



Creating Dynamic Tasks for Avaya Engagement Designer

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17.0 AGREEMENT IN ENGLISH.

The parties confirm that it is their wish that the Agreement, as well as all other documents relating hereto, including all notices, have been and shall be drawn up in the English language only. Les parties aux présentes confirment leur volonté que cette convention, de même que tous les documents, y compris tout avis, qui s'y rattachent, soient rédigés en langue anglaise.

18.0 ENTIRE AGREEMENT.

This Agreement, its exhibits and other agreements or documents referenced herein, constitute the full and complete understanding and agreement between the parties and supersede all contemporaneous and prior understandings, agreements and representations relating to the subject matter hereof. No modifications, alterations or amendments shall be effective unless in writing signed by both parties to this Agreement.

19. REDISTRIBUTABLE CLIENT FILES.

The list of SDK client files that can be redistributed, if any, are in the SDK in a file called Redistributable.txt.

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Chapter 1: Creating dynamic tasks for Avaya Engagement Designer

Introduction to dynamic tasks

Dynamic tasks allow you to program unique tasks to meet your business workflow requirements. You can add dynamic tasks to an existing drawer on the Engagement Designer palette, or create a new drawer for your tasks. Dynamic tasks can be added to the palette any time after Engagement Designer has been installed. The underlying technology for dynamic tasks is OSGi, which is a standard equivalent to Java EE. Avaya Breeze™ supports the Enterprise Bundle Service (eba) svar file for Engagement Designer and Composite Bundle Archive (cba) svar files for tasks.

You must have Java programming experience to create dynamic tasks.

Prerequisites

- Install and configure Avaya Breeze™. For instructions see *Deploying Avaya Breeze™*.
- Install and configure Engagement Designer. For instructions see *Avaya Engagement Designer Snap-in Reference*.
- Install and configure Eclipse or any development IDE.
- Install and configure Apache Maven.
- Install the Avaya Breeze™ SDK. For instructions see *Getting Started with the Avaya Breeze™ SDK*.

Installing the Engagement Designer SDK

About this task

To install the Engagement Designer SDK, you must first download it. If you have an Avaya SSO login and access to PLDS, you can download the SDK from PLDS. Or, you can download it from Avaya DevConnect. For information about downloading software from PLDS, see *Deploying Avaya Breeze™*. To download the SDK from the DevConnect site, following the steps in this procedure.

Procedure

1. Download the Engagement Designer SDK from DevConnect.
 - a. Go to [DevConnect: Avaya Engagement Designer](#).
 - b. In the left navigation pane, select **Releases**.

- c. Select **Downloads**.
 - d. Click **Avaya Engagement Designer Dynamic Tasks SDK**.
 - e. Accept the license agreement.
 - f. Click the **Download** link to download the SDK.
2. Unzip the SDK to a directory or folder, for example, `Avaya-ED-SDK`.
 3. Navigate to the SDK directory.
 4. For Linux or Mac OS, run `bash install.sh`. For Windows, run `install.bat`.
 5. Accept the EULA agreement by entering `y`.
- The SDK components are set up into your local repository.

Creating the scaffolding

Procedure

1. Navigate to the directory where the dynamic task must be created.
 2. Run the following command: `mvn archetype:generate -DarchetypeCatalog=local`
 3. Choose the archetype, by selecting `local->com.avaya.workflow.sdk:task-archetype` (Engagement Designer Task Archetype).
 4. Define a value for property 'groupId' (for example: `com.avaya`).
- The groupId property identifies the project uniquely across all projects. The value must follow the Java package name rules; it must be at least a domain name that the user controls.
5. Define value for property 'artifactId' (for example: `watasks`).
- The artifactId is the name of the jar without version.
6. Define value for property 'version' (for example: `1.0`).
 7. Define value for property 'package' (for example: `com.avaya.watasks`).
 8. Confirm properties configuration.

