

## Dynamic Documents in Windchill DynamicDesignLink:

This document assumes that Windchill DDL 6.2.6 is installed and configured.

This tutorial was tested with Windchill DDL 6.2.6 (datecode 2002700) on Windows 2000 SP2.

Use the following XSL template for the tutorial: <http://www.ptc-mss.com/Tutorial/Dyn Doc Template.xsl>

### Overall Process

The overall process for creating a dynamic document is:

- 1) Create an appropriate XSL template that contains all of the text (and static images) that will be displayed. The XSL template defines how the various elements of the document will be displayed and establishes placeholders for the information that will be provided by the generated variant.
- 2) Checkout the desired Generic Part in the Configuration Modeler.
- 3) Add a Deliverable Maker of type "FO:Maker" to the Generic Part, ensuring that the desired XSL template is specified.
- 4) Define the XSL parameters of the new Deliverable Maker as follows:
  - varname=VARIANT\_PART\_NAME
  - varnumber=VARIANT\_PART\_NUMBER
  - previewImage=PREVIEW\_IMAGE
  - (any other parameters that are required by the XSL file that you are using)
- 5) Make sure the new Deliverable Maker is ordered **after** the CAD Worker.
- 6) Checkin the Generic Part to save your results.
- 7) Using the Catalog Manager, create a new Generic Product for this Generic Part.
- 8) Publish the Generic Product.
- 9) Login as Approver and approve the pending Generic Product.

- 10) Login as “User” to the Product Portal and “Build Your Own” for the Generic Product created above.
- 11) Request Deliverables
- 12) Once the deliverables have been completed you should have a set of CAD files and a PDF file that can be viewed from the Product Portal.

## Creating Dynamic Documents

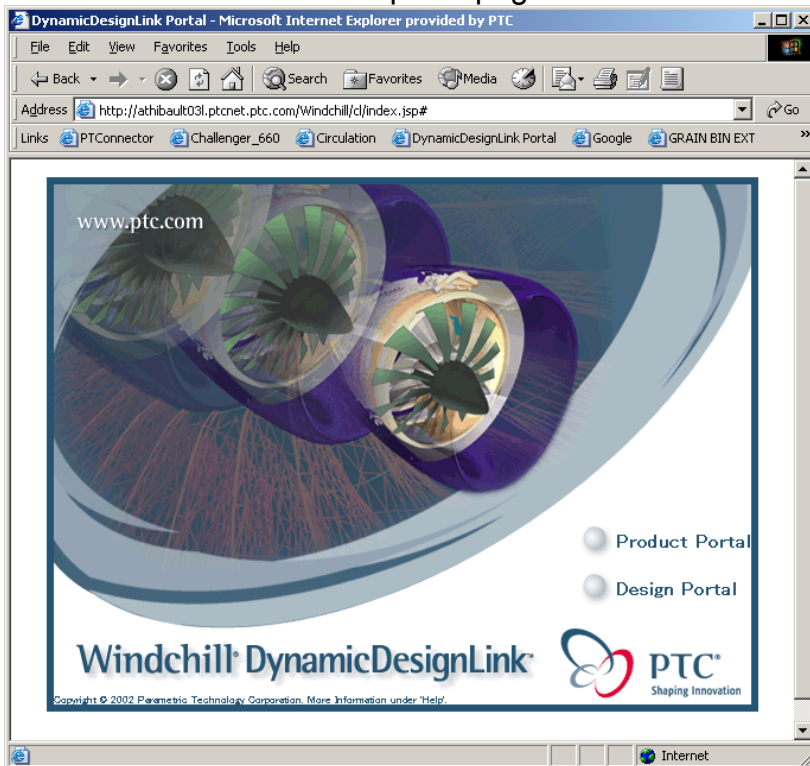
Once the XSL template that defines the Dynamic Document has been created, the Dynamic Document can be created using the following procedure.

Start Tomcat and the Method Server for Windchill DDL if it is not running. Also start the Registry server.

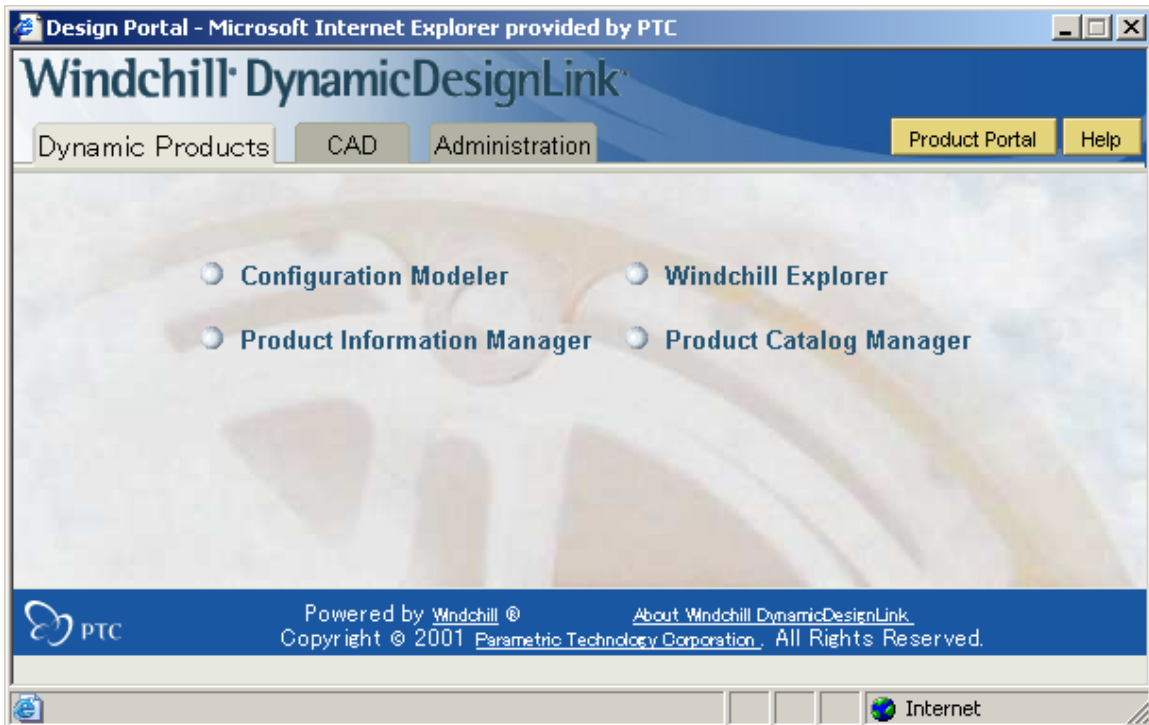
Open the web browser and enter the following url:

<http://<machine name> Windchill/cl/index.jsp#>

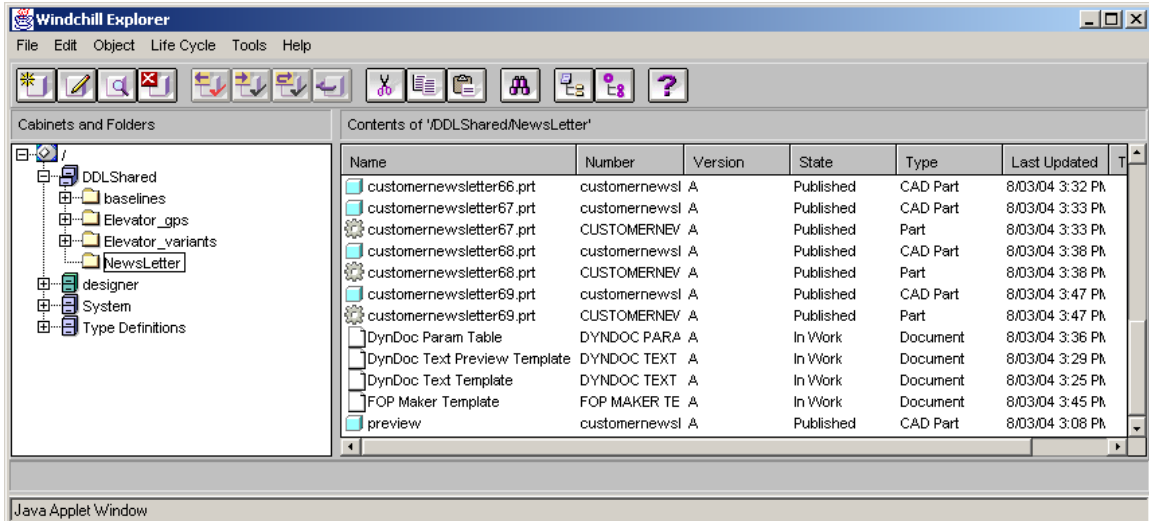
This is the Windchill DDL Splash page.



