

Programmatically Starting a BPM Process in CE 7.1 EhP1



Applies to

SAP NetWeaver Composition Environment 7.1.1

Summary

This article is to help you in programmatically starting a BPM process once it has been deployed into the Application Server.

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Introduction

A BPM process which has been deployed on to the Application Server can be started either by starting the process directly, using the nwa portal or by using the wsnavigator portal; or it can be started programmatically.

In this article I have mentioned the steps to be performed to start a BPM process programmatically once it has been deployed into the Application Server. Also, I have given a brief mention of how it can be started from the wsnavigator or nwa portal.

Starting the BPM process from a WPro application

One way to do start the BPM process is to make use of the web service created for the process. The service created for the process has the same name as the service associated to the start step. This web service can be used in a UI Client to start the process when required.

For example, in the case of warranty claims process demo –

1. A CAF has been used to create the claim service.
2. This service has been associated with the start step of the warranty claims process
3. Once the process is deployed onto the application server a web service with the name – Claim - is created.
4. You can create a client for this service and use it in your WPro UI.

Creating a Web Service client

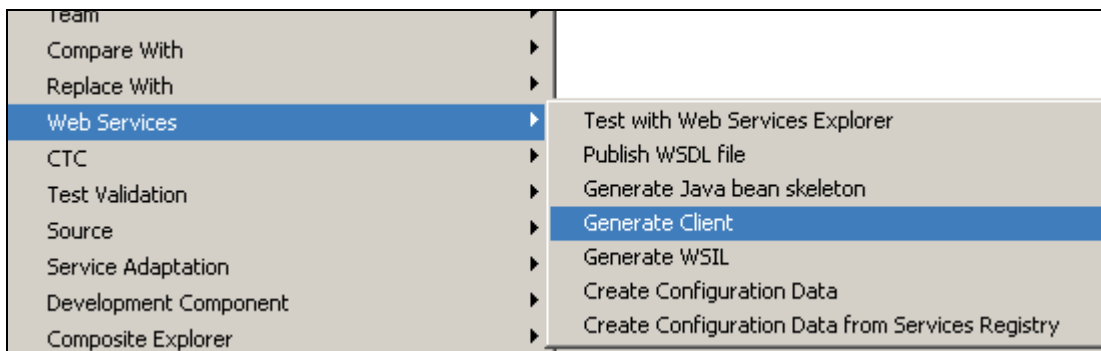
The NWDS provides us with a tool to generate a web service client easily. This tool lets you create the client in either a *dynamic web project* or in a *EJB project*.

The steps to be performed are –

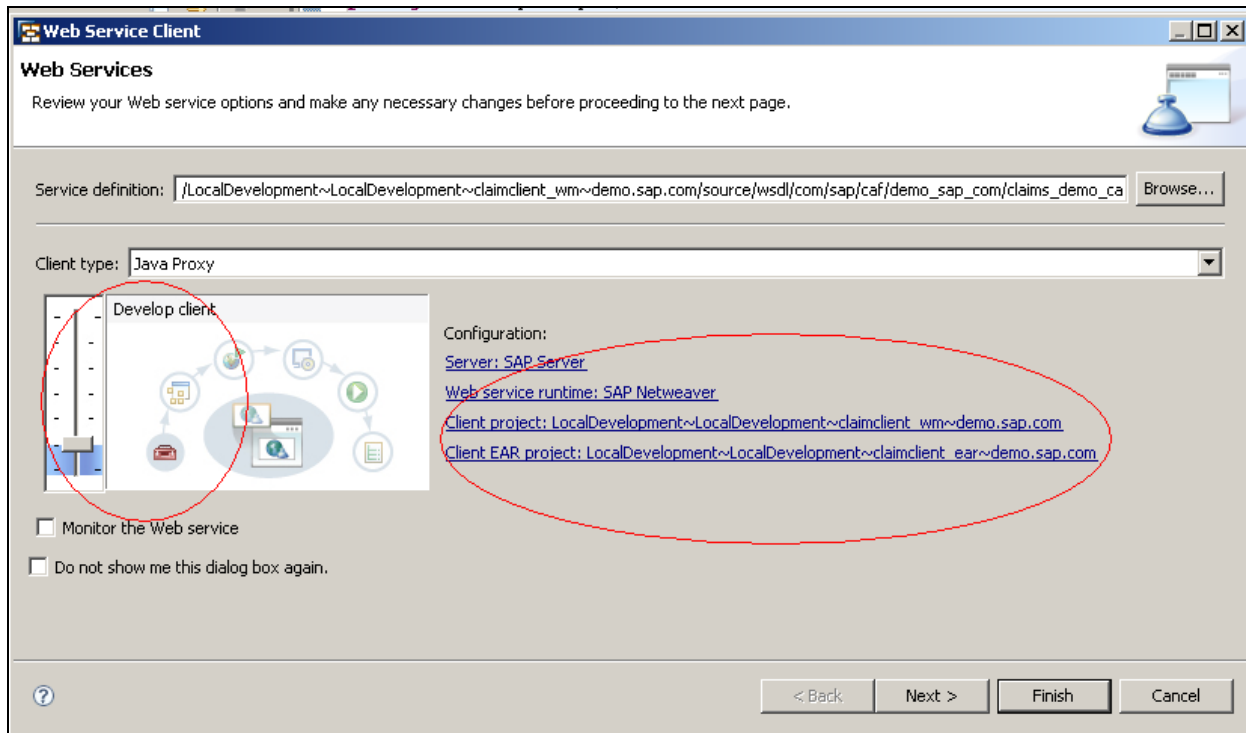
1. Import the wsdl file of the web service of the process to be started into any project in NWDS.

