>
            <classId>10141</classId>
            <className>Part</className>
            <classDisplayName>Part</classDisplayName>
            <objectId>6286561</objectId>
            <objectName>P00722</objectName>
        </objectIdentifier>
        <options>
            <id xsi:nil="true" />
            <property>
                <propertyName>IS-
PENDING</propertyName>
                <propertyValue>>false</propertyValue>
            </property>
            <property>
                <propertyName>MANUFACTURE-
SITE</propertyName>
                <propertyValue>ALL</propertyValue>
            </property>
            <property>
                <propertyName>HAS-SEND-
PRIVELEGE</propertyName>
                <propertyValue>>false</propertyValue>
            </property>
        </options>
        <Rev xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
            attributeId="1014">
            <selection>
                <id>0</id>
                <apiName>Rev</apiName>
                <value>Introductory</value>
            </selection>
        </Rev>
        <Number xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
            attributeId="1001">P00722</Number>
        <partType xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
            attributeId="1081">
            <selection>
                <id>10141</id>
                <apiName>PART</apiName>
                <value>Part</value>
            </selection>
        </partType>
        <lifecyclePhase
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
            attributeId="1084">
            <selection>
                <id>976</id>
                <apiName>PRELIMINARY</apiName>
                <value>Preliminary</value>
            </selection>
        </lifecyclePhase>
        <Description xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1002">Default
        </Description>
        <partCategory xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
            attributeId="1082" />
        <Size xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
            attributeId="1068" />
        <productLineS xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
            attributeId="1004" />
        <revIncorpDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1017" />

```

```

        <effectivityDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1016" />
        <shippableItem
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="12089" />
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000002781">
        <selection>
        <id>0</id>
        <apiName>NO</apiName>
        <value>No</value>
        </selection>
        </shippableItem>
        <excludeFromRollup
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000002859">
        <selection>
        <id>0</id>
        <apiName>NO</apiName>
        <value>No</value>
        </selection>
        </excludeFromRollup>
        <complianceCalculatedDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000004143" />
        <partFamily xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000004416" />
        <Mass xsi:type="common:AgileUnitOfMeasureType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000004612" />
        <overallCompliance
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000004891" />
        <Thumbnail xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008549">
        <selection>
        <id>7886</id>
        <apiName>48369R1SLDPRT</apiName>
        <value>com.agile.api.pc.attachment.ThumbnailID@13f4076</value>
        </selection>
        </Thumbnail>
        <ModelRef xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000009494"></ModelRef>
        <Text11 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1301"></Text11>
        <Text12 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1302"></Text12>
        <Text15 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1305"></Text15>
        <Text16 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1306"></Text16>
        <Text18 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1308"></Text18>
        <Text23 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1313"></Text23>
        <Text01 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2007"></Text01>
        <Text02 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"

```

```

        <List04 xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2023" />
        <myPublishedFrom xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2623310">1
        </myPublishedFrom>
    </AgileObject>
    <AgileObject>
        <objectIdentifier>
            <classId>10141</classId>
            <className>Part</className>
            <classDisplayName>Part</classDisplayName>
            <objectId>6286561</objectId>
            <objectName>P00722</objectName>
        </objectIdentifier>
        <options>
            <id xsi:nil="true" />
            <property>
                <propertyName>IS-
PENDING</propertyName>
                <propertyValue>true</propertyValue>
            </property>
            <property>
                <propertyName>MANUFACTURE-
SITE</propertyName>
                <propertyValue>ALL</propertyValue>
            </property>
            <property>
                <propertyName>HAS-SEND-
PRIVELEGE</propertyName>
                <propertyValue>>false</propertyValue>
            </property>
        </options>
    <Rev xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="1014">
        <selection>
            <id>6286682</id>
            <apiName>Rev</apiName>
            <value>(A) C00115</value>
        </selection>
    </Rev>
    <Number xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1001">P00722</Number>
    <partType xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="1081">
        <selection>
            <id>10141</id>
            <apiName>PART</apiName>
            <value>Part</value>
        </selection>
    </partType>
    <lifecyclePhase
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="1084">
        <selection>
            <id>976</id>
            <apiName>PRELIMINARY</apiName>
            <value>Preliminary</value>
        </selection>
    </lifecyclePhase>
    <Description xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1002">Default
    </Description>
    <partCategory xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="1082" />
    <Size xsi:type="common:AgileListEntryType"

```



```

        attributeId="1068" />
        <productLineS xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="1004" />
        <revIncorpDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1017" />
        <revReleaseDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1016" />
        <effectivityDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="12089" />
        <shippableItem
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000002781">
        <selection>
        <id>0</id>
        <apiName>NO</apiName>
        <value>No</value>
        </selection>
        </shippableItem>
        <excludeFromRollup
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000002859">
        <selection>
        <id>0</id>
        <apiName>NO</apiName>
        <value>No</value>
        </selection>
        </excludeFromRollup>
        <complianceCalculatedDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000004143" />
        <partFamily xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000004416" />
        <Mass xsi:type="common:AgileUnitOfMeasureType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000004612" />
        <overallCompliance
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000004891" />
        <Thumbnail xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        attributeId="2000008549">
        <selection>
        <id>7886</id>
        <apiName>48369R1SLDPRT</apiName>
        <value>com.agile.api.pc.attachment.ThumbnailID@4bae41</value>
        </selection>
        </Thumbnail>
        <ModelRef xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="2000009494"></ModelRef>
        <Text11 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1301"></Text11>
        <Text12 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1302"></Text12>
        <Text15 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1305"></Text15>
        <Text16 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
        attributeId="1306"></Text16>

```

```

<Text18 xsi:type="xs:string"
attributeId="1308"></Text18>
<Text23 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="1313"></Text23>
<Text01 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2007"></Text01>
<Text02 xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2008">DESIGN09435</Text02>
<List04 xsi:type="common:AgileListEntryType"

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="2023" />
<myPublishedFrom xsi:type="xs:string"

xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2623310">1
</myPublishedFrom>
</AgileObject>
</res>
</getDesignWhereAttachedResponse>
</soapenv:Body>
</soapenv:Envelope>

```

getDesignRelationships

Service To retrieve the version specific relationships between the given Design object and other Designs. It differentiates itself from the core service used to retrieve the contents of the Relationships table for Design objects in that: a) It filters out all objects which are not Designs and b) It allows a combination of versions for the target Design as well as the related Design objects.

Usage The request must contain a single Agile Object to represent the Design for which the relationships information should be retrieved. All the data to identify the Design object should be present in the ObjectIdentifier, including class-id, subclass, number and version. The service will additionally support two properties in the first set of general parameters: TARGET-DESIGN-VERSION and RELATED-DESIGN-VERSION. The property TARGET-DESIGN-VERSION may have the values "LATEST", "SPECIFIED" or "ALL", whereas the property RELATED-DESIGN-VERSION may have the values "LATEST" or "ALL". The property TARGET-DESIGN-VERSION refers to the given Design in the request, and indicates whether the Relationship information should be gathered for the given version (SPECIFIED), for the latest version (LATEST) or for all the versions of the Design object (ALL). Note that when using LATEST or ALL, any given version in the AgileObject in the request is ignored.

The property RELATED-DESIGN-VERSION refers to the version of the Design objects found in the Relationship table of the target design and indicates that only the latest version of the Design found, to which the target Design is related should be returned, or all the versions of the Design found, to which the target Design is related should be returned.

The service returns an array of AgileBusinessObjectType of type Design in the response object.

Syntax AgileECResponseExtType getDesignRelationshipsResponseType = agileStub.getDesignRelationships(getDesignRelationshipsRequestType)

Special Handling**Exceptions:**

1. If the object is not found for the given objectName
2. If the Object found is not of type Design
3. If the Object version is not valid
4. If the Object has no Object identifier

Basic Steps

1. Create the request object AgileECRequestExtType for the getDesignWhereUsed operation.
2. Create an array of AgileBusinessObjectType elements
3. Create an instance of an AgileBusinessObjectType and set it as the first element in the array.
4. Set the object identifier to contain the appropriate classId, subclass, number and version.
5. Optionally define an array of PropertyListType and set the request's general parameters to this list.
6. In the list, define PropertyType elements for the optional properties "TARGET-DESIGN-VERSION" and "RELATED-DESIGN-VERSION".
7. Call the WebService and check if an AgileBusinessObjectType is included in the response, scan through its contents.

Sample Code Java

```

try {
    setupServerLogin();
    Integer classId = getIntegerProperty(DSIGN CLASS ID);
    String subClass = getStringProperty(DSIGN SUBCLASS);
    String number = getStringProperty(DSIGN NUMBER);
    String version = getStringProperty(DSIGN VERSION);
    AgileECRequestExtType getDesignRelationshipsRequestType = new
AgileECRequestExtType();
    PropertyListType[] generalParameters = new PropertyListType[2];
    generalParameters[0] = new PropertyListType();
    PropertyType[] props = new PropertyType[2];
    props[0] = new PropertyType("TARGET-DESIGN-VERSION", "SPECIFIED");
    props[1] = new PropertyType("RELATED-DESIGN-VERSION", "ALL");
    generalParameters[0].setProperty(props);

    getDesignRelationshipsRequestType.setGeneralParameters(generalParameters);
    AgileBusinessObjectType[] agileRequestObjects = new
AgileBusinessObjectType[1];
    agileRequestObjects[0] = new AgileBusinessObjectType();
    agileRequestObjects[0].setObjectIdentifier(new
ObjectIdentifierType(classId, subClass, null, null, number, version));
    getDesignRelationshipsRequestType.setAgileObject(agileRequestObjects);
    AgileECResponseExtType getDesignRelationshipsResponseType =
agileStub.getDesignRelationships(getDesignRelationshipsRequestType);
    System.out.println("STATUS CODE: " +
getDesignRelationshipsResponseType.getStatusCode());
    if
(!getDesignRelationshipsResponseType.getStatusCode().toString().equals(ResponseStat
usCode.SUCCESS.getValue())) {
        AgileExceptionListType[] agileExceptionListType =
getDesignRelationshipsResponseType.getExceptions();
        for (AgileExceptionListType exceptionListType :
agileExceptionListType) {

```

```

        for (AgileExceptionType exception :
            -----
            System.out.println(exception.getMessage());
        }
    } else {
        AgileBusinessObjectType[] agileResponseObjects =
        getDesignRelationshipsResponseType.getAgileObject();
        if (agileResponseObjects != null) {
            for (AgileBusinessObjectType agileObject : agileResponseObjects) {
                ObjectIdentifierType objectIdentifier =
                agileObject.getObjectIdentifier();
                System.out.println("Agile Object Class ID: " +
                objectIdentifier.getClassId());
                System.out.println("Agile Object Class Name: " +
                objectIdentifier.getClassName());
                System.out.println("Agile Object Class Display Name: " +
                objectIdentifier.getClassDisplayName());
                System.out.println("Agile Object Object ID: " +
                objectIdentifier.getObjectId());
                System.out.println("Agile Object Object Name: " +
                objectIdentifier.getObjectName());
                PropertyListType options = agileObject.getOptions();
                if (options != null) {
                    for (PropertyType property : options.getProperty()) {
                        System.out.println("Option Property Name: " +
                        property.getPropertyName());
                        System.out.println("Option Property Value: " +
                        property.getPropertyValue());
                    }
                }
                AgileTableType[] tables = agileObject.getTable();
                if (tables != null) {
                    for (AgileTableType table : tables) {
                        System.out.println("Table Name: " +
                        table.getTableIdentifier().getTableName());
                        AgileRowType[] rows = table.getRow();
                        int rowNo = 0;
                        if (rows != null) {
                            for (AgileRowType row : rows) {
                                System.out.println("Table Row Number " + rowNo++);
                                for (MessageElement node : row.get any()) {
                                    System.out.println("** " + node.getLocalName()
+ ": " + node.getValue());
                                    node.getChildElements();
                                    Iterator<Node> nodeIt = (Iterator<Node>)
                                    while (nodeIt.hasNext()) {
                                        Node selectionNode = nodeIt.next();
                                        if (selectionNode instanceof
                                        MessageElement) {
                                            MessageElement element =
                                            Iterator<MessageElement> subNodeIt =
                                            (Iterator<MessageElement>) element.getChildElements();
                                            while (subNodeIt.hasNext()) {
                                                MessageElement subNode =
                                                subNodeIt.next();
                                                System.out.println("*** Selection "
+ subNode.getLocalName() + ": " + subNode.getValue());
                                            }
                                        }
                                    }
                                }
                            }
                        }
                    }
                }
                for (MessageElement node : agileObject.get any()) {
                    System.out.println("Agile Object " + node.getLocalName() +
                    ": " + node.getValue());
                    Iterator<Node> nodeIt = (Iterator<Node>)
                    node.getChildElements();
                    while (nodeIt.hasNext()) {
                        Node selectionNode = nodeIt.next();
                        if (selectionNode instanceof MessageElement) {
                            MessageElement element = (MessageElement)
                            selectionNode;
                            Iterator<MessageElement> subNodeIt =
                            (Iterator<MessageElement>) element.getChildElements();
                            while (subNodeIt.hasNext()) {
                                MessageElement subNode = subNodeIt.next();

```

```

        System.out.println("*** Selection " +
        .....
    }
}
}
} else {
    System.out.println("No results!");
}
}
}

```

Sample Code SOAP

```

==== Request ====
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<soapenv:Body>
<getDesignRelationships
xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
<req xmlns="">
<generalParameters>
<id xsi:nil="true" />
<property>
<propertyName>TARGET-DESIGN-
VERSION</propertyName>
<propertyValue>SPECIFIED</propertyValue>
</property>
<property>
<propertyName>RELATED-DESIGN-
VERSION</propertyName>
<propertyValue>ALL</propertyValue>
</property>
</generalParameters>
<generalParameters xsi:nil="true" />
<AgileObject>
<objectIdentifier>
<classId>2000008310</classId>
<className>Design</className>
<objectId xsi:nil="true" />
<objectName>DESIGN09436.SLDASM</objectName>
<version>2</version>
</objectIdentifier>
</AgileObject>
</req>
</getDesignRelationships>
</soapenv:Body>
</soapenv:Envelope>
==== Response ====
<?xml version="1.0" encoding="utf-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<soapenv:Body>
<getDesignRelationshipsResponse
xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
<res xmlns="">
<messageId xsi:nil="true" />
<messageName xsi:nil="true" />
<statusCode>SUCCESS</statusCode>
<AgileObject>
<objectIdentifier>
<classId>2000008310</classId>
<className>Design</className>
<classDisplayName>Design</classDisplayName>
<objectId>6286256</objectId>
<objectName>DESIGN09444.SLDASM</objectName>
</objectIdentifier>
<options>
<id xsi:nil="true" />
<property>

```

```

</propertyValue>false</propertyValue>
</property>
</property>

<propertyName>OPTION HAS SEND PRIVILEGE</propertyName>
<propertyValue>false</propertyValue>
</property>
</property>

<propertyName>OPTION HAS COMMENT PRIVELEGE</propertyName>
<propertyValue>true</propertyValue>
</property>
</property>

<propertyName>OPTION APPROVE REJECT PRIVELEGE</propertyName>
<propertyValue>true</propertyValue>
</property>
</options>
</Version xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="7951"
displayName="Version">3</Version>
<Number xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6173">DESIGN09444.SLDASM</Number>
<Type xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="6175">
<selection>
<id>2000008310</id>
<apiName>DESIGN</apiName>
<value>Design</value>
</selection>
</Type>
<lifecyclePhase
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="6390" />
<Description xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6174"></Description>
<lastModifiedDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6178">2010-08-
19T10:24:33.000Z</lastModifiedDate>
<checkoutStatus
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="6389">
<selection>
<id>1</id>
<apiName>CHECKED IN</apiName>
<value>Checked In</value>
</selection>
</checkoutStatus>
<checkoutUser xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="6180" />
<checkoutDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6184" />
<checkoutLocation xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6183"></checkoutLocation>
<checkinDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="6388">2010-08-
10T16:39:56.000Z</checkinDate>
<createDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema"

```

```

                                attributeId="6177">2010-07-
0600:41:12:0000</dateTimeStamp>
                                <Label xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2000008316"></Label>
                                <componentType
xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
                                attributeId="2000008317" />
                                <Thumbnail xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
                                attributeId="2000008554" />
                                <Revision xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2000008685"></Revision>
                                <revisionDate xsi:type="xs:date"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2000008686" />
                                <checkinUser xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
                                attributeId="2000008717">
                                    <selection>
                                        <id>704</id>
                                        <apiName xsi:nil="true" />
                                        <value>Administrator, Admin
(admin)</value>
                                    </selection>
                                </checkinUser>
                                <itemChangeStatus xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2000009487"></itemChangeStatus>
                                <createUser xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
                                attributeId="1420">
                                    <selection>
                                        <id>704</id>
                                        <apiName xsi:nil="true" />
                                        <value>Administrator, Admin
(admin)</value>
                                    </selection>
                                </createUser>
                                <drawnBy xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
                                attributeId="2020" />
                                <checkedBy xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
                                attributeId="2021" />
                                <designSystem xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2007">SW2009</designSystem>
                                <CADFilename xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2017">botthsg trough 678901234567.SLDASM</CADFilename>
                                <CADOldFilename xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2018"></CADOldFilename>
                                <designSystemIdentifier xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2008"></designSystemIdentifier>
                                <Filetype xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2009">SLDASM</Filetype>
                                <Subtype xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2010"></Subtype>
                                <Family xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2011"></Family>
                                <Variant xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
                                attributeId="2012"></Variant>

```