Select the **Design Portal** and login as a user with “designer” privileges



Select **Windchill Explorer**.



**Hint:** You may want to create a separate folder for all Dynamic Document templates within Windchill Explorer. This folder should be a subfolder of “/DDLSHared”.

Store the XSL Template file that you wish to use in Windchill DDL by selecting the folder where you want the template file to be stored, selecting

**File>>New >> Document**, and completing the various fields as shown:

Primary File: D:\User Profiles\athibault\Desktop\Dyn Doc Template.xsl

\*Name: Dyn Doc Template

Type: Document

Title:

\*Department: Engineering

\*Number: Dyn Doc Template

Description:

\*Location: /DDLShared/NewsLetter

\*Life Cycle: Default

Team:

Name	Modified	To-Do
------	----------	-------

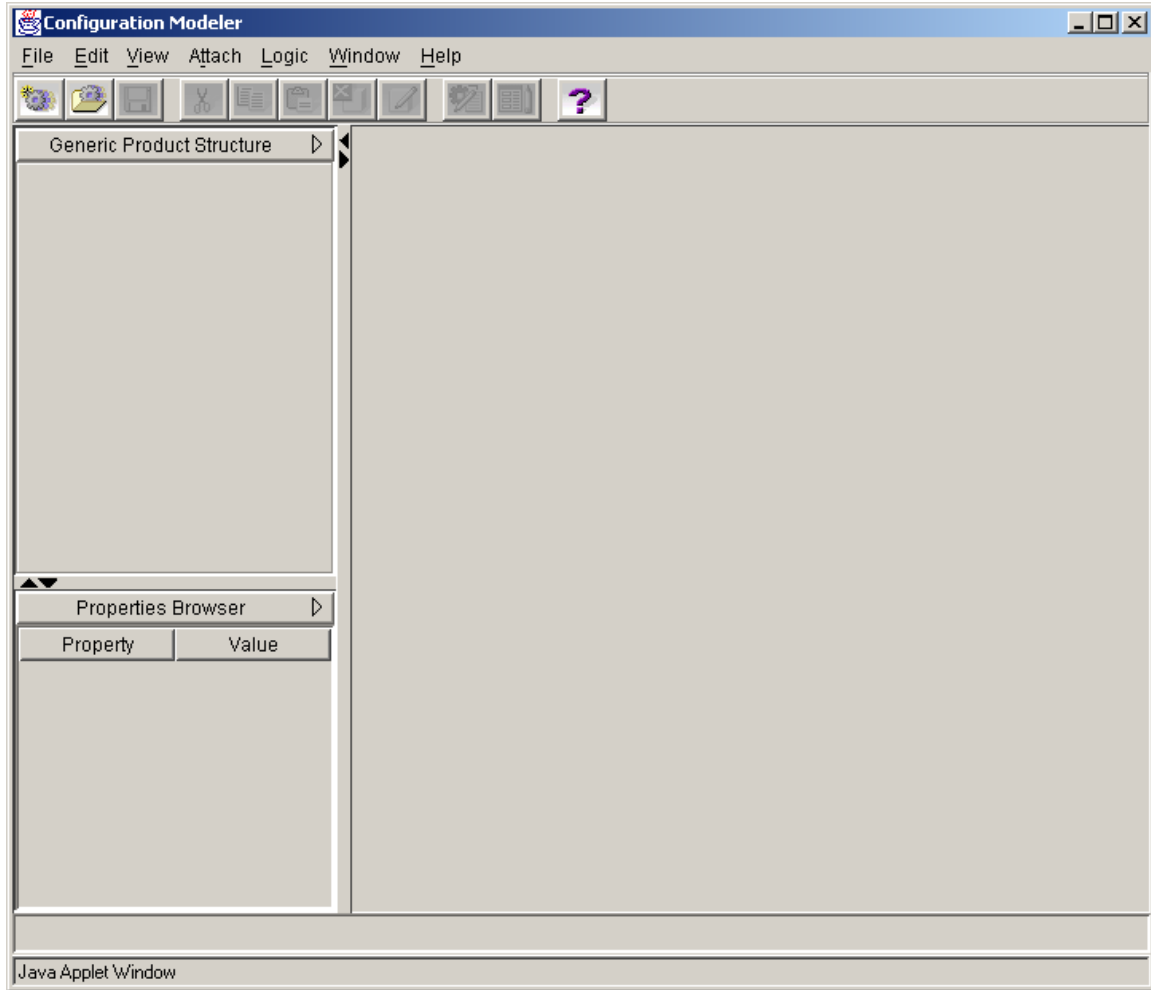
Buttons: Add File, Add URL, Remove, Replace, Get, Properties

Buttons: OK, Cancel, Help

Java Applet Window

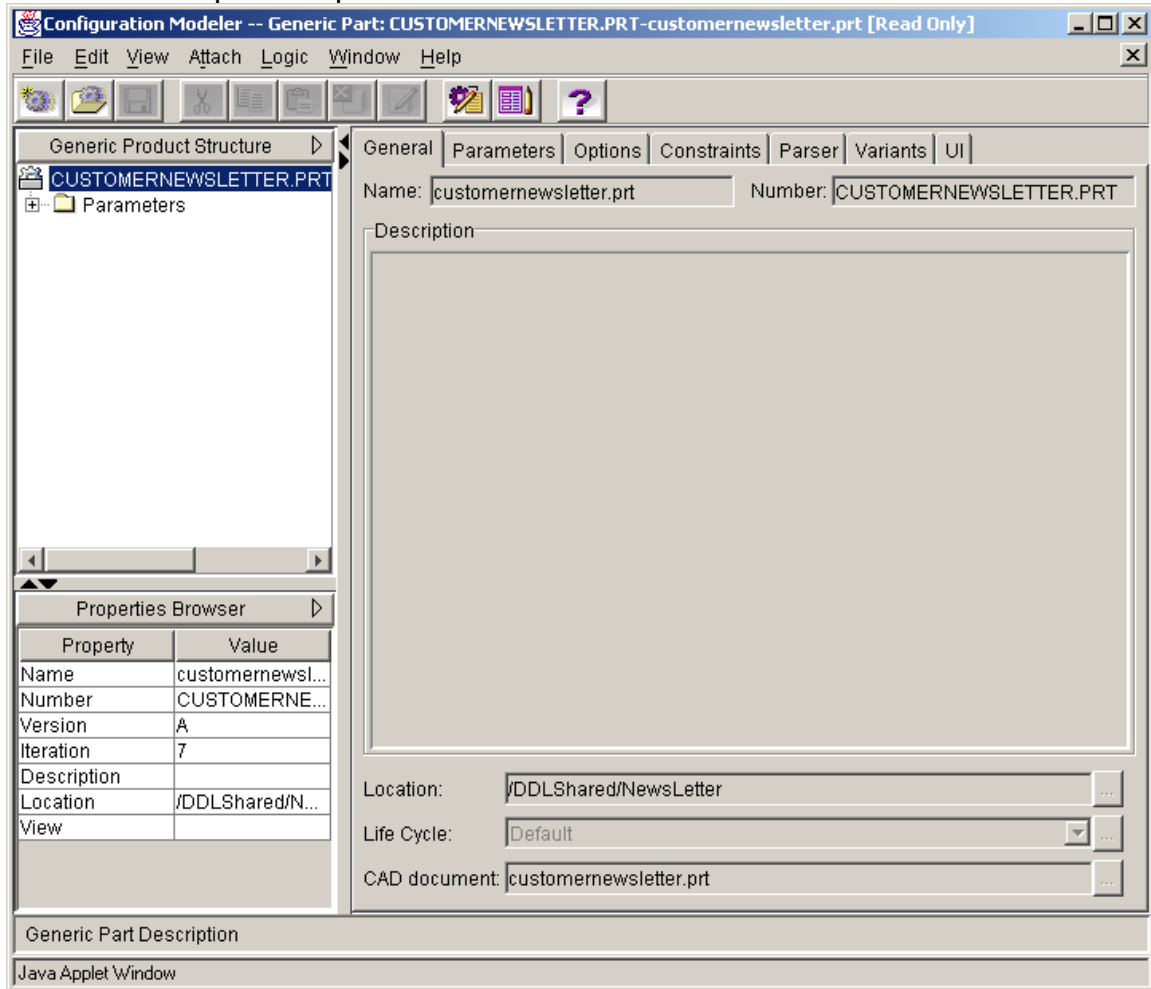
You may use any Name or Number that you wish, but you need to remember which Template you are using and where it is located so that you can correctly specify this information in the Deliverable Maker definition for the Generic Product.