For these examples:

```
groupId: com.avaya
artifactId: watasks
version: 1.0
package: com.avaya.watasks
serviceName: SampleTask
serviceVersion: 1.0.0.0.0
Y: :
```

This procedure generates the following sample directory structure:

A parent directory named `watasks` with the following contents:

- tasks folder
- task-snapin folder
- pom.xml file (generated by Maven)

Defining the task properties and icon

About this task

This is a multi-module project. The tasks folder is the project and contains the code. The tasks-snapin folder generates the cba (composite bundle archive) and svar (format supported by Avaya Breeze™).

Procedure

1. Open the pom.xml file in the parent directory and define common properties, like your unique task-name.
2. In the parent directory, open the `/tasks/pom.xml` file and define any other dependencies of your task.
3. Navigate to the `<parent directory>/tasks/resources` directory and open the `tasks.json` file.
4. Edit properties in the `tasks.json` file.

In this file edit properties like the task name, task drawer name, banner color, and others. See [Task properties description](#) on page 16 for a description of the different task properties that you can edit. See [Sample dynamic task.json file](#) on page 10 for sample code you can use as a reference.

5. Optionally, update the png icon file for the task in the `<parent directory>/tasks/resources` directory.
6. Optionally, update the HTML files for task help and the index.html file for the entire bundle in the `<parent directory>/tasks/resources` directory.

Sample dynamic task.json file

The following is a sample of a task.json file that defines task properties. It creates a new drawer "MyDrawer" on the Engagement Designer palette. The new drawer includes the new task type "MyTask," which displays with the name "My First Task." Two Java classes, HelloModel.java and HelloExecution.java are generated in the example.

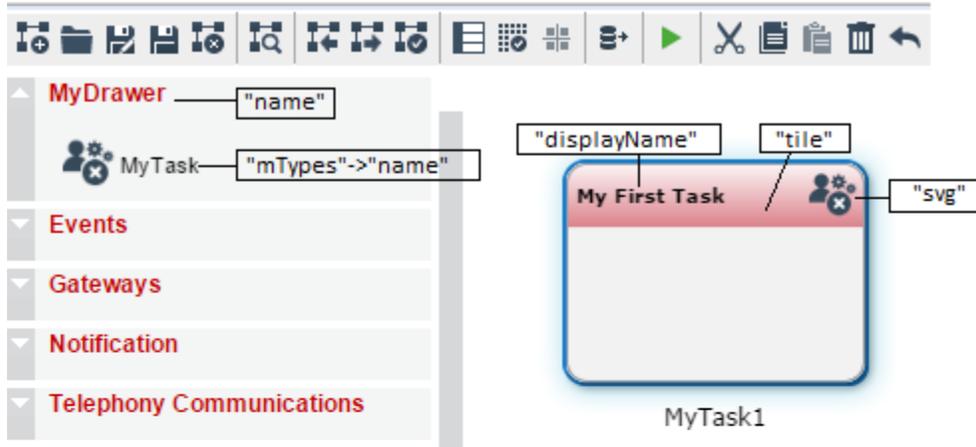
```
[  
{
```

```

"name": "MyDrawer",
"mTypes": [
  {
    "name": "MyTask",
    "snapinVersion": "3.0",
    "displayName": "My First Task",
    "tag": "hello",
    "svg": "hello",
    "helpUrl": "Hello.html",
    "tile": "red",
    "serviceName": "CollabDesigner",
    "custom": "true",
    "nodeType": "activity",
    "modelClass": "com.avaya.watasks.HelloModel",
    "executionClass": "com.avaya.watasks.HelloExecution",
    "properties": [
    ],
    "input_schema": "{title: InputSchema,
      type: object,
      properties: {title
        :{type: string}
      }
    }",
    "output_schema": "{title: OutputSchema,
      type: object,
      properties: {concatenatedStrings:{type: string}
      }
    }"
  }
]
}
]
}
]

```

This file defines the following task. See [Task properties description](#) on page 16 for a definition of the use of each property used in this sample.