```

xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2013"></drawingName>
<frameID xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2014"></frameID>
<nameFormat xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2015"></nameFormat>
<projectName xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2016"></projectName>
<localFlag xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="1301"></localFlag>
<partNumber xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="1302"></partNumber>
<filePath xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2019"></filePath>
<oldFilePath xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1331"></oldFilePath>
<modelType xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="1332"></modelType>
<modelReference xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1333"></modelReference>
<linkType xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="1334"></linkType>
<linkReference xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1335"></linkReference>
<TDMVersion xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="1307"></TDMVersion>
<TDMRevision xsi:type="xs:string"
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1308"></TDMRevision>
<MultiList01 xsi:type="common:AgileListEntryType"
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
attributeId="2090">
  <selection>
    <id>41000</id>
    <apiName xsi:nil="true" />
    <value>DEMO CUSTOMER 1</value>
  </selection>
</MultiList01>
</AgileObject>
</res>
</getDesignRelationshipsResponse>
</soapenv:Body>
</soapenv:Envelope>

```

generateThumbnails

Service

To trigger the generation of thumbnail images for Design assemblies once the complete check-in process has finished. Note that the PLM system will typically trigger the generation of thumbnail images automatically once the Design objects are checked-in, however, the thumbnail generation for assemblies requires a manual trigger to properly reflect all components. This is especially true for CAD models of certain tools.

Usage The request should contain at least one Agile Object to represent the Design for which the thumbnail generation should be triggered. All the data to identify the Design object should be present in the ObjectIdentifier, including class-id, subclass, number and version.

The service does not return any object in the response, only the status of the call. Note that the call to generate the thumbnails simply triggers the generation process on the PLM system. The actual generation of the thumbnails and the fact that they become visible on the Design form depends on the server side task schedule.

Syntax `AgileECResponseExtType generateThumbnailsResponseType = agileStub.generateThumbnails(generateThumbnailsRequestType);`

Special Handling Exceptions:

1. If the Object is not found for the given objectName
2. If the Object found is not of type Design
3. If the Object version is not valid
4. If the Object has no Object identifier

Basic Steps

1. Create the request object AgileECRequestExtType for the generateThumbnails operation.
2. Create an array of AgileBusinessObjectType elements
3. Create an instance of an AgileBusinessObjectType and set it as the first element in the array.
4. Set the object identifier to contain the appropriate classId, subclass, number and version.
5. Call the WebService and check the status of the response.

Sample Code Java

```
try {
    setupServerLogin();
    Integer classId = getIntegerProperty(DSIGN CLASS ID);
    String subClass = getStringProperty(DSIGN SUBCLASS);
    String number = getStringProperty(DSIGN NUMBER);
    String version = getStringProperty(DSIGN VERSION);
    AgileECRequestExtType generateThumbnailsRequestType = new
AgileECRequestExtType();
    AgileBusinessObjectType[] agileRequestObjects = new
AgileBusinessObjectType[1];
    agileRequestObjects[0] = new AgileBusinessObjectType();
    agileRequestObjects[0].setObjectIdentifier(new
ObjectIdentifierType(classId, subClass, null, null, number, version));
    generateThumbnailsRequestType.setAgileObject(agileRequestObjects);
    AgileECResponseExtType generateThumbnailsResponseType =
agileStub.generateThumbnails(generateThumbnailsRequestType);
    System.out.println("STATUS CODE: " +
generateThumbnailsResponseType.getStatusCode());
    if
(!generateThumbnailsResponseType.getStatusCode().toString().equals(ResponseStatusC
ode.SUCCESS.getValue())) {
        AgileExceptionListType[] agileExceptionListType =
generateThumbnailsResponseType.getExceptions();
```

```
        for (AgileExceptionListType exceptionListType :
            .....
            for (AgileExceptionType exception :
exceptionListType.getException()) {
                System.out.println(exception.getMessage());
            }
        } else {
            System.out.println("SUCCESS!");
        }
    }
}
```

Sample Code SOAP

```
==== Request ====
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Body>
    <generateThumbnails xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
      <req xmlns="">
        <AgileObject>
          <objectIdIdentifier>
            <classId>2000008310</classId>
            <className>Design</className>
            <objectId xsi:nil="true" />
            <objectName>DESIGN03412</objectName>
            <version>2</version>
          </objectIdIdentifier>
        </AgileObject>
      </req>
    </generateThumbnails>
  </soapenv:Body>
</soapenv:Envelope>
==== Response ====
<?xml version="1.0" encoding="utf-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Body>
    <generateThumbnailsResponse
xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
      <res xmlns="">
        <messageId xsi:nil="true" />
        <messageName xsi:nil="true" />
        <statusCode>SUCCESS</statusCode>
      </res>
    </generateThumbnailsResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

getUserPreferredLanguage

Service To retrieve the setting for the preferred language of the current user.

Usage The request should not contain any AgileObject, however, it should contain an empty element of type GetUserPreferredLanguageRequest.

The service returns the preferred language in the response.

Syntax GetUserPreferredLanguageResponseType
userPreferredLanguageResponseType =
agileStub.getUserPreferredLanguage (userPreferredLanguageRequestType)
;

Basic Steps

1. Create the request object `GetUserPreferredLanguageRequestType` for the `getUserPreferredLanguage` operation.
2. Create an empty element of type `GetUserPreferredLanguageRequest` and set it to the request type created above.
3. Call the `WebService` and get the preferred language setting from the response.

Sample Code Java

```

try {
    setupServerLogin();
    GetUserPreferredLanguageRequestType userPreferredLanguageRequestType =
new GetUserPreferredLanguageRequestType();
    GetUserPreferredLanguageRequest requests = new
GetUserPreferredLanguageRequest();
    userPreferredLanguageRequestType.setRequests(requests);
    GetUserPreferredLanguageResponseType userPreferredLanguageResponseType =
agileStub.getUserPreferredLanguage(userPreferredLanguageRequestType);
    System.out.println("STATUS CODE: " +
userPreferredLanguageResponseType.getStatusCode());
    if
(!userPreferredLanguageResponseType.getStatusCode().toString().equals(ResponseStat
usCode.SUCCESS.getValue())) {
        AgileExceptionListType[] agileExceptionListType =
userPreferredLanguageResponseType.getExceptions();
        for (AgileExceptionListType exceptionListType :
agileExceptionListType) {
            for (AgileExceptionType exception :
exceptionListType.getException()) {
                System.out.println(exception.getMessage());
            }
        }
    } else {
        System.out.println("SUCCESS!");
        UserPreferredLanguageResponse response =
userPreferredLanguageResponseType.getResponses();
        System.out.println("Preferred language: " + response.getLanguage());
    }
}

```

Sample Code SOAP

```

==== Request ====
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Body>
    <getUserPreferredLanguage
      xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
      <req xmlns="">
        <messageId>MessageId</messageId>
        <requests />
      </req>
    </getUserPreferredLanguage>
  </soapenv:Body>
</soapenv:Envelope>
==== Response ====
<?xml version="1.0" encoding="utf-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Body>
    <getUserPreferredLanguageResponse
      xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
      <res xmlns="">
        <messageId>MessageId</messageId>
        <messageName xsi:nil="true" />
        <statusCode>SUCCESS</statusCode>
        <responses>
          <language>en</language>
          <country></country>
        </responses>
      </res>
    </getUserPreferredLanguageResponse>
  </soapenv:Body>
</soapenv:Envelope>

```

```
        </getUserPreferredLanguageResponse>  
    </soapenv:Body>  
</soapenv:Envelope>
```

EC Web Services - Orchestrated Calls

This chapter includes the following:

▪ getDesignPropertiesAndRights.....	95
▪ getDesignItemPropertiesAndRights.....	101
▪ createUpdateThenReserve.....	107
▪ reserveThenCreateUpdate	114
▪ createUpdateThenRelate.....	127
▪ retrieveDesignStructureAndMetadata.....	136

The orchestrated services for Engineering Collaboration in Agile 9.3 are based on Oracle's BPEL engine, which is a very flexible and robust framework for automating sequences of Web Service calls to conduct several actions within one single call to the server side. The result is improved performance, especially in WAN environments, where the response time for a round trip to the server is significantly longer than that in LAN environments.

The following sections list the available EC Orchestrated Web Services. For information about the compilation and deployment of these services, please refer to the EC BPEL Services Guide, which is included in the documentation for this release.

getDesignPropertiesAndRights

Service To retrieve the metadata of the given Agile Class and the privileges of the given user on the given Design object in one call.

Usage The request should not have any Agile Object. Instead, all the parameters used by this service are provided as properties included in the first general Parameters section of the request.

The following properties should be included in this section:

1. **userIdentification** – The name of the user whose privileges should be checked
2. **classIdentifier** – The numeric ID of the Designs' subclass whose tables' metadata will be retrieved. Note that metadata for the following tables will be retrieved:

TitleBlock (table id = 6146)
Page Two (table id = 810)
Page Three (table id = 1501)
Where Used (table id = 6149)
Files (table id = 6150)
Relationships (table id = 2000007761)
History (table id = 815)
Structure (table id = 2000008318)
Where Used Design (table id = 2000008495)

3. **object Number** - The number of the Design object for which the user's privileges will be retrieved
4. **privilege** – The number of the privilege to check. Note that more than one privilege property may be included in the generalParameters section to check more than one privilege in one call.

The service will return a response which includes each of the individual responses obtained during the execution of the orchestrated process.

Syntax

```
GetDesignPropertiesAndRightsResponseRes  
getDesignPropertiesAndRightsResponseType =  
bpelStub.getDesignPropertiesAndRights (getDesignPropertiesAndRightsRe  
questType);
```

Basic Steps

1. Create the request object AgileECRequestExtType for the getDesignPropertiesAndRights operation.
2. Create a general parameters list of type PropertyListType
3. Add the property 'userIdentification' to the list, set its value to the desired username.
4. Add the property 'classIdentifier' to the list, set its value to the subclass of Design whose metadata should be retrieved.
5. Add the property 'objectNumber' to the list, set its value to the number of the design whose privileges should be checked.
6. Add one or more 'privilege' properties to the list, set the values of the ids of the privileges to check.
7. Call the WebService and review the metadata information returned, as well as the privilege information.

Sample Code Java

```
try {  
    setupServerLogin();  
    String userId = getStringProperty("USERNAME");  
    Integer designClassId = getIntegerProperty(DSIGN_CLASS_ID);  
    Integer partClassId = getIntegerProperty(PART_CLASS_ID);  
    String designNumber = getStringProperty(DSIGN_NUMBER);  
    String partNumber = getStringProperty(PART_NUMBER);
```

```

        AgileECRequestExtType getDesignPropertiesAndRightsRequestType = new
        PropertyListType[] generalParameters = new PropertyListType[2];
        generalParameters[0] = new PropertyListType();
        PropertyType[] props = new PropertyType[8];
        props[0] = new PropertyType("userIdentification", userId);
        props[1] = new PropertyType("classIdentifier",
String.valueOf(designClassId));
        props[2] = new PropertyType("objectNumber", designNumber);
        props[3] = new PropertyType("type", "design");
        // Multiple privileges can be checked in one call
        props[4] = new PropertyType("privilege", "2");
        props[5] = new PropertyType("privilege", "15");
        props[6] = new PropertyType("privilege", "17");
        props[7] = new PropertyType("privilege", "38");
        generalParameters[0].setProperty(props);
        generalParameters[1] = new PropertyListType(); props = new
PropertyType[8]; props[0] = new PropertyType("userIdentification", userId);
        props[1] = new PropertyType("classIdentifier",
String.valueOf(partClassId));
        props[2] = new PropertyType("objectNumber", partNumber);
        props[3] = new PropertyType("type", "item");
        // Multiple privileges can be checked in one call
        props[4] = new PropertyType("privilege", "2");
        props[5] = new PropertyType("privilege", "15");
        props[6] = new PropertyType("privilege", "17");
        props[7] = new PropertyType("privilege", "38");
        generalParameters[1].setProperty(props);

        getDesignPropertiesAndRightsRequestType.setGeneralParameters(generalParameters);
        GetDesignItemPropertiesAndRightsResponseRes
        getDesignPropertiesAndRightsResponseType =
        bpelStub.getDesignItemPropertiesAndRights(getDesignPropertiesAndRightsRequestType)
        ;
        System.out.println("STATUS CODE: " +
        getDesignPropertiesAndRightsResponseType.getStatusCode());
        if
        (!getDesignPropertiesAndRightsResponseType.getStatusCode().toString().equals(Respo
nseStatusCode.SUCCESS.getValue())) {
            CheckPrivilegeResponse checkOutFFResponse =
            getDesignPropertiesAndRightsResponseType.getCheckPrivilegeResponse();
            AgileExceptionListType[] agileExceptionListType =
            checkOutFFResponse.getResponse().getExceptions();
            if (agileExceptionListType != null) {
                for (AgileExceptionListType exceptionListType :
            agileExceptionListType) {
                    for (AgileExceptionType exception :
            exceptionListType.getException()) {
                        System.out.println(exception.getMessage());
                    }
                }
            } else { // If the call was successful, then examine its contents
                AgileCheckPrivilegeResponseType[] checkPrivilegeResponses =
            getDesignPropertiesAndRightsResponseType.getCheckPrivilegeResponse().getResponse()
            .getResponses();
                if (checkPrivilegeResponses != null) {
                    for (AgileCheckPrivilegeResponseType agileResponse :
            checkPrivilegeResponses) {
                        CheckPrivilegeType privilege = agileResponse.getPrivilege();
                        System.out.println("Privilege ID: " + privilege.getPrivilege() +
            ". Has Privilege: " + privilege.getCheckPrivilege());
                    }
                } else {
                    System.out.println("No results!");
                }
            }
        }
    }
}

```

Sample Code SOAP

```

===== Request =====
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<soapenv:Body>
<getDesignItemPropertiesAndRights

```

```

<req xmlns="">
  <generalParameters>
    <id xsi:nil="true" />
    <property>

    <propertyName>userIdentification</propertyName>
      <propertyValue>admin</propertyValue>
    </property>
    <property>

    <propertyName>classIdentifier</propertyName>
      <propertyValue>2000008310</propertyValue>
    </property>
    <property>
      <propertyName>objectNumber</propertyName>
      <propertyValue>DESIGN09502</propertyValue>
    </property>
    <property>
      <propertyName>type</propertyName>
      <propertyValue>design</propertyValue>
    </property>
    <property>
      <propertyName>privilege</propertyName>
      <propertyValue>2</propertyValue>
    </property>
    <property>
      <propertyName>privilege</propertyName>
      <propertyValue>15</propertyValue>
    </property>
    <property>
      <propertyName>privilege</propertyName>
      <propertyValue>17</propertyValue>
    </property>
    <property>
      <propertyName>privilege</propertyName>
      <propertyValue>38</propertyValue>
    </property>
  </generalParameters>
  <generalParameters>
    <id xsi:nil="true" />
    <property>

    <propertyName>userIdentification</propertyName>
      <propertyValue>admin</propertyValue>
    </property>
    <property>

    <propertyName>classIdentifier</propertyName>
      <propertyValue>10141</propertyValue>
    </property>
    <property>
      <propertyName>objectNumber</propertyName>
      <propertyValue>P00776</propertyValue>
    </property>
    <property>
      <propertyName>type</propertyName>
      <propertyValue>item</propertyValue>
    </property>
    <property>
      <propertyName>privilege</propertyName>
      <propertyValue>2</propertyValue>
    </property>
    <property>
      <propertyName>privilege</propertyName>
      <propertyValue>15</propertyValue>
    </property>
    <property>
      <propertyName>privilege</propertyName>
      <propertyValue>17</propertyValue>
    </property>
    <property>
      <propertyName>privilege</propertyName>
      <propertyValue>38</propertyValue>
    </property>
  </generalParameters>
</req>
</getDesignItemPropertiesAndRights>
</soapenv:Body>
</soapenv:Envelope>
==== Response ====

```



```

    xmlns:wsa="http://www.w3.org/2005/08/addressing"
    <env:Header>
      <wsa:MessageID>urn:E2612FC0AC5211DFBFDF3F7C676F77F9</wsa:MessageID>
      <wsa:ReplyTo>
        <wsa:Address>http://www.w3.org/2005/08/addressing/anonymous
        </wsa:Address>
      </wsa:ReplyTo>
    </env:Header>
    <env:Body>
      <getDesignItemPropertiesAndRightsResponse
xmlns:dvm="http://www.oracle.com/XSL/Transform/java/oracle.tip.dvm.LookupValue"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
  <res xmlns="">
    <messageId />
    <messageName />
    <statusCode>WARNING</statusCode>
    <sessionParameters />
    <generalParameters>
      <id xsi:nil="true" />
      <property>
        <propertyName>userIdentification</propertyName>
        <propertyValue>admin</propertyValue>
      </property>
      <property>
        <propertyName>classIdentifier</propertyName>
        <propertyValue>2000008310</propertyValue>
      </property>
      <property>
        <propertyName>objectNumber</propertyName>
        <propertyValue>DESIGN09502</propertyValue>
      </property>
      <property>
        <propertyName>type</propertyName>
        <propertyValue>design</propertyValue>
      </property>
      <property>
        <propertyName>privilege</propertyName>
        <propertyValue>2</propertyValue>
      </property>
      <property>
        <propertyName>privilege</propertyName>
        <propertyValue>15</propertyValue>
      </property>
      <property>
        <propertyName>privilege</propertyName>
        <propertyValue>17</propertyValue>
      </property>
      <property>
        <propertyName>privilege</propertyName>
        <propertyValue>38</propertyValue>
      </property>
    </generalParameters>
    <generalParameters>
      <id xsi:nil="true" />
      <property>
        <propertyName>userIdentification</propertyName>
        <propertyValue>admin</propertyValue>
      </property>
      <property>
        <propertyName>classIdentifier</propertyName>
        <propertyValue>10141</propertyValue>
      </property>
      <property>
        <propertyName>objectNumber</propertyName>
        <propertyValue>P00776</propertyValue>
      </property>
      <property>
        <propertyName>type</propertyName>
        <propertyValue>item</propertyValue>
      </property>
      <property>
        <propertyName>privilege</propertyName>
        <propertyValue>2</propertyValue>
      </property>
      <property>
        <propertyName>privilege</propertyName>
        <propertyValue>15</propertyValue>
      </property>
    </generalParameters>
  </res>
</env:Body>
</env:Envelope>