Close Windchill Explorer and select **Configuration Modeler**.

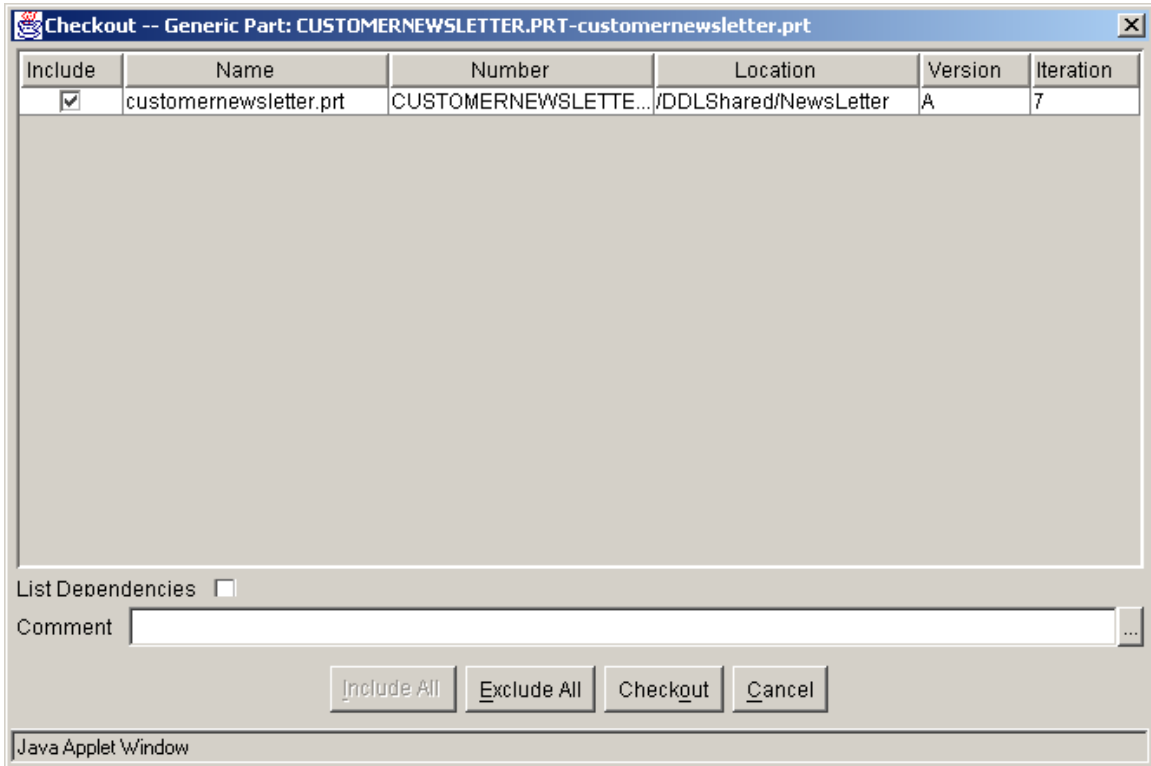


Open the Generic Part that will be used to create this Dynamic Document by selecting **File >> Open** and specifying the part name, number, etc. that you wish to open.

Select **OK** to open this part as shown.

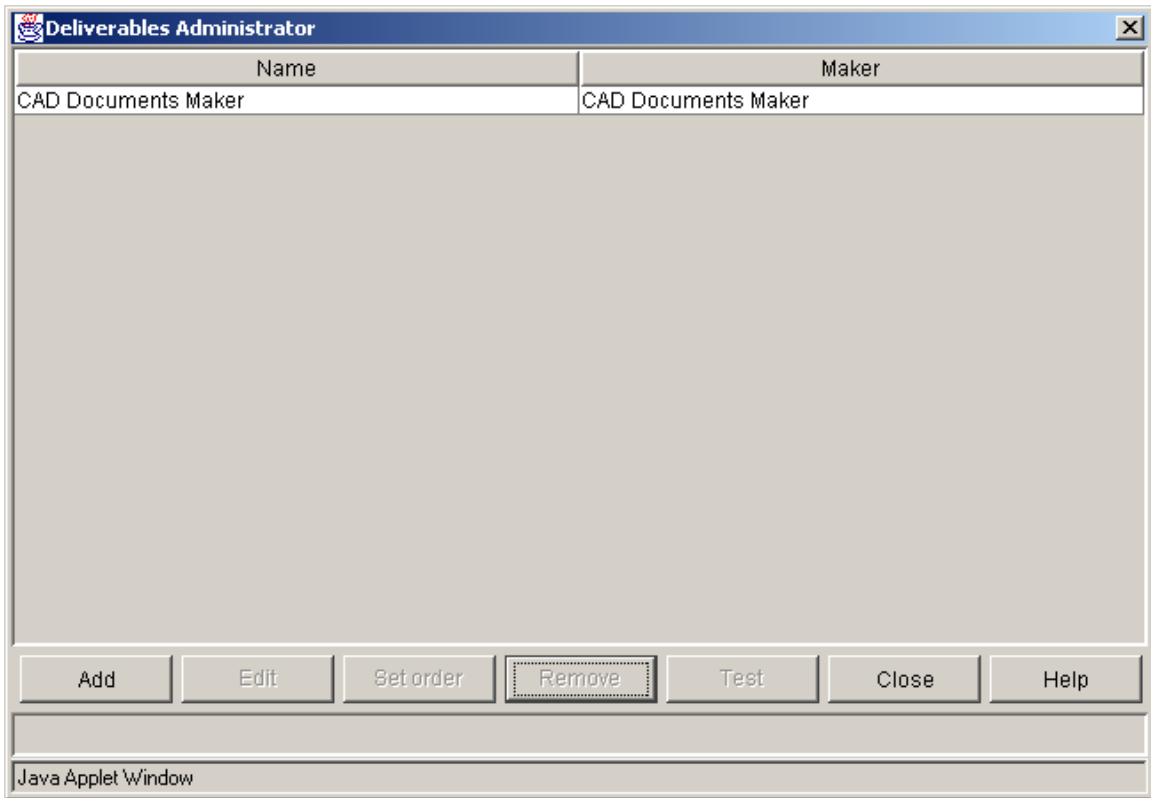


Select the top-level object and **File >> Checkout** to check out this object as shown.