NOTE: Before you continue on to creating the web service you need to create either a *dynamic web project* or a *EJB project* and the EAR project to which this will be associated. This is required while generating the client for the web service.

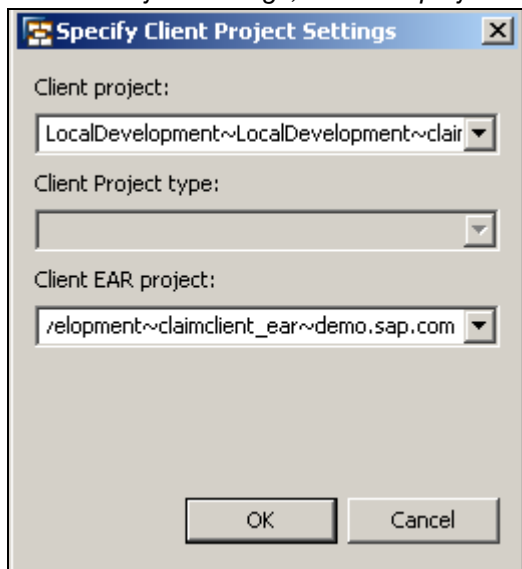
2. Select the option *Web Services > Generate Client* from context menu of the wsdl file.



3. Select the option *Develop Client* in the dialog box displayed.



4. Here, in the *Web Service Client* dialog box you have to select the server and in the *Specify Client Project Settings*, the *client project* and the *client EAR project* then select the button *OK*.



5. Once these configurations have been set. Select *Finish*.
6. This will generate the required client classes in the client project mentioned.
7. Now you need to make use of this client class created to invoke the web methods available in the service.
8. An example of how this can be done –
In the example (the Web Service; the Operation) associated to the start step of the process is –
(Claim; Create).

```
public Boolean createClaim(<parameters required by the operation associated with start step of the process>)
    throws Exception{
```

```

Claim port;
try {

Claim_Service service = new Claim_Service(new java.net.URL("<wsdl location>"), new
    javax.xml.namespace.QName("<tns of the wsdl>", "<Service Nasme>"));

port = service.getClaimBindingPort();

com.sap.caf.demo_sap_com.claims_demo_caf.modeled.Claim claim = port.create<parameters
    required by the operation associated with start step of the process>));
return true;

    } catch (RuntimeException e) {
        e.printStackTrace();
        return false;
    }
}

```

9. Use this method in your WDPPro UI to invoke the web method/operation associated with the start step of the process.
10. This will start the BPM process.

Using the generated client in WDPPro form

As the client has been created in a client project which needs to be associated with an EAR, the classes though visible at the design level are not available for use at runtime. To facilitate the availability of the classes at runtime, we have a need for these classes generated at build time. This will be available in the war file of the client project.

A copy of these classes generated, are to be placed as a copy in the WDPPro DCs WEB-INF folder. This will ensure that the classes are available for the invocation of the web methods.

Starting the process from the wsnavigator

The process can also be started from the wsnavigator portal of the Application Server. To do this

1. Open the wsnavigator portal
2. Go to provider system tab.
3. Search for the service starting with the same name as the service name associated with the start step of the process.
4. Select the web service created for the process.
5. Select Next.
6. Select the method/operation associated with the start step and select Next
7. Enter the required inputs
8. Select the button *Invoke*
9. This will start the process.


Starting the process from the nwa portal

Another way of starting the process is to -

1. Open the *nwa* portal
2. Access the tabs – *Configuration Management > Processes and Tasks > Process Repository*.

Availability and Performance Management | Operation Management | **Configuration Management** | Problem Management | SOA Management

Security | Infrastructure | Scenarios | **Processes and Tasks** | Connectivity

 **Process Repository**
 The NW BPM Process Repository tool display all the deployed process development components, the versions of the components deployed and all the process and task definitions deployed

3. Select the component (the process to be started)
4. The latest version deployed on the Application Server is the one which is highlighted.
5. Select the Process to be started. Select the button *Start Process*

warranty_demo (demo.sap.com)

Component Versions of the Component: warranty_demo (demo.sap.com)

Active	Version
<input type="checkbox"/>	20081010152842 (localDevelopment)
<input type="checkbox"/>	20081010152842 (localDevelopment)
<input type="checkbox"/>	20081014174649 (localDevelopment)
<input checked="" type="checkbox"/>	20081014174649 (localDevelopment)
<input type="checkbox"/>	20081007160005 (localDevelopment)

Processes, Tasks and Rules of the Component: warranty_demo

Processes, Tasks and Rules | Resources

Process Flow | **Start Process**

Name
process

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