```

```

        <propertyName>privilege</propertyName>
        <propertyValue>17</propertyValue>
    </property>
    <property>
        <propertyName>privilege</propertyName>
        <propertyValue>38</propertyValue>
    </property>
</generalParameters>
<notes>
    <id />
    <processNote>
        <message />
    </processNote>
</notes>
<exceptions>
    <id />
    <exception>
        <exceptionId />
        <message />
    </exception>
</exceptions>
<getTableMetadataResponse xmlns:xsd="http://www.w3.org/2001/XMLSchema"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns="http://xmlns.oracle.com/AgileObjects/Core/AdminMetadata/V1">
    <response xmlns="">Response omitted from this sample due to
        the size. Check the documentation about the getTableMetadata
        service, which is part of the AdminMetadata services in a9
    </response>
</getTableMetadataResponse>
<checkPrivilegeResponse xmlns:xsd="http://www.w3.org/2001/XMLSchema"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns="http://xmlns.oracle.com/AgileObjects/Core/Business/V1">
    <response xmlns="">
        <messageId>f467ace57764bfde:-1d875c14:12a8e6a4023:-7f87
        </messageId>
        <messageName>checkPrivilege-by-
ECGetDesignItemPropertiesAndRights
        </messageName>
        <statusCode>SUCCESS</statusCode>
        <responses>
            <userIdentification>
                <userIdentifier>admin</userIdentifier>
            </userIdentification>
            <privilege>
                <privilege>2</privilege>
                <checkPrivilege>true</checkPrivilege>
                <classIdentifier>2000008310</classIdentifier>
                <objectNumber>DESIGN09502</objectNumber>
            </privilege>
        </responses>
        <responses>
            <userIdentification>
                <userIdentifier>admin</userIdentifier>
            </userIdentification>
            <privilege>
                <privilege>15</privilege>
                <checkPrivilege>false</checkPrivilege>
                <classIdentifier>2000008310</classIdentifier>
                <objectNumber>DESIGN09502</objectNumber>
            </privilege>
        </responses>
        <responses>
            <userIdentification>
                <userIdentifier>admin</userIdentifier>
            </userIdentification>
            <privilege>
                <privilege>17</privilege>
                <checkPrivilege>true</checkPrivilege>
                <classIdentifier>2000008310</classIdentifier>
                <objectNumber>DESIGN09502</objectNumber>
            </privilege>
        </responses>
        <responses>
            <userIdentification>
                <userIdentifier>admin</userIdentifier>
            </userIdentification>
            <privilege>
                <privilege>38</privilege>
                <checkPrivilege>true</checkPrivilege>
                <classIdentifier>2000008310</classIdentifier>

```

```

        </privilege>
      </responses>
    <responses>
      <userIdentification>
        <userIdentifier>admin</userIdentifier>
      </userIdentification>
      <privilege>
        <privilege>2</privilege>
        <checkPrivilege>false</checkPrivilege>
        <classIdentifier>10141</classIdentifier>
        <objectNumber>P00776</objectNumber>
      </privilege>
    </responses>
  <responses>
    <userIdentification>
      <userIdentifier>admin</userIdentifier>
    </userIdentification>
    <privilege>
      <privilege>15</privilege>
      <checkPrivilege>false</checkPrivilege>
      <classIdentifier>10141</classIdentifier>
      <objectNumber>P00776</objectNumber>
    </privilege>
  </responses>
</responses>
<responses>
  <userIdentification>
    <userIdentifier>admin</userIdentifier>
  </userIdentification>
  <privilege>
    <privilege>17</privilege>
    <checkPrivilege>true</checkPrivilege>
    <classIdentifier>10141</classIdentifier>
    <objectNumber>P00776</objectNumber>
  </privilege>
</responses>
</responses>
<responses>
  <userIdentification>
    <userIdentifier>admin</userIdentifier>
  </userIdentification>
  <privilege>
    <privilege>38</privilege>
    <checkPrivilege>false</checkPrivilege>
    <classIdentifier>10141</classIdentifier>
    <objectNumber>P00776</objectNumber>
  </privilege>
</responses>
</response>
</checkPrivilegeResponse>
</res>
</getDesignItemPropertiesAndRightsResponse>
</env:Body>
</env:Envelope>

```

getDesignItemPropertiesAndRights

Service To retrieve the metadata of the given AgileClass and the privileges of the given user on the given object in one call. This call may combine Design and Item classes in one call, thus being able to retrieve metadata and privilege information for both class types in one single call.

Usage The request should not have any Agile Object. Instead, all the parameters used by this service are provided as properties included in the first two generalParameters sections of the request.

The following properties should be included in each of the generalParameters sections:

1. **userIdentification** – The name of the user whose privileges should be checked
2. **classIdentifier** – The numeric ID of the subclass whose tables' metadata will be retrieved. Note that for a subclass of design, metadata for the following tables will be retrieved:

TitleBlock (table id = 6146)

Page Two (table id = 810)

Page Three (table id = 1501)

Where Used (table id = 6149)

Files (table id = 6150)

Relationships (table id = 2000007761)

History (table id = 815)

Structure (table id = 2000008318)

Where Used Design (table id = 2000008495)

For a subclass of parts or documents, metadata for the following tables will be retrieved:

TitleBlock (table id = 801)

Page Two (table id = 810)

Page Three (table id = 1501)

Where Used (table id = 805)

Attachments (table id = 807)

Relationships (table id = 2000007761)

History (table id = 814)

BOM (table id = 803)

Pending Changes (table id = 804)

Change History (table id = 802)

Redline BOM (table id = -803)

3. **type** –Set to either "design" or "item", depending on whether the given subclass is a subclass of the Designs class or a subclass of the Parts or Documents classes.
4. **objectNumber** – The number of the Design or Item for which the user's privileges will be retrieved.
5. **privilege** – The number of the privilege to check. Note that more than one privilege property may be included in the generalParameters section to check more than one privilege in one call.

The service will return a response which includes each of the individual responses obtained during the execution of the orchestrated process.

Syntax

```
GetDesignItemPropertiesAndRightsResponseRes  
getDesignPropertiesAndRightsResponseType =
```

```
bpelStub.getDesignItemPropertiesAndRights (getDesignPropertiesAndRightsRequestType);
```

Basic Steps

1. Create the request object `AgileECRequestExtType` for the `getDesignItemPropertiesAndRights` operation.
2. Create an array of general parameters list of type `PropertyListType` with a maximum of two elements.
3. For each of the `generalParameter` elements in the array, perform steps 4 to 8 below:
4. Add the property 'userIdentification' to the list, set its value to the desired username.
5. Add the property 'classIdentifier' to the list, set its value to the subclass of Design whose metadata should be retrieved.
6. Add the property 'type' set to either 'item' or 'design'.
7. Add the property 'objectNumber' to the list, set its value to the number of the design whose privileges should be checked.
8. Add one or more 'privilege' properties to the list, set the values of the ids of the privileges to check.
9. Call the `WebService` and review the metadata information returned, as well as the privilege information.

Sample Code Java

```
try {
    setupServerLogin();
    String userId = getStringProperty("USERNAME");
    Integer classId = getIntegerProperty(DSIGN CLASS ID);
    String number = getStringProperty(DSIGN NUMBER);
    AgileECRequestExtType getDesignPropertiesAndRightsRequestType = new
    AgileECRequestExtType();
    PropertyListType[] generalParameters = new PropertyListType[1];
    generalParameters[0] = new PropertyListType();
    PropertyType[] props = new PropertyType[7];
    props[0] = new PropertyType("userIdentification", userId);
    props[1] = new PropertyType("classIdentifier", String.valueOf(classId));
    props[2] = new PropertyType("objectNumber", number);
    // Multiple privileges can be checked in one call
    props[3] = new PropertyType("privilege", "2");
    props[4] = new PropertyType("privilege", "15");
    props[5] = new PropertyType("privilege", "17");
    props[6] = new PropertyType("privilege", "38");
    generalParameters[0].setProperty(props);

    getDesignPropertiesAndRightsRequestType.setGeneralParameters(generalParameters);
    GetDesignPropertiesAndRightsResponseType
    getDesignPropertiesAndRightsResponse =
    bpelStub.getDesignPropertiesAndRights(getDesignPropertiesAndRightsRequestType);
    System.out.println("STATUS CODE: " +
    getDesignPropertiesAndRightsResponseType.getStatusCode());
    if
    (!getDesignPropertiesAndRightsResponseType.getStatusCode().toString().equals(Response
    nseStatusCode.SUCCESS.getValue())) {
        CheckPrivilegeResponse checkOutFFResponse =
        getDesignPropertiesAndRightsResponseType.getCheckPrivilegeResponse();
        AgileExceptionListType[] agileExceptionListType =
        checkOutFFResponse.getResponse().getExceptions();
        if (agileExceptionListType != null) {
            for (AgileExceptionListType exceptionListType :
            agileExceptionListType) {
```

```

        for (AgileExceptionType exception :
            System.out.println(exception.getMessage());
        }
    }
} else { // If the call was successful, then examine its contents
    AgileCheckPrivilegeResponseType[] checkPrivilegeResponses =
getDesignPropertiesAndRightsResponseType.getCheckPrivilegeResponse().getResponse().
getResponses();
    if (checkPrivilegeResponses != null) {
        for (AgileCheckPrivilegeResponseType agileResponse :
checkPrivilegeResponses) {
            CheckPrivilegeType privilege = agileResponse.getPrivilege();
            System.out.println("Privilege ID: " + privilege.getPrivilege() +
". Has Privilege: " + privilege.getCheckPrivilege());
        }
    } else {
        System.out.println("No results!");
    }
}
}
}

```

Sample Code SOAP

```

==== Request ====
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<soapenv:Body>
    <getDesignPropertiesAndRights
        xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
        <req xmlns="">
            <generalParameters>
                <id xsi:nil="true" />
                <property>
                    <propertyName>userIdentification</propertyName>
                    <propertyValue>admin</propertyValue>
                </property>
                <property>
                    <propertyName>classIdentifier</propertyName>
                    <propertyValue>2000008310</propertyValue>
                </property>
                <property>
                    <propertyName>objectNumber</propertyName>
                    <propertyValue>DESIGN09502</propertyValue>
                </property>
                <property>
                    <propertyName>privilege</propertyName>
                    <propertyValue>2</propertyValue>
                </property>
                <property>
                    <propertyName>privilege</propertyName>
                    <propertyValue>15</propertyValue>
                </property>
                <property>
                    <propertyName>privilege</propertyName>
                    <propertyValue>17</propertyValue>
                </property>
                <property>
                    <propertyName>privilege</propertyName>
                    <propertyValue>38</propertyValue>
                </property>
            </generalParameters>
        </req>
    </getDesignPropertiesAndRights>
</soapenv:Body>
</soapenv:Envelope>
==== Response ====
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:wsa="http://www.w3.org/2005/08/addressing">
<env:Header>
    <wsa:MessageID>urn:27E6B210AC4711DFBFD3F7C676F77F9</wsa:MessageID>
    <wsa:ReplyTo>
        <wsa:Address>http://www.w3.org/2005/08/addressing/anonymous

```

```

        </wsa:ReplyTo>
    </env:Header>
    <env:Body>
        <getDesignPropertiesAndRightsResponse
xmlns:dvm="http://www.oracle.com/XSL/Transform/java/oracle.tip.dvm.LookupValue"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
            <res xmlns="">
                <messageId />
                <messageName />
                <statusCode>SUCCESS</statusCode>
                <sessionParameters />
                <generalParameters>
                    <id xsi:nil="true" />
                    <property>
<propertyName>userIdentification</propertyName>
                        <propertyValue>admin</propertyValue>
                    </property>
                </property>
<propertyName>classIdentifier</propertyName>
                        <propertyValue>2000008310</propertyValue>
                    </property>
                </property>
                    <propertyName>objectNumber</propertyName>
                    <propertyValue>DESIGN09502</propertyValue>
                </property>
                </property>
                    <propertyName>privilege</propertyName>
                    <propertyValue>2</propertyValue>
                </property>
                </property>
                    <propertyName>privilege</propertyName>
                    <propertyValue>15</propertyValue>
                </property>
                </property>
                    <propertyName>privilege</propertyName>
                    <propertyValue>17</propertyValue>
                </property>
                </property>
                    <propertyName>privilege</propertyName>
                    <propertyValue>38</propertyValue>
                </property>
            </generalParameters>
            <notes>
                <id />
                <processNote>
                    <message />
                </processNote>
            </notes>
            <exceptions>
                <id />
                <exception>
                    <exceptionId />
                    <message />
                </exception>
            </exceptions>
            <warnings>
                <id />
                <warning>
                    <message />
                </warning>
            </warnings>
        </getDesignPropertiesAndRightsResponse>
        <getTableMetadataResponse
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xmlns="http://xmlns.oracle.com/AgileObjects/Core/AdminMetadata/V1">
            <response xmlns="">Response omitted from this
sample due to
the size. Check the documentation about
the getTableMetadata service, which is part of the AdminMetadata services in
a9</response>
        </getTableMetadataResponse>
        <checkPrivilegeResponse
xmlns:xsd="http://www.w3.org/2001/XMLSchema"

```

```

    xmlns:xsi="http://www.w3.org/2001/XMLSchema-
    <response xmlns=""
      <messageId>f467ace57764bfde:-
1d875c14:12a8e6a4023:-7f94
      </messageId>
      <messageName>checkPrivilege-by-
ECGetDesignPropertiesAndRights
      </messageName>
      <statusCode>SUCCESS</statusCode>
      <responses>
        <userIdentification>
<userIdentifier>admin</userIdentifier>
          </userIdentification>
          <privilege>
            <privilege>2</privilege>
<checkPrivilege>true</checkPrivilege>
<classIdentifier>2000008310</classIdentifier>
<objectNumber>DESIGN09502</objectNumber>
          </privilege>
        </responses>
      </responses>
        <userIdentification>
<userIdentifier>admin</userIdentifier>
          </userIdentification>
          <privilege>
            <privilege>15</privilege>
<checkPrivilege>false</checkPrivilege>
<classIdentifier>2000008310</classIdentifier>
<objectNumber>DESIGN09502</objectNumber>
          </privilege>
        </responses>
      </responses>
        <userIdentification>
<userIdentifier>admin</userIdentifier>
          </userIdentification>
          <privilege>
            <privilege>17</privilege>
<checkPrivilege>true</checkPrivilege>
<classIdentifier>2000008310</classIdentifier>
<objectNumber>DESIGN09502</objectNumber>
          </privilege>
        </responses>
      </responses>
        <userIdentification>
<userIdentifier>admin</userIdentifier>
          </userIdentification>
          <privilege>
            <privilege>38</privilege>
<checkPrivilege>true</checkPrivilege>
<classIdentifier>2000008310</classIdentifier>
<objectNumber>DESIGN09502</objectNumber>
          </privilege>
        </responses>
      </response>
    </checkPrivilegeResponse>
  </res>
</getDesignPropertiesAndRightsResponse>
</env:Body>
</env:Envelope>

```


createUpdateThenReserve

Service	To create or update one or many Design objects and then check them out.
Usage	<p>The request should have at least one AgileObject, which represents the Design object to be created or updated. The attributes of the new design should be included in the object identifier, including class id, subclass and number. If an autonumber source should be used to provide the number for the new design, then the objectName element in the ObjectIdentifier should be left empty and a property named "autoNumberSrc" should be added to the first set of options of the AgileObject. The value of this property should be set to the name of the autonumber source to use.</p> <p>The service will attempt to create the objects it finds in the request, therefore, an error will be triggered if an object with the given number already exists in the PLM system. To avoid this error and allow an existing object to be updated, a property called "updateExistingObject" should be added to the first set of options of the AgileObject with its value set to "true". Other attributes to be populated, such as TitleBlock, Page Two or Page Three attributes should be included inside table element with the table identifier set to the respective page. One single row element should be included in the table and attributes are added as child elements of the row, with the attributeld set to the BaseID of the attribute to update.</p> <p>The service will return a response which includes each of the individual responses obtained during the execution of the orchestrated process.</p>
Syntax	<pre>CreateUpdateThenReserveResponseRes createUpdateThenReserveResponseType = bpelStub.createUpdateThenReserve(createUpdateThenReserveRequestType)</pre>
Basic Steps	<ol style="list-style-type: none"> 1. Create the request object AgileECRequestExtType for the createUpdateThenRelate operation. 2. Create an array of AgileBusinessObjectType elements 3. Create an instance of an AgileBusinessObjectType and set it as the first element in the array. 4. Set the object identifier to contain the appropriate classId, subclass, and number. 5. Optionally define an array of PropertyListType to add options to this object. 6. In the list, define PropertyType elements for the optional properties "autoNumberSrc" and "updateExistingObject" 7. If attributes in Title Block, Page Two or Page Three need to be updated, define table elements for these tables and add a single AgileRowType element to them. Define the attributes inside the row element as any elements with an attribute called attributeld, set to the BaseID of the attribute to update. 8. Call the WebService and check the individual responses included in the global response.