**Note:** It is not necessary to check-out the dependent objects.

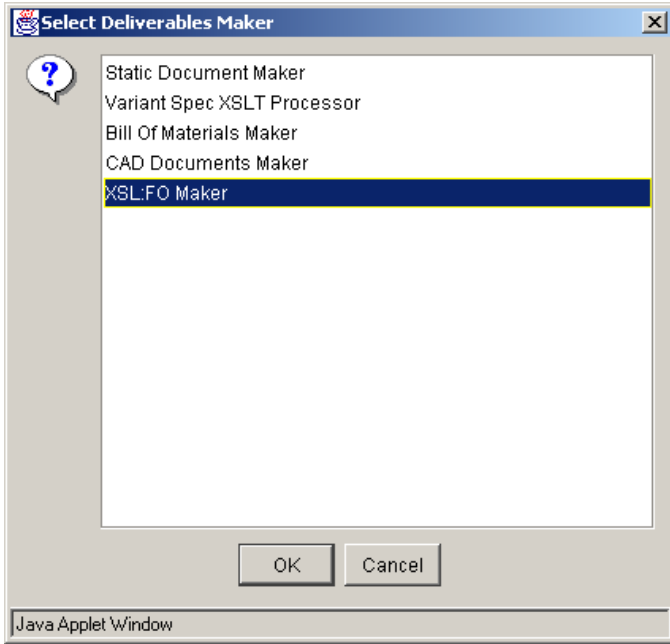
Modify the deliverable definition for the top-level object by selecting the object (in this case “customernewsletter”) and selecting **File >> Deliverables** to display the following window:



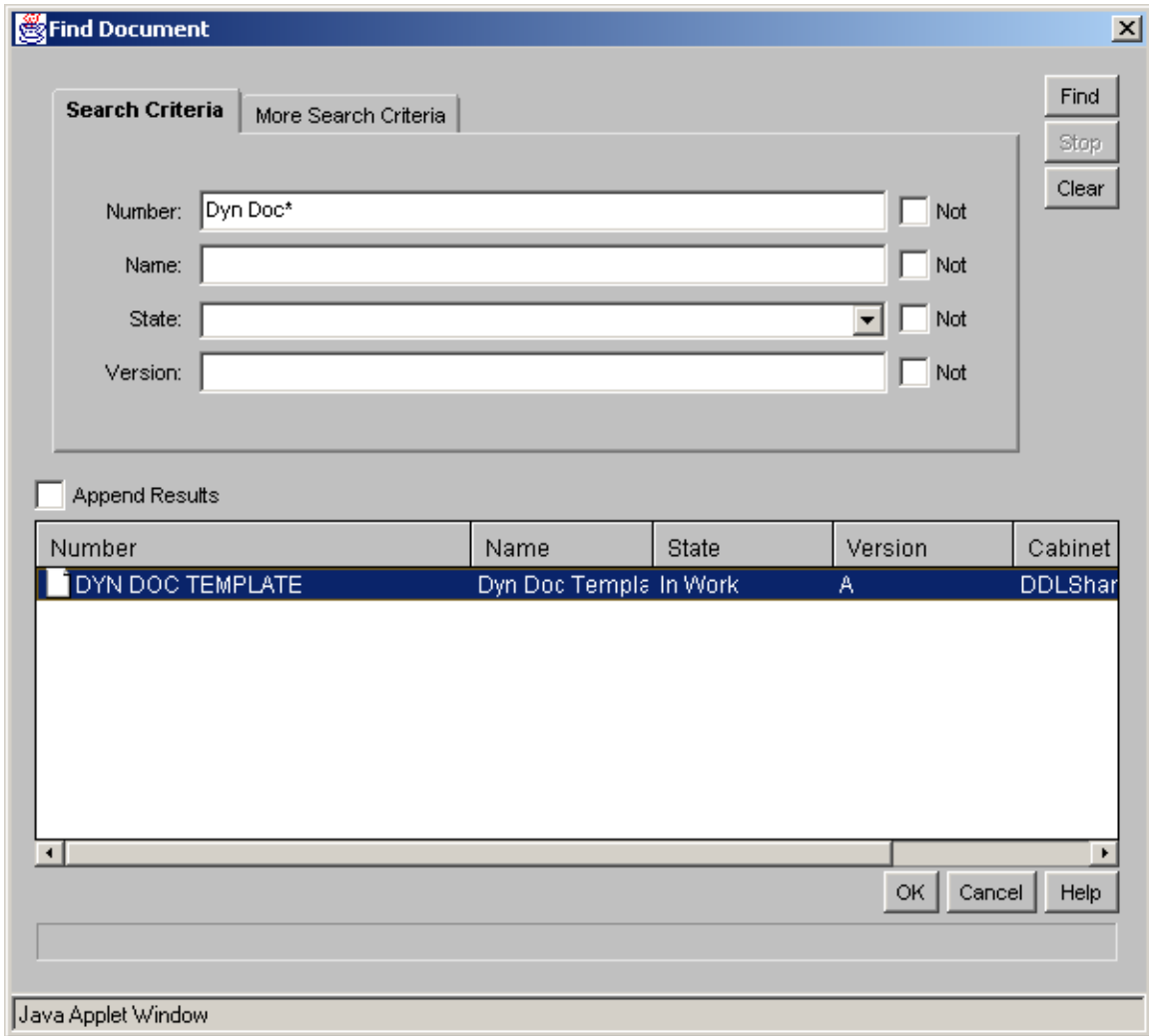
Add a new Deliverable Maker by selecting **Add** and selecting **XSL:FO Maker** from the list as shown.

Select **OK** to complete this step.



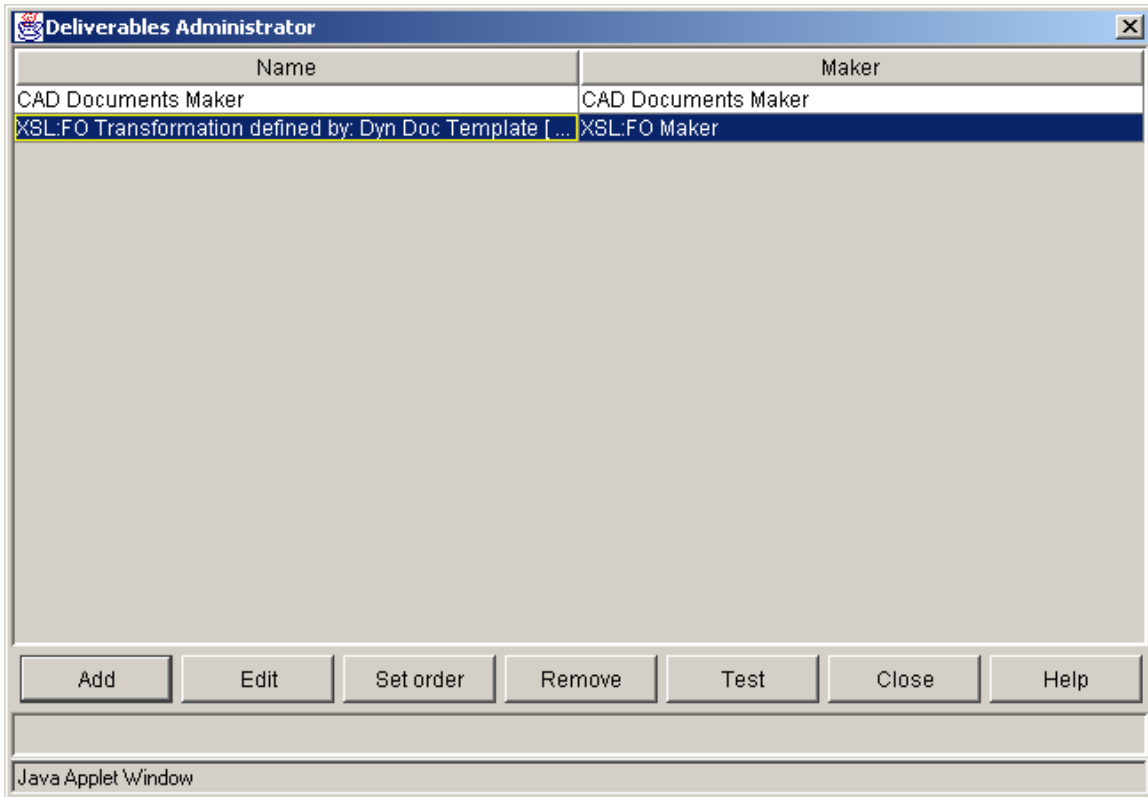


This Deliverable Maker requires an XSL Template file for processing that is specified using the Find Document dialog as shown below.



The default settings for this Deliverable Maker are typically not suitable and should be changed by editing it.