Sample dynamic task – ReadNumbers

This sample ReadNumbers dynamic task is useful for several solutions. It reads the digits entered individually. For example, 8421 is read as eight, four, two, one instead of as the default eight thousand four hundred twenty-one. The task has many use case, for example, reading an account number to bank customers, or confirming a phone number associated with an account.

Every task has a tasks.json file, model, and execution class, like the samples provided here. You can use these samples as a reference to create properties for your task and to write your model and execution classes.

Tasks.json

```
[
  {
    "name": "MyDrawer",
    "mTypes": [
      {
        "name": "Read Numbers",
        "snapinVersion": "3.0",
        "displayName": "Read Numbers",
        "tag": "ReadNumbers",

```

```

    "svg": "ReadNumbers",
    "tile": "green",
    "serviceName": "CollabDesigner",
    "custom": "true",
    "nodeType": "activity",
    "modelClass": "com.avaya.readnumbers.ReadNumbersModel",
    "executionClass": "com.avaya.readnumbers.ReadNumbersExecution",
    "properties": [{
      "name": "NumbersString",
      "displayPropName": "NumbersString",
      "type": "String",
      "controlType": "text",
      "modelName": "setNumbersString",
      "mapping": "numbersString"
    }
  ],
  "mapping": "[\"input\", \"output\"]",
  "input_schema": "{title: ReadNumbersInputSchema,
    type: object,
    properties: { numbersString:{type:string} } }",
  "output_schema": "{title: ReadNumbersOutputSchema,
    type: object,
    properties: { result: { type: string } } }"
}
]
}
]

```

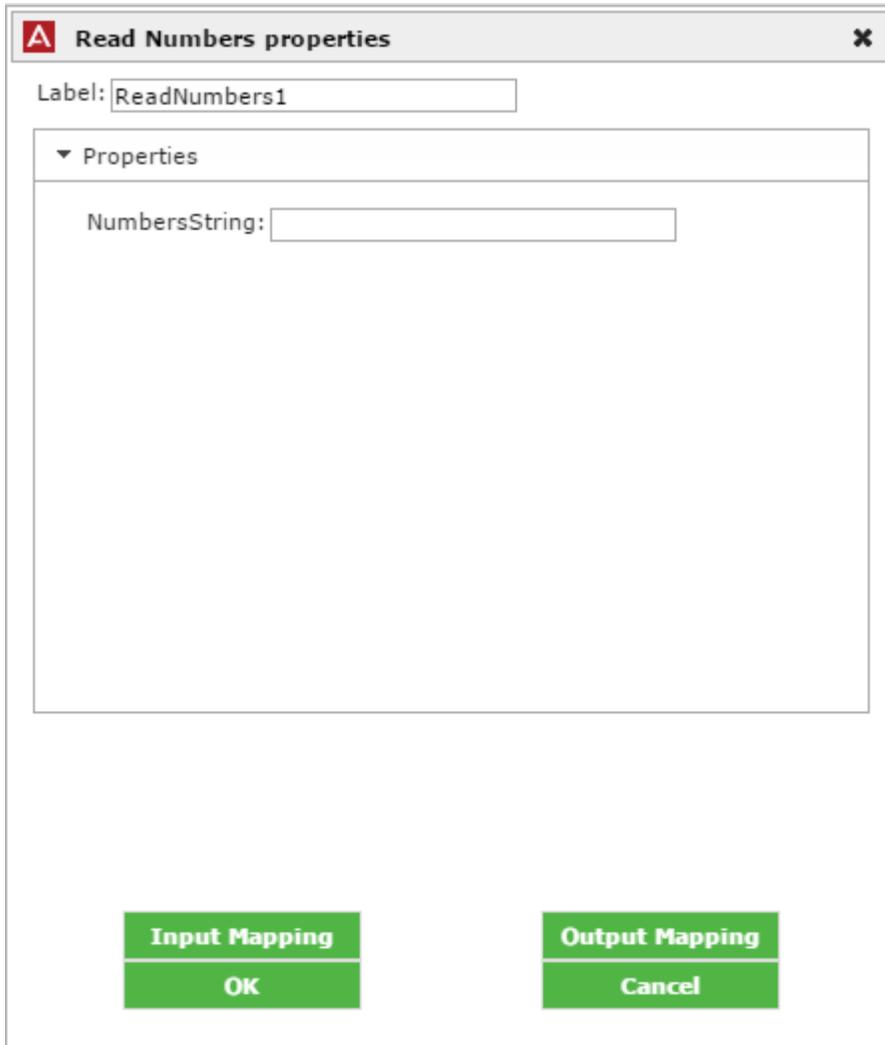
The properties tag defines the following task properties.

```

"properties": [{
  "name": "NumbersString",
  "displayPropName": "NumbersString", //display name
  "type": "String",
  "controlType": "text",
  "modelName": "setNumbersString", //setter method in model class
  "mapping": "numbersString" //name of mapping in model and execution class
}
]