Sample Code Java

```

try {
    setupServerLogin();
    Integer classId = getIntegerProperty(DSIGN CLASS ID);
    String subClass = getStringProperty(DSIGN SUBCLASS);
    String description = getStringProperty(DSIGN DESCRIPTION);
    String autoNumberSource = getStringProperty(DSIGN AUTONUMBER SOURCE);
    AgileECRequestExtType createUpdateThenReserveRequestType = new
AgileECRequestExtType();
    AgileBusinessObjectType[] agileRequestObjects = new
AgileBusinessObjectType[1];
    agileRequestObjects[0] = new AgileBusinessObjectType();
    agileRequestObjects[0].setObjectIdentifier(new
ObjectIdentifierType(classId, subClass, null, null, null, null));
    // set option to use autonumber for this design
    PropertyListType options = new PropertyListType();
    PropertyType[] props = new PropertyType[1];
    props[0] = new PropertyType("autoNumberSrc", autoNumberSource);
    options.setProperty(props);
    agileRequestObjects[0].setOptions(options);
    AgileTableType[] parentTables = new AgileTableType[1];
    // Update the description
    parentTables[0] = new AgileTableType();
    TableIdentifierType tbTableIdentifier = new TableIdentifierType();
    tbTableIdentifier.setTableName("Title Block");
    tbTableIdentifier.setTableId(new Integer(6146));
    parentTables[0].setTableIdentifier(tbTableIdentifier);
    AgileRowType[] tbRow = new AgileRowType[1];
    // First row
    tbRow[0] = new AgileRowType();
    MessageElement[] anyElementTbRow = new MessageElement[1];
    anyElementTbRow[0] = new MessageElement();
    anyElementTbRow[0].setName("Description");
    anyElementTbRow[0].addAttribute(null, "attributeId", "6174");
    anyElementTbRow[0].setValue(description);
    tbRow[0].set any(anyElementTbRow);

    parentTables[0].setRow(tbRow);
    agileRequestObjects[0].setTable(parentTables);
    createUpdateThenReserveRequestType.setAgileObject(agileRequestObjects);
    CreateUpdateThenReserveResponseRes createUpdateThenReserveResponseType =
bpelStub.createUpdateThenReserve(createUpdateThenReserveRequestType);
    System.out.println("STATUS CODE: " +
createUpdateThenReserveResponseType.getStatusCode());
    if
(!createUpdateThenReserveResponseType.getStatusCode().toString().equals(ResponseSt
atusCode.SUCCESS.getValue())) {
        CreateObjectResponseType createObjectResponse =
createUpdateThenReserveResponseType.getCreateObjectResponse().getResponse();
        AgileExceptionListType[] agileExceptionListType =
createObjectResponse.getExceptions();
        if (agileExceptionListType != null) {
            for (AgileExceptionListType exceptionListType :
agileExceptionListType) {
                for (AgileExceptionType exception :
exceptionListType.getException()) {
                    System.out.println(exception.getMessage());
                }
            }
        }
        CheckOutFFResponse checkOutFFResponse =
createUpdateThenReserveResponseType.getCheckOutFFResponse();
        agileExceptionListType =
checkOutFFResponse.getResponse().getExceptions();
        if (agileExceptionListType != null) {
            for (AgileExceptionListType exceptionListType :
agileExceptionListType) {
                for (AgileExceptionType exception :
exceptionListType.getException()) {
                    System.out.println(exception.getMessage());
                }
            }
        }
    } else { // If the object, was successfully retrieved, then examine its
contents

```

```

        AgileCreateObjectResponse[] agileCreateResponses =
createUpdateThenReserveResponseType.getCreateObjectResponse().getResponse().getRes
        if (agileCreateResponses != null) {
            for (AgileCreateObjectResponse agileResponse :
agileCreateResponses) {
                AgileObjectType agileObject = agileResponse.getAgileObject();
                ObjectIdentifierType objectIdentifier =
agileObject.getObjectIdentifier();
                System.out.println("Agile Object Class ID: " +
objectIdentifier.getClassId());
                System.out.println("Agile Object Class Name: " +
objectIdentifier.getClassName());
                System.out.println("Agile Object Class Display Name: " +
objectIdentifier.getClassDisplayName());
                System.out.println("Agile Object Object ID: " +
objectIdentifier.getObjectId());
                System.out.println("Agile Object Object Name: " +
objectIdentifier.getObjectName());
                AgileTableType[] tables = agileObject.getTable();
                if (tables != null) {
                    for (AgileTableType table : tables) {
                        System.out.println("Table Name: " +
table.getTableIdentifier().getTableName());
                        AgileRowType[] rows = table.getRow();
                        int rowNo = 0;
                        if (rows != null) {
                            for (AgileRowType row : rows) {
                                System.out.println("Table Row Number " + rowNo++);
                                for (MessageElement node : row.get any()) {
                                    System.out.println("** " + node.getLocalName() +
": " + node.getValue());
                                }
                                Iterator<Node> nodeIt = (Iterator<Node>)
node.getChildElements();
                                while (nodeIt.hasNext()) {
                                    Node selectionNode = nodeIt.next();
                                    if (selectionNode instanceof MessageElement) {
                                        MessageElement element = (MessageElement)
selectionNode;
                                        Iterator<MessageElement> subNodeIt =
(Iterator<MessageElement>) element.getChildElements();
                                        while (subNodeIt.hasNext()) {
                                            MessageElement subNode =
subNodeIt.next();
                                            System.out.println("*** Selection " +
subNode.getLocalName() + ": " + subNode.getValue());
                                        }
                                    }
                                }
                            }
                        }
                    }
                }
                for (MessageElement node : agileObject.get any()) {
                    System.out.println("Agile Object " + node.getLocalName() + ":
" + node.getValue());
                    Iterator<Node> nodeIt = (Iterator<Node>)
node.getChildElements();
                    while (nodeIt.hasNext()) {
                        Node selectionNode = nodeIt.next();
                        if (selectionNode instanceof MessageElement) {
                            MessageElement element = (MessageElement)
selectionNode;
                            Iterator<MessageElement> subNodeIt =
(Iterator<MessageElement>) element.getChildElements();
                            while (subNodeIt.hasNext()) {
                                MessageElement subNode = subNodeIt.next();
                                System.out.println("*** Selection " +
subNode.getLocalName() + ": " + subNode.getValue());
                            }
                        }
                    }
                }
            }
        }
        else {
            System.out.println("No results!");
        }
    }
}

```

Sample Code SOAP

```

==== Request ====
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Body>
    <createUpdateThenReserve
      xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
      <req xmlns="">
        <AgileObject>
          <objectIdentifier>
            <classId>2000008310</classId>
            <className>Design</className>
            <objectId xsi:nil="true" />
            <objectName xsi:nil="true" />
          </objectIdentifier>
          <table>
            <tableIdentifier>
              <tableId>6146</tableId>
              <tableName>Title Block</tableName>
            </tableIdentifier>
            <row rowId="0">
              <Description
                attributeId="6174">Generated by a BPEL Service
              </Description>
            </row>
          </table>
          <options>
            <id xsi:nil="true" />
            <property>
              <propertyName>autoNumberSrc</propertyName>
              <propertyValue>Designs
                Number</propertyValue>
              </property>
            </options>
          </AgileObject>
        </req>
      </createUpdateThenReserve>
    </soapenv:Body>
  </soapenv:Envelope>
==== Response ====
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:wsa="http://www.w3.org/2005/08/addressing">
  <env:Header>
    <wsa:MessageID>urn:F7974930AC3711D9BFD3F7C676F77F9</wsa:MessageID>
    <wsa:ReplyTo>
      <wsa:Address>http://www.w3.org/2005/08/addressing/anonymous
      </wsa:Address>
    </wsa:ReplyTo>
  </env:Header>
  <env:Body>
    <createUpdateThenReserveResponse
      xmlns:dvm="http://www.oracle.com/XSL/Transform/java/oracle.tip.dvm.LookupValue"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
      <res xmlns="">
        <messageId />
        <messageName />
        <statusCode>SUCCESS</statusCode>
        <sessionParameters />
        <generalParameters />
        <notes />
        <warnings>
          <id />
          <warning>
            <message />
          </warning>
        </warnings>
        <createObjectResponse
          xmlns:xsd="http://www.w3.org/2001/XMLSchema"
          xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
          xmlns="http://xmlns.oracle.com/AgileObjects/Core/Business/V1">
          <response xmlns="">

```



```

xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6184" readOnly="True" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="6183" readOnly="True" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6388" readOnly="True">2010-08-20T08:50:20.000Z
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6177" readOnly="True">2010-08-20T08:50:20.000Z
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008316" readOnly="False" />
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008317"
/>
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008554"
/>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008685" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008686" readOnly="False" />
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008717"
/>
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000009374"
/>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000009487" readOnly="False" />
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="1420"
/>
<id>704</id>
xsi:nil="true" />
<value>Administrator, Admin (admin)</value>
/>

```

```

<checkedBy
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2021" readOnly="False"
/>
<designSystem
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2007" readOnly="False" />
<CADFilename
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2017" readOnly="False" />
<CADOldFilename
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2018" readOnly="False" />
<designSystemIdentifier
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2008" readOnly="False" />
<Filetype
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2009" readOnly="False" />
<Subtype
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2010" readOnly="False" />
<Family
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2011" readOnly="False" />
<Variant
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2012" readOnly="False" />
<drawingName
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2013" readOnly="False" />
<frameID
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2014" readOnly="False" />
<nameFormat
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2015" readOnly="False" />
<projectName
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2016" readOnly="False" />
<localFlag
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1301" readOnly="False" />
<partNumber
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1302" readOnly="False" />
<filePath
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="2019" readOnly="False" />
<oldFilePath
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1331" readOnly="False" />
<modelType
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1332" readOnly="False" />
<modelReference
xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeId="1333" readOnly="False" />
<linkType
xmlns:xs="http://www.w3.org/2001/XMLSchema"

```

```

<linkReference
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1335" readOnly="False" />
<TDMVersion
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1307" readOnly="False" />
<TDMRevision
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1308" readOnly="False" />
<Text13
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1303" readOnly="False" />
<Text14
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1304" readOnly="False" />
<List04
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2023"
readOnly="False" />
<MultiList01
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2090"
readOnly="False" />
<MultiList04
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008063"
readOnly="True" />
</aqliteObject>
</responses>
</response>
</createObjectResponse>
<checkOutFFResponse
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns="http://xmlns.oracle.com/AgileObjects/Core/Attachment/V1">
<response xmlns="">
<messageId>f467ace57764bfde:-
1d875c14:12a8e6a4023:-7fab
</messageId>
<messageName>checkOutFF-by-
ECCreateUpdateThenReserve</messageName>
<statusCode>SUCCESS</statusCode>
<responses>
<folderNumber>DESIGN09500</folderNumber>
</responses>
</response>
</checkOutFFResponse>
</res>
</createUpdateThenReserveResponse>
</env:Body>
</env:Envelope>

```

reserveThenCreateUpdate

Service To checkout existing Design objects and then to create new Designs or Update existing ones.

Usage

The request should have at least one `AgileObject`, which represents the Design object to be checked out and then updated. The attributes of the design should be included in the object identifier, including class id, subclass and number. Additionally, the Title Block table should be included with at least the Title Block.Number attribute represented by an element of type any inside the single row for this table.

Additionally, new objects may be created by this service, which follow the same guidelines as the `CreateUpdateThenReserve` web service call.

Certain objects may be marked so that they are not included in the call to check-out, which is especially important for new objects, as they do not exist when the call to checkout is executed. To mark an object to be excluded from the checkout, add an property called "checkoutFlag" to the first set of options of the object with its value set to "false".

After the call to checkout, the service will attempt to create the objects it finds in the request, therefore, an error will be triggered if an object with the given number already exists in the PLM system. To avoid this error and allow an existing object to be updated, a property called "updateExistingObject" should be added to the first set of options of the `AgileObject` with its value set to "true". Other attributes to be populated, such as TitleBlock, Page Two or Page Three attributes should be included inside table element with the table identifier set to the respective page. One single row element should be included in the table and attributes are added as child elements of the row, with the `attributeld` set to the BaseID of the attribute to update.

The service will return a response which includes each of the individual responses obtained during the execution of the orchestrated process.

Syntax

```
ReserveThenCreateUpdateResponseRes
reserveThenCreateUpdateResponseType =
bpelStub.reserveThenCreateUpdate(reserveThenCreateUpdateRequestType)
```

Basic Steps

1. Create the request object `AgileECRequestExtType` for the `createUpdateThenRelate` operation.
2. Create an array of `AgileBusinessObjectType` elements
3. Create an instance of an `AgileBusinessObjectType` and set it as the first element in the array.
4. Set the object identifier to contain the appropriate `classId`, `subclass`, and `number`.
5. Optionally define an array of `PropertyListType` to add options to this object.
6. In the list, define `PropertyType` elements for the optional properties "autoNumberSrc", "updateExistingObject" and "checkoutFlag" as needed.
7. Define a table element for the TitleBlock table. Add a single row through a `AgileRowType` and add an attribute to represent the TitleBlock.Number attribute, that is, the BaseID 6173. Add other attributes of this table that should be updated.

8. If attributes in Page Two or Page Three need to be updated, define table elements for these tables and add a single `AgileRowType` element to them. Define the attributes inside the row element as any elements with an attribute called `attributeId`, set to the `BaseID` of the attribute to update.
9. Call the `WebService` and check the individual responses included in the global response.

Sample Code Java

```
try {
    setupServerLogin();
    Integer classId = getIntegerProperty(DSIGN CLASS ID);
    String subClass = getStringProperty(DSIGN SUBCLASS);
    String number = getStringProperty(DSIGN NUMBER);
    String description = getStringProperty(DSIGN DESCRIPTION);
    String autoNumberSource = getStringProperty(DSIGN AUTONUMBER SOURCE);
    AgileECRequestExtType reserveThenCreateUpdateRequestType = new
    AgileECRequestExtType();
    AgileBusinessObjectType[] agileRequestObjects = new
    AgileBusinessObjectType[2];
    agileRequestObjects[0] = new AgileBusinessObjectType();
    agileRequestObjects[0].setObjectIdentifier(new
    ObjectIdentifierType(classId, subClass, null, null, null, null));
    // set options to use autonumber for this design and skip the checkout
    PropertyListType options = new PropertyListType();
    PropertyType[] props = new PropertyType[2];
    props[0] = new PropertyType("autoNumberSrc", autoNumberSource);
    props[1] = new PropertyType("checkoutFlag", "false");
    options.setProperty(props);
    agileRequestObjects[0].setOptions(options);
    AgileTableType[] designTables = new AgileTableType[1];
    // Update the description
    designTables[0] = new AgileTableType();
    TableIdentifierType tbTableIdentifier = new TableIdentifierType();
    tbTableIdentifier.setTableName("Title Block");
    tbTableIdentifier.setTableId(new Integer(6146));
    designTables[0].setTableIdentifier(tbTableIdentifier);
    AgileRowType[] tbRow = new AgileRowType[1];
    // First row
    tbRow[0] = new AgileRowType();
    MessageElement[] anyElementTBRow = new MessageElement[1];
    anyElementTBRow[0] = new MessageElement();
    anyElementTBRow[0].setName("Description");
    anyElementTBRow[0].addAttribute(null, "attributeId", "6174");
    anyElementTBRow[0].setValue(description);
    tbRow[0].set any(anyElementTBRow);

    designTables[0].setRow(tbRow);
    agileRequestObjects[0].setTable(designTables);
    agileRequestObjects[1] = new AgileBusinessObjectType();
    agileRequestObjects[1].setObjectIdentifier(new
    ObjectIdentifierType(classId, subClass, null, null, number, null));
    // set option to update object if exists
    options = new PropertyListType();
    props = new PropertyType[1];
    props[0] = new PropertyType("updateExistingObject", "true");
    options.setProperty(props);
    agileRequestObjects[1].setOptions(options);
    designTables = new AgileTableType[1];
    // Update the description
    designTables[0] = new AgileTableType();
    tbTableIdentifier = new TableIdentifierType();
    tbTableIdentifier.setTableName("Title Block");
    tbTableIdentifier.setTableId(new Integer(6146));
    designTables[0].setTableIdentifier(tbTableIdentifier);
    tbRow = new AgileRowType[1];
    // First row
    tbRow[0] = new AgileRowType();
    anyElementTBRow = new MessageElement[2];
    // Make sure to add the Title Block.Number attribute. This is required
    for the checkout call
    anyElementTBRow[0] = new MessageElement();
    anyElementTBRow[0].setName("Number");
    anyElementTBRow[0].addAttribute(null, "attributeId", "6173");
```

```

anyElementTbRow[0] = new MessageElement();
anyElementTbRow[1] = new MessageElement();
anyElementTbRow[1].setName("Description");
anyElementTbRow[1].addAttribute(null, "attributeId", "6174");
anyElementTbRow[1].setValue(description);
tbRow[0].set any(anyElementTbRow);

designTables[0].setRow(tbRow);
agileRequestObjects[1].setTable(designTables);
reserveThenCreateUpdateRequestType.setAgileObject(agileRequestObjects);
ReserveThenCreateUpdateResponseRes reserveThenCreateUpdateResponseType =
bpelStub.reserveThenCreateUpdate(reserveThenCreateUpdateRequestType);
System.out.println("STATUS CODE: " +
reserveThenCreateUpdateResponseType.getStatusCode());
if
(!reserveThenCreateUpdateResponseType.getStatusCode().toString().equals(ResponseSt
atusCode.SUCCESS.getValue())) {
    CheckOutFFResponse checkOutFFResponse =
reserveThenCreateUpdateResponseType.getCheckOutFFResponse();
    AgileExceptionListType[] agileExceptionListType =
checkOutFFResponse.getResponse().getExceptions();
    if (agileExceptionListType != null) {
        for (AgileExceptionListType exceptionListType :
agileExceptionListType) {
            for (AgileExceptionType exception :
exceptionListType.getException()) {
                System.out.println(exception.getMessage());
            }
        }
    }
    CreateObjectResponseType createObjectResponse =
reserveThenCreateUpdateResponseType.getCreateObjectResponse().getResponse();
    agileExceptionListType = createObjectResponse.getExceptions();
    if (agileExceptionListType != null) {
        for (AgileExceptionListType exceptionListType :
agileExceptionListType) {
            for (AgileExceptionType exception :
exceptionListType.getException()) {
                System.out.println(exception.getMessage());
            }
        }
    }
} else { // If the object, was successfully retrieved, then examine its
contents
    AgileCreateObjectResponse[] agileCreateResponses =
reserveThenCreateUpdateResponseType.getCreateObjectResponse().getResponse().getRes
ponses();
    if (agileCreateResponses != null) {
        for (AgileCreateObjectResponse agileResponse :
agileCreateResponses) {
            AgileObjectType agileObject = agileResponse.getAgileObject();
            ObjectIdentifierType objectIdentifier =
agileObject.getObjectIdentifier();
            System.out.println("Agile Object Class ID: " +
objectIdentifier.getClassId());
            System.out.println("Agile Object Class Name: " +
objectIdentifier.getClassName());
            System.out.println("Agile Object Class Display Name: " +
objectIdentifier.getClassDisplayName());
            System.out.println("Agile Object Object ID: " +
objectIdentifier.getObjectId());
            System.out.println("Agile Object Object Name: " +
objectIdentifier.getObjectName());
            AgileTableType[] tables = agileObject.getTable();
            if (tables != null) {
                for (AgileTableType table : tables) {
                    System.out.println("Table Name: " +
table.getTableIdentifier().getTableName());
                    AgileRowType[] rows = table.getRow();
                    int rowNo = 0;
                    if (rows != null) {
                        for (AgileRowType row : rows) {
                            System.out.println("Table Row Number " + rowNo++);
                            for (MessageElement node : row.get any()) {
                                System.out.println("* " + node.getLocalName() +
": " + node.getValue());
                                Iterator<Node> nodeIt = (Iterator<Node>)
node.getChildElements();
                                while (nodeIt.hasNext()) {
                                    Node selectionNode = nodeIt.next();

