Agile Product Lifecycle Management for Process

Install/Upgrade Guide

Release 6.0

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DOCUMENT CONTROL

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Date	Author	Version	Change Reference
Sept-07	Agile	1.0	Initial release of manual
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ABOUT THIS MANUAL

Agile Product Lifecycle Management for Process Documentation

The Agile Product Lifecycle Management (PLM) for Process documentation set includes Adobe® Acrobat™ PDF files. The Oracle Technology Network (OTN) Web site: http://www.oracle.com/technology/documentation/agile.html contains the latest versions of the Agile PLM for Process 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 for Process Documentation folder available on your network from which you can access the Agile PLM for Process documentation (PDF) files.

Note To read the PDF files, you must use the free Adobe Reader™ version 7.0 or later. This program can be downloaded from the Adobe Web site: http://www.adobe.com/.

If you need additional assistance or information, please go to http://metalink.oracle.com or phone 1.800.233.1711 for assistance.

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

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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.

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Audience

This guide is intended for end users who are responsible for creating and managing information in Agile Product Lifecycle Management for Process. Information about administering the system resides in the *Agile Product Lifecycle Management for Process Administrator User Guide.*

Variability of Installations

Descriptions and illustrations of the Agile PLM for Process user interface included in this manual may not match your installation. The user interface of Agile PLM for Process applications and the features included can vary greatly depending on such variables as:

❑ Which applications your organization has purchased and installed

❑ Configuration settings that may turn features off or on

❑ Customization specific to your organization

❑ Security settings as they apply to the system and your user account

Where to Find Information
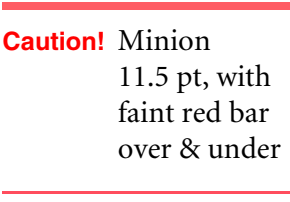
Consult the table below to find specific information from the relevant Agile Product Lifecycle Management for Process information source.

Table 1: Agile Product Lifecycle Management for Process documentation topics, by source

Information type	Install/ Upgrade Guide	Admin. User Guide	Release Notes	Agile training	Help Desk	Agile sales rep
Cache management		●				
Core data management		●				
Custom data management		●				
Custom sections		●		●		
Extended attributes		●		●		
Feature requests					●	●
Group management		●				
Installing Agile PLM for Process	●			●		●
Known issues			●			
Managing specifications				●		
New in this release			●	●		●
Printing				●		
Resolved issues			●			
System-based roles		●				
Technical support					●	
Upgrading Agile PLM for Process	●					
User management		●				
Workflow management		●				

Document Conventions

The following formatting elements appear in Agile Product Lifecycle Management for Process documentation.

Element	Meaning
Helvetica Condensed, 9 pt. bold type	A user interface (UI) element that a procedure is instructing you to click, select, or type into. For example, buttons or text entry fields.
`9 pt. monospace font`	Code samples
`10 pt. monospace font`	File names or directory names
Blue italic font	The linked portion of a cross-reference. Click it to go to the referenced heading, table, or figure.
Minion Typeface, Title Case	A named UI element that a procedure is describing but not instructing you to click, select, or type into.
Note Minion 11.5 pt, with faint blue bar over & under	Alerts you to supplemental information.
Caution! Minion 11.5 pt, with faint red bar over & under	Alerts you to possible data loss, breaches of security, or other more serious problems.
Important Minion 11.5 pt, with thick red bar over & under	Alerts you to supplementary information that is essential to the completion of a task.

CHAPTER 1

Installation

This chapter discusses Agile Product Lifecycle Management for Process installation and includes the following topics:

❑ *Installation Requirements*

❑ *Pre-Installation Checklists*

❑ *Installation*

❑ *Post-Installation Checklists*

Overview

Installing Agile Product Lifecycle Management for Process involves several steps, including:

❑ Understanding system requirements

❑ Performing pre-installation tasks (such as setting up the Web application server and database)

❑ Running the command prompt installation batch files

❑ Performing post-installation tasks, such as:

• Configuring the remote container service

• Performing some base application environment configurations

• Testing the installation

Installation Requirements

This section discusses Agile Product Lifecycle Management for Process installation requirements for the client, application server, and database server. Make sure your systems meet all installation requirements before attempting to install the Agile application suite. In order to properly run, Agile Product Lifecycle Management for Process requires a Web client, a Web application server, a remoting container (provided by Agile), and a database server. Figure 1-1 on the next page shows the necessary architecture.

Figure 1-1: Agile Product Lifecycle Management for Process Physical Architecture
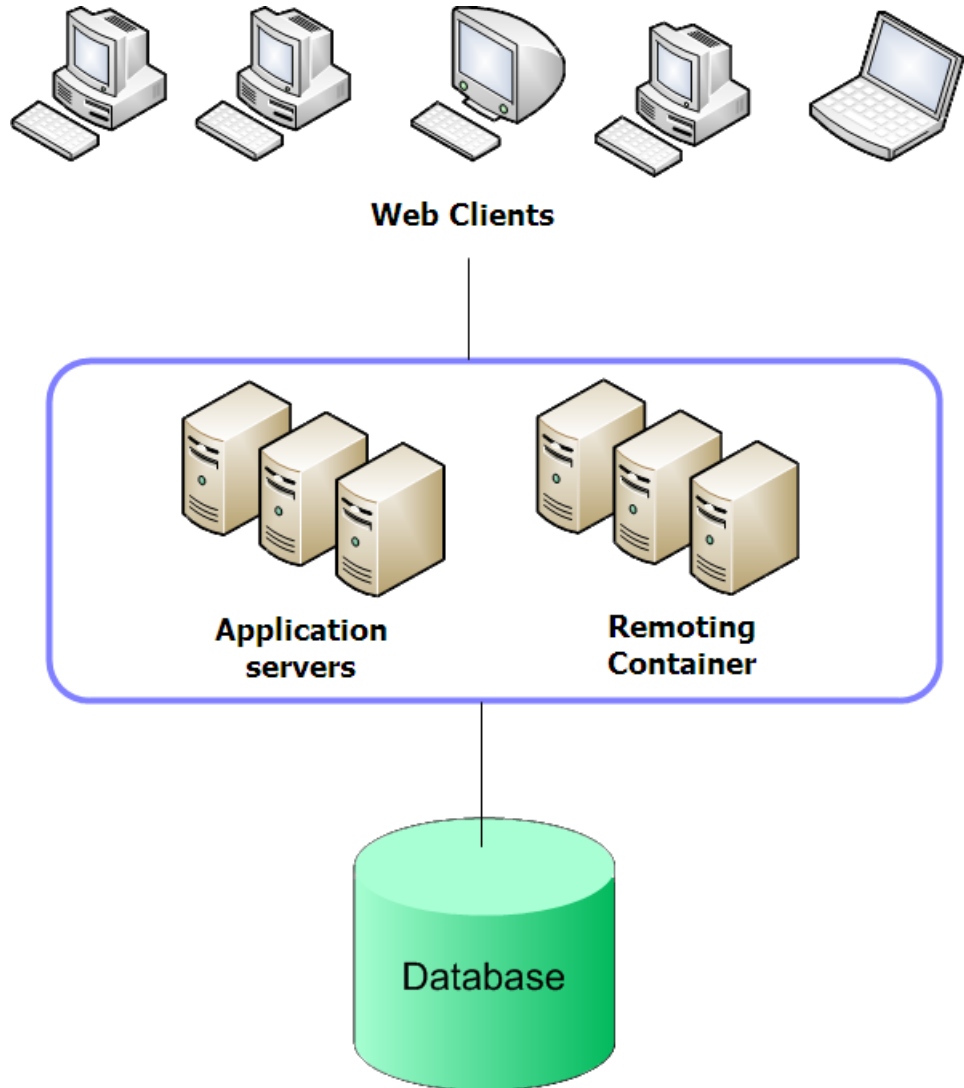
Web Client Requirements

To properly run Agile Product Lifecycle Management for Process, Web clients must meet the following minimum requirements:

❑ Internet Explorer 6.0

❑ Adobe Reader 7.0

Web Application Server Requirements

To properly run Agile Product Lifecycle Management for Process, Web application servers must meet the following requirements:

- ❏ Microsoft Windows™ 2003 Server, SP1
- ❏ Microsoft IIS 6.0
- ❏ Internet Explorer 7.0
- ❏ Microsoft .NET Framework 2.0
- ❏ Dual processor 2.0GHZ (Xeon recommended)
- ❏ 2.0 GB Memory
- ❏ 10K RPM U320 SCSI with minimum RAID 1

Each application in the Agile application suite can be hosted on one or more Web application servers.

> **Note** We recommend that you use separate application pools if the same Web application server is shared across Agile applications.

SQL Database Server Requirements

To properly run Agile Product Lifecycle Management for Process, the SQL database server must meet the following requirements:

- ❏ Microsoft Windows 2003 Server, SP1
- ❏ Microsoft SQL Server 2005, SP2
- ❏ Dual processor 2.0 GHZ (Quad capable, Xeon recommended for expansion), minimum
- ❏ 2.0 GB memory, minimum
- ❏ 10K RPM U320 SCSI with minimum RAID 1 (separation of SQL database and log files recommended)
- ❏ Two disk arrays (for database and log file separation), minimum

> **Note** The database server can be managed in a clustered environment.

Oracle Database Server Requirements

Software Requirements

To properly run Agile Product Lifecycle Management for Process, use the following supported versions for the Oracle database server:

- ❏ Oracle database 10.2.0.4
- ❏ ODP.NET 10.2.0.1 (On the IIS server, as described in *Microsoft IIS 6.0 Checklist* on page 1-8)
- ❏ Operating system supported by the Oracle database

Hardware Requirements

To properly run Agile Product Lifecycle Management for Process, the Oracle database server must meet the following minimum requirements:

❑ Dual processor 2.0 GHZ (Quad capable, Xeon recommended for expansion)

❑ 2.0 GB memory

❑ 10K RPM U320 SCSI with minimum RAID 1 (separation of datafiles and redo logs recommended)

❑ Two disk arrays (for datafile and redo log separation)

Remoting Container Requirements

With the Agile application suite, you receive the Agile Remoting Container, a Windows OS-level service. This remoting container can exist on the same Web application server described above. The following are requirements for the remoting container:

❑ Microsoft Windows 2003 Server, SP1

❑ Microsoft .NET Framework 2.0

The Agile remoting container typically hosts the following Agile services:

❑ Authentication bridge for Agile Single Sign-on (SSO)

❑ Authorization bridge for Agile SSO pertinent to DRL file access

❑ Syndication server (a component of Content Syndication and Synchronization)

❑ Reporting Queue service

❑ Taxonomy Denormalization service

❑ Import/Export service

❑ Object-level security Denormalization service

Note The remoting container can be scaled or isolated as needed.

Scaling Requirements

You will need to scale your system for performance and availability as your system begins to grow due to an increased use of the Agile application suite and a growing number of users and as your business demands change or increase. The following sections provide scalability recommendations.

Scaling for Performance

You will need to scale for performance as your number of users and applications begins to increase over time. In consideration of performance scaling, we recommend the following:

❏ No more than 250 registered users per processor.

❏ Organize scaling according to regional user patterns (according to users in similar time zones and geographical regions).

❏ Once physical Web application server limitations are met, use a load-balanced (logical or actual) solution.

Scaling Beyond Five Core Applications

The following are recommendations for scaling beyond five (5) core Agile applications. Core Agile applications include:

- Global Specification Management (GSM)
- Supply Chain Relationship Management (SCRM)
- New Product Development (NPD)
- eQuestionnaire (eQ)
- Agile applications portal

❏ Run no more than five (5) core Agile applications on a single Web application server.

❏ Organize scaling based on an evaluation of utilization patterns (known application characteristics).

Load Balancing

As mentioned above, once physical Web application server limitations are met, use a logical load-balanced solution based on application distribution across servers. For example, as shown in figure 1-2 below, a logical separation might be organized by application as follows:

GSMAppGroup—Includes GSM and other complimentary applications

NPDAppGroup—Includes NPD and other complimentary applications

Figure 1-2: Agile Product Lifecycle Management for Process deployed in a logical separation
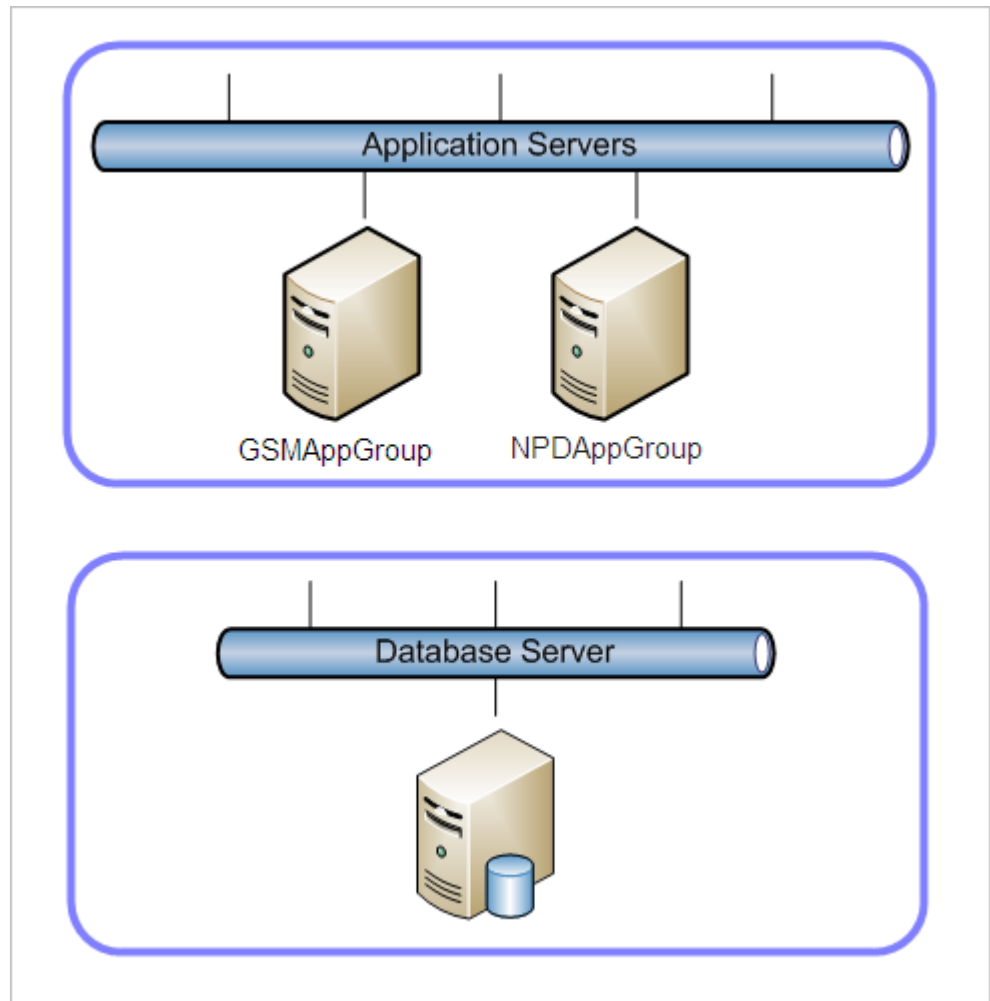
Scaling for Availability

You may also need to scale for availability as your business demands begin to change or increase over time.

For application load-balancing, we recommend the following:

❑ A load balancer (such as f5 BigIP or Cisco CSS11000) that supports the following:

- Secure Sockets Layer (SSL) protocol
- Sticky sessions

❑ A maximum of five core Agile applications per load-balanced node.

Note A clustered node is an expansion of a logical application separation.