```

This is how the NumbersString property looks:



Model class

```

package com.avaya.readnumbers;
//Dependencies can be added in pom, as described at the end of this section.
import com.roobroo.bpm.model.BpmNode;
import com.roobroo.bpm.util.WFUtil;
import org.apache.commons.lang.StringUtils;
import java.util.List;
@SuppressWarnings("serial")

//Detail on BpmNode is provided in the section BpmNode API class.
public class ReadNumbersModel extends BpmNode {

    public ReadNumbersModel(String name, String id) { super(name, id);}

    private String numbersString;

    //This is the setter method as defined under "modelName" of the property
    "NumbersString" in tasks.json
    public void setNumbersString(String numbers){this.numbersString=numbers;}

    public String getNumbersString(){ return numbersString;}
    
```

```

@Override
public boolean validateProperties(List<String> w, List<String> e){
    boolean isValid = true;

    //Mandatory parameter numbersString, checked that the property numberString
    has an assigned value either through mapping or as an input to the task.
    //WFUtil.validateMapping has been used below with the last parameter
    "numbersString" as defined in tasks.json's properties under 'mapping'
    //WFUtil.validateEmptyProperty has been used below with second parameter
    as the private member "numbersString" of this class.
    if(! WFUtil.validateMapping(w, e, getDataInputAssociations(),
    "numbersString"))&&! WFUtil.validateEmptyProperty(numbersString,
    "numbersString", e)){

        isValid = false;
        return super.validateProperties(w, e) && isValid;
    }
    if(StringUtils.isEmpty(getNumbersString()) &&
    (! WFUtil.validateMapping(w, e,
    getDataInputAssociations(), "numbersString")))
    {
        try
        {
            Integer.parseInt(getNumbersString());
        }
        catch(NumberFormatException nfe)
        {
            e.add("Invalid number format");
            isValid=false;
        }
    }
    return super.validateProperties(w, e) && isValid;
}
}

```

Execution class

```

package com.avaya.readnumbers;

import org.apache.commons.lang.StringUtils;
import org.json.JSONObject;
import com.avaya.app.entity.Instance;
import com.avaya.app.entity.NodeInstance;
import com.roobroo.bpm.model.BpmNode;

//Detail on NodeInstance is provided in the section NodeInstance API class.

@SuppressWarnings("serial")
public class ReadNumbersExecution extends NodeInstance {

    public ReadNumbersExecution(Instance instance, BpmNode node) {
        super(instance, node);
    }

    public Object execute() throws Exception {
        //Get node from Model Class
        ReadNumbersModel rnm=(ReadNumbersModel)getNode();

        //Get the value form tasks.json
        String num = (String) get("numbersString");

        //This is the json object that is returned after execution of task and can
        be viewed by clicking on the task in the instance generated under admin
        console.
    }
}