```

```

        MessageElement element = (MessageElement)
selectionNode;
        Iterator<MessageElement> subNodeIt =
        (Iterator<MessageElement>) element.getChildElements();
        while (subNodeIt.hasNext()) {
            MessageElement subNode =
subNodeIt.next();
            System.out.println("*** Selection " +
subNode.getLocalName() + ": " + subNode.getValue());
        }
    }
}
}
}
}
}
for (MessageElement node : agileObject.get any()) {
    System.out.println("Agile Object " + node.getLocalName() + ":
" + node.getValue());
    Iterator<Node> nodeIt = (Iterator<Node>)
node.getChildElements();
    while (nodeIt.hasNext()) {
        Node selectionNode = nodeIt.next();
        if (selectionNode instanceof MessageElement) {
            MessageElement element = (MessageElement)
selectionNode;
            Iterator<MessageElement> subNodeIt =
            (Iterator<MessageElement>) element.getChildElements();
            while (subNodeIt.hasNext()) {
                MessageElement subNode = subNodeIt.next();
                System.out.println("*** Selection " +
subNode.getLocalName() + ": " + subNode.getValue());
            }
        }
    }
}
} else {
    System.out.println("No results!");
}
}
}

```

Sample Code SOAP

```

==== Request ====
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<soapenv:Body>
    <reserveThenCreateUpdate
xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
        <req xmlns="">
            <AgileObject>
                <objectIdentifier>
                    <classId>2000008310</classId>
                    <className>Design</className>
                    <objectId xsi:nil="true" />
                    <objectName xsi:nil="true" />
                </objectIdentifier>
                <table>
                    <tableIdentifier>
                        <tableId>6146</tableId>
                        <tableName>Title Block</tableName>
                    </tableIdentifier>
                    <row rowId="0">
                        <Description
attributeId="6174">Generated by a BPEL Service
                        </Description>
                    </row>
                </table>
                <options>
                    <id xsi:nil="true" />
                </property>
            </AgileObject>
        </req>
    </reserveThenCreateUpdate>
</soapenv:Body>
</soapenv:Envelope>

```

```

Number</propertyValue>
                                </property>
                                <property>

<propertyName>checkoutFlag</propertyName>
<propertyValue>>false</propertyValue>
                                </property>
                                </options>
                                </AgileObject>
                                <AgileObject>
                                    <objectIdentifier>
                                        <classId>2000008310</classId>
                                        <className>Design</className>
                                        <objectId xsi:nil="true" />
                                        <objectName>DESIGN09502</objectName>
                                    </objectIdentifier>
                                    <table>
                                        <tableIdentifier>
                                            <tableId>6146</tableId>
                                            <tableName>Title Block</tableName>
                                        </tableIdentifier>
                                        <row rowId="0">
                                            <Number
attributeId="6173">DESIGN09502</Number>
                                            <Description
attributeId="6174">Generated by a BPEL Service
                                            </Description>
                                        </row>
                                    </table>
                                    <options>
                                        <id xsi:nil="true" />
                                    </property>

<propertyName>updateExistingObject</propertyName>
<propertyValue>true</propertyValue>
                                </property>
                                </options>
                                </AgileObject>
                                </req>
                                </reserveThenCreateUpdate>
</soapenv:Body>
</soapenv:Envelope>
==== Response ====
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:wsa="http://www.w3.org/2005/08/addressing">
<env:Header>
    <wsa:MessageID>urn:ED2D4100AC3E11DFBFDF3F7C676F77F9</wsa:MessageID>
    <wsa:ReplyTo>
        <wsa:Address>http://www.w3.org/2005/08/addressing/anonymous
        </wsa:Address>
    </wsa:ReplyTo>
</env:Header>
<env:Body>
    <reserveThenCreateUpdateResponse

xmlns:dvm="http://www.oracle.com/XSL/Transform/java/oracle.tip.dvm.LookupValue"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
    <res xmlns="">
        <messageId />
        <messageName />
        <statusCode>SUCCESS</statusCode>
        <sessionParameters />
        <generalParameters />
        <notes />
        <warnings>
            <id />
            <warning>
                <message />
            </warning>
        </warnings>
        <checkoutFFResponse
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns="http://xmlns.oracle.com/AgileObjects/Core/Attachment/V1">
            <response xmlns="">

```

```

1d875c14:12a8e6a4023:-7f9b-
<messageId>f467ace57764bfde:-
</messageId>
<messageName>checkOutFF-by-
ECReserveThenCreateUpdate</messageName>
<statusCode>SUCCESS</statusCode>
<responses>

<folderNumber>DESIGN09502</folderNumber>
</responses>
</response>
</checkOutFFResponse>
<createObjectResponse
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns="http://xmlns.oracle.com/AgileObjects/Core/Business/V1">
<response xmlns="">
<messageId>f467ace57764bfde:-
1d875c14:12a8e6a4023:-7f9b
</messageId>
<messageName>createObject-by-
ECReserveThenCreateUpdate
</messageName>
<statusCode>SUCCESS</statusCode>
<responses>
<agileObject>
<objectIdentifier>

<classId>2000008310</classId>
<className>Design</className>
<classDisplayName>Design</classDisplayName>
<objectId>6289670</objectId>
<objectName>DESIGN09506</objectName>
</objectIdentifier>
<Number>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="6173" readOnly="False">DESIGN09506
</Number>
<Type>
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="6175"
readOnly="False">
<selection>

<id>2000008310</id>
<apiName>DESIGN</apiName>
<value>Design</value>
</selection>
</Type>
<lifecyclePhase>

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="6390"
readOnly="False"
/>
<Description>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="6174" readOnly="False">Generated by a
BPEL
Service</Description>
<Version>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:integer" attributeId="7951" readOnly="True">0</Version>
<lastModifiedDate>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6178" readOnly="True">2010-08-20T09:40:10.000Z
xsi:type="xs:date"
</lastModifiedDate>
<checkoutStatus>

```

```

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="6389"
                                readOnly="True">
                                <selection>
                                <id>1</id>

<apiName>CHECKED IN</apiName>
<value>Checked In</value>
                                </selection>
                                </checkoutStatus>
                                <checkoutUser

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="6180"
                                readOnly="True" />
                                <checkoutDate

xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6184" readOnly="True" />
                                xsi:type="xs:date"
                                <checkoutLocation

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="6183" readOnly="True" />
                                <checkinDate
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6388" readOnly="True">2010-08-20T09:40:10.000Z
                                </checkinDate>
                                <createDate
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6177" readOnly="True">2010-08-20T09:40:10.000Z
                                </createDate>
                                <Label

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008316" readOnly="False" />
                                <componentType

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008317"
                                readOnly="False"
/>
                                <Thumbnail
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008554"
                                readOnly="True" />
                                <Revision

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008685" readOnly="False" />
                                <revisionDate
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008686" readOnly="False" />
                                xsi:type="xs:date"
                                <checkinUser

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008717"
                                readOnly="True" />
                                <approvalStatus

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000009374"
                                readOnly="True" />
                                <itemChangeStatus

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000009487" readOnly="False" />
                                <createUser

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"

```

```

        <value>Administrator, Admin (admin)</value>
        </createUser>
        <drawnBy
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2020"
readOnly="False"
/>
        <checkedBy
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2021"
readOnly="False"
/>
        <designSystem
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2007" readOnly="False" />
        <CADFilename
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2017" readOnly="False" />
        <CADOldFilename
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2018" readOnly="False" />
        <designSystemIdentifier
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2008" readOnly="False" />
        <Filetype
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2009" readOnly="False" />
        <Subtype
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2010" readOnly="False" />
        <Family
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2011" readOnly="False" />
        <Variant
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2012" readOnly="False" />
        <drawingName
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2013" readOnly="False" />
        <frameID
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2014" readOnly="False" />
        <nameFormat
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2015" readOnly="False" />
        <projectName
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2016" readOnly="False" />
        <localFlag
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1301" readOnly="False" />
        <partNumber
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1302" readOnly="False" />

```



```

xmlns:xs="http://www.w3.org/2001/XMLSchema" <filePath
xsi:type="xs:string" attributeId="2019" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <oldFilePath
xsi:type="xs:string" attributeId="1331" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <modelType
xsi:type="xs:string" attributeId="1332" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <modelReference
xsi:type="xs:string" attributeId="1333" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <linkType
xsi:type="xs:string" attributeId="1334" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <linkReference
xsi:type="xs:string" attributeId="1335" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <TDMVersion
xsi:type="xs:string" attributeId="1307" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <TDMRevision
xsi:type="xs:string" attributeId="1308" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <Text13
xsi:type="xs:string" attributeId="1303" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <Text14
xsi:type="xs:string" attributeId="1304" readOnly="False" />
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2023"
readOnly="False" />
<MultiList01
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2090"
readOnly="False" />
<MultiList04
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008063"
readOnly="True" />
</agileObject>
</responses>
<responses>
  <agileObject>
    <objectIdentifier>
      <classId>2000008310</classId>
      <className>Design</className>
      <classDisplayName>Design</classDisplayName>
      <objectId>6289639</objectId>
      <objectName>DESIGN09502</objectName>
      </objectIdentifier>
      <Number>
        xsi:type="xs:string" attributeId="6173" readOnly="False">DESIGN09502
      </Number>

```

```

</Type>
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="6175"
readOnly="False">
<selection>

<id>2000008310</id>
<apiName>DESIGN</apiName>
<value>Design</value>

</selection>
</Type>
<lifecyclePhase

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="6390"
readOnly="False"
/>
<Description
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="6174" readOnly="False">Generated by a
BPEL
Service</Description>
<Version
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:integer" attributeId="7951" readOnly="True">2</Version>
<lastModifiedDate
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:date"
attributeId="6178" readOnly="True">2010-08-20T09:40:10.000Z
</lastModifiedDate>
<checkoutStatus

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="6389"
readOnly="True">
<selection>
<id>0</id>

<apiName>CHECKED OUT</apiName>
<value>Checked Out</value>

</selection>
</checkoutStatus>
<checkoutUser

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="6180"
readOnly="True">
<selection>

<id>704</id>
<apiName
xsi:nil="true" />
<value>Administrator, Admin (admin)</value>

</selection>
</checkoutUser>
<checkoutDate
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:date"
attributeId="6184" readOnly="True">2010-08-20T12:38:02.000Z
</checkoutDate>
<checkoutLocation
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="6183" readOnly="True" />
<checkinDate
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:date"
attributeId="6388" readOnly="True">2010-08-20T09:40:10.000Z
</checkinDate>
<createDate
xmlns:xs="http://www.w3.org/2001/XMLSchema"

```

```

xsi:type="xs:date"
</createDate>
<Label
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008316" readOnly="False" />
<componentType
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008317"
readOnly="False"
/>
<Thumbnail
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008554"
readOnly="True" />
<Revision
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008685" readOnly="False" />
<revisionDate
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:date"
attributeId="2000008686" readOnly="False" />
<checkinUser
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008717"
readOnly="True" />
<approvalStatus
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000009374"
readOnly="True" />
<itemChangeStatus
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000009487" readOnly="False" />
<createUser
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="1420"
readOnly="True">
<selection>

<id>704</id>
<apiName
xsi:nil="true" />
<value>Administrator, Admin (admin)</value>
</selection>
</createUser>
<drawnBy
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2020"
readOnly="False"
/>
<checkedBy
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2021"
readOnly="False"
/>
<designSystem
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2007" readOnly="False" />
<CADFilename
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2017" readOnly="False" />
<CADOldFilename
xmlns:xs="http://www.w3.org/2001/XMLSchema"

```

```

<!-- End of "EC WebServices" element -->
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2008" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2009" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2010" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2011" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2012" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2013" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2014" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2015" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2016" readOnly="False">EC WebServices
Docu</projectName>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1301" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1302" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2019" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1331" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1332" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1333" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1334" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1335" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1307" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1308" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"

```

```

</Text14
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1304" readOnly="False" />
<List04
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2023"
readOnly="False"
/>
<MultiList01
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2090"
readOnly="False"
/>
<MultiList04
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008063"
readOnly="True" />
</agileObject>
</responses>
</response>
</createObjectResponse>
</res>
</reserveThenCreateUpdateResponse>
</env:Body>
</env:Envelope>

```

createUpdateThenRelate

Service To create or update one or many Design objects and then add relationships among them or to other existing objects in the PLM system.

Usage The request should have at least one AgileObject, which represents the Design object to be created or updated. The attributes of the new design should be included in the object identifier, including class id, subclass and number. If an autonumber source should be used to provide the number for the new design, then the objectName element in the ObjectIdentifier should be left empty and a property named "autoNumberSrc" should be added to the first set of options of the AgileObject. The value of this property should be set to the name of the autonumber source to use.

The service will attempt to create the objects it finds in the request, therefore, an error will be triggered if an object with the given number already exists in the PLM system. To avoid this error and allow an existing object to be updated, a property called "updateExistingObject" should be added to the first set of options of the AgileObject with its value set to "true".

Other attributes to be populated, such as TitleBlock, Page Two or Page Three attributes should be included inside table element with the table identifier set to the respective page. One single row element should be included in the table and attributes are added as child elements of the row, with the attributeId set to the BaseID of the attribute to update.

Finally, the Relationships table should be included, having a tableId of "2000007761". Inside this table, each row representing a new relationship should include the key attribute "2000007767" (Relationships.Name) with its value set to a ReferentIdType, which represents the object to be related to the design.

The service will return a response which includes each of the individual responses obtained during the execution of the orchestrated process.

Syntax

```
CreateUpdateThenRelateResponseRes createUpdateThenRelateResponseType  
= bpelStub.createUpdateThenRelate(createUpdateThenRelateRequestType)
```

Basic Steps

1. Create the request object AgileECRequestExtType for the createUpdateThenRelate operation.
2. Create an array of AgileBusinessObjectType elements
3. Create an instance of an AgileBusinessObjectType and set it as the first element in the array.
4. Set the object identifier to contain the appropriate classId, subclass, and number.
5. Optionally define an array of PropertyListType to add options to this object.
6. In the list, define PropertyType elements for the optional properties "autoNumberSrc" and "updateExistingObject"
7. If attributes in Title Block, Page Two or Page Three need to be updated, define table elements for these tables and add a single AgileRowType element to them. Define the attributes inside the row element as any elements with an attribute called attributeld, set to the BaseID of the attribute to update.
8. If relationships should be created for this design object, define the relationships table to have id equal to "2000007761". Add as many row elements as needed.
9. For each AgileRowType, define at least one element of type any with the following attributes:
10. "attributeld" set to "2000007767"
11. "type", with namespace ["http://xmlns.oracle.com/AgileObjects/Core/Common/V1"](http://xmlns.oracle.com/AgileObjects/Core/Common/V1) set to "ObjectReferentIdType".
12. Set the value of this element to be a ObjectReferentIdType pointing to the object to be related.
13. Call the WebService and check the individual responses included in the global response.