For database, file, and service clustering, we recommend the following:

❑ A clustered server to support an active or passive database system

❑ A file cluster (where required)

❑ Service clustering

Figure 1-3: Sample deployment of a load-balanced and clustered system
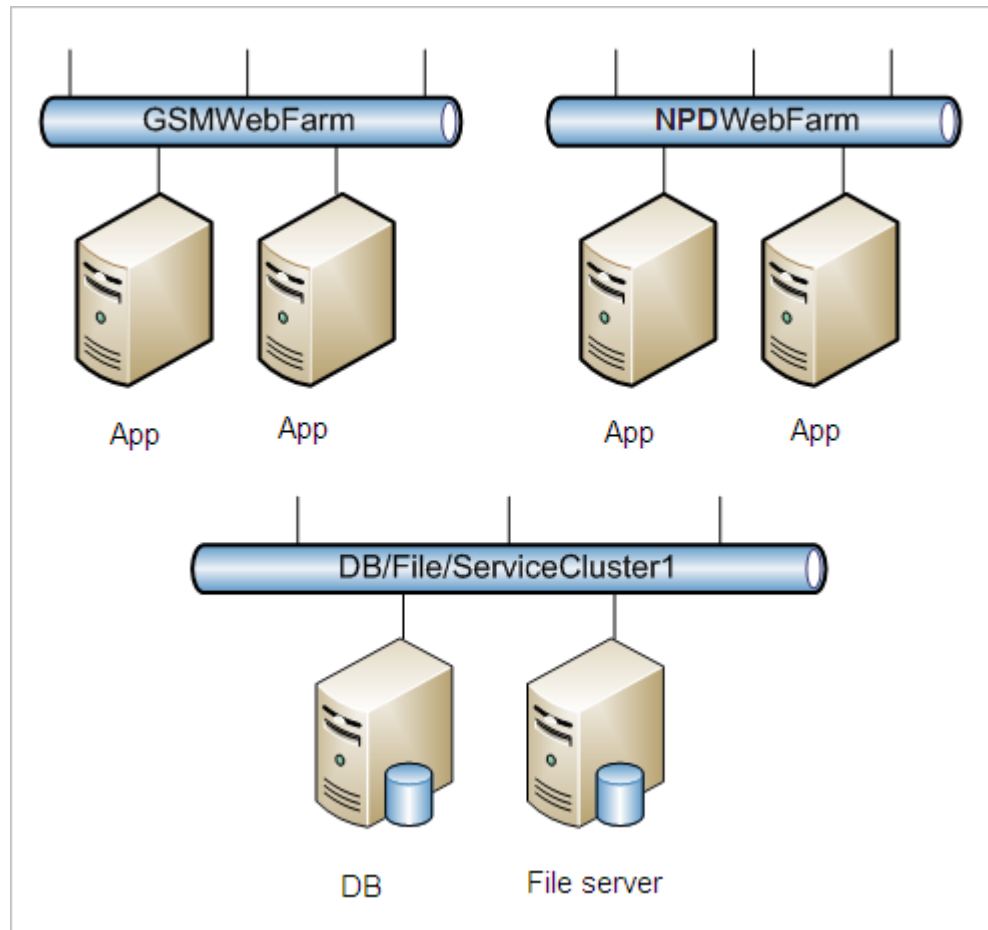
Pre-Installation Checklists

This section discusses Web application server-related tasks that an Agile implementer must complete before installing the Agile application suite.

Microsoft IIS 6.0 Checklist

Before installing the Agile application suite, complete all of the Microsoft IIS 6.0-related tasks in the following sections:

❑ *Adding an IIS Server Role to Microsoft Windows 2003*
❑ *Configuring the IP Address of the IIS Default Site*
❑ *Configuring IIS Application Pool Settings*
❑ *IIS Metabase Explorer Settings*
❑ *Enabling IIS Indexing Service*
❑ *Enabling IIS WebDAV for NPD Applications*

Adding an IIS Server Role to Microsoft Windows 2003

You will need to create a Web server role using the ASP.NET Role Manager. The role type must be the IIS server role, ASP.NET only.

To add a role for IIS, follow these steps:

1 Click **Start > All Programs > Administrative Tools**, and then click **Manage Your Server.**
2 On the Manage Your Server page, click **Add or remove a role**, and then click **Next**.
3 Under Server Role, select the **Application server (IIS, ASP.NET)** server role, and then click **Next**.
4 Check the **Enable ASP.NET** box, and then click **Next**.
5 Verify that Enable ASP.NET is listed on the Summary of Selections page, and then click **Next**.
6 If prompted, insert your Windows Server 2003 CD in the CD drive, and then click **Next**.
7 Click **Finish.**

Configuring the IP Address of the IIS Default Site

When you install IIS, it is preconfigured to serve as a default Web site; however, you may want to change some of the settings.

To change the basic settings for the Web site:
1 Log on to the Web server computer as an administrator.
2 Click **Start > All Programs > Control Panel.**
3 Double-click **Administrative Tools**, and then double-click **Internet Services Manager.**
4 Right-click the Web site that you want to configure in the left pane, and then click **Properties**.
5 Click the **Web site** tab.
6 Enter a description for the Web site in the **Description** box.
7 Enter a value in the **IP Address field** for the Internet Protocol (IP) address to use for the Web site.
8 Modify the Transmission Control Protocol (TCP) Port as appropriate.
9 Click the **Home Directory** tab.
   - To use a folder on the local computer, select a directory located on this computer, and then click **Browse** to locate the folder to use.

   - To use a folder that has been shared from another computer on the network, click a share located on another computer, and then either type the network path or click **Browse** to select the shared folder.

10 Click **Read** to grant read access to the folder (required).
11 Click **OK** to accept the Web site properties.

Configuring IIS Application Pool Settings

You must configure various IIS Application Pool settings as follows:

1 Log on to the Web server computer as an administrator.

2 Click **Start > All Programs > Control Panel > Administrative Tools > Internet Information Services (IIS) Manager**.

3 In the left pane, expand the local computer and locate Application Pools.

4 Right-click the **DefaultAppPool** option.

5 Make the following configuration changes:
   - On the Recycling tab, deselect all five check boxes.

   - On the Performance tab, check the **Limit the kernel request queue** box. Set the value to `4000`.

   - On the Health tab, check the **Predefined** box. Set the value to `LocalSystem`.

   - Set the Application Pool Identity to `Local System`.

IIS Metabase Explorer Settings

IIS Metabase allows you to view, edit, copy, paste, move, drag, drop, and monitor activity in your IIS metabase. You will need to install the IIS Metabase Explorer 1.1 and make the following Application Pool Key settings:

❑ Set **DissallowOverlappingRotation** to `1` (from `0`)

❑ Set **LogEventOnRecycle** to `255` (from `137`)

Enabling IIS Indexing Service

The Microsoft Indexing Service, a component of Microsoft IIS 6.0, allows for full text searching for attachments. The following is a checklist for setting this service up for use with the Agile application suite:

1 Ensure that Microsoft Indexing Server is installed. This is a separate Windows component that may or may not have been installed with the original operating system.
   - In Control Panel, click **Add or Remove Programs**.

   - Select **Add/Remove Windows Components**.

   - Make sure the component *Indexing Service* is installed.

2 Delete the two default catalogs that are created when the Microsoft Indexing Server is installed using the Computer Management tool under **Control Panel > Administrative Tools**. This is an optional step; however, it provides for increased security if these catalogs are not going to be used.

3 Create two folders to house the files generated by the Index catalog. For example:

   `c:\catalogs\GSMSpecs`

   `c:\catalogs\XDocs`

4 Stop the Indexing service.

5 Add a GSMSpecs catalog to the Indexing Server again using the Computer Management tool. Use the following specifications:
Name: GSMSpecs

Location: c:\catalogs\GSMSpecs

6 Add an XDocs catalog to the Indexing Server using the following specifications:
Name: XDocs

Location: c:\catalogs\XDocs

7 Add the directory that the GSMSpec files are stored in to the GSMSpecs catalog. Note that the Alias field is optional and can be left blank. Ensure that the **Include in Index** option is selected.

8 Add the directory that the XDoc files are stored in to the XDocs catalog.

9 Restart the Indexing service.

Enabling IIS WebDAV for NPD Applications

If you are installing the Agile NPD (New Product Development) application, you must enable the WebDAV (Distributed Authoring and Versioning) protocol in Microsoft IIS 6.0 to support in-place editing.

Set up the WebDAV environmentsettings.config file as follows (using the following examples):

PDFWorkArea = https://<hostname>/webdav/npdworkarea/

PDFCommentRepository = https://<hostname>.com/webdav/pdfcomments/

OfficeDocWorkArea = https://<hostname>.com/webdav/npdworkarea/

PDFWorkAreaUNC = https://<hostname>/webdav/npdworkarea/

OfficeDocWorkAreaUNC = \\<hostname>\webdav\npdworkarea\

PDFCommentRepositoryUNC = \\<hostname>\webdav\pdfcomments\

> **Note** Be sure to create accounts with appropriate permissions to allow the Web application server access to the above WebDAV UNC paths.

Set up the Microsoft IIS 6.0 configuration for WebDAV as follows:
1 Create a virtual directory named WebDAV with default IIS 6.0 settings.
2 Create two directories under the WebDAV vdir:
   - PDFComments (with browsing enabled)
   - NPDWorkarea (with no browsing)
3 In the WebServiceExtensions folder, ensure the WebDAV directory is set to 'Allowed.'

> **Note** It may be necessary to give the account used by IIS (iuser_machinename) admin rights or full access to the WebDAV virtual directory.

Microsoft SQL Server 2005 Checklist

Refer to Microsoft SQL Server documentation for installation instructions. For information on the MS SQL Reporting Server, which can be optionally installed, refer to the *Agile Product Lifecycle Management for Process Configuration Guide*. When installing MS SQL Server 2005 Standard Edition, be sure to:

❑ Install MS SQL Server 2005 Standard Edition with the mixed mode authentication and default options.
(Ensure the Collation designator and sort order are Latin1_General.)

1 Run the MS SQL Server setup.

2 Select **Install Database Server** and click **Next**.

3 Select **Install Default Instance on Local Computer** and click **Next**.

4 Select **Default Instance** and click **Next**.

5 For Setup Type, select **Typical** and click **Next**.

6 Select **Use Same Account for Each Service** and **Use the Local System Account** and click **Next**.

7 Select **Mixed Mode**. Enter a System Admin password and confirm.

8 Click **Next** twice to complete the installation.

❑ Configure the MS SQL Server 2005 settings as follows:

1 In the SQL Server Enterprise Manager, right-click the server in the tree view, left pane.

2 Select **Properties** and click the **Memory** tab.

3 Select **Use a Fixed Memory Size.**

4 On the Processor tab, under Processor Control, select all available processors.

5 Click **Boost SQL Server Priority**, assuming the box is only running SQL Server.

6 Under Parallelism, select **Use All Available Processors.**

7 Under **Database Settings > New Database Default Location**, set the appropriate paths for the data and log files:

• Data files:
```
array2\Program Files\Microsoft SQL Server\MSSQL\Data
```
(optimized for balance of reads and writes - 75/25)

• Log files:
```
array1\Program Files\Microsoft SQL Server\MSSQL\Data
```
(optimized for sequential writes)

8 On the General tab, select **Autostart SQL Server** and **Autostart SQL Server Agent**.

❑ Set up two SQL accounts, which are recommended to run and manage the application:

- **ProdikaDBAdmin**—This account should have database owner access to the application database. Use this account to run the application installation and upgrade scripts.

- **ProdikaAppUser**—This account will be used by the Web server applications for access to the back-end data and should have read/write access to all of the application database tables and views. Additionally, this account should have access to execute all user-defined functions.

❑ Apply all available security patches for MS SQL Server 2005.

❑ Schedule a maintenance plan. Production backups should occur nightly. Test backups should occur twice weekly.

1 In the Enterprise Manager, drill down in the left pane to **Management > Database Maintenance Plan**.

2 In right pane, right-click and select **New Maintenance Plan**.

3 Select the database to maintain.

4 Click through the Wizard to configure the database maintenance plan.

Oracle Database Checklist

The following Oracle Database Checklist can be used in conjunction with Oracle Database documentation containing installation instructions. Clients should use this checklist **or** the *Microsoft SQL Server 2005 Checklist* on page 1-12, but not both, as they are separate installation methods. When installing the Oracle client, be sure to:

❑ Install Oracle Client 10.2.0.4 on the server hosting the application.

❑ Install ODP.NET 10.2.0.1.

❑ Update the `tnsnames.ora`, located at `%Oracle Client Home%\network\admin\tnsnames.ora`, to include a new data source. This data source should point to the Oracle PLM for Process database that has been set up.

❑ Build your connection string:

`"User Id=<user id>;Password=<password>;Data Source=<data source created in step 4>"` where

a User Id = `db username`
b Password = `passwd`
c Data Source = The name that you gave your tnsnames.ora entry

SSL Checklist

SSL (Secure Sockets Layer) is a protocol from Netscape Communications Corporation that is designed to provide secure communications on the Internet. SSL is not required for an Agile installation but will be used in most instances, as determined by the customer.

SSL can be deployed in many ways. Most commonly, SSL will run within IIS or on an intermediary system such as a Reverse Proxy or SSL accelerator.

The Agile application suite can operate in any of these scenarios, but the HTTP scheme must be configured (via `deployment.xml`) to generate the desired relative URLs correctly (http vs. https).

East Asian Language Support

If you plan to support foreign languages in Agile Product Lifecycle Management for Process, you must install East Asian language support on the server.

To install East Asian language support on the server:

1 Access the Windows Control Panel dialog box by clicking **Start > Control Panel.**
2 Select **Date, Time, Language, and Regional Options** > **Regional and Language Options** and click the **Languages** tab.
3 Check the **Install Files for East Asian Languages** box.
4 Click **Apply** and **OK.**

Restoring the SQL Database and Setup Database Accounts

You should receive a copy of a prepared database as part of your Agile software media from Agile Software. Using Microsoft SQL Server Management Studio, you will need to restore this database onto your local database server. You will also need to make sure that the user responsible for accessing the database has the appropriate account setup and assigned roles.

Restoring the SQL Database
To restore the database onto your local database server:

1 Open MS SQL Server Management Studio.
2 In the left pane, right-click on **Databases** and select **Restore Database**. The Restore Database dialog displays.
3 In the General page, type a database in the **To Database** field.

> **Note** We recommend that your database name include the environment name and software version, for example: `production_v50`.

4 Select **From device**.
5 Click the browse button for the **From device** text box, which opens the Specify Backup dialog box.
6 Click the **Add** button to display the Locate Backup File dialog box. Browse to the software media containing the database from Agile Software.
7 Click **OK** twice to return to the Server Management Studio.
8 In the Options page, select **Restore Database.**
9 Verify that the data file and log file paths are set to the correct paths.
10 Click **OK** to begin the restoration.

Setting Up User Permissions

To set up database user permissions:

1 Open MS SQL Server Management Studio.
2 In the left pane, drill down into the Databases folder to locate the database that you just restored.
3 For this database, select **Security > Users**.
4 Right-click on Users and select **New User** to display the Database User - New dialog box.
5 Type a user name in the **User Name** field.
6 Select **Login Name**. To the right of this radio button, click the browse button to display the Select Login dialog box.
7 In the Select Login dialog, click **Browse** to display a list of login objects. Select a login object and click **OK** twice to return to the Database User - New dialog box.
8 In the Database Role Membership section, assign the following two roles to the user:

   • db_datareader

   • db_datawriter

9 Click **OK**.

Restoring the Oracle Database

To restore the Oracle database:

1 Create an Oracle database user. The following scripts can be used:

```
CREATE USER "STAGING" PROFILE "DEFAULT" IDENTIFIED BY "staging"
DEFAULT TABLESPACE "USERS" TEMPORARY TABLESPACE "TEMP" ACCOUNT
UNLOCK;
GRANT CREATE SESSION TO "STAGING" WITH ADMIN OPTION;
GRANT CREATE USER TO "STAGING" WITH ADMIN OPTION;
GRANT CREATE VIEW TO "STAGING" WITH ADMIN OPTION;
GRANT UNLIMITED TABLESPACE TO "STAGING" WITH ADMIN OPTION;
GRANT "CONNECT" TO "STAGING" WITH ADMIN OPTION;
GRANT "RESOURCE" TO "STAGING" WITH ADMIN OPTION;
```

2 Import the Oracle DB dmp file from the command window:

```
imp <ORCL dbuser>/<ORCL dbpwd>@<datasource> fromuser=<from
dbuser>  touser=<target dbuser>  file=<dmp file>  log=<log file>
```

Remote Container Service and Application Pool Accounts

The remote container service and application pool are standard Microsoft Windows services, which require user accounts in order to run. During the Agile installation, the service is installed as the Local System account.

To change the account which the service runs under:

1 Select **Start > Administrative Tools > Services**.
2 Locate the RemoteContainerService within the list of services listed in the Services dialog box.
3 Right-click the RemoteContainerService row and select **Properties**.
4 Select the Log On tab.
5 Select the **This account** radio button.

6 Select the user account that has the necessary security access to run the Remoting Container Service.

Before installing Agile Product Lifecycle Management for Process, make sure that your IT department has created an account for each service for you. Such accounts can be system accounts, local Windows accounts, or domain accounts (active directory). The process for creating a remote container service account and application pool account is a standard approach for creating Windows accounts.

Installation

The Agile PLM suite is installed through a set of manual configuration steps.
Several of the steps are automated with utility batch scripts for a default
configuration. The overall process consists of the following steps:

- ❏ Set up PRODIKA_HOME
- ❏ Install the core application files
- ❏ Register environment components
- ❏ Install individual media bundle application files
- ❏ Set up the initial IIS Web site
- ❏ Set up the initial IIS application pools
- ❏ Register the IIS virtual directories for the installed applications
- ❏ Register .Net version 2.0 for ASP
- ❏ Restore the reference database
- ❏ Configure applications
- ❏ Complete optional steps

Installation Process

Setting up PRODIKA_HOME

Note This step needs to be done only once per Web site instance. If you have
multiple instances of the Agile PLM suite running on the same server, you
will need to perform this step once per instance.