```

```

JSONObject obj=new JSONObject();

//Mapping is given priority in this case, if it is empty, then the value
entered in the task(coming from model class) is used.
if(num == null || num.isEmpty())
{ num = rnm.getNumbersString();}

if(StringUtils.isNotEmpty(num))
{ try
{ Integer.parseInt(num);}
catch(NumberFormatException nfe)
{ throw new IllegalArgumentException("The number is not valid");}

String[] a;
a=num.split("");
String b=StringUtils.join(a,"",1,a.length);
obj.put("result",b); }
else
{ obj.put("result","");
throw new IllegalArgumentException("Empty string");}
return obj;}
}

```

Add dependencies

You can add dependencies under <parent directory>/tasks/pom.xml.

- ReadNumbersModel class has a dependency on org.apache.commons.lang.StringUtils. Add the following under the <dependencies> tag:

```

<dependency>
  <groupId>commons-lang</groupId>
  <artifactId>commons-lang</artifactId>
  <version>2.6</version>
</dependency>

```

- ReadNumbersModel imports packages com.roobroo, ReadNumbersExecution imports com.avaya.app.entity,javax.persistence. These dependencies are there by default in the scaffold project generated by the SDK. You can add this using:

```

<Import-
Package>javax.persistence,org.json,com.avaya.app.entity,com.avaya.workflow.*,com.roob
roo.*;
!*</Import-Package>

```

Task properties description

The following properties are defined in the tasks.json file in the /task/resources directory.

Task properties

Property	Description
name	The task name displayed on the palette.
snapinVersion	The task snap-in version number

Table continues...

Property	Description
displayName	The task name displayed when the task is dragged onto the canvas.
tag	How the task appears in the bpmn file. Spaces are not allowed in the tag.
svg	The name of the png file that has the icon image for the task. Do not include the file extension in the name. Add the icon png file to the resources folder.
helpUrl	The reference to the help file in the <code>resources/help</code> folder. The help is accessed by clicking the help icon on the task properties window. (You may need to create the <code>resources/help</code> folder.)
tile	Color of the top band of the task displayed on the canvas. Choose from the following colors: red, green, purple, gold, or blue.
serviceName	CollabDesigner. This value remains constant.
custom	Indicates if this is a custom task. For a dynamic task, this is always "true."
nodeType	The type of task: activity.
modelClass	The name of model class for the task. It is defined by user under <code><parent directory/tasks/src/<package name defined during creation></code> .
executionClass	The name of execution class. It is defined by user under <code><parent directory/tasks/src/<package name defined during creation></code> .
properties	All the properties that display in the task properties window.
input schema	JSON schema that defines the expected input for the task.
output schema	JSON schema that defines the expected output of the task.
displayProperties	JSON definition of indicating what is shown in the display tile of the activity. That is, when the task is dragged and dropped on the palette, what is shown before clicking the task to open the properties window. There are two subsections: mapping and properties. If a mapping is available for the input schema variable 'mediauri', it will be used as the display value for the property "Media-URI" defined in the task type. The 'properties' section indicates that if there are no mappings done, then the content of the first available property from this list will show in the tile display.

Values that describe properties of fields displayed in the task properties window

Property	Description
name	Name of the property displayed in the task properties window. Spaces are not supported.
controlType	The type of control used for the property. See list of User Interface controls below.
type	The type of data the property stores.
modelName	A data variable name in the model class where the entered value is stored in the model. For example, a setter function that sets the value of this property.
fillerModel	The model class name that supplies the entries in the drop down box.
mapping	The variable in the input schema associated with the control.
textLines	The number of lines in a multiline text box. The default is 7.
clickerModel	Model class that handles the button click.
clicker	A function name in the model class that gets executed when the button is clicked.
clickerParam	Parameters in JSON format passed to the clicker function.
clickerLabel	The name that appears on the button.
clickerTextField	Another field name defined in the same property dialog that can display any return strings from the clicker function.