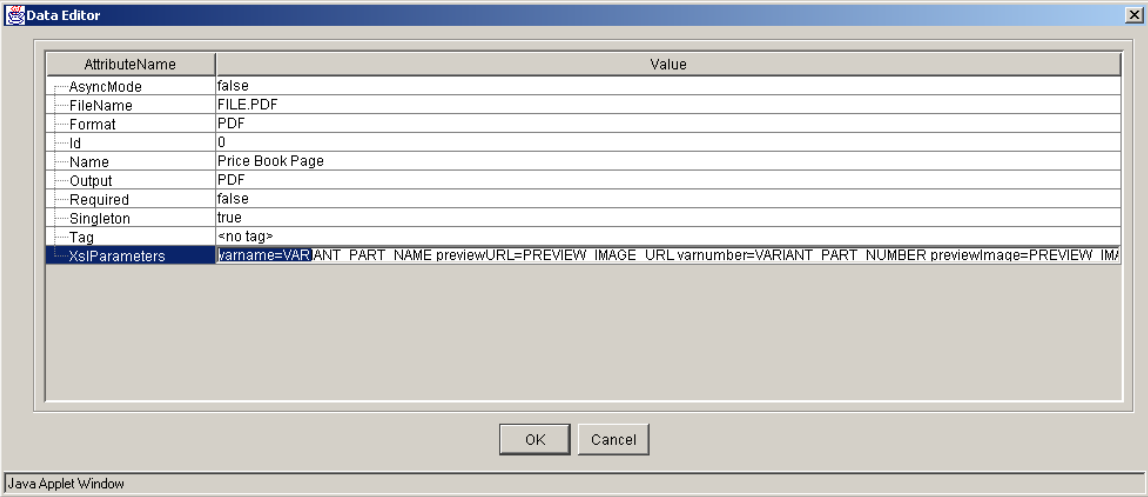
Select the maker and select **Edit** as shown.



The attributes of the Deliverable Maker should be modified by selecting the following **value** cells and ensuring that the following entries are used:

AttributeName	Required Value	Notes
Name	Price Book Page	Any name can be used, but it should be suitable for end-users since it will be displayed in the list of available deliverables.
Format	PDF	A number of format types are supported. PDF is the most common and perhaps the most useful.
FileName	FILE.PDF	If the format is changed, the extension of the FileName must also change to one of the supported values (see the Deployment Guide for more information). If you use the default "FILE" keyword, the name of the generated deliverable will be based on the name of your template document. You may want to use a name such as "Price Book Page for (number).PDF"
XslParameters	varname=VARIANT_PART_	These values are passed from DDL

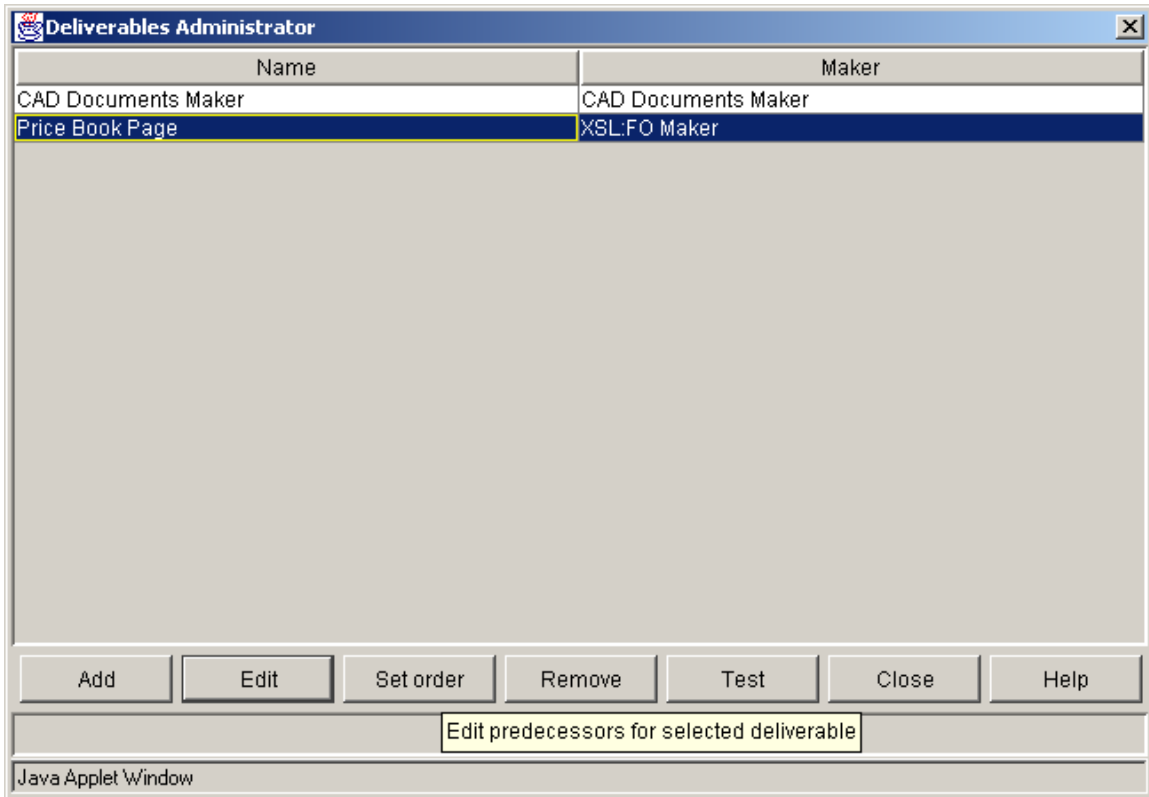
	NAME varnumber=VARIANT_PART_NUMBER previewImage=PREVIEW_IMAGE previewURL=PREVIEW_IMAGE	to the Dynamic Document. They must be entered <b>EXACTLY</b> as shown.  If you have additional / or different parameters specified in your XSL file, they should be included in the same way.
--	---	---



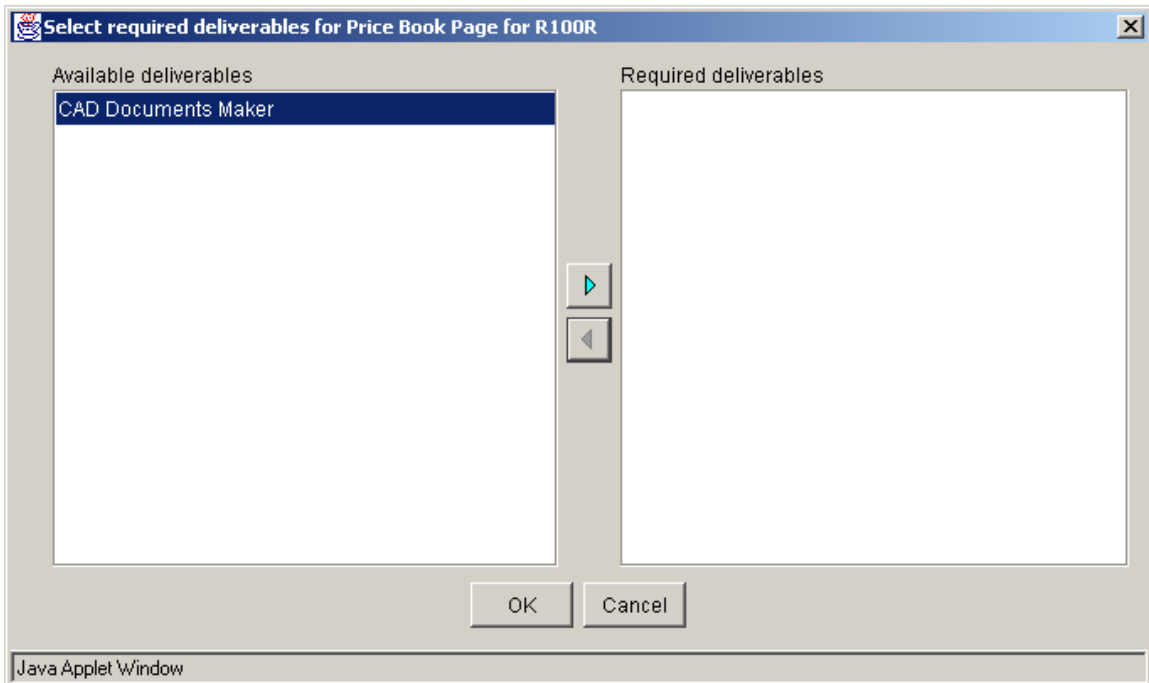
Select **OK** to complete this step.