1 Create a folder (e.g. c:\PLM) into which to install the application. For
instructional purposes, this folder will be called PRODIKA_HOME.

Installing the Core Application Files

Note This step needs to be done only once per PRODIKA_HOME. If you have
multiple instances of the Agile PLM suite running on the same server, you
will need to perform this step once per instance.

Throughout the instructions below, the place where you extracted the media
bundle zip file will be referred to as INSTALLER_HOME.

1 Open the containing directory for INSTALLER_HOME.
2 Extract **Core.zip** located in INSTALLER_HOME\PDM (where PDM is the
name of the media bundle being installed) to a temporary directory (i.e.;
c:\temp). This will give you a directory structure like c:\temp\Apps,
c:\temp\Config, etc. This temporary directory will be referred to as
TEMP_HOME.

3 Copy **FileCompressionHelper.exe** from INSTALLER_HOME to TEMP_HOME.

4 Open a command prompt and navigate to TEMP_HOME (i.e.; >cd c:\temp).

5 Run the following:
```
>FileCompressionHelper.exe -d
```

Important It is extremely important that you perform the decompression described in step 5 before continuing to install any additional media pack bundle files.

---

6 When the distribution is complete, move your TEMP_HOME contents to PRODIKA_HOME.

Registering Environment Components

1 Register event logs.

a Open a command prompt and navigate to **INSTALLER_HOME\Installer\Tools**.

b Run the following batch file:
```
>SetupEventLogs.bat
```

c You will be asked to verify the addition of each event log to your system event logs. Click **Yes/Ok** through all of the event log additions.

2 Register Component Art and Apoc.

a Open a command prompt and navigate to **INSTALLER_HOME\Installer\Tools**.

b Run the following batch file:
```
>ConfigureRegistry.bat
```

c You will be asked to verify the addition of each registry entry. Click **Yes/Ok** through all of the event log additions.

3 Install the Remoting Container Service.

> **Note** This step needs to be done only once per PRODIKA_HOME. If you have multiple instances of the Agile PLM suite running on the same server, you will need to perform this installation once per instance.

a Open a command prompt and navigate to **INSTALLER_HOME\Installer\Tools**.

b Stop IIS - from the command prompt type the following:
```
>iisreset /stop
```

c Run the following batch file with <PRODIKA_HOME> replaced by your specific PRODIKA_HOME directory:
```
>InstallRemotingContainerService.bat <PRODIKA_HOME>
```

Installing Individual Media Bundle Application Files

1 Open the containing directory for INSTALLER_HOME.

2 Extract the media pack zip file located in INSTALLER_HOME to a temporary directory (i.e.; c:\temp). This will give you a directory structure like c:\temp\config, c:\temp\FileCompressHelper_CentralDirectory & c:\temp\Web.

3 Confirm Media bundle names for the ZIP files, where the name can be one of :

   • MP1.zip for the PDM install

   • MP2.zip for the FC install

   • MP3.zip for the PSC install

   • MP4.zip for the NPD install

4 Copy FileCompressionHelper.exe from INSTALLER_HOME to TEMP_HOME.

5 Open a command prompt and navigate to TEMP_HOME (i.e.; >cd c:\Temp).

6 For all of the media bundles other than the NPD media bundle, run the following utility application:
   >FileCompressionHelper.exe -d

7 When the distribution is complete, move your TEMP_HOME contents to PRODIKA_HOME.

8 Accept the warning(s) to overwrite the directories that already exist.

Setting Up the Initial IIS Web Site

It is recommended that you create a new Web site under IIS under which the Agile PLM suite will be managed. If you choose to run the suite under the default Web site, you may skip this step.

1 Open the Internet Information Services (IIS) Manager utility **Start > All Programs > Control Panel**.

2 Double-click **Administrative Tools**, and then double-click **Internet Information Services Manager**.

3 Expand the {server_name} node, where {server_name} is the name of the server.

4 Expand the **Web sites** node.

5 Right-click the **Web sites** node and select **New > Web Site…**.

6 Click **Next**.

7 Enter a **Description** (e.g. Agile PLM) for your Web site.

8 Click **Next**.

9 Set the IP configuration and Host Header for your Web site.

10 Click **Next**.

11 Set the path to point to the PRODIKA_HOME directory you created as the first step of this installation.

12 Leave the **Allow anonymous access to this Web site** checked.

13 Click **Next**.

14   Make sure the **Read**, **Run scripts** (such as ASP), and **Execute** (such as ISAPI applications or CGI) are checked.

15   Click **Next**.

16   Click **Finish**.

Setting Up ASP.net AJAX

ASP.net AJAX is the third party software required to navigate to applications in Agile PLM for process.

To install AJAX:

1   Access the following site:

http://www.asp.net/AJAX/downloads/

2   Under the section named ASP.NET AJAX Downloads for ASP.NET 2.0, click **ASP.NET AJAX Extensions v1.0** to begin the download process.

Setting Up the Initial IIS Application Pools

In a default installation, it is recommended that you run the suite of applications under multiple application pools in order to provide better resource management and security. The utility scripts are designed to place the different applications under the same application pool, or you may run the SetupVirtualDirectories.bat file manually giving the values for the specific Web applications to segment them as you see fit.

The general process of installing the necessary Web applications using the utility scripts is listed below:

1   Open a command prompt and navigate to the directory **INSTALLER_HOME\Installer\Tools**.

2   To install the core Web site virtual directories, choose one of the following options:

   • **Option 1**, **Creating a single app pool**—To install the core Web site virtual directories, type the following where the values <PRODIKA_HOME>, <siteid> & <AppPool> are replaced with the values associated with your specific environment:

```
SetupCoreVirtualDirectories.bat <PRODIKA_HOME> <siteid>
<AppPool>
```

   • **Option 2**, **Segmenting the applications into separate application pools**—To manually create the virtual directories needed for the individual applications within the core application bundle, type the following. You will need to repeat this script for each of the different applications within core. Refer to the SetupCoreVirtualDirectories.bat file to determine the applications within core.

```
SetupVirtualDirectories.bat drl <siteid> <PRODIKA_HOME> <AppPool>
drl
```

> **Note** Please refer to the section *Determining a Web Site's Site ID* on page 1-31 to determine the value for <siteid>.

3 Each media bundle has an associated Setup<MediaBundle>VitualDirectories.bat batch file where <MediaBundle> is PDM, FC, SupplierCollab or NPD. To install the necessary virtual directories for each installed media bundle, repeat the process outlined in step 2, replacing <Media Bundle> appropriately.

Registering .Net version 2.0 under ASP

1 Open a command prompt and navigate to **INSTALLER_HOME\Installer\Tools**.
2 Run the following command:

```
>RegisterASP_2_0.bat
```

Installing the Reference Database

There is a reference database that is located under INSTALLER_HOME\Database. Restore this database to your database server by following the instructions outlined under the *Restoring the SQL Database* on page 1-14 and *Setting Up User Permissions* on page 1-15 section earlier in this guide.

Configuring Applications

Review the *Agile Product Lifecycle Management for Process Configuration Guide* to apply the configuration changes required for the installation.

Configuring the Oracle Database Connection

To configure the Oracle Database Connection:

1 Change the Database Connection pools as shown below. The ADAPTER_FACTORY needs to have the Oracle specific ADAPTER_FACTORY. The format of the CONNECT_STRING is different from the default SQL Server settings.

```
<ConnectionPools>
<ProdikaDB configChildKey="key">
<config key="MAX" value="8"
configOverrideModifier="IsLocked"/>

<config key="CONNECT_STRING" value="User Id=<ORCL DB
USER>;Password=<ORCL DB PWD>;Data Source=<DATASOURCE>"
configAttributeOverrideBehavior="Replace"
configOverrideModifier="IsLocked"/>
<config key="ADAPTER_FACTORY"
value="Class:Xeno.Data.Oracle.OracleDbAdapterFactory,
DataLib" configAttributeOverrideModifier="CanExtend"/>
</ProdikaDB>
<ReportDB copyOf="ConnectionPools/ProdikaDB">
<config key="CONNECT_STRING" value="User Id=<ORCL DB
USER>;Password=<ORCL DB PWD>;Data Source=<DATASOURCE>" />
</ReportDB>
</ConnectionPools>
```

> **Note** You should change the connect string in the `environmentvariables.config` file.

2 Add the EQT Service config in the EnvironmentSettings and specify the DBHelper to be Oracle Specific DB Helper as shown below:

```
<Prodika>

  <Services>
  .
  .
  .
  <EmailService configChildKey="name">

   <envvar name="EMAIL_DOMAIN_FILTER" value="<YOUR EMAIL
   DOMAIN - ex: oracle.com"
   configOverrideModifier="IsLocked"/>

   <envvar name="BCC_AUDIT_EMAIL_ADDRESS" value=""
   configOverrideModifier="IsLocked"/>

   <envvar name="SMTP_SERVER" value="<YOUR SMTP ADDRESS>"
   configAttributeOverrideBehavior="Replace"
   configOverrideModifier="IsLocked"/>

  </EmailService>
  <EQTService configChildKey="name">
```

```
   <envvar name="DBHelper"
   value="Xeno.Prodika.EQT.Execution.OracleDBHelper,EQT" />

</EQTService>

<SyndicationService configChildKey="name">

   <envvar name="ErrorNotifyFromAddress"
   value="#CUSTOMER_FROM@CUSTOMER.COM"
   configElementOverrideModifier="IsLocked"
   configAttributeOverrideModifier="Replace" />

   <envvar name="ErrorNotifyToAddress"
   value="#CUSTOMER_TO@CUSTOMER.COM"
   configElementOverrideModifier="IsLocked"
   configAttributeOverrideModifier="Replace" />

</SyndicationService>
.
.
.
</Services>
```

3 Restart IIS. You can now use the Prodika installation on the Oracle
Database.

BI Publisher for Printing and Reporting

Oracle Business Intelligence Publisher (BI Publisher) has been integrated with the Printing and Reporting applications. Printing and Reporting have separate configurations settings, and BI Publisher can be configured for Printing, Reporting, or both.

Requirements: Oracle BI Publisher version 10.1.3.2 must be installed and accessible to the Agile PLM for Process environment.

When installing BI Publisher, you will be prompted to enter an administrator username and password for administering the BI Publisher reports. This username and password will also grant access to a BI Publisher web service used by Agile PLM for Process to processes printing and reporting requests. Take note of the username and password as it will be required for the configuration settings.

Note that when setting up BI publisher for Reporting, you will need to set up a database connection to the Agile PLM for Process database. This may involve installing relevant JDBC drivers, setting up the DataSource in BI Publisher, and configuring the connection string and database driver class. Please refer to the Oracle BI Publisher documentation for details.

Configuring BI Publisher for Printing

To configure BI Publisher for Printing, you will need to update Agile PLM for Process configuration settings and set up BI Publisher to process the incoming data using BI Publisher's Report Templates.

Print data is sent to the BI Publisher web service as XML data; the relevant BI Publisher Report Template takes the incoming XML data and can then transform it using a custom XSL as needed.

To configure Agile PLM for Process:

1 Update the `\config\environmentvariables.config` file:

Key	Value
Prodika.Print.BIPublisherIntegration.EndPoint	http://<BIPublisher-location>:9704/xmlpserver/services/PublicReportService
Prodika.Print.BIPublisherIntegration.UserName	BI Publisher username as configured on installation
Prodika.Print.BIPublisherIntegration.Password	BI Publisher password as configured on installation

2 Update the `\config\Extensions\PrintSettings.config file`. This file contains the print configurations for the various print items, such as Specifications, NPD printing, etc. You will need to update this file to use the BIPublisherFORender print manager:

    a Open the `\config\Extensions\PrintSettings.config`.

    b Update the specification (or other print item) type you want to print to use the BI publisher print manager. You can add the following to an existing entry, or create a new entry:

```
printmanager="BIPublisherFORender" reportPath="Your custom
BI Publisher report path"
```

For example:

```
<PrintTemplate id="Default" library="XSL_FO_LIBRARY"
report="GSM$xlate$.xsl"
printmanager="BIPublisherFORender" reportPath="/
ProdikaPrint/ProdikaPrintFO/ProdikaPrintFO.xdo"/>
```

An optional attribute, `reportTemplate`, is used to specify which BI Publisher report Layout to use.

Note that the reportPath value should correspond to the report set up in BI Publisher.

To configure BI Publisher for Reporting:

Setting up BI Publisher for Printing involves creating a BI Publisher report, configuring its Data Model to link it to Agile PLM for Process, and setting up the possible Layouts. In this section, an example report configuration is presented, but other configurations are possible.

1 Log in to BI Publisher (http://<YourBIServerURL>:9704/xmlpserver/).

2 In the Reports tab, click the **Shared Folders** link.

3 Create a new folder (ex: ProdikaPrint).

4 In the new folder, click the **Create a new report** link on the left, enter a report name (ex: ProdikaPrintFO) and click the **Create** button.

5 Click the **Edit** link.

6 Click **Parameters**, then click the **New** icon.

Figure 1-4: Parameters option, Parameter page
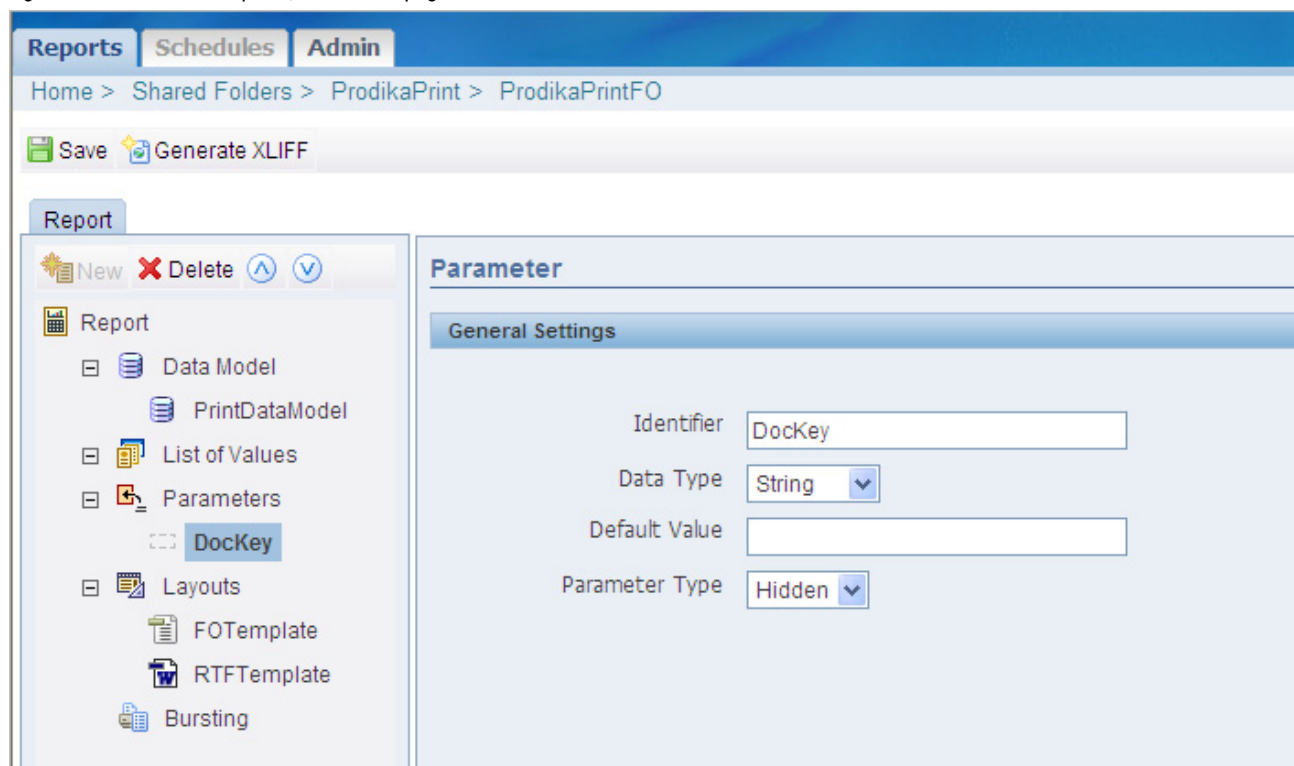
a Make entries in the following fields:

   Identifier— Enter **DocKey**. This is a required field.

   Data Type—Select **String** from the drop-down list. This is a required field.

   Default Value—Leave this field blank.

   Parameter Type—Select **Hidden** from the drop-down list. This is a required field.

b Click **Save**.

7 Click **Data Model**, then click the **New** icon, as shown in figure 1-5 below.

Figure 1-5: PrintDataModel option, Data Set page

a   Make entries in the following fields:

Name—Name of the data model. This is a required field.

Type—Select **HTTP (XML Feed)** from the drop-down list. This is a required field.