User interface controls supported for task properties

Control type	Property type	Description
"combo"	"String"	Indicates that the property's control is a drop-down combo box.
"text"	"String"	Indicates that the property's control is a simple text box.
"multilineText"	"String"	Indicates that the property is a multi line text box.
"password"	"String"	Indicates that the property is a text box that accepts passwords (characters are masked).
"button"		Indicates that the property is a clickable button.
"checkbox"		Indicates that the property is a checkbox.

Table continues...

"datetime"	"String"	<p>Indicates the property uses a calendar widget to get the date and time.</p> <p>The property value would be in the format of MM/DD/YYYY HH:MM (e.g. 12/24/2014 15:30).</p> <p>You can use the following Java code to convert the datetime string to Date object.</p> <pre>Date date = new SimpleDateFormat("MM/dd/yyyy HH:mm").parse("12/24/2014 15:30");</pre>
------------	----------	---

BpmNode API class

The HelloModel.java class extends the BpmNode class.

```
import com.roobroo.bpm.model.BpmNode;
public class HelloModel extends BpmNode {
    public HelloModel(String name, String id) {
        super(name, id);
        // TODO Auto-generated constructor stub
    }
}
```

This class defines the fields corresponding to the properties of the task. All the fields must be 'public'.

NodeInstance API class

HelloExecution extends NodeInstance and implements the execute method.

```
import org.json.JSONObject;
import com.roobroo.bpm.im.Instance;
import com.roobroo.bpm.im.NodeInstance;
import com.roobroo.bpm.model.BpmNode;

public class HelloExecution extends NodeInstance {
    public HelloExecution(Instance instance, BpmNode node) {
        super(instance, node);
    }
    public Object execute() throws Exception {
        return new JSONObject("{title:Hello}");
    }
}
```

Execute can throw an exception that can be processed by Engagement Designer using an Error Boundary Event. The execute method returns an output that can be used in output mapping.

The NodeInstance API class has the following methods.

```
public Object get(String name); – Gets a particular part of input data, the part is specified in the json path syntax.
public BpmNode getNode(); – Returns the bpm node for which this is the executor.
public Instance getInstance(); – Returns the workflow instance.
public boolean isReconstruction(); – Checks whether the executor is being run a second time because there was a failover.
public void log(String message); – Log using the Engagement Designer logger.
public String subscribe*(String family, String type) throws JSONException; – A convenience methods to allow to subscribe to Eventing Framework.
public BpmNode getParentNode() throws JSONException; – If there is a parent workflow instance which called this instance, this is the reference to the parent bpm node.
```

OSGi task bundles

The task author can add as many tasks as wanted in a single bundle by adding the model and execution classes to the tasks.json directory. Also, add a png file for each task icon to the resources directory.

The tasks bundle contains the OSGi service, which implements the interface. This code is generated and generally does not need to be modified.

```
public interface TaskService {
    public String getName();
    Category[] getTaskCategories(); // for listing tasks available
    BpmNode getModel(String model, String name, String id);
    NodeInstance getExecutor(Instance instance, BpmNode node,
        String whatYouWantFromWhatever);
    byte[] getResource(String resourceName); // to get png, help files
    public ArrayList<String> getFillerData(String modelName, String filler,
        String strParam);
    public String executeClicker(String clickerModel, String clickerFunc,
        String strParam);
}
```

The task bundle is registered with OSGi using the OSGi blueprint file of their bundle. This code does not need to be modified.

```
<?xml version="1.0" encoding="UTF-8"?>
<blueprint xmlns="http://www.osgi.org/xmlns/blueprint/v1.0.0">
    <service id="myService">
        <interfaces>
            <value>com.roobroo.TaskService</value>
        </interfaces>
        <bean class="com.avaya.MyTaskService"/>
    </service>
</blueprint>
```