Sample Code Java

```
try {  
    setupServerLogin();  
    Integer classId = getIntegerProperty(DSIGN CLASS ID);  
    String subClass = getStringProperty(DSIGN SUBCLASS);  
    String parentNumber = getStringProperty(DSIGN NUMBER);  
    String parentVersion = getStringProperty(DSIGN VERSION);  
    String parentDescription = getStringProperty(DSIGN_DESCRIPTION);
```

```

        Integer firstRelatedClassId =
//----- Integer firstRelatedClassId =
        String firstRelatedNumber =
getStringProperty(FIRST RELATED OBJECT NUMBER);
        Integer secondRelatedClassId =
getIntegerProperty(SECOND RELATED OBJECT CLASS ID);
        String secondRelatedNumber =
getStringProperty(SECOND RELATED OBJECT NUMBER);
        AgileECRequestExtType createUpdateThenRelateRequestType = new
AgileECRequestExtType();
        AgileBusinessObjectType[] agileRequestObjects = new
AgileBusinessObjectType[1];
        agileRequestObjects[0] = new AgileBusinessObjectType();
        agileRequestObjects[0].setObjectIdentifier(new
ObjectIdentifierType(classId, subClass, null, null, parentNumber, parentVersion));
        // set option to update object if exists
        PropertyListType options = new PropertyListType();
        PropertyType[] props = new PropertyType[1];
        props[0] = new PropertyType("updateExistingObject", "true");
        options.setProperty(props);
        agileRequestObjects[0].setOptions(options);
        AgileTableType[] parentTables = new AgileTableType[2];
        // Update the description
        parentTables[0] = new AgileTableType();
        TableIdentifierType tbTableIdentifier = new TableIdentifierType();
        tbTableIdentifier.setTableName("Title Block");
        tbTableIdentifier.setTableId(new Integer(6146));
        parentTables[0].setTableIdentifier(tbTableIdentifier);
        AgileRowType[] tbRow = new AgileRowType[1];
        // First row
        tbRow[0] = new AgileRowType();
        MessageElement[] anyElementTBRow = new MessageElement[2];
        anyElementTBRow[0] = new MessageElement();
        anyElementTBRow[0].setName("Number");
        anyElementTBRow[0].addAttribute(null, "attributeId", "6173");
        anyElementTBRow[0].setValue(parentNumber);
        anyElementTBRow[1] = new MessageElement();
        anyElementTBRow[1].setName("Description");
        anyElementTBRow[1].addAttribute(null, "attributeId", "6174");
        anyElementTBRow[1].setValue(parentDescription);
        tbRow[0].set any(anyElementTBRow);
        parentTables[0].setRow(tbRow);
        // Define the relationships table
        parentTables[1] = new AgileTableType();
        TableIdentifierType tableIdentifier = new TableIdentifierType();
        tableIdentifier.setTableName("Relationships");
        tableIdentifier.setTableId(new Integer(2000007761));
        parentTables[1].setTableIdentifier(tableIdentifier);
        // Create two rows of related items
        AgileRowType[] rows = new AgileRowType[2];
        // First row
        rows[0] = new AgileRowType();
        MessageElement[] anyElementFirstRow = new MessageElement[1];
        anyElementFirstRow[0] = new MessageElement();
        anyElementFirstRow[0].setName("key2000007767");
        anyElementFirstRow[0].addAttribute(null, "attributeId", "2000007767");
        anyElementFirstRow[0].addAttribute("http://xmlns.oracle.com/AgileObjects/Core/Comm
on/V1", "type", "ObjectReferentIdType");
        anyElementFirstRow[0].setObjectValue(new
ObjectReferentIdType(String.valueOf(firstRelatedClassId), firstRelatedNumber,
null, null));
        rows[0].setRowId(0);
        rows[0].set any(anyElementFirstRow);

        // Second row
        rows[1] = new AgileRowType();
        MessageElement[] anyElementSecondRow = new MessageElement[1];
        anyElementSecondRow[0] = new MessageElement();
        anyElementSecondRow[0].setName("key2000007767");
        anyElementSecondRow[0].addAttribute(null, "attributeId", "2000007767");
        anyElementSecondRow[0].addAttribute("http://xmlns.oracle.com/AgileObjects/Core/Com
mon/V1", "type", "ObjectReferentIdType");
        anyElementSecondRow[0].setObjectValue(new
ObjectReferentIdType(String.valueOf(secondRelatedClassId), secondRelatedNumber,
null, null));
        rows[1].set any(anyElementSecondRow);
        rows[1].setRowId(1);

        parentTables[1].setRow(rows);

```

```

        createUpdateThenRelateRequestType.setAgileObject(agileRequestObjects);
        CreateUpdateThenRelateResponseRes createUpdateThenRelateResponseType =
        bpelStub.createUpdateThenRelate(createUpdateThenRelateRequestType);
        System.out.println("STATUS CODE: " +
        createUpdateThenRelateResponseType.getStatusCode());
        if
        (!createUpdateThenRelateResponseType.getStatusCode().toString().equals(ResponseSta
        tusCode.SUCCESS.getValue())) {
            CreateObjectResponseType createObjectResponse =
            createUpdateThenRelateResponseType.getCreateObjectResponse().getResponse();
            AgileExceptionListType[] agileExceptionListType =
            createObjectResponse.getExceptions();
            if (agileExceptionListType != null) {
                for (AgileExceptionListType exceptionListType :
            agileExceptionListType) {
                    for (AgileExceptionType exception :
            exceptionListType.getException()) {
                        System.out.println(exception.getMessage());
                    }
                }
            }
            AddRowsResponse[] addRowsResponses =
            createUpdateThenRelateResponseType.getAddRowsResponse();
            for (AddRowsResponse addRowsResponse : addRowsResponses) {
                agileExceptionListType =
            addRowsResponse.getResponse().getExceptions();
                if (agileExceptionListType != null) {
                    for (AgileExceptionListType exceptionListType :
            agileExceptionListType) {
                        for (AgileExceptionType exception :
            exceptionListType.getException()) {
                            System.out.println(exception.getMessage());
                        }
                    }
                }
            }
        } else { // If the object, was successfully retrieved, then examine its
        contents
            AgileCreateObjectResponse[] agileCreateResponses =
            createUpdateThenRelateResponseType.getCreateObjectResponse().getResponse().getResp
            onses();
            if (agileCreateResponses != null) {
                for (AgileCreateObjectResponse agileResponse :
            agileCreateResponses) {
                    AgileObjectType agileObject = agileResponse.getAgileObject();
                    ObjectIdentifierType objectIdentifier =
            agileObject.getObjectIdentifier();
                    System.out.println("Agile Object Class ID: " +
            objectIdentifier.getClassId());
                    System.out.println("Agile Object Class Name: " +
            objectIdentifier.getClassName());
                    System.out.println("Agile Object Class Display Name: " +
            objectIdentifier.getClassDisplayName());
                    System.out.println("Agile Object Object ID: " +
            objectIdentifier.getObjectId());
                    System.out.println("Agile Object Object Name: " +
            objectIdentifier.getObjectName());
                    AgileTableType[] tables = agileObject.getTable();
                    if (tables != null) {
                        for (AgileTableType table : tables) {
                            System.out.println("Table Name: " +
            table.getTableIdentifier().getTableName());
                            rows = table.getRow();
                            int rowNo = 0;
                            if (rows != null) {
                                for (AgileRowType row : rows) {
                                    System.out.println("Table Row Number " + rowNo++);
                                    for (MessageElement node : row.get any()) {
                                        System.out.println("* " + node.getLocalName() +
            ": " + node.getValue());
                                    }
                                }
                            }
                            Iterator<Node> nodeIt = (Iterator<Node>)
            node.getChildElements();
                            while (nodeIt.hasNext()) {
                                Node selectionNode = nodeIt.next();
                                if (selectionNode instanceof MessageElement) {
                                    MessageElement element = (MessageElement)
            selectionNode;
                                    Iterator<MessageElement> subNodeIt =
            (Iterator<MessageElement>) element.getChildElements();
                                    while (subNodeIt.hasNext()) {

```



```

        MessageElement subNode =
            System.out.println("*** Selection " +
subNode.getLocalName() + ": " + subNode.getValue());
    }
}
}
}
}
for (MessageElement node : agileObject.get any()) {
    System.out.println("Agile Object " + node.getLocalName() + ":
" + node.getValue());
    Iterator<Node> nodeIt = (Iterator<Node>)
node.getChildElements();
    while (nodeIt.hasNext()) {
        Node selectionNode = nodeIt.next();
        if (selectionNode instanceof MessageElement) {
            MessageElement element = (MessageElement)
selectionNode;
            Iterator<MessageElement> subNodeIt =
(Iterator<MessageElement>)
element.getChildElements();
            while (subNodeIt.hasNext()) {
                MessageElement subNode = subNodeIt.next();
                System.out.println("*** Selection " +
subNode.getLocalName() + ": " + subNode.getValue());
            }
        }
    }
} else {
    System.out.println("No results!");
}
}

```

Sample Code SOAP

```

==== Request ====
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
<soapenv:Body>
<createUpdateThenRelate
xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
<req xmlns="">
<AgileObject>
<objectIdentifier>
<classId>2000008310</classId>
<className>Design</className>
<objectId xsi:nil="true" />
</objectIdentifier>
<objectName>DESIGN10006.SLDASM</objectName>
<version>1</version>
</objectIdentifier>
<table>
<tableIdentifier>
<tableId>6146</tableId>
<tableName>Title Block</tableName>
</tableIdentifier>
<row rowId="0">
<Number
attributeId="6173">DESIGN10006.SLDASM</Number>
<Description
attributeId="6174">Generated by a BPTEL Service
</Description>
</row>
</table>
<table>
<tableIdentifier>
<tableId>2000007761</tableId>
<tableName>Relationships</tableName>
</tableIdentifier>

```

```

</table>
</options>
<id xsi:nil="true" />
<property>
  <propertyName>updateExistingObject</propertyName>
  <propertyValue>true</propertyValue>
</property>
</options>
</AgileObject>
</req>
</createUpdateThenRelate>
</soapenv:Body>
</soapenv:Envelope>
==== Response ====
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:wsa="http://www.w3.org/2005/08/addressing">
  <env:Header>
    <wsa:MessageID>urn:E0F48AC0AC2E11DFBFD3F7C676F77F9</wsa:MessageID>
    <wsa:ReplyTo>
      <wsa:Address>http://www.w3.org/2005/08/addressing/anonymous
      </wsa:Address>
    </wsa:ReplyTo>
  </env:Header>
  <env:Body>
    <createUpdateThenRelateResponse
      xmlns:dvm="http://www.oracle.com/XSL/Transform/java/oracle.tip.dvm.LookupValue"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
        <res xmlns="">
          <messageId />
          <messageName />
          <statusCode>SUCCESS</statusCode>
          <sessionParameters />
          <generalParameters />
          <warnings>
            <id />
            <warning>
              <message />
            </warning>
          </warnings>
          <createObjectResponse
            xmlns:xsd="http://www.w3.org/2001/XMLSchema"
            xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xmlns="http://xmlns.oracle.com/AgileObjects/Core/Business/V1">
            <response xmlns="">
              <messageId>f467ace57764bfde:-
              </messageId>
              <messageName>createObject-by-
              </messageName>
              <statusCode>SUCCESS</statusCode>
              <responses>
                <agileObject>
                  <objectIdentifier>

```

```

<!---3000000310 / -3000000310-->
<className>Design</className>
<classDisplayName>Design</classDisplayName>
<objectId>6289591</objectId>
<objectName>DESIGN10006.SLDASM</objectName>
</objectIdentifier>
<Number
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="6173" readOnly="False">DESIGN10006.SLDASM
</Number>
<Type
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="6175"
readOnly="False">
<selection>

<id>2000008310</id>
<apiName>DESIGN</apiName>
<value>Design</value>

</selection>
</Type>
<lifecyclePhase
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="6390"
readOnly="False"
/>
<Description
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="6174" readOnly="False">Generated by a
BPEL
Service</Description>
<Version
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:integer" attributeId="7951" readOnly="True">1</Version>
<lastModifiedDate
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:date"
attributeId="6178" readOnly="True">2010-08-20T07:45:18.000Z
</lastModifiedDate>
<checkoutStatus
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="6389"
readOnly="True">
<selection>
<id>0</id>

<apiName>CHECKED OUT</apiName>
<value>Checked Out</value>

</selection>
</checkoutStatus>
<checkoutUser
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="6180"
readOnly="True">
<selection>

<id>704</id>
<apiName
xsi:nil="true" />
<value>Administrator, Admin (admin)</value>

</selection>
</checkoutUser>

```

```

xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6184" readOnly="True">2010-08-20T10:43:00.000Z
</checkoutDate>
<checkoutLocation
xsi:type="xs:string" attributeId="6183" readOnly="True" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6388" readOnly="True">2010-08-20T07:45:10.000Z
</checkinDate>
<createDate
xsi:type="xs:date"
attributeId="6177" readOnly="True">2010-08-20T07:42:13.000Z
</createDate>
<Label
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008316" readOnly="False" />
<componentType
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008317"
readOnly="False"
/>
<Thumbnail
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008554"
readOnly="True" />
<Revision
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008685" readOnly="False" />
</revisionDate>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="2000008686" readOnly="False" />
<checkinUser
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008717"
readOnly="True" />
<approvalStatus
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000009374"
readOnly="True" />
<itemChangeStatus
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000009487" readOnly="False" />
<createUser
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="1420"
readOnly="True">
<selection>
<id>704</id>
<apiName
xsi:nil="true" />
<value>Administrator, Admin (admin)</value>
</selection>
</createUser>
<drawnBy
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2020"
readOnly="False"
/>

```

```

<checkedBy
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" attributeId="2021"
/>
/>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2007" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2017" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2018" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2008" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2009" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2010" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2011" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2012" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2013" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2014" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2015" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2016" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1301" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1302" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2019" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1331" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1332" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1333" readOnly="False" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"

```

```

<linkReference
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1335" readOnly="False" />
<TDMVersion
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1307" readOnly="False" />
<TDMRevision
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1308" readOnly="False" />
<Text13
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1303" readOnly="False" />
<Text14
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="1304" readOnly="False" />
<List04
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2023"
readOnly="False" />
<MultiList01
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2090"
readOnly="False" />
<MultiList04
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008063"
readOnly="True" />
</agileObject>
</responses>
</response>
</createObjectResponse>
<addRowsResponse
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns="http://xmlns.oracle.com/AgileObjects/Core/Table/V1">
<response xmlns="">
<messageId>f467ace57764bfde:-
1d875c14:12a8e6a4023:-7fbe
</messageId>
<messageName>addRows-by-
ECCreateUpdateAndRelate</messageName>
<statusCode>SUCCESS</statusCode>
</response>
</addRowsResponse>
</res>
</createUpdateThenRelateResponse>
</env:Body>
</env:Envelope>

```

retrieveDesignStructureAndMetadata

Service To retrieve the structure and privileges of a given Design object as well as the metadata for the given AgileClass in one call.

Usage This service orchestrates two EC WebServices in one single call. These services are `getDesignService` and `getDesignPropertiesAndRights`. By doing this, it allows to retrieve all information related to a Design object in one call to the server side. Given this, the request of this service is a combination of the elements in the requests used for calling each of those two web services separately. For details on the specific requests, please review the documentation for those services in the preceding sections.

The service will return the combined responses of both service calls.

Syntax

```
RetrieveDesignStructureAndMetadataResponseRes
retrieveDesignStructureAndMetadataResponseType =
bpelStub.retrieveDesignStructureAndMetadata(retrieveDesignStructureA
ndMetadataRequestType);
```

Basic Steps

1. Create the request object `AgileECRequestExtType` for the `retrieveDesignStructureAndMetadata` operation.
2. Create a general parameters list of type `PropertyListType`
3. Add the property 'userIdentification' to the list, set its value to the desired username.
4. Add the property 'classIdentifier' to the list, set its value to the subclass of Design whose metadata should be retrieved.
5. Add the property 'objectNumber' to the list, set its value to the number of the design whose privileges should be checked.
6. Add one or more 'privilege' properties to the list, set the values of the ids of the privileges to check.
7. Create an array of `AgileBusinessObjectType` elements
8. Create an instance of an `AgileBusinessObjectType` and set it as the first element in the array.
9. Set the object identifier to contain the appropriate classId, subclass and number.
10. Optionally add a Version element with an attribute called "attributeld" with value "7951", which corresponds to the BaseID of the TitleBlock.Version attribute for Designs.
11. Set the value of this element to the desired Design version.
12. Call the WebService and check the responses.