URL—Enter
`http://{application URL}/gsm/PopUps/docstream.aspx`
where {application URL} is the address of the application. This is a required field.

Method—Select **GET** from the drop-down list. This is a required field.

b   Click **Add** to display the Parameters Name and Value fields.

c   Make the following entries:

Name—The name of the parameter that you created in step a. This is a required field.

Value (Parameter)—Select **DocKey** from the drop-down list. This is a required field.

d   Click **Save**.

8 Click **Layout** to set up the report layout.

a In the Manage Template Files section, upload your XSL template to use. In this scenario, we created and uploaded a simple XSL "pass-through" file called `ReportTemplate.xsl`, as such:

```
<?xml version='1.0'?>
<xsl:stylesheet version="1.0" xmlns:xsl="http://
www.w3.org/1999/XSL/Transform">
        <xsl:template match="/">
                <xsl:copy-of select="/" />
        </xsl:template>
</xsl:stylesheet>
```

However, you can easily create your own transformation rules yourself.

b Click **New** to create a new report Layout, as shown in figure 1-6 below.

Note You can create multiple layouts and then declare the desired layout in the `PrintSettings.config` file.

Figure 1-6: Layouts, FOTemplate option, Layout page
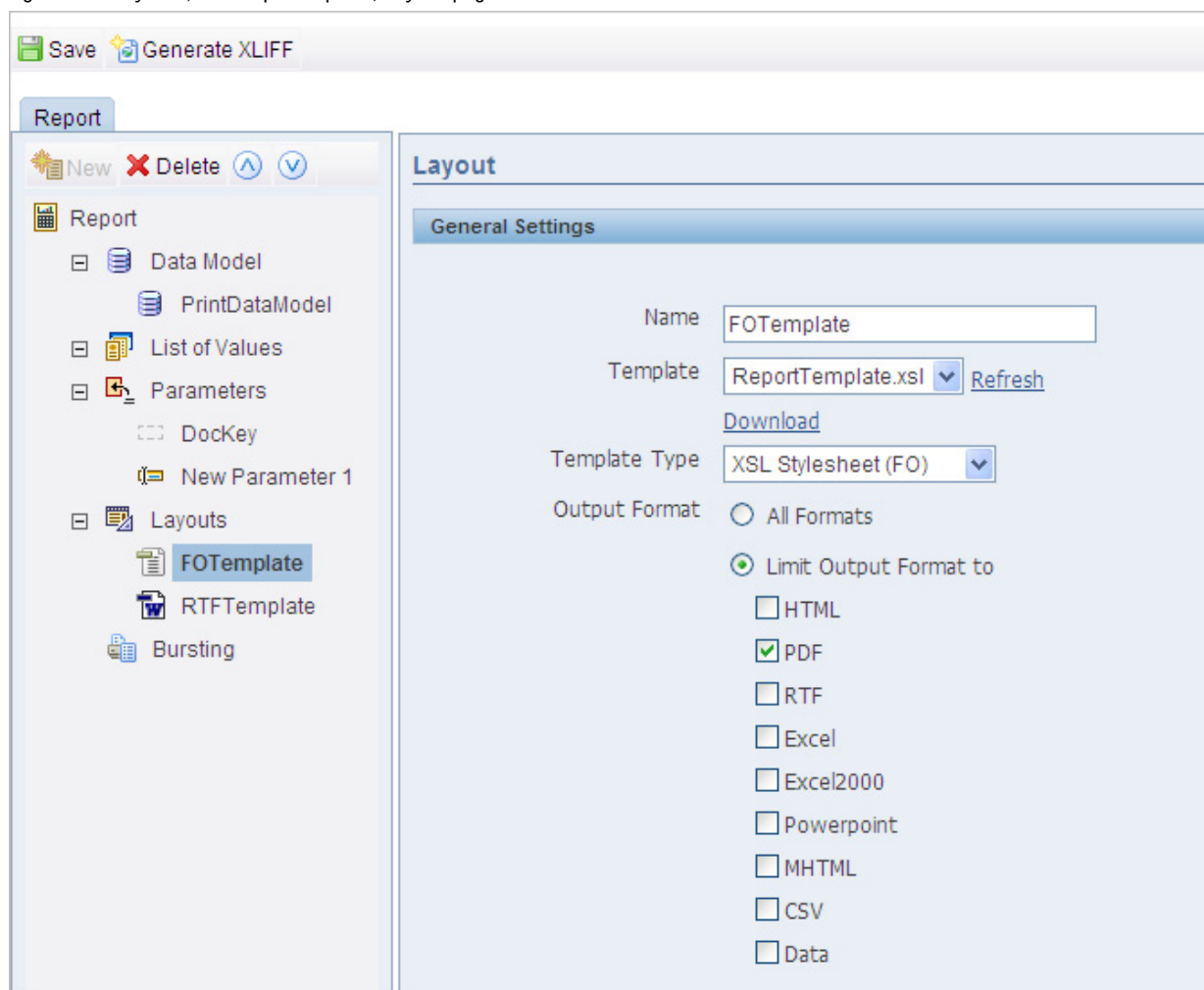
    c   Make the following entries:

       Name—The name of the report layout. This is a required field.

       Template— Select **XSL Stylesheet (FO)** from the drop-down list. This is a required field.

       Template Type— Select the **Limit Output Format to** radio button, and then select the **PDF** checkbox. This is a required field.

    d   Click **Save**.

Your report should now be available for printing. Make sure that the link to the report matches the `reportPath` value in the `PrintSettings.config` file. (While editing the report in BI Publisher, right-click on the **View** link in the top right and select **Copy Shortcut** to get the value).

If your Printing includes any images, such as logos, make sure they are available to BI Publisher, by adding them to the BI publisher directory. The location will depend on the path used.

Configuring BI Publisher for Printing

The Agile PLM for Process Reporting application allows clients to organize, configure, secure, and launch custom reports. The configuration is managed in the `CustomerReportExtensions.xml` located in the `\Config\Extensions\` directory. Report and their parameters are presented in PLM for user entry; their values are then passed to custom BI Publisher reports to process the parameters, query data sources, and generate the report.

To use BI Publisher for Reporting, you will need to update Agile PLM for Process configuration settings, set up custom reports in BI Publisher, and update the Agile PLM for Process Reporting configurations accordingly.

For details on configuring custom PLM reports, refer to the *Agile Product Lifecycle Management for Process Custom Report Configuration Guide*.

To configure Agile PLM for Process:

  1 Update the `\config\environmentvariables.config` file:

Key	Value
Prodika.ReportServer.URL	http://<BIPublisher-location>
Prodika.ReportService.URL	@@VAR:Prodika.ReportServer.URL@@:9704/ xmlpserver/services/PublicReportService
Prodika.ReportService.SysUser	BI Publisher username as configured on installation
Prodika.ReportService.SysPassword	BI Publisher password as configured on installation

2 Update the `\config\Custom\CustomerSettings.config` file:

    a Find `SQLReportingService` node in the `/CustomerSettings/Core/Prodika/Services` section.

    b Set it as follows:

```
<SQLReportingService refscope="Session"
factory="Class:Xeno.Reporting.Service.ReportGenerationS
ervice.Oracle.OracleBIPReportGenerationServiceFactory,
ReportingService" configChildKey="name"
configAttributeOverrideModifier="Replace"></
SQLReportingService>
```

3 Update the `\config\Extensions\CustomerReportExtensions.xml` file to set up the custom reports for the Reporting application. Details can be found in the *Agile Product Lifecycle Management for Process Custom Report Configuration Guide*.

Configuring BI Publisher Reports

Please refer to Oracle BI Publisher documentation for creating and setting up reports in BI Publisher.

Completing Optional Steps

For the NPD media bundle, create the WebDAV folder. Some parts of the Agile suite use WebDAV to allow in-place editing of certain document types. To allow for this, a setting is available in the <PRODIKA_HOME>/config/Custom/ EnvironmentSettings.config file for the WebDAV virtual folder. In cases for which WebDAV is required, create a WebDAV virtual folder and allow the anonymous user to access (read and write) the physical folder location on the hard drive. Refer to *Installing WebDAV* on page A-1 for instructions.

Determining a Web Site's Site ID

To determine the Site ID for a new Web Site within IIS 6.0:

1 Open the Internet Information Services (IIS) Manager utility by selecting **Start > All Programs > Control Panel.**
2 Double-click **Administrative Tools**, and then double-click **Internet Information Services Manager.**
3 Expand the {server_name} node, where {server_name} is the name of the server.
4 Expand the Web site's node.
5 Right-click the {website_name}, where {website_name} is the name of the Web site for which you wish to obtain the Site ID, and select **Properties** from the context menu that is displayed.
6 In the {website_name} **Properties** dialog box, on the **Web Site** tab, inside the Enable logging section, next to the Active log format: drop down list, click the **Properties** button, as figure 1-7 shows below.

Figure 1-7: Properties button
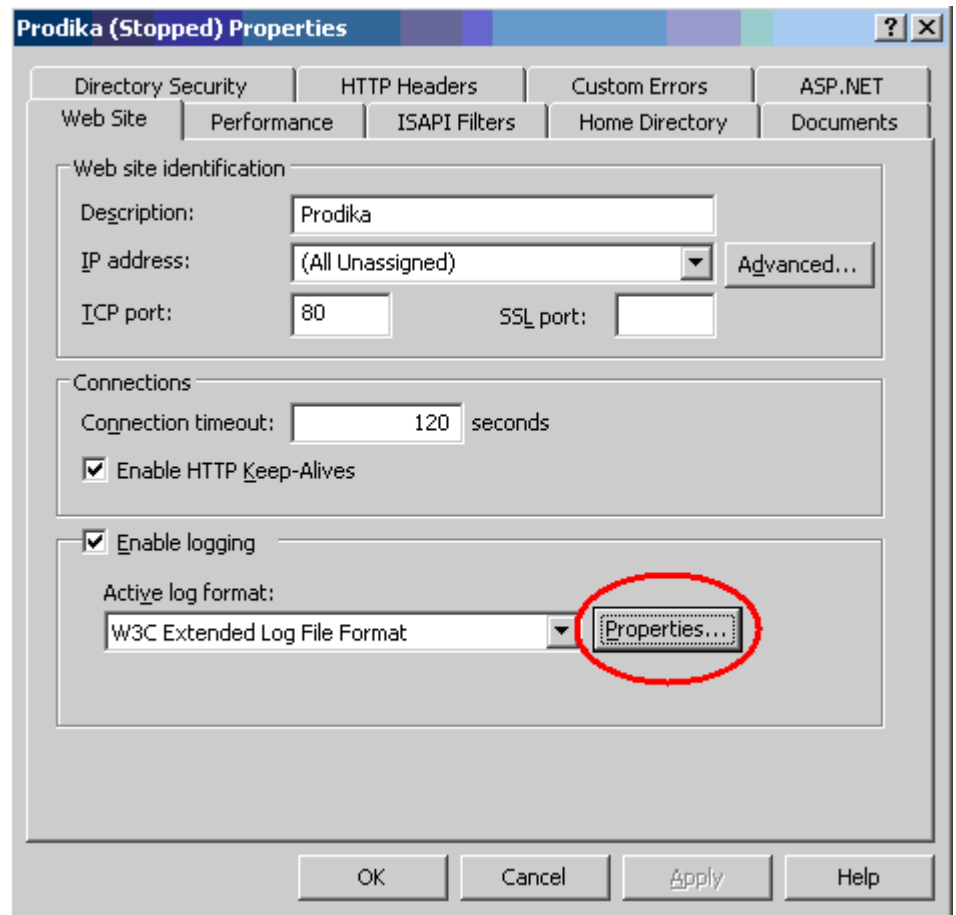
The Logging Properties dialog box displays.

7 At the bottom of the Logging Properties dialog box is a line of text with the name of the log file for the {website_name} Web site in the form W3SVCXXXX\exyymmdd.log. The XXXX in that field is the site ID assigned to the {website_name} Web site, as figure 1-8 shows below.

Figure 1-8: Log file containing site ID
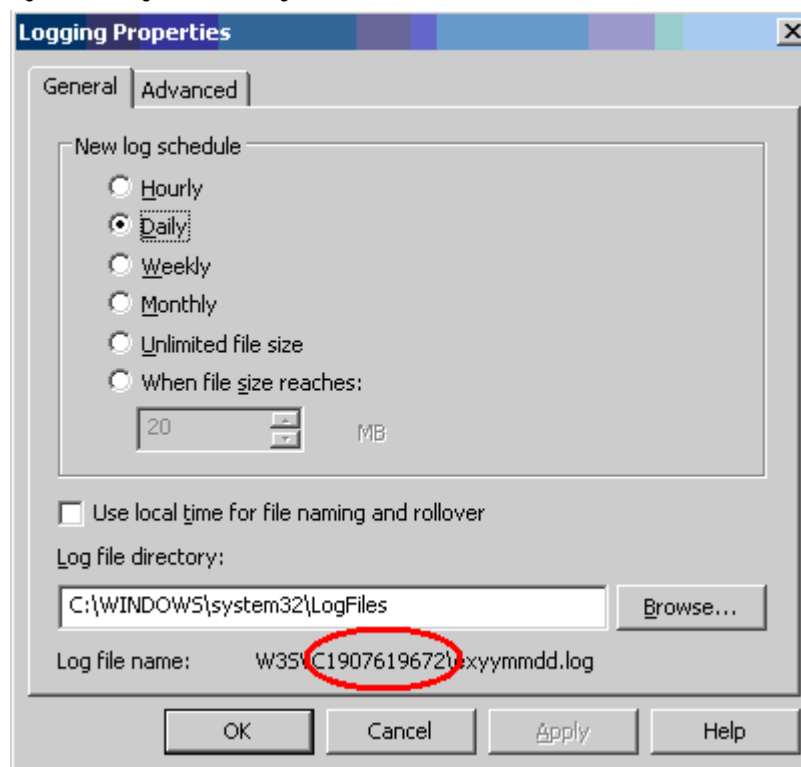
Event Log

Event Viewer contains the following core event logs:

1 **cssPortal-Prodika**—Contains events or errors that are logged from within the Content Syndication Service Portal web application
2 **DRL-Prodika**—Contains events or errors that are logged while utilizing the document repository library (DRL)
3 **DWB-Prodika**—Contains events or errors that are logged while working with design workbench (DWB)
4 **DWBService-Prodika**—Contains events or errors that are logged during processing of formulation optimization events
5 **EQ-Prodika**—Contains events or errors that are logged from within eQuestionnaire (EQ)
6 **EQService-Prodika**—Contains events or errors that are logged while utilizes services provided by eQuestionnaire
7 **Integration-Prodika**—Contains events or errors that are logged while utilizing external system integration services
8 **NPD-Prodika**—Contains events or errors that are logged from within New Product Development (NPD)
9 **Optimization**—Contains events or errors that are logged during the process of optimization
10 **PLMFramework-Prodika**—Contains general events or errors that are logged during lower level service calls used throughout the Prodika framework

11 **Portal-Prodika**—Contains events or errors that are logged from within the Portal web application

12 **PQS-Prodika**—Contains events or errors that are logged from within the Product Quality Scorecard (PQS) web application

13 **PrincipalManagement-Prodika**—Contains events or errors that are logged within the User Group Management (UGM) web application

14 **Print-Prodika**—Contains events or errors that are logged during printing events

15 **Prodika**—Contains general framework events or errors that are logged during standard processes, such as failed log ins, etc.

16 **ProdikaCommon**—Contains events or errors that are logged from within the ProdikaCommon support library

17 **Reg-Prodika**—Contains events or errors that are logged from within the Regulatory web applications (CACS, Label Claims, FSIS, etc.)

18 **ReportGenerator-Prodika**—Contains events or errors that are logged during report generation

19 **Reporting-Prodika**—Contains events or errors that are logged from within the Reporting web application

20 **SCRM-Prodika**—Contains events or errors that are logged from within the Supply Chain Relationship Management (SCRM) web application

21 **SP-Prodika**—Contains events or errors that are logged from within the Supplier Portal (SP) web application

22 **SupplierPortalAdmin-Prodika**—Contains events or errors that are logged from within the Supplier Portal Administration web application

23 **Syndication-Service**—Contains events or errors that are logged from within the Content Synchronization and Syndication web application

24 **WebCommon-Prodika**—Contains events or errors that are logged from the common web controls used throughout the entire Prodika web framework

25 **wfAdmin-Prodika**—Contains events or errors that are logged from within the Workflow Administration web application

26 **workFlowAdmin-Prodika**—Contains events or errors that are logged from within the Workflow Administration web application

Changing the Default Settings

To manually change the Event Log default settings:

1   Right click **My Computer**, and then click **Manage**. The Computer
Management dialog box displays, as figure 1-9 shows below.