The FOP Deliverable Maker should be executed by Windchill DDL **after** the CAD Maker is generated so that the graphical image (that is created by the CAD Maker) can be used within the Dynamic Document created by the FOP Maker.

Use the following procedure to order the FOP Maker correctly.



From the Deliverables Administration screen (shown above), select the **XSL:FOP Maker** and **Set Order** to display the following screen



Select the **CAD Document Maker** and the “Right Arrow” to specify that the CAD Document Maker should be executed before the FOP Maker.  
(The CAD Document Maker should be moved to the right-hand window.

Select **OK** to complete this step.

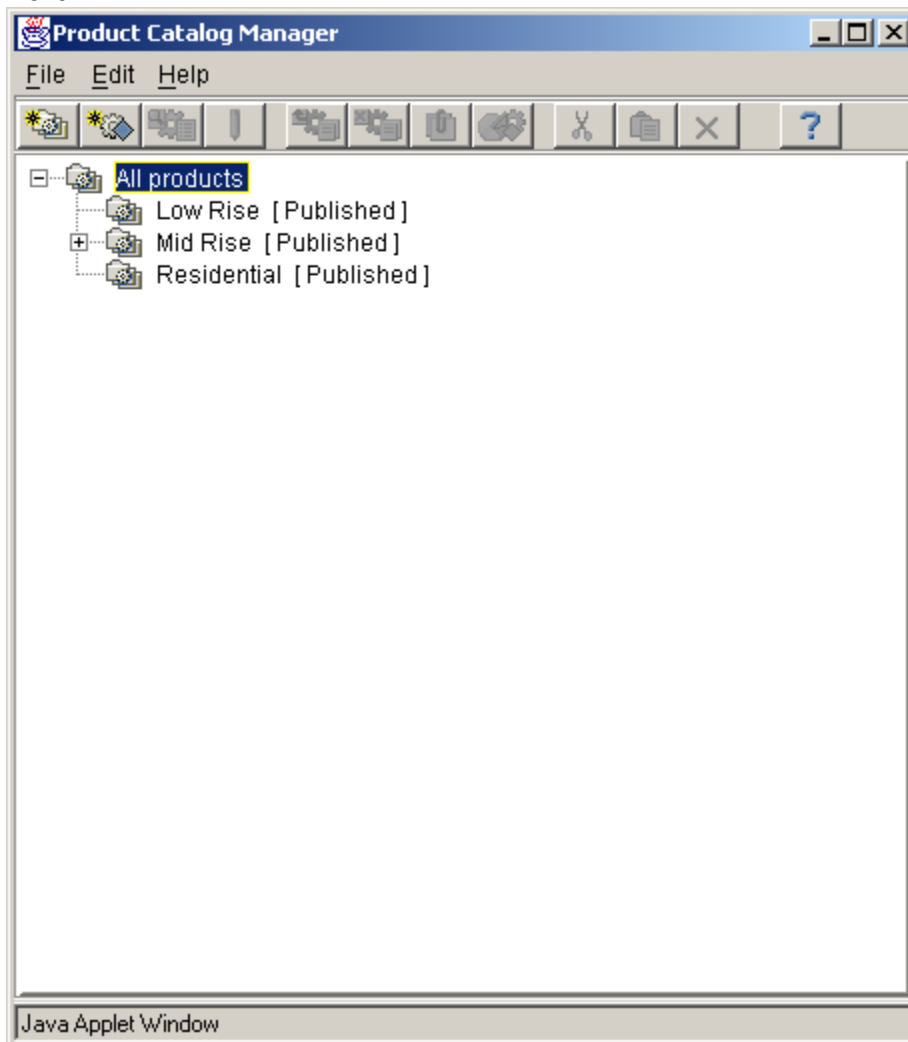
Select **Close** to return to the Configuration Modeler.

Select the top-level component and check-in your changes by selecting **File >> Checkin**.

As before, you do not need to include any dependent objects.

Select **Checkin** to complete this step.

Close the Configuration Modeler and select **Product Catalog Manager** from the Windchill DynamicDesignLink Design Portal main screen to publish this Generic Part.



Create a new Dynamic Product within the Product Catalog Manager by selecting **New >> Product**.

Provide the name, number of other search criteria to locate the desired Generic Part. (This example continues to use “customernewsletter” .) Select the Generic Part and **OK** to complete this step.

The screenshot shows a Java Applet Window titled "Create Generic Product". The window contains the following fields and controls:

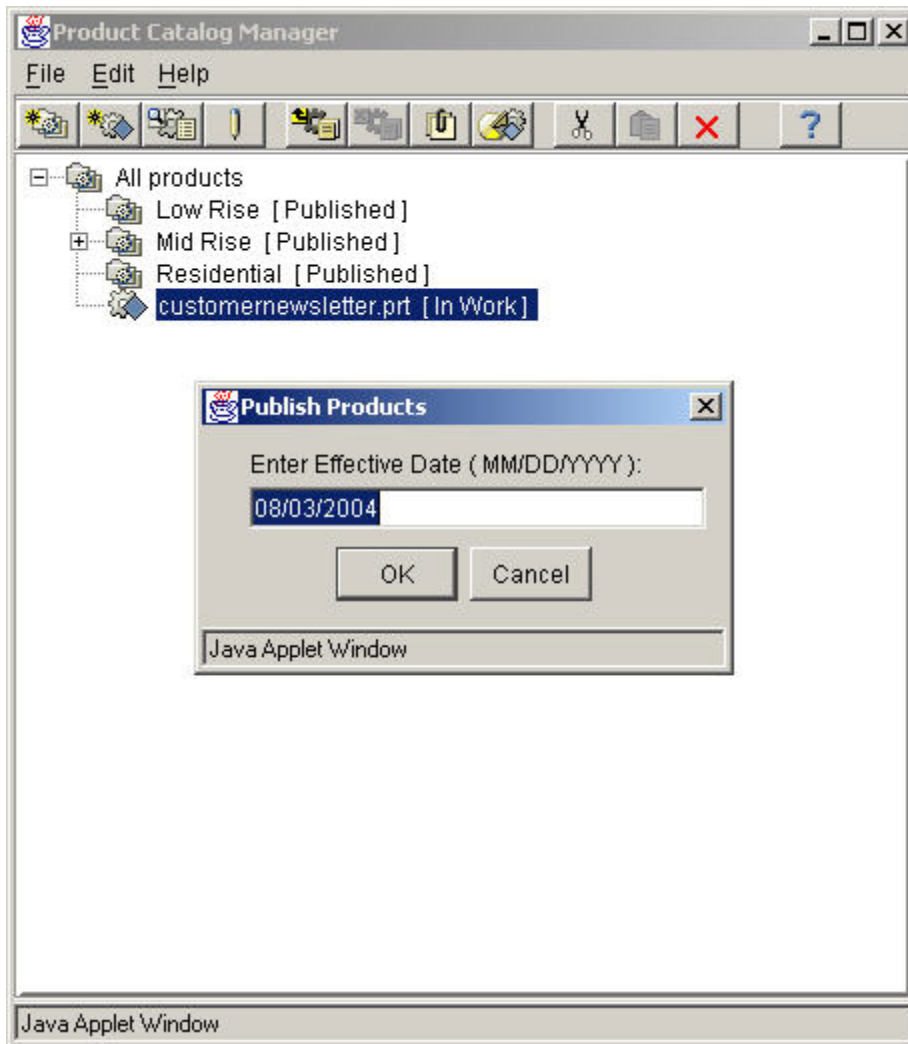
- Root Generic Part: customernewsletter.prt
- Name: customernewsletter.prt
- Description: (empty)
- State: In Work
- Image URL: blueprint.gif (with a "Browse" button)
- Help URL: html/producthelp\_en.html (with a "Browse" button)
- Project Template: DDL Project Template (dropdown menu)
- Product Template: DDL Product Template (dropdown menu)
- Inactivity Time (in days): 3
- Catalog: All products

At the bottom of the window are "Create" and "Cancel" buttons. On the right side, there is a dashed rectangular box representing an image placeholder.

Specify the desired name for this Generic Product as shown and select **Create** to complete this step.

The new Dynamic Product must be published before it will appear in the Product Portal.