Sample Code Java

```
try {
    setupServerLogin();
    String userId = getStringProperty("USERNAME");
    Integer classId = getIntegerProperty(DSIGN CLASS ID);
    String subClass = getStringProperty(DSIGN SUBCLASS);
    String number = getStringProperty(DSIGN NUMBER);
    String version = getStringProperty(DSIGN VERSION);
    AgileECRequestExtType retrieveDesignStructureAndMetadataRequestType = new
    AgileECRequestExtType();
```

```

        // First, set the general parameters section for the metadata
PropertyListType[] generalParameters = new PropertyListType[1];
PropertyType[] props = new PropertyType[5];
props[0] = new PropertyType("userIdentification", userId);
props[1] = new PropertyType("classIdentifier", String.valueOf(classId));
props[2] = new PropertyType("objectNumber", number);
// Multiple privileges can be checked in one call
props[3] = new PropertyType("privilege", "2");
props[4] = new PropertyType("privilege", "15");
generalParameters[0].setProperty(props);

retrieveDesignStructureAndMetadataRequestType.setGeneralParameters(generalParameters);

// Next, define the agile object for retrieving the structure
AgileBusinessObjectType[] agileRequestObjects = new
AgileBusinessObjectType[1];
agileRequestObjects[0] = new AgileBusinessObjectType();
agileRequestObjects[0].setObjectIdentifier(new
ObjectIdentifierType(classId, subClass, null, null, number, version));
// Add the version as an additional element MessageElement[] anyElement =
new MessageElement[1];
anyElement[0] = new MessageElement();
anyElement[0].setName("Version");
anyElement[0].addAttribute(null, "attributeId", "7951"); //
FileFolderConstants.ATT TITLE BLOCK VERSION
anyElement[0].setValue(version);
agileRequestObjects[0].set any(anyElement);

retrieveDesignStructureAndMetadataRequestType.setAgileObject(agileRequestObjects);
RetrieveDesignStructureAndMetadataResponseRes
retrieveDesignStructureAndMetadataResponseType =
bpelStub.retrieveDesignStructureAndMetadata(retrieveDesignStructureAndMetadataRequestType);
System.out.println("STATUS CODE: " +
retrieveDesignStructureAndMetadataResponseType.getStatusCode());
AgileECResponseExtType retrieveDesignStructureResponseType =
retrieveDesignStructureAndMetadataResponseType.getRetrieveDesignStructureResponse().getRes();
if
(!retrieveDesignStructureAndMetadataResponseType.getStatusCode().toString().equals
(ResponseStatusCode.SUCCESS.getValue())) {
    AgileExceptionListType[] agileExceptionListType =
retrieveDesignStructureResponseType.getExceptions();
    if (agileExceptionListType != null) {
        for (AgileExceptionListType exceptionListType :
agileExceptionListType) {
            for (AgileExceptionType exception :
exceptionListType.getException()) {
                System.out.println(exception.getMessage());
            }
        }
    }
    CheckPrivilegeResponse checkOutFFResponse =
retrieveDesignStructureAndMetadataResponseType.getCheckPrivilegeResponse();
    agileExceptionListType = checkOutFFResponse.getResponse().getExceptions();
    if (agileExceptionListType != null) {
        for (AgileExceptionListType exceptionListType :
agileExceptionListType) {
            for (AgileExceptionType exception :
exceptionListType.getException()) {
                System.out.println(exception.getMessage());
            }
        }
    }
} else { // If the call was successful, then examine its contents
    AgileBusinessObjectType[] agileResponseObjects =
retrieveDesignStructureResponseType.getAgileObject();
    if (agileResponseObjects != null) {
        for (AgileBusinessObjectType agileObject : agileResponseObjects) {
            ObjectIdentifierType objectIdentifier =
agileObject.getObjectIdentifier();
            System.out.println("Agile Object Class ID: " +
objectIdentifier.getClassId());
            System.out.println("Agile Object Class Name: " +
objectIdentifier.getClassName());
            System.out.println("Agile Object Class Display Name: " +
objectIdentifier.getClassDisplayName());
            System.out.println("Agile Object Object ID: " +
objectIdentifier.getObjectId());

```



```

        System.out.println("Agile Object Object Name: " +
        .....);
        PropertyListType options = agileObject.getOptions();
        if (options != null) {
            for (PropertyType property : options.getProperty()) {
                System.out.println("Option Property Name: " +
property.getPropertyName());
                System.out.println("Option Property Value: " +
property.getPropertyValue());
            }
        }
        AgileTableType[] tables = agileObject.getTable();
        for (AgileTableType table : tables) {
            System.out.println("Table Name: " +
table.getTableIdentifier().getTableName());
            AgileRowType[] rows = table.getRow();
            int rowNo = 0;
            if (rows != null) {
                for (AgileRowType row : rows) {
                    System.out.println("Table Row Number " + rowNo++);
                    for (MessageElement node : row.get any()) {
                        System.out.println("* " + node.getLocalName() +
": " + node.getValue());
node.getChildElements();
                        Iterator<Node> nodeIt = (Iterator<Node>)
                        while (nodeIt.hasNext()) {
                            Node selectionNode = nodeIt.next();
                            if (selectionNode instanceof MessageElement)
                                MessageElement element = (MessageElement)
                                selectionNode;
                                Iterator<MessageElement> subNodeIt =
                                (Iterator<MessageElement>) element.getChildElements();
                                while (subNodeIt.hasNext()) {
                                    MessageElement subNode =
                                    subNodeIt.next();
                                    System.out.println("*** Selection " +
subNode.getLocalName() + ": " + subNode.getValue());
                                }
                            }
                        }
                    }
                }
            }
            for (MessageElement node : agileObject.get any()) {
                System.out.println("Agile Object " + node.getLocalName() + ":
" + node.getValue());
                Iterator<Node> nodeIt = (Iterator<Node>)
                node.getChildElements();
                while (nodeIt.hasNext()) {
                    Node selectionNode = nodeIt.next();
                    if (selectionNode instanceof MessageElement) {
                        MessageElement element = (MessageElement)
                        selectionNode;
                        Iterator<MessageElement> subNodeIt =
                        (Iterator<MessageElement>) element.getChildElements();
                        while (subNodeIt.hasNext()) {
                            MessageElement subNode = subNodeIt.next();
                            System.out.println("*** Selection " +
subNode.getLocalName() + ": " + subNode.getValue());
                        }
                    }
                }
            }
        }
        AgileCheckPrivilegeResponseType[] checkPrivilegeResponses =
retrieveDesignStructureAndMetadataResponseType.getCheckPrivilegeResponse().getResp
onse().getResponses();
        if (checkPrivilegeResponses != null) {
            for (AgileCheckPrivilegeResponseType agileResponse :
checkPrivilegeResponses) {
                CheckPrivilegeType privilege = agileResponse.getPrivilege();
                System.out.println("Privilege ID: " + privilege.getPrivilege() +
". Has Privilege: " + privilege.getCheckPrivilege());
            }
        } else {
            System.out.println("No results!");
        }
    }
}

```

}

Sample Code SOAP

```

==== Request ====
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Body>
    <retrieveDesignStructureAndMetadata
      xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
      <req xmlns="">
        <generalParameters>
          <id xsi:nil="true" />
          <property>

<propertyName>userIdentification</propertyName>
          <propertyValue>admin</propertyValue>
          </property>
          <property>

<propertyName>classIdentifier</propertyName>
          <propertyValue>2000008310</propertyValue>
          </property>
          <property>

<propertyName>objectNumber</propertyName>
          <propertyValue>DESIGN09022.ASM</propertyValue>
          </property>
          <property>

<propertyName>privilege</propertyName>
          <propertyValue>2</propertyValue>
          </property>
          <property>

<propertyName>privilege</propertyName>
          <propertyValue>15</propertyValue>
          </property>
        </generalParameters>
        <AgileObject>
          <objectIdentifier>
            <classId>2000008310</classId>
            <className>Design</className>
            <objectId xsi:nil="true" />
            <objectName>DESIGN09022.ASM</objectName>
            <version>2</version>
          </objectIdentifier>
          <Version attributeId="7951">2</Version>
        </AgileObject>
      </req>
    </retrieveDesignStructureAndMetadata>
  </soapenv:Body>
</soapenv:Envelope>
==== Response ====
<env:Envelope xmlns:env="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:wsa="http://www.w3.org/2005/08/addressing">
  <env:Header>
    <wsa:MessageID>urn:30A0D370AC5811DFBFD3F7C676F77F9</wsa:MessageID>
    <wsa:ReplyTo>
      <wsa:Address>http://www.w3.org/2005/08/addressing/anonymous</wsa:Address>
    </wsa:ReplyTo>
  </env:Header>
  <env:Body>
    <retrieveDesignStructureAndMetadataResponse
      xmlns:dvm="http://www.oracle.com/XSL/Transform/java/oracle.tip.dvm.LookupValue"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
      <res xmlns="">
        <messageId />
        <messageName />
        <statusCode>SUCCESS</statusCode>
        <sessionParameters />
        <generalParameters>
          <id xsi:nil="true" />
          <property>

```

```

</property>
</property>
<property>
  <propertyValue>admin</propertyValue>
</property>
</property>
<property>
  <propertyValue>2000008310</propertyValue>
</property>
</property>
<property>
  <propertyName>objectNumber</propertyName>
  <propertyValue>DESIGN09022.ASM</propertyValue>
</property>
</property>
  <propertyName>privilege</propertyName>
  <propertyValue>2</propertyValue>
</property>
  <propertyName>privilege</propertyName>
  <propertyValue>15</propertyValue>
</property>
</generalParameters>
<notes>
  <id />
  <processNote>
    <message />
  </processNote>
</notes>
<exceptions>
  <id />
  <exception>
    <exceptionId />
    <message />
  </exception>
</exceptions>
<warnings>
  <id />
  <warning>
    <message />
  </warning>
</warnings>
<getTableMetadataResponse
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xmlns="http://xmlns.oracle.com/AgileObjects/Core/AdminMetadata/V1">
  <response xmlns="">Response omitted from this
sample due to
the size. Check the documentation about
the getTableMetadata
AdminMetadata services in a9
service, which is part of the
  </response>
</getTableMetadataResponse>
<retrieveDesignStructureResponse
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://xmlns.oracle.com/AgileObjects/ECS/V1">
  <res xmlns="">
    <messageId>f467ace57764bfde:-
1d875c14:12a8e6a4023:-7f85
    </messageId>
    <messageName>retrieveDesignStructure-by-
ECRetrieveDesignStructureAndMetadata
    </messageName>
    <statusCode>SUCCESS</statusCode>
    <AgileObject>
      <objectIdentifier>
<classId>2000008310</classId>
<className>Design</className>
<classDisplayName>Design</classDisplayName>
<objectId>6250017</objectId>
<objectName>DESIGN09022.ASM</objectName>

```

```

</table>
<table>
  <tableIdentifier>

<tableId>6150</tableId>
<tableName>Files</tableName>
  </tableIdentifier>
  <row rowId="0">
    <Thumbnail

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008555" />
    <fileName
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="6303">design09022.asm</fileName>
    <fileDescription
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="6181" />
    <fileSize
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:double" attributeId="6148">32980.0</fileSize>
    <fileType
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="6305">asm</fileType>
    <filePath
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="6304" />
    <lastViewDate
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:date" attributeId="6176">2010-04-06T13:31:38.000Z
    </lastViewDate>
    <fileCategory

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008509">
    <selection>
    <id>1</id>
    <apiName>SOURCE</apiName>
    <value>Source</value>
    </selection>
    </fileCategory>
    <documentText
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="4684" />
    <checkoutLocation
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000007045" />
    <masterThumbnail
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008560" />
    <FileID
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" displayName="FileID">6250666</FileID>
  </row>
  <row rowId="0">
    <Thumbnail

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008555" />
    <fileName
xmlns:xs="http://www.w3.org/2001/XMLSchema"

```

```

xmlns:xs="http://www.w3.org/2001/XMLSchema" <fileDescription
xsi:type="xs:string" attributeId="6181" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <fileSize
xsi:type="xs:double" attributeId="6148">436089.0</fileSize>
xmlns:xs="http://www.w3.org/2001/XMLSchema" <fileType
xsi:type="xs:string" attributeId="6305">stp</fileType>
xmlns:xs="http://www.w3.org/2001/XMLSchema" <filePath
xsi:type="xs:string" attributeId="6304" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <lastViewDate
xsi:type="xs:date" attributeId="6176">2010-04-06T13:31:38.000Z
</lastViewDate>
<fileCategory>

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008509">
<selection>
<id>2</id>
<apiName>VIEWABLE</apiName>
<value>Viewable</value>
</selection>
</fileCategory>
<documentText

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="4684" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <checkoutLocation
xsi:type="xs:string" attributeId="2000007045" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <masterThumbnail
xsi:type="xs:string" attributeId="2000008560" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <FileID
xsi:type="xs:string" displayName="FileID">6250667</FileID>
</row>
<row rowId="0">
<Thumbnail

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008555" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <fileName
xsi:type="xs:string" attributeId="6303">design09022.igs</fileName>
xmlns:xs="http://www.w3.org/2001/XMLSchema" <fileDescription
xsi:type="xs:string" attributeId="6181" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <fileSize
xsi:type="xs:double" attributeId="6148">1648692.0</fileSize>
xmlns:xs="http://www.w3.org/2001/XMLSchema" <fileType
xsi:type="xs:string" attributeId="6305">igs</fileType>
xmlns:xs="http://www.w3.org/2001/XMLSchema" <filePath

```

```

<!-- End of "AgileListEntry" element -->
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:date" attributeId="6176">2010-04-06T13:31:38.000Z
</lastViewDate>
<fileCategory>

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008509">
<selection>
<id>2</id>
<apiName>VIEWABLE</apiName>
<value>Viewable</value>
</selection>
</fileCategory>
<documentText>

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="4684" />
<checkoutLocation>

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000007045" />
<masterThumbnail>

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008560" />
<FileID>

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" displayName="FileID">6250668</FileID>
</row>
</table>
<table>
<tableIdentifier>

<tableId>2000008318</tableId>
<tableName>Structure</tableName>
<tableDisplayName>Structure</tableDisplayName>
</tableIdentifier>
<row rowId="0">
<Attachments>

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008326">true</Attachments>
<Linked>

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008327">false</Linked>
<checkedOut>

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008328">false</checkedOut>
<Thumbnail>

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008556">
<selection>
<id>3551</id>
<apiName>DESIGN09015PRT</apiName>
<value>com.agile.api.pc.attachment.ThumbnailID@1158395
</value>
</selection>
</Thumbnail>

```

```

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008319">
<selection>
<id>2000008310</id>
<apiName>DESIGN</apiName>
<value>Design</value>
</selection>
</designType>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008320">DESIGN09015.PRT</Number>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008321" />
<lifeCyclePhase
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008322" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:integer" attributeId="2000008323">2</Version>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:double" attributeId="2000008324">0.0</findNum>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:double" attributeId="2000008325">1.0</Quantity>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008329" />
<componentType
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008330" />
<structureMultiText01 xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008365" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008376" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008377">CAX-PROE</Identifier>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008378" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008379" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008380" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000009479" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"

```

```

    </row>
    <row rowId="0">
      <Attachments
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
        xsi:type="xs:string" attributeId="2000008326">true</Attachments>
      <Linked
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
        xsi:type="xs:string" attributeId="2000008327">false</Linked>
      <checkedOut
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
        xsi:type="xs:string" attributeId="2000008328">false</checkedOut>
      <Thumbnail
        xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        xsi:type="common:AgileListEntryType" attributeId="2000008556">
        <selection>
          <id>3554</id>
          <apiName>DESIGN09016PRT</apiName>
          <value>com.agile.api.pc.attachment.ThumbnailID@18032cb
        </value>
        </selection>
      </Thumbnail>
      <designType
        xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        xsi:type="common:AgileListEntryType" attributeId="2000008319">
        <selection>
          <id>2000008310</id>
          <apiName>DESIGN</apiName>
          <value>Design</value>
        </selection>
      </designType>
      <Number
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
        xsi:type="xs:string" attributeId="2000008320">DESIGN09016.PRT</Number>
      <Description
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
        xsi:type="xs:string" attributeId="2000008321" />
      <lifeCyclePhase
        xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
        xsi:type="common:AgileListEntryType" attributeId="2000008322" />
      <Version
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
        xsi:type="xs:integer" attributeId="2000008323">2</Version>
      <findNum
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
        xsi:type="xs:double" attributeId="2000008324">0.0</findNum>
      <Quantity
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
        xsi:type="xs:double" attributeId="2000008325">1.0</Quantity>
      <Label
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
        xsi:type="xs:string" attributeId="2000008329" />
      <componentType

```



```

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008330" />
<structureMultiText01 xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008365" />
                                                                                   <modelName
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008376" />
                                                                                   <Identifier
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008377">CAX-PROE</Identifier>
                                                                                   <Component
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008378" />
                                                                                   <Reference
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008379" />
                                                                                   <Configuration
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008380" />
                                                                                   <revision
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000009479" />
                                                                                   <revisionDate
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:date" attributeId="2000009480" />
                                                                                   </row>
                                                                                   <row rowId="0">
                                                                                       <Attachments
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008326">true</Attachments>
                                                                                       <Linked
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008327">false</Linked>
                                                                                       <checkedOut
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008328">false</checkedOut>
                                                                                       <Thumbnail
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008556">
<selection>
<id>3557</id>
<apiName>DESIGN09018PRT</apiName>
<value>com.agile.api.pc.attachment.ThumbnailID@e1fdc0</value>
</selection>
                                                                                   </Thumbnail>
                                                                                   <designType

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008319">
<selection>
<id>2000008310</id>
<apiName>DESIGN</apiName>
<value>Design</value>
</selection>