Figure 1-9: Computer Management dialog box
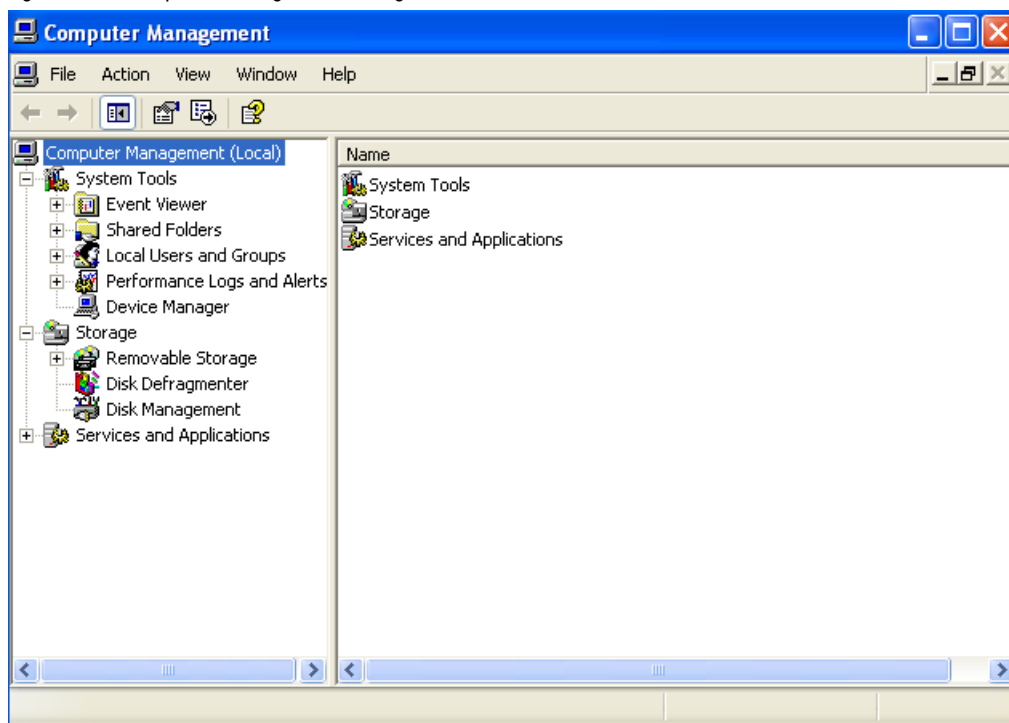
2   Expand the **Event Viewer** node to see the listing of all event logs within the
system, as shown in figure 1-10 below.

Figure 1-10: Event Viewer, expanded
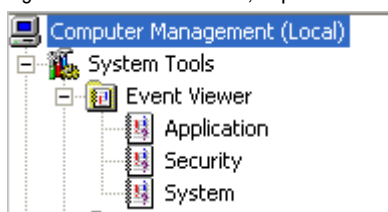
3   Select the Event Log you wish to modify by right-clicking and selecting
Properties from the context menu. The Application Properties dialog box
displays, as shown in figure 1-11.

Figure 1-11: Application Properties dialog box
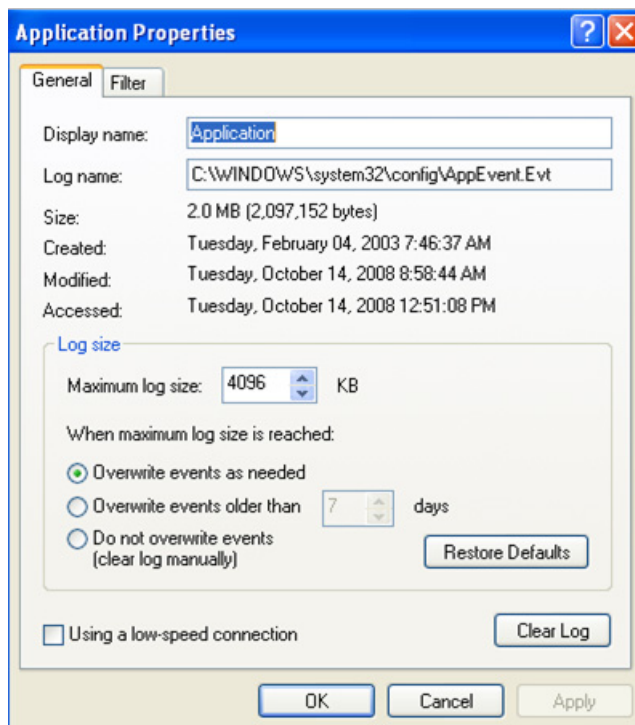
4 Modify the settings to match your needs and then click **OK** to save and exit the dialog box.

Post-Installation Checklists

This section discusses tasks that an Agile implementer must complete after installing the Agile application suite.

Setting the IIS Event Viewer Logging

Important This step is critical to successfully running the Agile application suite. You must set the Event Viewer logging to **Overwrite events as needed** for System, Security, Application, and all Agile-created event logs.

If an event log is set to **Overwrite events older than 7 days**, then you may run into an issue when a new feature is introduced that uses multiple Warnings, Errors, or Information. The introduction of new event logging can fill up the event log so that no more events can be logged, throwing an exception back to the user of the application. The exception will not go away until the log is set to **Overwrite events as needed** or until the log is cleared manually. For this reason, we suggest setting all event logs to **Overwrite events as needed.**

Important You will need to start up every Agile application, which will generate a new event viewer log. Review each event viewer setting to make sure the **Overwrite events as needed** option is selected.

To set the IIS Event Viewer Logging in IIS 6.0:

1 On your desktop, right-click the **My Computer** icon.

2 Click **Manage** from the fly-out menu to display the Computer Management dialog box.

3 In the left pane, click **System Tools > Event Viewer** to display all of the available event viewers.

4 Right-click on each event viewer and select **Properties** to display the Application Properties dialog box.

5 Select the **Overwrite events as needed** option.

6 Click **Apply**, and then click **OK**.

Updating the Version Number in the version.txt File

Modify the version.txt file as follows:

1 In your `Prodika_Home` directory, locate the `version.txt` file.

2 Open the file with a text editor.

3 Edit the first line so that it contains only the following text:
`Version: v6.0`

4 Click **File > Save** to save the your change.

Starting the Remote Container Service

To start the remote container service:

1 Right click **My Computer**.

2 Select **Manage** from the context menu. The Computer Management console will open.

3 Expand the **Services and Applications** node.

4 Select the **Services** node.

5 The services will be listed in the main content area.

6 Locate the RemoteContainerService.

7 Right click and select **Start**.

8 Wait a few seconds to verify that it starts and stays running.

Note Troubleshooting: If the service starts and then stops, check the log file under <PRODIKA_HOME>\logs\remoteContainer-stdout.log to determine the root cause.

Microsoft .NET Framework

After installing Microsoft .NET Framework, you need make some configuration changes to the `machine.config` file for performance optimization purposes.

Make the following updates to the machine.config file as follows:

1 Locate and open the `machine.config` file at:

```
C:\Windows\Microsoft.NET\Framework\v2.0.50727\Config\machine.config
```

2 Locate the system.web tag and add the following under it:

```
<pages validateRequest="true" enabledEventValidation="false"/>
<processModel enable="true" timeout="Infinite"
idleTimeout="Infinite"
shutdownTimeout="00:00:05" requestLimit="Infinite"
requestQueueLimit="5000" restartQueueLimit="10"
memoryLimit="60" webGarden="False" cpuMask="0xffffffff"
userName="SYSTEM" password="AutoGenerate" logLevel="Errors"
clientConnectedCheck="00:00:05"
comAuthenticationLevel="Connect"
comImpersonationLevel="Impersonate"
responseDeadlockInterval="00:03:00"
responseRestartDeadlockInterval="00:03:00" autoConfig="True"
maxWorkerThreads="20" maxIoThreads="20" minWorkerThreads="1"
minIoThreads="1" serverErrorMessageFile=""
pingFrequency="Infinite"
pingTimeout="Infinite" maxAppDomains="2000" />
<machineKey
validationKey="B3B1257C1B375B1190AF16044C40A42739DEDDBA26C2F9DA3
5B20FC20C3F63B11B22C6B92D602EB8886E3D18F9548B84A0B80EBADC575C407
ED33F39ACE08389"
decryptionKey="6D53B0178EF6AA0604C1D559B0962228B7449DAFD920113B"
validation="SHA1"/>
```

> **Note** Sometimes, these tags might exist prior to this step. If these tags are already present, please update them to look as above.

3 Locate forms Attributes. (The xpath to the node is: `/configuration/system.web/authentication`.) [@mode='Windows']/forms Change protection to `None`.

4 Run the following command from a command prompt:
`\Windows\Microsoft.NET\Framework\v2.0.50727\aspnet_regiis.exe -i`

5 Open Internet Information Server Administrator and right-click on the Web virtual folder and choose **Properties**.

6 Click on the ASP.NET tab to confirm that .NET 2.0 is selected.

Installation Verification Tests

In order to perform the recommended Agile installation verification tests, you will need the user name and password for an Agile user account having access to all Agile applications. The standard username and password that ships with the certified database is:

Username: `prodikaadmin`

Password: `agile`

> **Important** Since this is a published username and password, it is highly advised that you change this password immediately upon successful installation of the system.

User access is managed using the User Group Management (UGM) application. For more information on user management, see the *Agile Product Lifecycle Management for Process Administrator User Guide*.

To verify installation:
1 Turn on Agile PLM for Process.
2 Access the Agile application using Internet Explorer. Use the following URL, substituting the appropriate server name and http/https values (depending on whether or not SSL is enabled):
`https://servername/portal/WebCommon/Login.aspx`
3 Type your use name and password, and press the **Enter** key.

> **Note** The following installation verification tests assume that you have installed the entire Agile application suite. If this is not the case, omit tests for applications that you have not installed.

Caution! You must be assigned the correct Agile roles to perform these installation verification tests. For more information on roles, see the *Agile Product Lifecycle Management for Process Administrator User Guide.*

Global Specification Management Test

Before performing this test, note that specifications, once created, cannot be deleted from GSM. Therefore, creating specifications for verification purposes contributes to the proliferation of meaningless specifications. If specifications already exist in the system, you may wish to skip this test.

The purpose of this test is to verify that GSM is properly functioning.

To perform the GSM test:
1 Log in to Agile Product Lifecycle Management for Process.
2 From the left navigation panel, select **GSM > Ingredient Specifications**.
3 Click **Create New** in the upper right corner. A new ingredient specification template is displayed.
4 Type a specification name in the **Spec Name** field.
5 Complete the Approved for Use In section at the bottom of the page.
6 Click **Save & Close Document** in the upper right corner.
7 From the left navigation panel, select **GSM > Ingredient Specifications**.
8 Conduct a blind search by clicking **Reset** and then **Search** or specify search criteria to retrieve the specification that you just created.
9 In the Search Results table, click the **Spec #** link. The selected specification is displayed.
10 Click **Workflow** in the upper right corner.
11 Type any value in the **Comments** field.
12 Click the move step forward ( ) icon. If additional dialog boxes appear, it confirms that GSM is functioning.

Note To remove the test data in a production environment, restore your database, restart the Remoting Container, and then restart the application pools. This returns the environment to the default installation state.

Printing Test

The purpose of this test is to verify that the Agile Printing Service is correctly functioning.

To perform the Printing test:
1 Log in to Agile Product Lifecycle Management for Process.
2 From the left navigation panel, select **GSM > Ingredient Specifications**.
3 Search for the specification that you created in *Global Specification Management Test* on page 1-40.
4 Click **Print** in the upper right corner.

5   In the resulting Print dialog box under Current Specification > Sections, select any check box.

6   Click **Print** again. The specification is rendered in PDF format in a separate window.

7   Close the window once the PDF successfully is displayed and proceed to the next test. If the PDF does not appear, double-click the file `Prodika\Scripts\Installation\ApocEntry.reg` and retry this test.

Attachment Test

The purpose of this test is to verify that the Attachments feature is correctly functioning.

To perform the Attachment test:

1   Navigate to any trade specification in GSM.

2   Select the Supporting Documents tab.

3   Click **Edit** to put the specification in edit mode.

4   Select the Attachments/Procedures link under Supporting Documents.

5   Click **Add New** button.

6   In the Title field, type `test`.

7   Click the **Browse…** button to select a file, and then select **Open**.

> **Note**   The size of the selected file must be less than the designated limit.

8   Click the **Upload** button. The first upload may take up to 30 seconds to complete.

Reporting Test

The purpose of this test is to verify that the Prodika Reporting Service is correctly functioning.

To perform the Reporting test:

1   Log in to Agile Product Lifecycle Management for Process.

2   From the left navigation panel, click **RPT** (**Reporting)**.

3   Search for the specification that you created in *Global Specification Management Test* on page 1-40.

4   Click **Generate Report**.

5   In the resulting dialog, type a report name in the **Report Name** field and then click **Save**.

6   In the left navigation panel, select **Ad Hoc Reports > Reports Queue**.

7   The resulting Reports Queue should contain an entry for your report. Refresh this view periodically by toggling from Reports Queue to Reporting and back, to see the status of your report update. If the report status fails to update, there is likely a problem with the Reporting Service.

8   When the report status indicates `Complete`, click the hyperlinked name of the report to download the report.

Supply Chain Relationship Management Test

The purpose of this test is to verify that the Agile SCRM application is correctly functioning.

To perform the SCRM test:
1 Log in to Agile Product Lifecycle Management for Process.
2 From the left navigation panel, select **SCRM > Company Profiles**.
3 Conduct a blind search and select any company profile from the Search Results table to verify that it is displayed correctly.
4 If the company profile is displayed, click **Cancel** and proceed to the next test.

Nutrition Surveillance Management Test

The purpose of this test is to verify that the Agile NSM application is correctly functioning.

To perform the NSM test:
1 Log in to Agile Product Lifecycle Management for Process.
2 From the left navigation panel, select **NSM > Nutrient Analysis**.
3 Click **Create New** in the upper right corner.
4 If the Nutrient Analysis template is displayed, click **Cancel** and proceed to the next test.

eQuestionnaire Test

The purpose of this test is to verify the Agile eQ application is correctly functioning.

To perform the eQ test:
1 Log in to Agile Product Lifecycle Management for Process.
2 From the left navigation panel, select **eQ > Ingredient Questionnaires**.
3 Click **Create New eQuestionnaire** in the upper right corner.
4 In the Select Questionnaire Type dialog box, select the ingredient type and click **Create New**.
5 If the eQuestionnaire template is displayed, click **Cancel** and proceed to the next test.

New Product Development Test

The purpose of this test is to verify that the Agile NPD application is correctly functioning.

To perform the NPD test:
1 Log in to Agile Product Lifecycle Management for Process.
2 From the left navigation panel, select **NPD > New Product Development > Projects**.
3 Conduct a blind search and select any project from the Search Results table to verify that it is displayed correctly. If so, NPD has passed the test.
4 If no projects are found, click **Create New** in the upper right corner.

5 Select a business unit and project type in the resulting dialog box and then click **Done**.

6 If the NPD (Stage 1) template is displayed, click **Cancel** and proceed to the next test.

Product Quality Scorecard Test

The purpose of this test is to verify that the Agile PQS application is correctly functioning.

To perform the PQS test:

1 Log in to Agile Product Lifecycle Management for Process.

2 From the left navigation panel, select **PQS > Lot Samples**.

3 Click **Create Sample** in the upper right corner. The Enter Code Data/Sample ID page loads.

4 In the **Code Data or Sample ID** field, type any text.

5 Click **Next**. The Select Specification page loads.

6 In the Specification section, click the **Specification** link. A Specification Search dialog box appears.

7 In the resulting Search dialog box, type criteria to find and select the ingredient specification that you created in *Global Specification Management Test* on page 1-40.

8 If the ingredient specification is displayed, the test has succeeded.

9 Click **Close** in the upper right corner, and proceed to the next test.

Component Catalog Test

The purpose of this test is to verify that the Agile Component Catalog service is correctly functioning.

To perform the FIC test:

1 Log in to Agile Product Lifecycle Management for Process.

2 From the left navigation panel, select **GSM > Component Catalog**.

3 Conduct a blind search and select any catalog from the Search Results table.

4 If the catalog is displayed successfully, click **Cancel** and proceed to the next test.

Computer Aided Compliance Screening Test

The purpose of this test is to verify that the Agile CACS application is correctly functioning.

To perform the CACS test:

1 Log in to Agile Product Lifecycle Management for Process.

2 From the left navigation panel, select **CACS**.

3 Conduct a blind search and select any computer aided compliance screen from the Search Results table to verify that it is displayed correctly.

4 If no computer aided compliance screens are found, click **Create New** in the upper right corner.

5 Type a name for the screen in the **Title** field and a description in the **Description** field.

6 Click **Save & Close**.

Supplier Portal Test

The purpose of this test is to verify that the Agile Supplier Portal (SPA) application is correctly functioning.

To perform the SPA test:

1 Log in to Agile Product Lifecycle Management for Process.

2 From the left navigation panel, select **SPA > Approved Registrations**.
If there are any approved registrations in the system, they will be displayed.