Select it and select **File >> Publish**.



When prompted, provide an effective date and

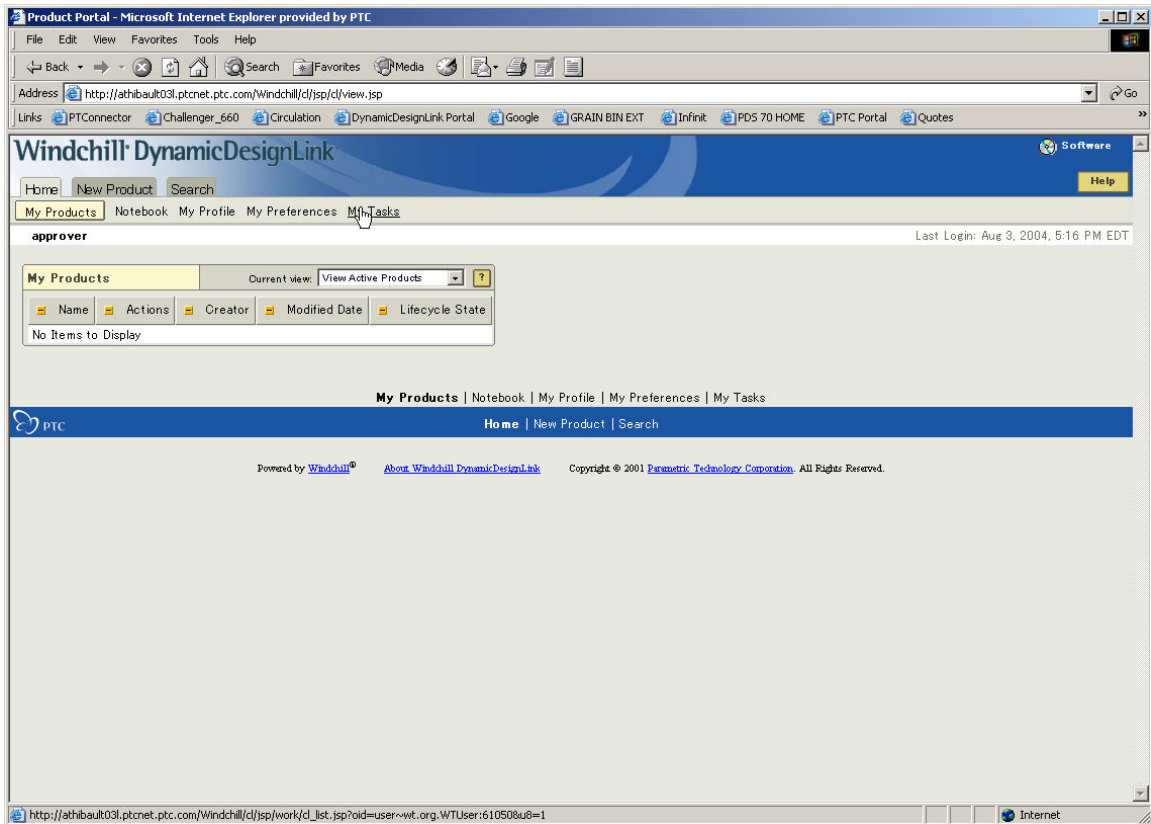
Select **OK** to complete this step as shown.

Close the Product Catalog Manager.

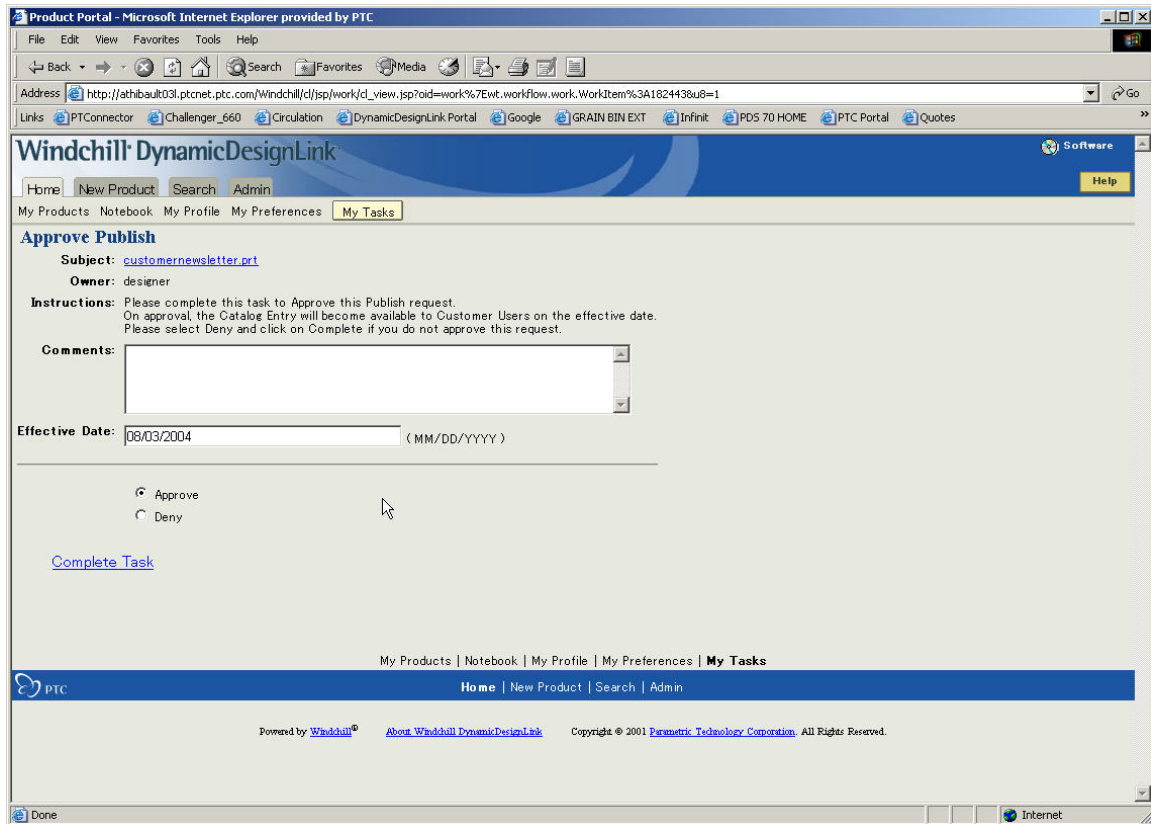
Open a new Windchill DDL window (in the standard way) and login to the Product Portal as a userid with “Approver” privileges.

Select **My Tasks** to display the list of items to be approved.





Select **View Task** for the Dynamic Product name that was published earlier (in this case “customernewsletter”) as shown:



Ensure that **Approve** is selected and that the effective date is “today”.

Select **Complete Task** to approve this product.

Close all Windchill DDL windows associated with the “Approver” user.

Open a new Windchill DDL window (in the standard way) and login to the Product Portal as a userid with “User” privileges.

Select **Product Portal** and **New Product**.

Select **Build Your Own** for the newly created Dynamic Product (in this case the “Wonderful Product”).

When prompted, provide an appropriate Product Name and First Alternative Name as shown and select **OK**.

Build Your Own Product

\* Product Name:

\* First Alternative:

Enter the following information in the fields above:

**Product Name:** The unique name for the new configuration(s) of the selected product. A product may have multiple variations (or alternatives).