The code to make this an OSGi bundle is also generated in <parent directory>task/tasks/pom.xml.

```
<plugin>
    <groupId>org.apache.felix</groupId>
    <artifactId>maven-bundle-plugin</artifactId>
```

```

<version>2.4.0</version>
<extensions>true</extensions>
<configuration>
  <manifestLocation>META-INF</manifestLocation>
  <rebuildBundle>true</rebuildBundle>
  <instructions>
    <Export-Package>!*</Export-Package>
    <Import-Package>com.avaya.workflow.*,com.roobroo.*;!*
    </Import-Package>
    <Bundle-Blueprint>OSGI-INF/blueprint.xml
    </Bundle-Blueprint>
    <Embed-Dependency>*;scope=!runtime;artifactId=!engine
    </Embed-Dependency>
    <Embed-Transitive>true</Embed-Transitive>
    <Embed-Directory>target/dependency</Embed-Directory>
    <Embed-StripGroup>true</Embed-StripGroup>
  </instructions>
</configuration>
</plugin>
<plugin>
  <artifactId>maven-dependency-plugin</artifactId>
  <executions>
    <execution>
      <id>copy-dependencies</id>
      <phase>package</phase>
      <goals>
        <goal>copy-dependencies</goal>
      </goals>
    </execution>
  </executions>
</plugin>

```

The OSGi classloader loads classes from two places:

- When another bundle is exporting the package, it can be imported in the `<Import-Package>` instruction. This applies to packages that are exported by Avaya Breeze™ as part of the `edp-osgi-api` bundle as well.
- The jar can be included providing the class as a dependency in the pom. Only those jars will be included that are specified by the filter in `<Embed-Dependency>`.

Predefined task properties

The generated `properties.xml` file in the `svr` has predefined properties that are required for the `cba` to link to the Engagement Designer `eba`. There is no need to change these properties – you can add more properties if needed.

```

<?xml version="1.0" encoding="UTF-8"?>
<service xmlns="http://archiveschemas.aus.avaya.com/properties"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://archiveschemas.aus.avaya.com/properties properties.xsd"
  name="{serviceName}" version="{serviceVersion}"
  application="{serviceName}-{serviceVersion}">
  <smgr>
    <description>My Service</description>
    <!-- orig_order>1</orig_order-->
    <!-- orig_group>1</orig_group-->
    <fs_component>true</fs_component>
    <attribute name="AssociatedBusinessLevelApplicationName">

```

```

<displayName>AssociatedBusinessLevelApplicationName</displayName>
  <helpInfo>
  </helpInfo>
  <global>>false</global>
  <validation name="AnyString">
    <type>STRING</type>
  </validation>
  <admin_visible>>false</admin_visible>
  <admin_changeable>>false</admin_changeable>
  <factory>
    <value>EngagementDesigner</value>
    <user_changeable>>false</user_changeable>
  </factory>
</attribute>
<attribute name="AssociatedBusinessLevelApplicationVersion">

<displayName>AssociatedBusinessLevelApplicationVersion</displayName>
  <helpInfo>
  </helpInfo>
  <global>>false</global>
  <validation name="AnyString">
    <type>STRING</type>
  </validation>
  <admin_visible>>false</admin_visible>
  <admin_changeable>>false</admin_changeable>
  <factory>
    <value>3.1.0.0.9000</value>
    <user_changeable>>false</user_changeable>
  </factory>
</attribute>
<attribute name="AssociatedCompositionUnitName">

<displayName>AssociatedCompositionUnitName</displayName>
  <helpInfo>
  </helpInfo>
  <global>>false</global>
  <validation name="AnyString">
    <type>STRING</type>
  </validation>
  <admin_visible>>false</admin_visible>
  <admin_changeable>>false</admin_changeable>
  <factory>
    <value>engine-snapin-eba</value>
    <user_changeable>>false</user_changeable>
  </factory>
</attribute>
<attribute name="CompositeBundleName">
  <displayName>CompositeBundleName</displayName>
  <helpInfo>
  Composite bundle name that is the symbolic name of the cba which will
  be the name used by the local repository
  </helpInfo>
  <global>>false</global>
  <validation name="AnyString">
    <type>STRING</type>
    <type>STRING</type>
  <admin_visible>>false</admin_visible>
  <admin_changeable>>false</admin_changeable>
  <factory>
    <value>tasks-snapin-cba</value>
    <user_changeable>>false</user_changeable>
  </factory>
</attribute>
<attribute name="CompositeBundleVersion">