User Group Administration Test

The purpose of this test is to verify that the Agile UGM application is correctly functioning.

To perform the UGM test:

1 Log in to Agile Product Lifecycle Management for Process.

2 From the left navigation panel, select **UGM > Groups**.

3 Conduct a blind search and select any group from the Search Results table to verify that it is displayed correctly.

Workflow Administration Test

The purpose of this test is to make sure that the Agile WFA application is correctly functioning.

To perform the WFA test:

1 Log in to Agile Product Lifecycle Management for Process.

2 From the left navigation panel, click **WFA (Workflow Administration)**.

3 Click **New Process Template** in the upper right corner.

4 In the resulting dialog box, select **GSM** and then click **Done**.

5 If the process template is displayed successfully, click **Cancel** and proceed to the next test.

Manage Core Data Test

The purpose of this test is to verify that the Agile ADMN (Manage Core Data) application is correctly functioning.

To perform the ADMN test:

1 Log in to Agile Product Lifecycle Management for Process.
2 From the left navigation panel, select **ADMN > GSM Compliance > Additives**.
3 If the additives currently in the system are displayed successfully, click **Cancel** and proceed to the next test.

Manage Data Caches Test

The purpose of this test is to verify that the Agile CACHE application is correctly functioning.

To perform the CACHE test:

1 Log in to Agile Product Lifecycle Management for Process.
2 From the left navigation panel, click **CACHE (Manage Data Caches)**.
3 If the Schedule Cache Flush tool is displayed successfully, the test has succeeded.

You can now use the scheduled Cache Flush Queue feature to see details for the different applications that been flushed. For more information, refer to the "Using CACHE to Manage Caches" chapter of the *Agile Product Lifecycle Management for Process Administrator User Guide*.

CHAPTER 2

Upgrading

This chapter discusses upgrading Agile Product Lifecycle Management for Process.
Topics in this chapter include:

- ❑ *Upgrade Tasks*
- ❑ *Web Application Tasks*
- ❑ *Stopping Services and Backing Up Files*
- ❑ *Installing Software and Scripts*
- ❑ *Reconfiguring Settings*
- ❑ *Customizing the User Interface*
- ❑ *Reconfiguring and Restarting Remote Container Service and Web Application Server*
- ❑ *Verifying the Installation*

Upgrade Tasks

This chapter discusses the basic steps required to upgrade the Agile application suite to the 6.0 version. The main steps in the upgrade process include:

Web Application Tasks

Check for Active Web Application Server Sessions

Before bringing down the Web application server, perform two checks to make sure there are no active user sessions on the server.

> **Note** We recommend that you notify all users in advance that you are performing the upgrade, to give them time to shut down their connections.

Check the Performance System Monitor for Active Sessions

Using Performance System Monitor, check to see how many people currently have active sessions.

1 Select **Start > Run**.
2 In the Run dialog box, type `perfmon` and click **OK** to bring up the Performance dialog box.
3 Select the **System Monitor** option in the left pane to bring up the System Monitor dialog box.
4 In the bottom portion of the System Monitor dialog box, a list of counters is displayed. Right-click in this area and select **Add Counters** from the shortcut menu to display the Add Counters dialog box.
5 Select the **Select Counters from Computer** option and select your Web application server.
6 From the Performance Object drop-down list, select **ASP.NET Apps v2.0.50727**.
7 Select the **Select Counters From List** option and from the associated scrolling list, choose **Sessions Active**, and then click **Add.**
8 Click **Close** to close the Add Counters dialog box.
9 Using the new active sessions counter, you can view the active sessions for the Web application server by selecting its row in the counter list at the bottom of the System Monitor dialog box. In particular, look at the number of active sessions in the Last field. If this number is greater than 2 active sessions, it is likely that users are logged on to the server. Contact the user(s) to have them log off before you shut down the Web application server.
10 You can save the active sessions counter by right-clicking it and selecting **Save As** from the shortcut menu. You may wish to save this counter to your desktop for future use.

Check the Event Viewer for Last Login

Using IIS Computer Management, check the Event Viewer log for Agile to see when the last user login occurred.

1 Right-click **My Computer** and select **Manage** from the shortcut menu to display the Computer Management dialog box.
2 Under System Tools, select **Event Viewer**.
3 Locate and double-click the Portal-Prodika log under Event Viewer.
4 Review the log to see when the last user login occurred. If a recent login has occurred, it is likely that a user is still logged on to the server. Contact the user to have them log off before you shut down the Web application server.

Stop the Web Application Server

After you have verified that there are no active sessions on the Web application server, bring the server down as follows:

1 Open a command prompt.
2 Enter the following command to stop the Web application server:

```
C:\Documents and Settings\Administrator>iisreset /stop
```

Stopping Services and Backing Up Files

Stop the Remote Container Service

Using IIS Computer Management, stop the remote container service as follows:

1 Right-click **My Computer** and select **Manage** from the shortcut menu to display the Computer Management dialog box.
2 Under Services and Applications, select **Service** to display a list of services in the right pane.
3 Locate the RemoteContainer Service and click it.
4 Select the **Stop the Service** option in the top left-hand portion of the Services pane.

Back Up the Previous Database Deployment

Using SQL Server Enterprise Manager, back up the previous deployment of the database. Be sure to use a meaningful name for the backup for future reference; for example, `Agile 5.2.1 - Full Backup`.

Note The database server must be running in order to perform the backup.

1 Open SQL Server Management Studio.
2 In the left pane under Databases, locate the database instance to back up.
3 Right-click the database and select **Tasks > Back Up…** from the shortcut menu.

4 Select the destination for your backup. Select the **Add…** button to the right of the **Back up to:** text area. A dialog box will appear in which you can choose where to store the backup file. After you have chosen a name, click the **OK** button.

5 Click the **OK** button at the bottom of the dialog and the backup process will begin.

Installing Software and Scripts

Install the Agile 6.0 Upgrade Software

The upgrade process is a manual process that uses batch files. The number of steps during the upgrade process is determined by the applications that you utilize within your installation.

For each installation, you will need to install the Core package first. This package needs to be installed only once per server instance.

After installing the Core package, depending on your installation, you will install one to four media packs. Each media pack is installed in the same manner outlined below.

Set Up the Installation Environment

Note This step is common to all media pack installations.

Download the Media Pack installation file for the specific media pack being installed. Unzip the media pack zip archive to a temporary directory (i.e.; c:\INSTALL_HOME). Follow the directions detailed below for Core/Media Pack installation.

Upgrade the Software

Archiving the Previous Installation
The first step in the upgrade process is to manually archive the previous installation, as described below.

1 Move (i.e.; cut) all of the directories other than attachments/XDocuments & logs directories to your designated archive location. We recommend that you name the containing directory as the version that you are upgrading from (i.e.; v5.1.2 - installation, etc.).

Installing the Core Bundle
2 The next step in the upgrade process is installing the Core bundle.

> **Note** This should be done only once per PRODIKA_HOME, meaning that if you have multiple installations of the Prodika suite of applications running on the same server, you will need to perform this step only once per Prodika installation.

Throughout the instructions below, the place where you extracted the media bundle zip file will be referred to as INSTALLER_HOME.

3   Open the containing directory for INSTALLER_HOME.

4   Extract Core.zip located in INSTALLER_HOME to a temporary directory (i.e.; c:\temp). This will give you a directory structure like c:\temp\Apps, c:\temp\Config, etc. - this temporary directory will be referred to as TEMP_HOME.

5   Copy FileCompressionHelper.exe from INSTALLER_HOME to TEMP_HOME.

6   Open a command prompt and navigate to TEMP_HOME (i.e.; >cd c:\temp)

7   Run the following (it is extremely important that you perform this decompression before moving on to install any additional media pack bundle files):

    FileCompressionHelper.exe -d

8   When the distribution is complete, move the contents of TEMP_HOME to PRODIKA_HOME.

Upgrade the Media Pack Applications

For each media bundle you will follow the same nine step process below. The one exception is with the NPD media bundle installation. With NPD, there is no need to perform step 6.

1   If there are any files remaining in your TEMP_HOME, remove them.

2   Unzip the media pack zip file located in your INSTALLER_HOME directly to TEMP_HOME.

3   Confirm Media bundle names for the ZIP files, where the name can be one of :

    • MP1.zip for the PDM install

    • MP2.zip for the FC install

    • MP3.zip for the PSC install

    • MP4.zip for the NPD install

4   Copy FileCompressionHelper.exe from INSTALLER_HOME to TEMP_HOME.

5   Open a command prompt and navigate to TEMP_HOME (i.e.; >cd c:\Temp).

6   Run the following (it is extremely important that you perform this decompression before moving on to install any additional media pack bundle files):

    FileCompressionHelper.exe -d

7 When the distribution is complete, move the contents of `TEMP_HOME` to `PRODIKA_HOME`.

8 You will receive a warning that a Web & config directory already exist, accept this to move the contents into these directories.

9 Accept the warning to overwrite the configuration file `PRODIKA_HOME\Config\Core\FeatureDeployment\<media pack>-FeatureConfig.config`.

Update the Version Number in the version.txt File

Modify the version.txt file as follows:

1 In your `Prodika_Home` directory, locate the `version.txt` file.

2 Open the file with a text editor.

3 Change the first line so that it contains only the following text:
`Version: v6.0`

4 Click **File > Save** to save the your change.

Apply Database Upgrade Scripts

Agile Software customers will receive the Agile 6.0 database upgrade scripts on a CD.

Important It is very important that you back up the database as indicated in *Back Up the Previous Database Deployment* on page 2-3 before upgrading the database. Once the scripts have been applied, there is no way to revert the database to the previous state without a backup.

It is also important that you run the database upgrade scripts in version order (5.2.0, 5.2.1, 6.0) to bring the database up to the current software version.

Pre Database Upgrade Procedures

Prior to running the database upgrade using ApplyScripts, you must do the following:

1 Verify that there are no duplicate ID data entries in common tables.

   a Run the SQL script titled **6.0 Pre Database Upgrade script - check for uniqueness.sql** located in the Installer\Tools folder of the media bundle. This script will check various tables for duplicate PKID entries and raises an error for each table affected. Affected tables will have to be examined individually to determine the impact of the duplicate entries and what to do about them.

      • For duplicates whose complete row (all columns) is a duplicate of another one, the duplicate entry should simply be removed. This is the most common scenario.

- When the duplicate entries are not complete duplicates, determining the impact may require more detailed analysis and assistance.

2 Verify there are no duplicate label claims.

   a Search the gsmLabelClaim table for entries that have the same Name and langID.

   b Make any duplicates unique by modifying their Name. For example, if there are two entries for "Low Fat" with a langID = 0, modify one of them to be "Low Fat - Archived".

     The following SQL query will return duplicate label claims:

```
SELECT * FROM gsmLabelClaim a INNER JOIN gsmLabelClaim
b ON a.Name = b.Name AND a.langID = b.langID WHERE
a.pkid <> b.pkid
```

Run Database Upgrade Script

To run the database upgrade script:

1 Open a command prompt and navigate to the directory where you unzipped the upgrade package.

2 Change directories (cd) to the Installer/ApplyScripts directory.

3 Apply the scripts using the following call to the ApplyScripts.exe utility:

- If running the SQL Server database upgrade:

```
ApplyScripts -c "server=<database_server>;uid=<user>;
password=<password>;database=<database>" -f v6.0.0.xml
```

- If running the Oracle database upgrade:

```
ApplyScripts -c "server=<database_server>;uid=<user>;
password=<password>;database=<database>"
-dbvendor="orcl" -f v6.0.0-orcl.xml
```

4 After each ApplyScripts call, you can confirm that the database upgrade scripts have been applied successfully when the system prompts you with the following message:

"**Complete - with no errors**"

Reconfiguring Settings

Update the IIS Virtual Directories

Follow the steps outlined in Configuring IIS Application Pool Settings on page 1-10. Verify that the following virtual directories have been added to IIS: opt, gsmview, GSMExtensions, and then manually remove the dwb virtual directory from IIS.

Configure the Environment Variables Settings

Using a text-based editor, open the environmentvariables.config file and update the server names and port addresses.

Note For further guidance, please refer to the "Environment Variable Settings" section of the *Agile Product Lifecycle Management for Process Configuration Guide*.

Reconfigure the Application Environment Settings

Using a diff tool such as WinMerge, you will need to reconfigure the `environmentSettings.config` file located in your `Prodika_Home\Config\` directory.

To reconfigure application environment settings:

1 Rename the new `environmentSettings.config` file; change the name to `environmentSettings.config-new`.
2 Make a backup copy of the archived version of the `environmentSettings.config` file (from the archived directory) and copy it into the `Prodika_Home\Config\Custom\` directory.
3 Using the diff tool, compare the `environmentSettings.config-new` file to the archived copy of the `environmentSettings.config` file.
4 Update the `environmentSettings.config-new` file as follows:
   a Under **ConnectionPools**, change the CONNECT_STRING path values to the following:

   server = `your database server`

   database = `your database name`

   Uid = `your database user ID`

   Pwd = `your database password`

   b Under Prodika > Services, make sure that the port numbers are correctly set up for your Agile services.
   c Change `%PRODIKA_HOME%` values to the correct `Prodika_Home` value (`c:\Prodika_Home\`).
   d Carefully merge any other configuration differences for your particular customer needs.
5 When you have completed the file comparison and updates, delete the copy that you made of the archived `environmentSettings.config` file.
6 Rename the `environmentSettings.config-new` file; change the name back to `environmentSettings.config`.

Reconfigure the Customer Settings

Using a diff tool such as WinMerge, you will need to reconfigure the `CustomerSettings.config` file located in your `Prodika_Home\Custom\` directory.

To reconfigure customer settings:

1 Rename the new `CustomerSettings.config` file; change the name to `CustomerSettings.config-new`.
2 Make a backup copy of the archived version of the `CustomerSettings.config` file (from the archived directory) and copy it into the `Prodika_Home\Config\Custom\` directory.
3 Using the diff tool, compare the `CustomerSettings.config-new` file to the archived copy of the `CustomerSettings.config` file.
4 Carefully merge any configuration differences for your particular customer needs.

5 When you have completed the file comparison and updates, delete the copy that you made of the archived `CustomerSettings.config` file.

6 Rename the `CustomerSettings.config-new` file back to `CustomerSettings.config`.

Configure the New CustomWFAExtensionsConfig.xml Configuration File

WFA now allows the assignment of workflow actions and guard conditions to a workflow transition through the user interface (Previously, this was done via database scripts only).

If you have added any workflow actions or guard conditions to WFA using database scripts, you may need to add those entries to the new `CustomWFAExtensionsConfig.xml` file in the \config\extensions folder. Doing so will allow those workflow actions and guard conditions to be selectable from a pop-up in the Transitions table in WFA.

> **Note** WFA gives the ability to assign these to the transition only, not to the activity, so if you are configuring workflow actions and guard conditions on activities (not transitions) you will still need to do so using SQL scripts.

Look at the fkOwner column values in the following tables:

❑ For gsmWorkflowActionTemplates and gsmWFGaurdConditionTemplates:
  • If fkOwner starts with 5758 = workflow action is on the activity template (gsmWorkflowActivityTemplates)
  • If fkOwner starts with 5757 = guard condition is on the transition template (gsmWorkflowTransitionTemplates)

❑ For cssWorkflowActionTemplates and cssWFGuardConditionTemplates:
  • If fkOwner starts with 3165 = workflow action is on the activity template (cssWorkflowActivityTemplates)
  • If fkOwner starts with 3166 = guard condition is on the transition template (cssWorkflowTransitionTemplates)

Also, note that the tables cssWFGuardConditionTemplates and gsmWFGaurdConditionTemplates now have a new Name column. You must update its value to match a user friendly name for the guard condition that needs to then be added to the new `CustomWFAExtensionsConfig.xml` configuration file. Look at the xml file for examples.

Customizing the User Interface

You can customize the look and feel of your Agile PLM for Process installation in two ways:

❑ Edit the HTML of the home page or "landing page" — by using any HTML editor (see *Customizing the Agile PLM for Process Default Page* on page 2-11)

❑ Revise the site-wide style sheet (see *Customizing the Site-wide Style Sheet* on page 2-11)

Customizing the Agile PLM for Process Default Page

The default page, or dashboard, of your Agile PLM for Process installation consists partly of an HTML file located at:

```
<HOME_DIR>/Config/Custom/Content/DefaultDashboard.htm
```

This file displays in the main area of your Agile PLM for Process suite, as shown in figure 2-1 below.