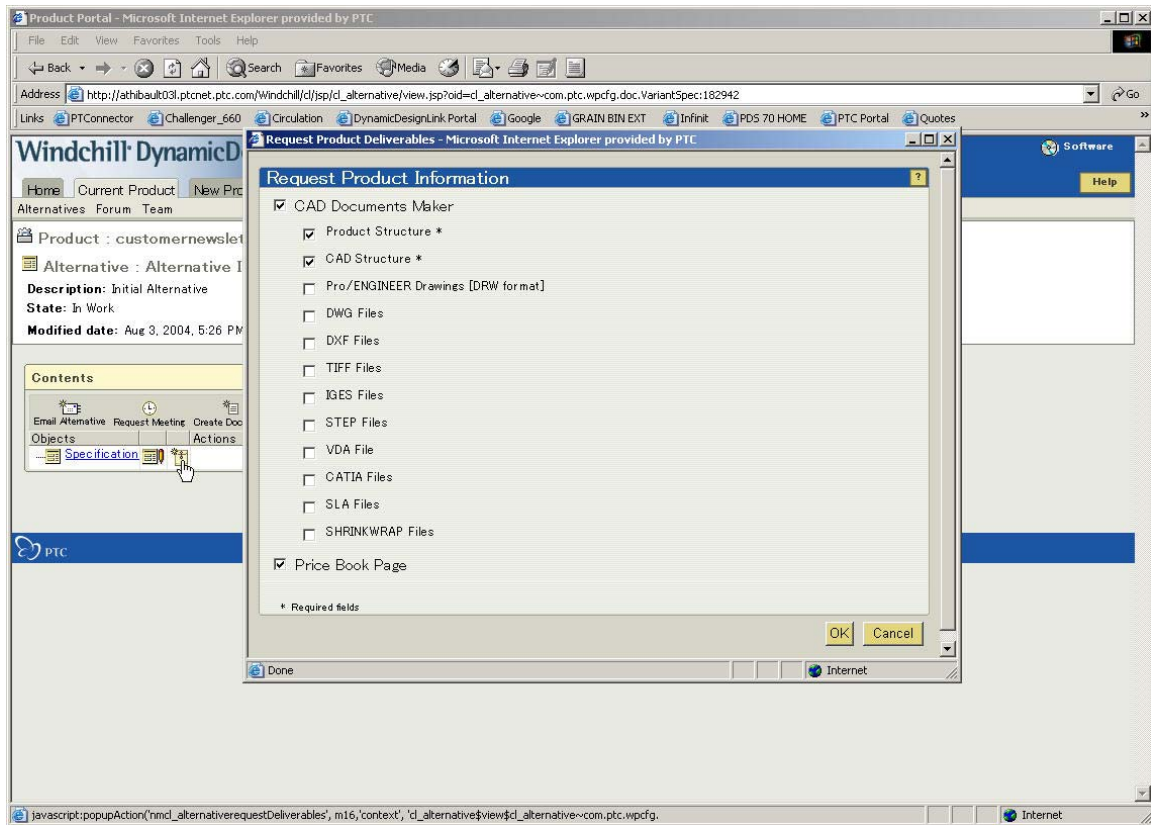
**First Alternative:** The unique name of the first variation that you wish to specify for this product. Each alternative represents a product variation.

\* Required fields

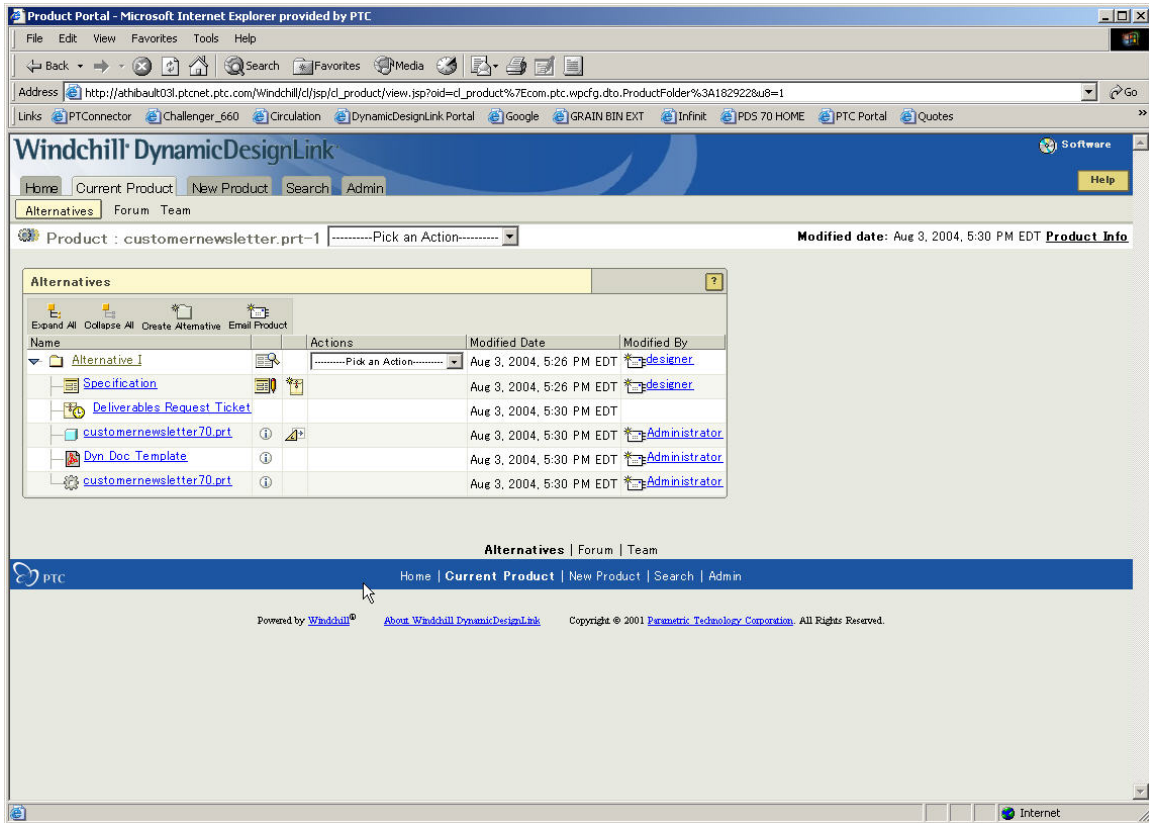
OK Cancel

Specify the values required by the Specification Editor to define the variant in the standard way and select "Next" until the solution page is displayed.

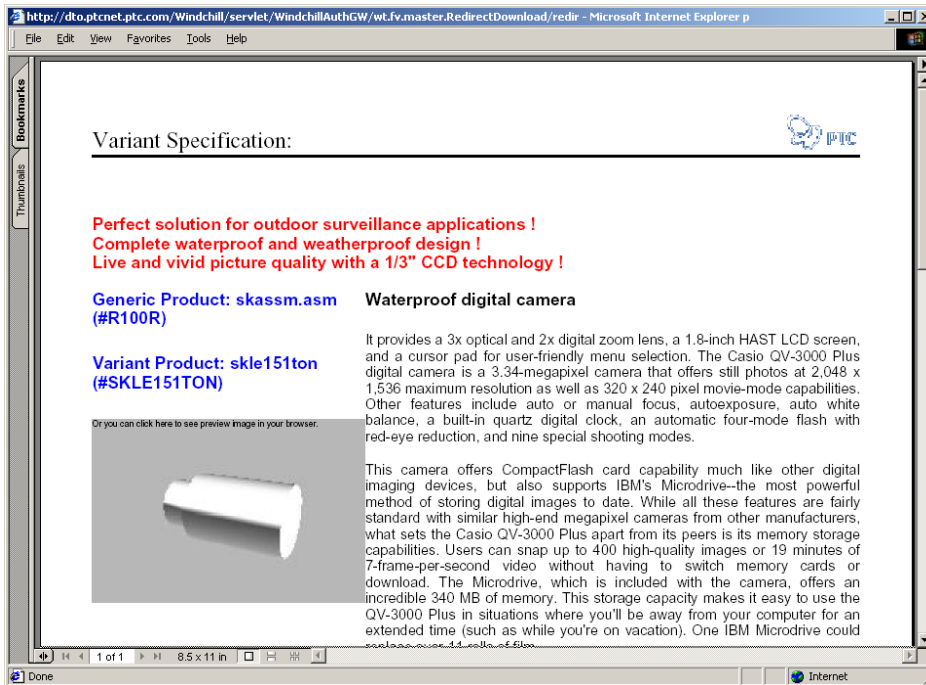
From the Current Product tab select the **Request Product Info** icon



Once the Deliverables have been completed, you should have a PDF document included in the available Deliverables as shown:



If you select the PDF deliverable, it should be displayed within your browser as shown.



If you scroll the PDF viewing window down, the parameter values that were entered in the Specification Editor are also included in this template, as shown.