```

```

        <displayName>CompositeBundleVersion</displayName>
        <helpInfo>
        Composite bundle version that is the bundle version of the
        cba which will be the name used by the local repository
        </helpInfo>
        <global>false</global>
        <validation name="AnyString">
            <type>STRING</type>
        </validation>
        <admin_visible>false</admin_visible>
        <admin_changeable>false</admin_changeable>
        <factory>
            <value>3.1.0-SNAPSHOT</value>
            <user_changeable>false</user_changeable>
        </factory>
    </attribute>
</smgr>
</service>

```

Building and deploying the task

Before you begin

Engagement Designer must be installed and configured before you can deploy new tasks.

About this task

When a new task is deployed on System Manager, Engagement Designer adds the task to the list of tasks available in the Engagement Designer palette. When a task is uninstalled, it is removed from the palette, and workflow definitions using that task show an error. When a new svar is uploaded that overrides an existing task, the new task is used for all existing and new workflow instances.

Procedure

1. Run the mvn package at the top level.

This step builds the svar package for the task bundle. The task svar file is generated at the location: `watasks/tasks-snapin/tasks-snapin-svar/target`. The default name of the task svar file is: `SampleTask-1.0.0.0.0.svar`.

2. Load and install the task on System Manager.

For instructions for installing a snap-in on System Manager see *Quick Start to Deploying Avaya Breeze™ Snap-ins*.

Chapter 2: Related resources

Documentation

See the following related documents at <http://support.avaya.com>.

Title	Use this document to:
<i>Deploying Avaya Breeze™</i>	Deploy and configure Avaya Breeze™.
<i>Getting Started with the Avaya Breeze™ SDK</i>	Install and use the Avaya Breeze™ SDK.
<i>Avaya Engagement Designer Snap-in Reference</i>	Deploy and configure Engagement Designer.
<i>Avaya Engagement Designer Developer's Guide</i>	Understand and use Engagement Designer.
<i>Getting Started with the Avaya Engagement Designer</i>	Learn the basics of Engagement Designer and how to create simple Workflow Definitions.

Related links

[Finding documents on the Avaya Support website](#) on page 24

Finding documents on the Avaya Support website

About this task

Use this procedure to find product documentation on the Avaya Support website.

Procedure

1. Use a browser to navigate to the Avaya Support website at <http://support.avaya.com/>.
2. At the top of the screen, enter your username and password and click **Login**.
3. Put your cursor over **Support by Product**.
4. Click **Documents**.
5. In the **Enter your Product Here** search box, type the product name and then select the product from the drop-down list.
6. If there is more than one release, select the appropriate release number from the **Choose Release** drop-down list.
7. Use the **Content Type** filter on the left to select the type of document you are looking for, or click **Select All** to see a list of all available documents.

For example, if you are looking for user guides, select **User Guides** in the **Content Type** filter. Only documents in the selected category will appear in the list of documents.

8. Click **Enter**.

Related links

[Documentation](#) on page 24

Avaya DevConnect

Avaya DevConnect provides additional resources for Engagement Designer developers. You can access documentation, videos, webinar recordings, tier 1 and tier 2 support as well as a developer forum. View the Engagement Designer DevConnect website at: [DevConnect: Avaya Engagement Designer](#).

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