Figure 2-1: Default dashboard page
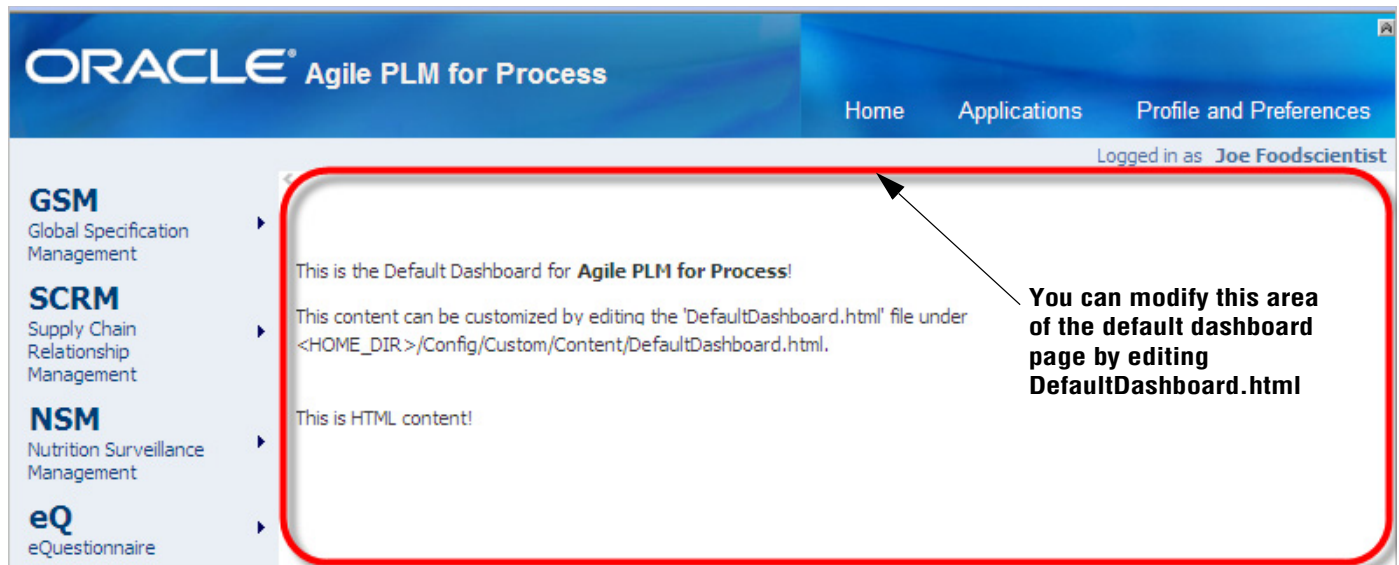
Customizing the Site-wide Style Sheet

You can customize the color scheme and logo of the user interface. A cascading style sheet (`.css`) file controls such visual aspects as background colors, link colors, and your company logo. This file is named "`Brand.css`" and resides at:

```
C:\{Prodika_Home}\Web\CSS\Brand.css
```

You can modify `Brand.css` before or after installing the application suite. In order to add some visual effects, such as your company logo, you must add a Web-viewable graphic file (typically a `.jpg` or `.gif` file) to the following directory:

```
C:\{Prodika_Home}\Web\images\brand
```

Note The style sheet uses standard HTML cascading style sheet tags as set out by the World Wide Web Consortium. Default colors are set out using hexadecimal numbers (and in some cases, the abbreviated, 3-digit hex method). Modifying these settings requires a level of familiarity with cascading style sheets.

The `Brand.css` style sheet file is divided into the following major sections:

Link Colors—Link, active link, visited link (See *Link Colors Section* on page 2-12)

Brand Styles—Appearance of headers, footers, buttons, primary and cobrand logo graphics, and so on. (See *Brand Styles Section* on page 2-14.)

Navigation— Backgrounds and text colors for the Agile PLM suite home page and for all applications, history drop-down list, tabs, and buttons, and so on. (See *Navigation Section* on page 2-15.)

Content Headings—Appearance of page titles and section headings. (See *Content Headings* on page 2-23.)

Tables— Table header rows, backgrounds, and background images. (See *Tables Section* on page 2-24.)

System Messages— Warning notes, error messages, and so on. (See *System Messages Section* on page 2-25.)

Login Styles—Customization of the various areas of the login page. (See *Login Styles Section* on page 2-26.)

NPD Map—Appearance of the current step in the workflow map of an NPD activity and that for past and future steps. (See *NPD Map Section* on page 2-29.)

Caution! Although Agile PLM for Process uses cascading stylesheets and other Web standards, the system depends on technology associated with Microsoft Internet Explorer™, and use of that Web browser is required for correct display and functioning of this system.

Consult the guidance below to modify any element in the cascading style sheet.

Link Colors Section

The Link Colors section, shown in figure 2-2 below, is the first section in `Brand.css`.

Figure 2-2: Brand.css style sheet, Link Colors section, showing default settings

```
/*LINK COLORS
---------------------------------------------------------- */
A:link {color: #2B7C92; font-weight: bold;}
A:visited {color: #2B7C92; font-weight: bold;}
A:active {color: #2B7C92; font-weight: bold;}

.cssxPsuedoLink,  .MultiTreeviewNotaccessed, .notaccessed
{color: #2B7C92;}
```

By default, hyperlinks do not change color when a user mouses over them or after a user has clicked them. You can revise that behavior by modifying the color value (in hexadecimal) and font weight.

Note You can modify link color, font weight, and any other valid CSS attribute in this section. By default, all links are underlined.

Brand Styles Section

In the Brand Styles section you can modify, among other things:

❑ Header background color and image

❑ Primary logo, which appears prominently on the left of the top header, as shown in figure 2-5, on page 2-14

❑ Cobrand logo, which appears at the top right of the page, in the header section, as shown in figure 2-3 below

> **Note** The cobrand logo image does not have to be a logo; it can be any image you like.

❑ Login info bar, as shown in figure 2-3

❑ Brand bar/product bar, as shown in figure 2-5

❑ Popup window header background and border, as shown in figure 2-4 below

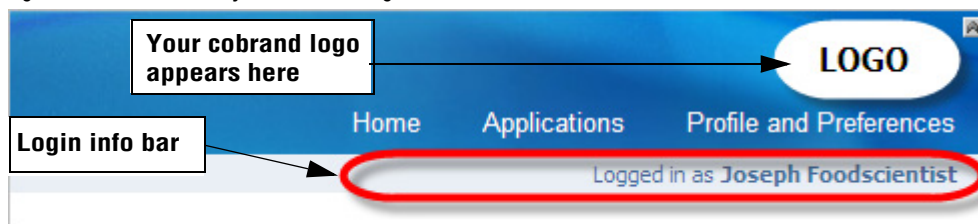Figure 2-3: Location of your cobrand logo
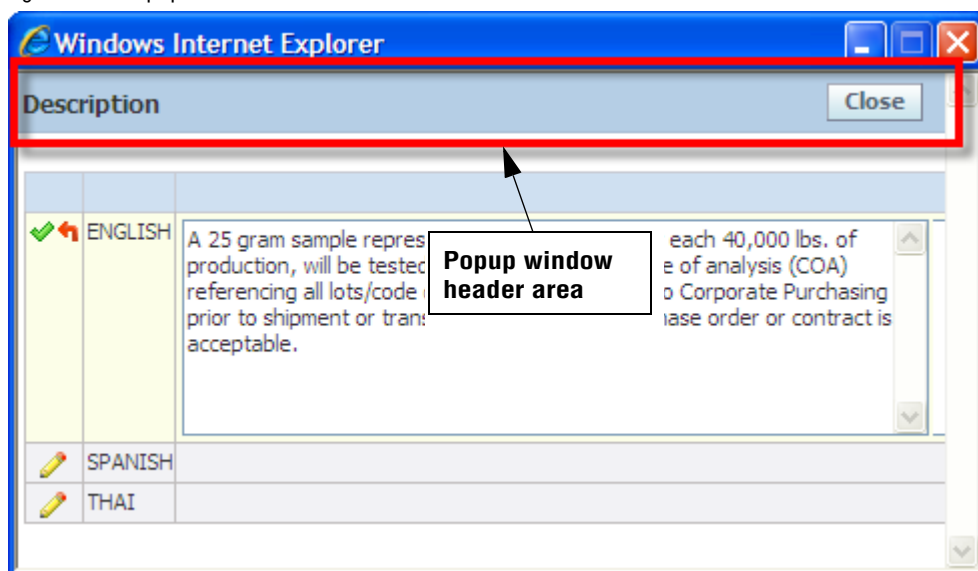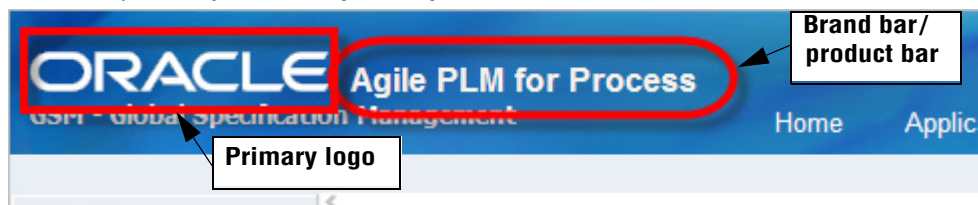

Figure 2-4: Popup window header

Figure 2-5: Agile PLM for Process header, showing primary logo and brand bar/product bar, whose appearance you can configure using Brand.css

Navigation Section

In the Navigation section, you can modify the appearance of:

❑ All navigation backgrounds—Navigational drop-down lists and menu items, for example. (See *All Navigation Backgrounds Subsection* on page 2-15.)

❑ Platform navigation—Top menu bar. (See *Platform Subsection* on page 2-16.)

❑ Portal navigation—Left navigation panel. (See *Portal Navigation Subsection* on page 2-16.)

❑ Application navigation—Left navigation panel as it appears once you are within an application. (See *Application Navigation Subsection* on page 2-18.)

❑ Text color—Text color for the left navigation panel (portal and application versions), the top menu bar, and history navigation. (See *Text Color Subsection* on page 2-19.)

❑ History drop-down list—Borders, colors, and any background image for the history drop-down list. (See *History Drop-Down List Subsection* on page 2-20.)

❑ Tabs—Borders, colors, and background images for all tabs used throughout Agile PLM for Process. (See *Tabs Subsection* on page 2-21.)

❑ Buttons—Borders, colors, and background images for all buttons in the Agile PLM for Process suite, including page-level function buttons and system buttons. (See *Buttons Subsection* on page 2-22.)

All Navigation Backgrounds Subsection

In this subsection, shown in figure 2-6, you can modify the appearance of the backgrounds of all navigational elements.

Figure 2-6: All Navigational Backgrounds Subsection, Navigation section, Brand.css

```
/*All Navigation Backgrounds*/
.cssxPlatformDrop, .cssxPlatformGroup, .cssxPortalGroup,
.cssxPortalMenu, .cssxPortalDrop, .cssxAppNav, .cssxAppNavBg,
.appNav-Level2Item, .historyMenuItem, .historyMenuGroup
{background-color: #eaeff5;}
```

Platform Subsection

In this subsection, shown in figure 2-7, you can modify the color of the text in the top menu bar, as shown in figure 2-8.

Figure 2-7: Platform subsection, Navigation section, Brand.css

```
/*PLATFORM*/
.cssxPlatformMenuItem, .cssxPlatformMenuItemH  /*Platform Text
Color*/
{color: #fff;}
```

Figure 2-8: The top menu bar, whose appearance is controlled by the style elements in the Platform sub-section
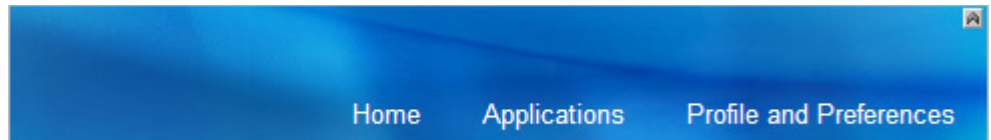
Portal Navigation Subsection

In this subsection, shown in figure 2-9 below, you can modify the appearance of the left navigation panel, shown in figure 2-10.

Figure 2-9: Portal Navigation subsection, Navigation section, Brand.css

```
/*PORTAL*/
.cssxPortalDropItemH, .cssxPlatformDropItemH /*Highlight*/
{
background-color: #ccd7e0;
}

.cssxPortalNavTitle, .cssxPortalNavCaption /*Text Color*/
{
color: #013d74;
}
```

Figure 2-10: The left navigation panel, whose appearance is controlled by the style elements in the Portal Navigation subsection

Application Navigation Subsection

In this subsection, shown in figure 2-11, you can modify the appearance of the left navigation panel that displays once you are in an application, as shown in figure 2-11, on page 2-18.

Figure 2-11: Application Navigation subsection, Navigation section, Brand.css

```
/*APPLICATION*/
.appNav-TopItem, .appNav-TopItem2 /*Parent Category*/
{
border: 1px solid #f2f9fe;
border-right-color:#9aa3aa;
border-bottom-color:#9aa3aa;
background-color: #ccd7e0;
}

.appNav-TopItemHover, .appNav-TopItemHover2 /*Parent Category
Highlight*/
{
border: 1px solid #f2f9fe;
border-right-color:#9aa3aa;
border-bottom-color:#9aa3aa;
background-color: #fff;
}

.appNav-Level2ItemHover, .appNav-Level2ItemSelected , .appNav-
TopItemActive2, .appNav-TopItemActive /*Parent & Item Highlights &
Onclicks*/
{
background-color: #fff;
}
```

Figure 2-12: GSM left navigation panel that displays once you click the application navigation icon
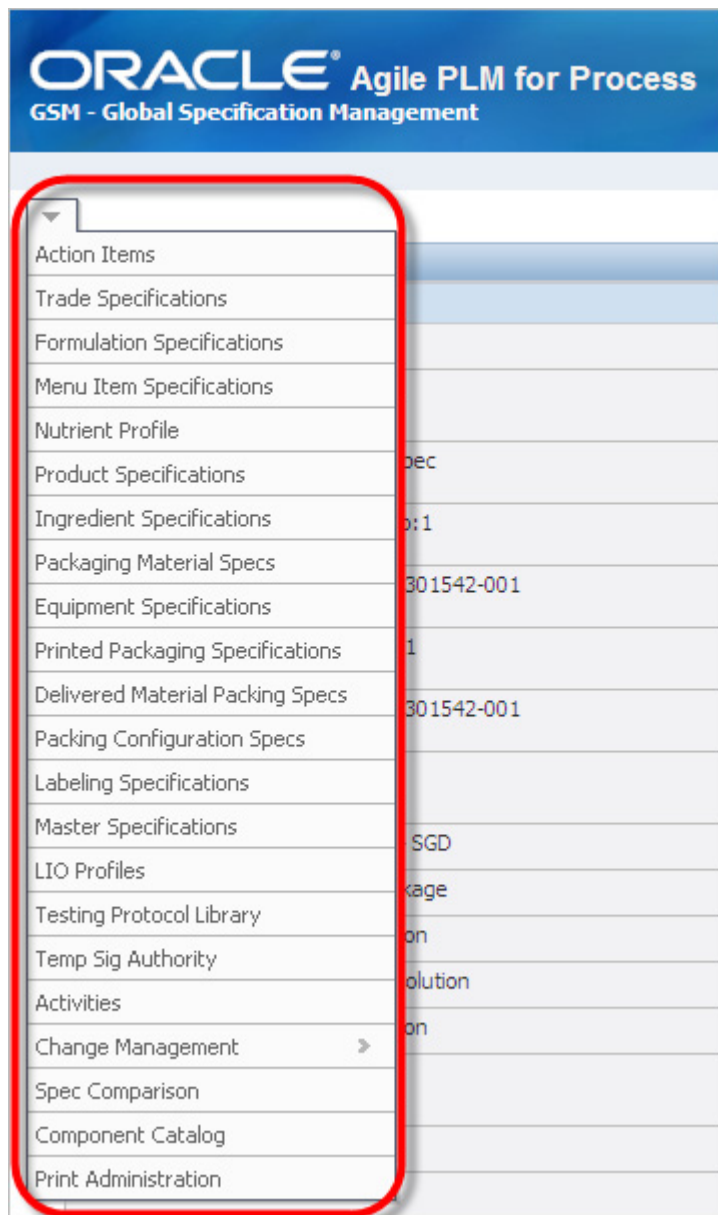
Text Color Subsection

In this subsection, shown in figure 2-13 below, you can modify the color of the text in the left navigation panel (portal and application versions), the top menu bar, and history navigation.

Figure 2-13: Text Color subsection, Navigation section, Brand.css

```
/*Text Color*/
.appNav-Level2Item td, .appNav-TopItemActive2 td, .appNav-TopItem
td, .appNav-TopItem2 td, .appNav-TopItemHover td, .appNav-
TopItemHover2 td, .appNav-TopItemActive td, .appNav-Level2ItemHover
td, .appNav-Level2ItemSelected td
{
color: #013d74;
}
```

History Drop-Down List Subsection

In this subsection, shown in figure 2-14 below, you can modify the borders, colors, and any background image used in history drop-down lists, as shown in figure 2-15.