```

```

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008320">DESIGN09018.PRT</Number>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008321" />
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008322" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:integer" attributeId="2000008323">2</Version>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:double" attributeId="2000008324">0.0</findNum>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:double" attributeId="2000008325">1.0</Quantity>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008329" />
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008330" />
<structureMultiText01 xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008365" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008376" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008377">CAX-PROE</Identifier>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008378" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008379" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008380" />
xsi:type="xs:string" attributeId="2000009479" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:date" attributeId="2000009480" />
</row>
<row rowId="0">
  <Attachments
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008326">true</Attachments>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008327">false</Linked>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008328">false</checkedOut>

```

```

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008556">
<selection>
<id>3561</id>
<apiName>DESIGN09019PRT</apiName>
<value>com.agile.api.pc.attachment.ThumbnailID@1441063
</value>
</selection>
</Thumbnail>
<designType

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008319">
<selection>
<id>2000008310</id>
<apiName>DESIGN</apiName>
<value>Design</value>
</selection>
</designType>
<Number

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008320">DESIGN09019.PRT</Number>
<Description

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008321" />
<lifeCyclePhase

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008322" />
<Version

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:integer" attributeId="2000008323">2</Version>
<findNum

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:double" attributeId="2000008324">0.0</findNum>
<Quantity

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:double" attributeId="2000008325">1.0</Quantity>
<Label

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008329" />
<componentType

xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008330" />
<structureMultiText01 xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008365" />
<modelName

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008376" />
<Identifier

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008377">CAX-PROE</Identifier>

```

```

xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008378" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008379" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008380" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000009479" />
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:date" attributeId="2000009480" />
</row>
<row rowId="0">
  <Attachments
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    xsi:type="xs:string" attributeId="2000008326">true</Attachments>
    <Linked
      xmlns:xs="http://www.w3.org/2001/XMLSchema"
      xsi:type="xs:string" attributeId="2000008327">false</Linked>
      <checkedOut
        xmlns:xs="http://www.w3.org/2001/XMLSchema"
        xsi:type="xs:string" attributeId="2000008328">false</checkedOut>
        <Thumbnail
          xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
          xsi:type="common:AgileListEntryType" attributeId="2000008556">
            <selection>
              <id>3564</id>
              <apiName>DESIGN09020PRT</apiName>
              <value>com.agile.api.pc.attachment.ThumbnailID@aa06e8</value>
            </selection>
          </Thumbnail>
          <designType
            xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
            xsi:type="common:AgileListEntryType" attributeId="2000008319">
              <selection>
                <id>2000008310</id>
                <apiName>DESIGN</apiName>
                <value>Design</value>
              </selection>
            </designType>
          <Number
            xmlns:xs="http://www.w3.org/2001/XMLSchema"
            xsi:type="xs:string" attributeId="2000008320">DESIGN09020.PRT</Number>
            <Description
              xmlns:xs="http://www.w3.org/2001/XMLSchema"
              xsi:type="xs:string" attributeId="2000008321" />
              <lifeCyclePhase
                xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
                xsi:type="common:AgileListEntryType" attributeId="2000008322" />
                <Version
                  xmlns:xs="http://www.w3.org/2001/XMLSchema"

```

```

xmlns:xs="http://www.w3.org/2001/XMLSchema" <findNum
xsi:type="xs:double" attributeId="2000008324">0.0</findNum>
xmlns:xs="http://www.w3.org/2001/XMLSchema" <Quantity
xsi:type="xs:double" attributeId="2000008325">1.0</Quantity>
xmlns:xs="http://www.w3.org/2001/XMLSchema" <Label
xsi:type="xs:string" attributeId="2000008329" />
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008330" />
<structureMultiText01 xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008365" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <modelName
xsi:type="xs:string" attributeId="2000008376" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <Identifier
xsi:type="xs:string" attributeId="2000008377">CAX-PROE</Identifier>
xmlns:xs="http://www.w3.org/2001/XMLSchema" <Component
xsi:type="xs:string" attributeId="2000008378" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <Reference
xsi:type="xs:string" attributeId="2000008379" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <Configuration
xsi:type="xs:string" attributeId="2000008380" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <revision
xsi:type="xs:string" attributeId="2000009479" />
xmlns:xs="http://www.w3.org/2001/XMLSchema" <revisionDate
xsi:type="xs:date" attributeId="2000009480" />
</row>
<row rowId="0">
  <Attachments
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008326">true</Attachments>
  <Linked
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008327">false</Linked>
  <checkedOut
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008328">false</checkedOut>
  <Thumbnail
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008556">
<selection>
<id>3567</id>
<apiName>DESIGN09021PRT</apiName>
<value>com.agile.api.pc.attachment.ThumbnailID@15100ec
</value>

```

```

</Thumbnail>
<designType
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008319">
<selection>
<id>2000008310</id>
<apiName>DESIGN</apiName>
<value>Design</value>
</selection>
</designType>
<Number
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008320">DESIGN09021.PRT</Number>
<Description
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008321" />
<lifeCyclePhase
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008322" />
<Version
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:integer" attributeId="2000008323">2</Version>
<findNum
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:double" attributeId="2000008324">0.0</findNum>
<Quantity
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:double" attributeId="2000008325">1.0</Quantity>
<Label
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008329" />
<componentType
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008330" />
<structureMultiText01 xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008365" />
<modelName
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008376" />
<Identifier
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008377">CAX-PROE</Identifier>
<Component
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008378" />
<Reference
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008379" />
<Configuration
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008380" />
<revision
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000009479" />

```

```

<revisionDate
xmlns:xsi="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:date" attributeId="2000009480" />
</table>
<table>
  <tableIdentifier>
    <tableId>2000008495</tableId>
    <tableName>Where
Used - Design</tableName>
    <tableDisplayName>Where Used - Design</tableDisplayName>
    </tableIdentifier>
    <row rowId="0">
      <Thumbnail
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008558">
        <selection>
          <id>3573</id>
          <apiName>DESIGN09023TIF</apiName>
          <value>com.agile.api.pc.attachment.ThumbnailID@1a307e6
          </value>
        </selection>
      </Thumbnail>
      <designType
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008497">
        <selection>
          <id>2000008310</id>
          <apiName>DESIGN</apiName>
          <value>Design</value>
        </selection>
      </designType>
      <Number
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008498">DESIGN09023.DRW</Number>
      <Description
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008499" />
      <lifeCyclePhase
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008500" />
      <Version
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:double" attributeId="2000008501">2.0</Version>
      <Attachments
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008504">true</Attachments>
      <Linked
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008505">true</Linked>
      <checkedOut
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000008506">false</checkedOut>
      <Label
xmlns:xs="http://www.w3.org/2001/XMLSchema"

```

```

<componentType
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008508" />
<checkinUser
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008819">
<selection>
<id>704</id>
<apiName xsi:nil="true" />
<value>Administrator, Admin (admin)</value>
</selection>
</checkinUser>
<modelName
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000009311" />
<identifier
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000009312">CAX-PROE-DRW</identifier>
<component
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000009313" />
<reference
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000009314" />
<configuration
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="2000009315" />
</row>
</table>
<tableIdentifier>
<tableId>6149</tableId>
<tableName>Where
Used - Attachment</tableName>
<tableDisplayName>Where Used - Attachment</tableDisplayName>
</tableIdentifier>
<row rowId="0">
<thumbnail
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2000008557">
<selection>
<id>3512</id>
<apiName>DESIGN09023TIF</apiName>
<value>com.agile.api.pc.attachment.ThumbnailID@1e9ddb1
</value>
</selection>
<selection>
<id>3570</id>
<apiName>DESIGN09022ASM</apiName>
<value>com.agile.api.pc.attachment.ThumbnailID@d9c9e4</value>

```



```

</selection>
<id>3573</id>
<apiName>DESIGN09023TIF</apiName>
<value>com.agile.api.pc.attachment.ThumbnailID@55b0ca</value>
</selection>
</Thumbnail>
<Type
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="6310">
<selection>
<id>10141</id>
<apiName>PART</apiName>
<value>Part</value>
</selection>
</Type>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="6299">P00539</numberName>
xmlns:xs="http://www.w3.org/2001/XMLSchema" xsi:type="xs:string"
attributeId="6302">(A)</Rev>
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string" attributeId="6300" />
</lifecycleStatus
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="6301">
<selection>
<id>976</id>
<apiName>PRELIMINARY</apiName>
<value>Preliminary</value>
</selection>
</lifecycleStatus>
</row>
</table>
<Number
xmlns:xs="http://www.w3.org/2001/XMLSchema"
attributeId="6173">DESIGN09022.ASM</Number>
xsi:type="xs:string"
<Type
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="6175">
<selection>
<id>2000008310</id>
<apiName>DESIGN</apiName>
<value>Design</value>
</selection>
</Type>
</lifecyclePhase
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="6390" />

```



```

...xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1" attributeId="2000009487" />
<selection>
  <id>704</id>
  <apiName
xsi:nil="true" />
</selection>
</checkinUser>
<itemChangeStatus
xsi:type="xs:string"
attributeId="2000009487" />
<createUser
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="1420">
  <selection>
    <id>704</id>
    <apiName
xsi:nil="true" />
</selection>
</createUser>
<drawnBy
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2020" />
<checkedBy
xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
xsi:type="common:AgileListEntryType" attributeId="2021" />
<designSystem
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string"
attributeId="2007">Pro/E Wildfire 3.0
</designSystem>
<CADFilename
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string"
attributeId="2017">DESIGN09022.ASM</CADFilename>
<CADOldFilename
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string"
attributeId="2018" />
<designSystemIdentifier
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string"
attributeId="2008" />
<Filetype
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string"
attributeId="2009">ASM</Filetype>
<Subtype
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string"
attributeId="2010" />
<Family
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string"
attributeId="2011" />
<Variant
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string"
attributeId="2012" />
<drawingName
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string"
attributeId="2013" />
<frameID
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string"
attributeId="2014" />
<nameFormat
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xsi:type="xs:string"
attributeId="2015" />
<projectName
xmlns:xs="http://www.w3.org/2001/XMLSchema"

```

```

    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="1301" />
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="1302">DESIGN09022</partNumber>
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="2019" />
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="1331" />
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="1332" />
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="1333" />
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="1334" />
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="1335" />
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="1307" />
    xmlns:xs="http://www.w3.org/2001/XMLSchema"
    attributeId="1308" />

    xsi:type="xs:string"
    <localFlag
      xsi:type="xs:string"
    <partNumber
      xsi:type="xs:string"
    <filePath
      xsi:type="xs:string"
    <oldFilePath
      xsi:type="xs:string"
    <modelType
      xsi:type="xs:string"
    <modelReference
      xsi:type="xs:string"
    <linkType
      xsi:type="xs:string"
    <linkReference
      xsi:type="xs:string"
    <TDMVersion
      xsi:type="xs:string"
    <TDMRevision
      xsi:type="xs:string"
    <MultiList01

    xmlns:common="http://xmlns.oracle.com/AgileObjects/Core/Common/V1"
    xsi:type="common:AgileListEntryType" attributeId="2090" />
  </AgileObject>
</res>
</retrieveDesignStructureResponse>
<checkPrivilegeResponse
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns="http://xmlns.oracle.com/AgileObjects/Core/Business/V1">
  <response xmlns="">
    <messageId>f467ace57764bfde:-
1d875c14:12a8e6a4023:-7f83
    </messageId>
    <messageName>checkPrivilege-by-
ECRetrieveDesignStructureAndMetadata
    </messageName>
    <statusCode>SUCCESS</statusCode>
    <responses>
      <userIdentification>
        </userIdentification>
      </userIdentification>
      <privilege>
        <privilege>2</privilege>
      </privilege>
    </responses>
    <checkPrivilege>true</checkPrivilege>
    <classIdentifier>2000008310</classIdentifier>
    <objectNumber>DESIGN09022.ASM</objectNumber>
    </privilege>
  </responses>
  <responses>
    <userIdentification>
      </userIdentification>
    </userIdentification>
  </responses>
  <userIdentifier>admin</userIdentifier>

```

```

                                </privilege>
                                <privilege>15</privilege>
<checkPrivilege>>false</checkPrivilege>
<classIdentifier>2000008310</classIdentifier>
<objectNumber>DESIGN09022.ASM</objectNumber>
                                </privilege>
                                </responses>
                                </response>
                                </checkPrivilegeResponse>
                                </res>
                                </retrieveDesignStructureAndMetadataResponse>
</env:Body>
</env:Envelope>
```


EC Web Services Schema Types

This chapter includes the following:

▪ AgileEObjectRequestType	161
▪ AgileECRequestExType	161
▪ AgileEObjectResponseType	162
▪ AgileECResponseExtType	162
▪ AgileECClassType	162
▪ getDesignPropertiesAndRightsResponse	163
▪ getDesignItemPropertiesAndRightsResponse	163
▪ createUpdateThenReserveResponse	164
▪ reserveThenCreateUpdateResponse	165
▪ createUpdateThenRelateResponse	165
▪ retrieveDesignStructureAndMetadataResponse	166

AgileEObjectRequestType

Description:		It defines the structure of request header for EC services.	
	<i>Contains</i>		
		req	Request
			Refer to AgileECRequestExtType

AgileECRequestExType

Description:		It defines the structure of request header for EC services.	
	<i>Extends</i>		
		AbstractRequestType	Base Request Type
			Refer to common:Abstract RequestExtType in core services documentation.
	<i>Contains</i>	AgileObject	List of objects
			Refer to bobjs:AgileBusinessObjectType in core services documentation.

AgileEObjectResponseType

Description:	It defines the structure of response header for EC services.		
	<i>Contains</i>		
		res	Response
			Refer to AgileECResponseExtType

AgileECResponseExtType

Description:	It defines the structure of response header for EC services.		
	<i>Extends</i>		
		AbstractResponseType	Base Response Type
			Refer to common:AbstractResponseType in core services documentation
	<i>Contains</i>	AgileClass	List of classes
			Refer to AgileECClassType
		AgileObject	List of objects
			Refer to bobjs:AgileBusinessObjectType in core services documentation

AgileECClassType

Description:	It defines the classes for EC services.		
	<i>Extends</i>		
		ClassType	Class Type
			Refer to common:ClassType in core service documentation.
	<i>Contains</i>	Properties	Property list
			Refer to common:PropertyListType in core services documentation.

		autoNumber	Auto number source
			Refer to common:AdminNodeType in core services documentation.
		attributeMetaData	Meta Data for Attribute
			Refer to common:AttributeType in core service documentation.
		tableMetaData	Meta Data for Table
			Refer to common:TableType in core service documentation

getDesignPropertiesAndRightsResponse

Description:	Response type for getDesignPropertiesAndRightsResponse call.		
	<i>Element</i>		
		res	Response element
	Extends		
		AbstractResponseType	Base response type
			Refer to common:AbstractResponseType in core services documentation.
	Contains		
		getTableMetadataResponse	Response for getTableMetadata call
			Refer to adminMetadata:getTableMetadataResponse in core services documentation.
		hasPrivilegeResponse	Response for hasPrivilege call
			Refer to bobjs:hasPrivilegeResponse in core services documentation.

getDesignItemPropertiesAndRightsResponse

Description:	Response type for getDesignItemPropertiesAndRightsResponse call.
---------------------	--

	<i>Element</i>		
		res	Response element
	Extends		
		AbstractResponseType	Base response type
			Refer to common:AbstractResponseType in core services documentation.
	Contains		
		getTableMetadataResponse	Response for getTableMetaData call
			Refer to adminMetadata:getTableMetadataResponse in core services documentation.
		hasPrivilegeResponse	Response for hasPrivilege call
			Refer to bobjs:hasPrivilegeResponse in core services documentation.

createUpdateThenReserveResponse

Description:	Response type for createUpdateThenReserveResponse call.		
	<i>Element</i>		
		res	Response element
	Extends		
		AbstractResponseType	Base response type
			Refer to common:AbstractResponseType in core services documentation.
	Contains		
		createObjectResponse	Response for createObject call
			Refer to bobjs:createObjectResponse in core services documentation.

		checkOutFFResponse	Response for checkOutFF call
			Refer to attach:checkOutFFResponse in core services documentation.

reserveThenCreateUpdateResponse

Description:	Response type for reserveThenCreateUpdateResponse call		
	<i>Element</i>		
		res	Response element
	Extends		
		AbstractResponseType	Base response type
			Refer to common:AbstractResponseType in core services documentation.
	Contains		
		CheckOutFFResponse	Response for checkOutFF call
			Refer to attach:checkOutFFResponse in core services documentation.
		createObjectResponse	Response for createObject call
			Refer to bobjs:createObjectResponse in core services documentation.

createUpdateThenRelateResponse

Description:	Response type for createUpdateThenRelateResponse call		
	<i>Element</i>		
		res	Response element

	Extends		
		AbstractResponseType	Base response type
			Refer to common:AbstractResponseType in core services documentation.
	Contains		
		CreateObjectResponse	Response for createObject call
			Refer to bobjs:createObjectResponse in core services documentation.
		addRowsResponse	Response for addRows call
			Refer to table:addRowsResponse in core services documentation.

retrieveDesignStructureAndMetadataResponse

Description:	Response type for retrieveDesignStructureAndMetadataResponse call		
	<i>Element</i>		
		res	Response element
	Extends		
		AbstractResponseType	Base response type
			Refer to common:AbstractResponseType in core services documentation.
	Contains		
		getTableMetadataResponse	Response for getTableMetada call
			Refer to adminMetadata:getTableMetadataResponse in core services documentation.
		retrieveDesignStructureResponse	Response for retrieveDesignStructure call

			Refer to retrieveDesignStructure
		hasPrivilegeResponse	Response for hasPrivilege call
			Refer to bobjs:hasPrivilegeResponse in core services documentation.

This page is blank.