Figure 2-14: History Drop-Down List subsection, Navigation section, Brand.css

```
/*HISTORY*/
.historyTopMenuItem, .historyTopMenuItemHover /*History Menu Top
Menu Background */
{
background-image: url(../images/brand/subDimTabBg.gif);
}


.historyMenuItemHover /*History Menu Highlight*/
{
background-color:#FFFFFF;
}
```

Figure 2-15: The history drop-down list, whose appearance is controlled by the style elements in the History Drop-Down List subsection of the Navigation section of Brand.css

Tabs Subsection

In this subsection, shown in figure 2-16 below, you can modify the borders, colors, and any background images used in all tabs throughout Agile PLM for Process.

Figure 2-16: Tabs subsection, Navigation section, Brand.css

```
/*TABS*/
.tabmenu /*Tab Bottom Line*/
{
border-bottom: #92badc 2px solid;
}

.subtabmenu /*SubTab Bottom Line*/
{
border-bottom: #82b2db 3px solid;
}

.DefaultTab, .subDefaultTab /*Unselected Tabs*/
{
background-image: url(../images/brand/subDimTabBg.gif);
border: 1px solid #c0c0c0;
}

.SelectedTab, .subSelectedTab /*Selected Tabs*/
{
background-image: url(../images/brand/subTabBg.gif);
border: 1px solid #a3bed8;
color: #3c3c3c;
}

.TabMenuText, .tabnav_unselectedtab_span, .subTabMenuText /*Text
Color*/
{
color: #3e5576;
 }
```

Buttons Subsection
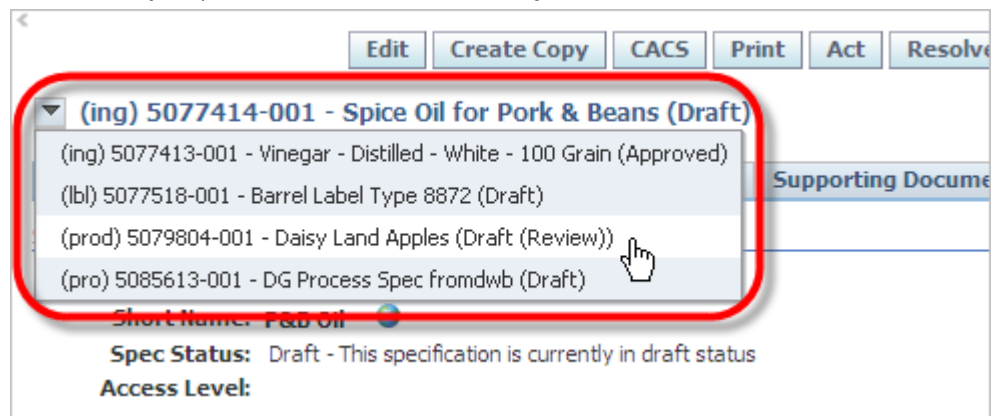
In this subsection, shown in figure 2-17 below, you can modify the borders, colors, and any background images used in all buttons throughout Agile PLM for Process. As shown in the figure, there are separate sections for page-level function buttons (see figure 2-18) and system buttons (see figure 2-19, on page 2-23).

Figure 2-17: Buttons subsection, Navigation section, Brands.css

```
/*BUTTONS*/

/*Page-Level Function Buttons*/
input.elButton, a.elButton, a.elButton:visited, a.elButton:linked,
a.elButton:hover,
.actionMenu-TopMenuItem, .actionMenu-TopMenuItemHover, .actionMenu-
MenuGroup, .actionMenu-MenuItem, .actionMenu-MenuItemHover
{
border-right: solid 1px #7b8194;
border-bottom: solid 1px #7b8194;
border-top: solid 1px #a5a9b6;
border-left: solid 1px #a5a9b6;
background-image: url(../images/brand/btn-bg.gif);
background-color: #c9e5ec;
color: #586073;
}

/*System Buttons*/
.cssxBtnFunction, A.cssxBtnFunction:link,
A.cssxBtnFunction:visited, A.cssxBtnFunction:hover,
.cssxBtnControl, A.cssxBtnControl:link, A.cssxBtnControl:visited,
A.cssxBtnControl:hover
{
border-right: solid 1px #7b8194;
border-bottom: solid 1px #7b8194;
border-top: solid 1px #a5a9b6;
border-left: solid 1px #a5a9b6;
background-image: url(../images/brand/btn-bg.gif);
background-color: #c9e5ec;
color: #586073;
}
```

Figure 2-18: Page-level function buttons, whose appearance is controlled by the style elements in the Buttons subsection of the Navigation section of Brand.css
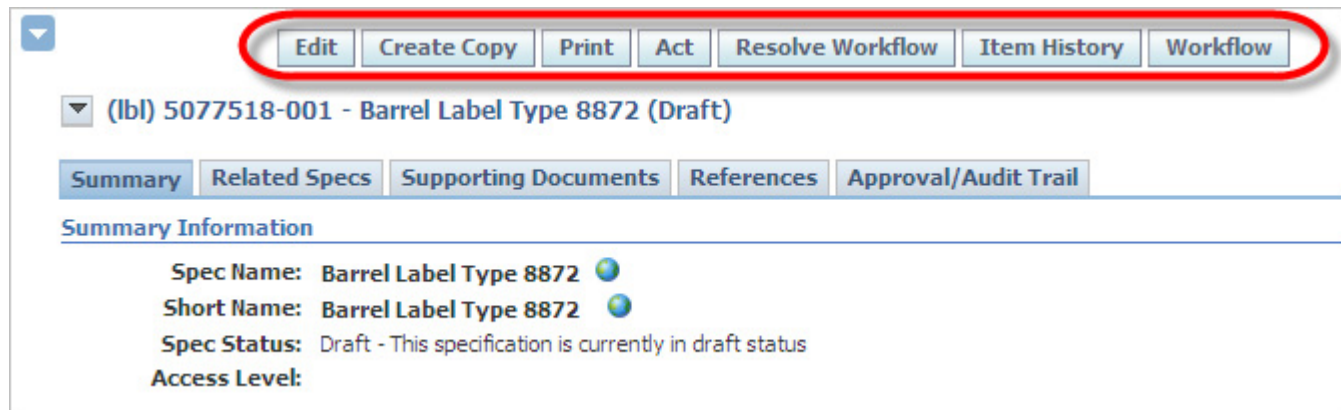
Figure 2-19: Sample of system buttons, whose appearance is controlled by the style elements in the Buttons subsection of the Navigation section of Brand.css
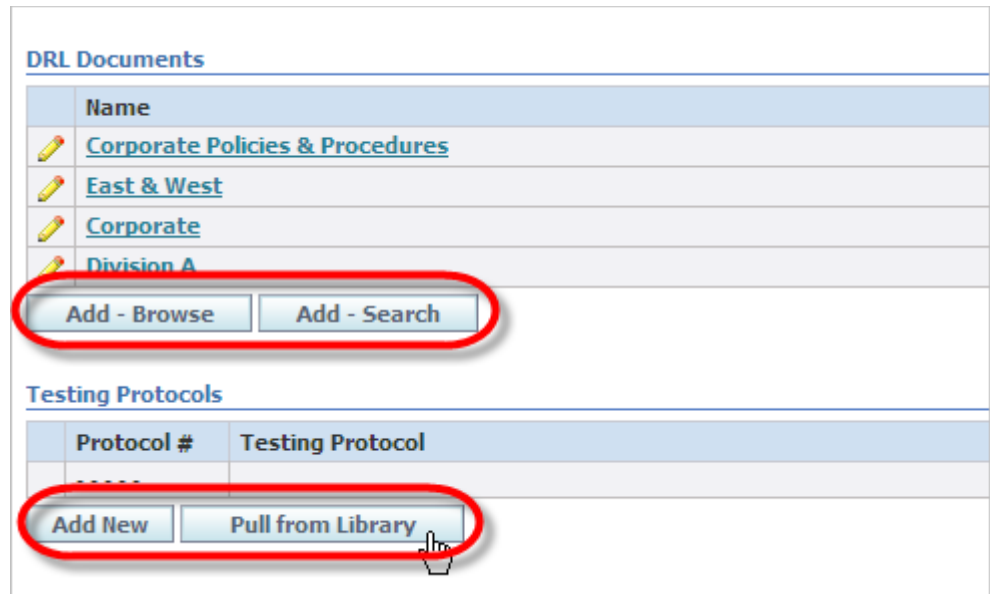
Content Headings

In the Content Headings section, shown in figure 2-20, you can modify the appearance of page titles and section headings.

Figure 2-20: Content headings section of Brand.css

```
/*CONTENT HEADINGS
--------------------------------------------------------- */
/*Page Titles*/
.cssxPageTitle, .cssxPageTitle H1, .cssxPageTitle a:link,
.cssxPageTitle a:visited, .cssxPageTitle a:hover, .cssxPageTitle
a:active
{
color: #3a5a87;
}

/*Section Headings*/
h2, h4
{
color: #426ca7;
border-bottom: #567fc7 1px inset;
font-size: 100%;
}
```

Tables Section

In the Tables section, shown in figure 2-21, you can modify the appearance of:

❑ Table header rows

❑ Table background

❑ Action Items header, as shown in figure 2-22

Figure 2-21: Tables section of Brand.css

```
/*TABLES
---------------------------------------------------------- */

/* Table Header Rows */
.cssxBaseGrid th, .cssxActionGrid TH, .cssxActionGrid
.cssxActionGridHeaders, .cssxTreeDataGrid th
{
background-color:#cfe0f1;
}

/*Table Background*/
.cssxTreeDataGrid, .cssxActionGrid td, .cssxBaseGrid
{
background-color:#f2f2f5;
}

/*Action Items Header*/
.cssxActionGrid .cssxActionHeader
{
background-image: url(../images/brand/hBar-Bg.gif);
color:#333;
}
```

Figure 2-22: Action Items header

System Messages Section

In the System Messages section, shown in figure 2-23 below, you can modify the appearance of:

❑ Warning note header image and background color

❑ Error message header image and background color

❑ Information note header image and background color

Figure 2-23: System Messages section of Brand.css

```
/*SYSTEM MESSAGES
---------------------------------------------------------- */
.cssxWarningNote /*Warning Message Header*/
{
background-image:url(../images/brand/warning-header.gif);
}

.cssxErrorNote /*Error Message Header*/
{
background-image:url(../images/brand/error-header.gif);
}

.cssxInfoNote /*Information Message Header*/
{
background-image:url(../images/brand/information-header.gif);
}

.cssxWarningNote, .cssxErrorNote, .cssxInfoNote /*Warning, Error,
Information Messages*/
{
border:solid 1px #b2c8dc;
background-color: #d9e5ef;
}
```

Figure 2-24: Error message, with image, background color, and border style set by .cssErrorNote
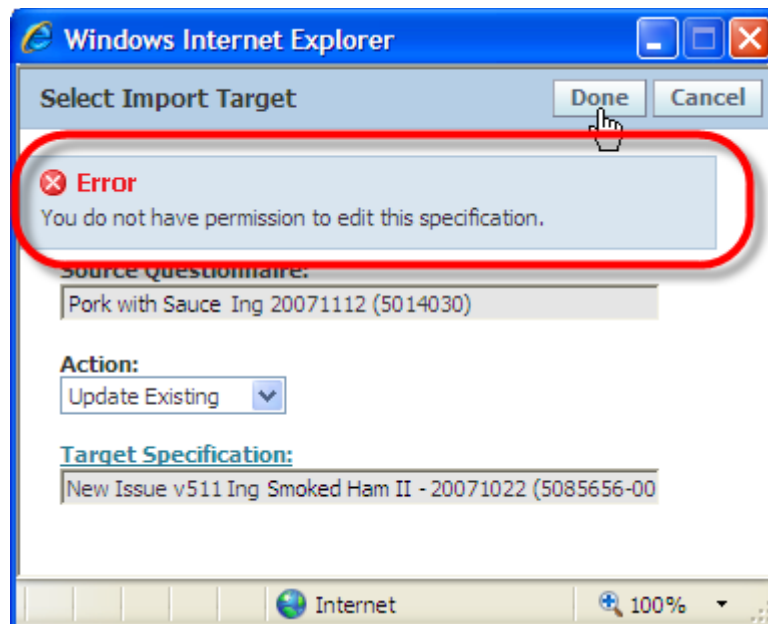
Login Styles Section

In the Login Styles section, shown in figure 2-25 below, you can modify the appearance of different sections of the login page. The six style elements in the Login Styles section apply to five areas of the login screen (two elements apply to one area).

Figure 2-25: Login Styles section of Brand.css

```
/*LOGIN STYLES
---------------------------------------------------------- */
.cssxLogin-1 /*Row 1*/
{background-color:#ededed;height:70px;}

.cssxLogin-2 /*Row 2*/
{background-color:#f4f4f4;}

.cssxLogin-3a /*Row 3 Column 1*/
{background-color:#f4f4f4;}

.cssxLogin-3b /*Row 3 Column 2*/
{background-image:url(../images/style/login-lightBlue_back.jpg);
background-repeat:repeat-x;background-color:#fbfbfb}

.cssxLoginPhoto
 {
 background-image: url(../images/style/login-people.jpg);
 width: 417px;
 height: 54px;
 }

.cssxLoginGraphic
 {
 background-image: url(../images/style/login-globe.jpg);
 width: 351px;
 height: 259px;
 }
```

The area affected by each of the six elements is illustrated in the following figures:

cssxLogin-1— *Login screen area affected by the .cssLogin-1 style element of Brand.css* on page 2-27

cssxLogin-2—*Login screen area affected by cssxLogin-2 style element of Brand.css* on page 2-27

cssxLoginPhoto—*Login screen area affected by the .cssxLoginPhoto style element in Brand.css* on page 2-28

cssxLogin-3a and **cssxLoginGraphic**—*Login screen area affected by cssxLogin-3a and cssxLoginGraphic style elements of Brand.css* on page 2-28

cssxLogin-3b—*Login screen area affected by the cssxLogin-3b style element of Brand.css* on page 2-29

Figure 2-26: Login screen area affected by the .cssLogin-1 style element of Brand.css

Figure 2-27: Login screen area affected by cssxLogin-2 style element of Brand.css

Figure 2-28: Login screen area affected by the .cssxLoginPhoto style element in Brand.css

Figure 2-29: Login screen area affected by cssxLogin-3a and cssxLoginGraphic style elements of Brand.css
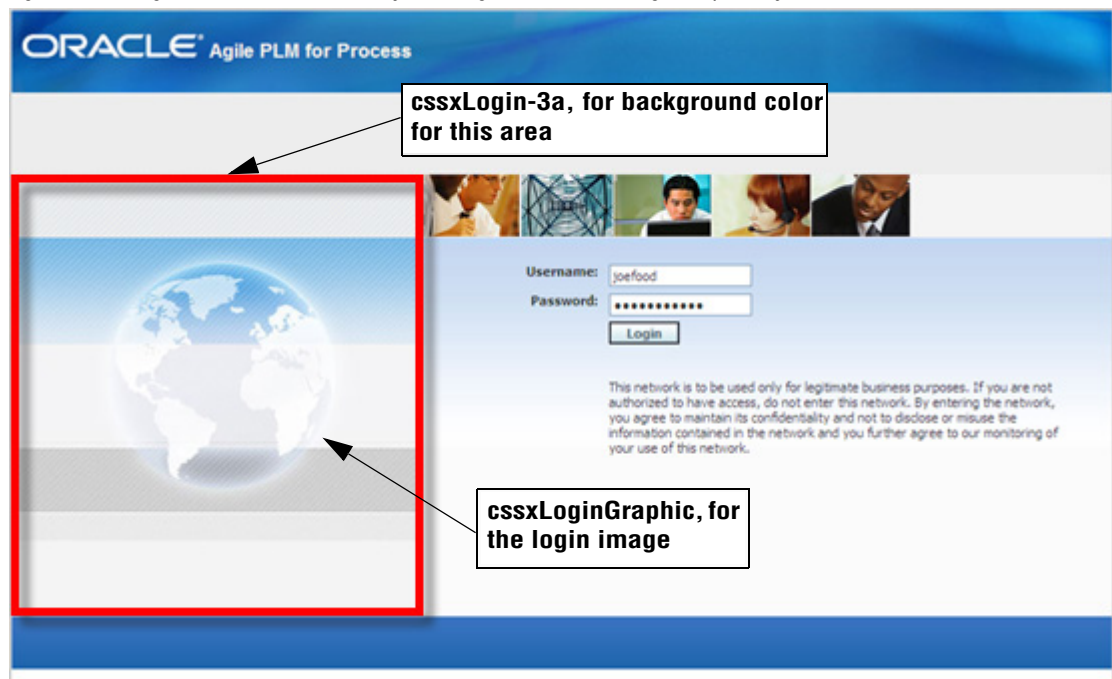
Figure 2-30: Login screen area affected by the cssxLogin-3b style element of Brand.css
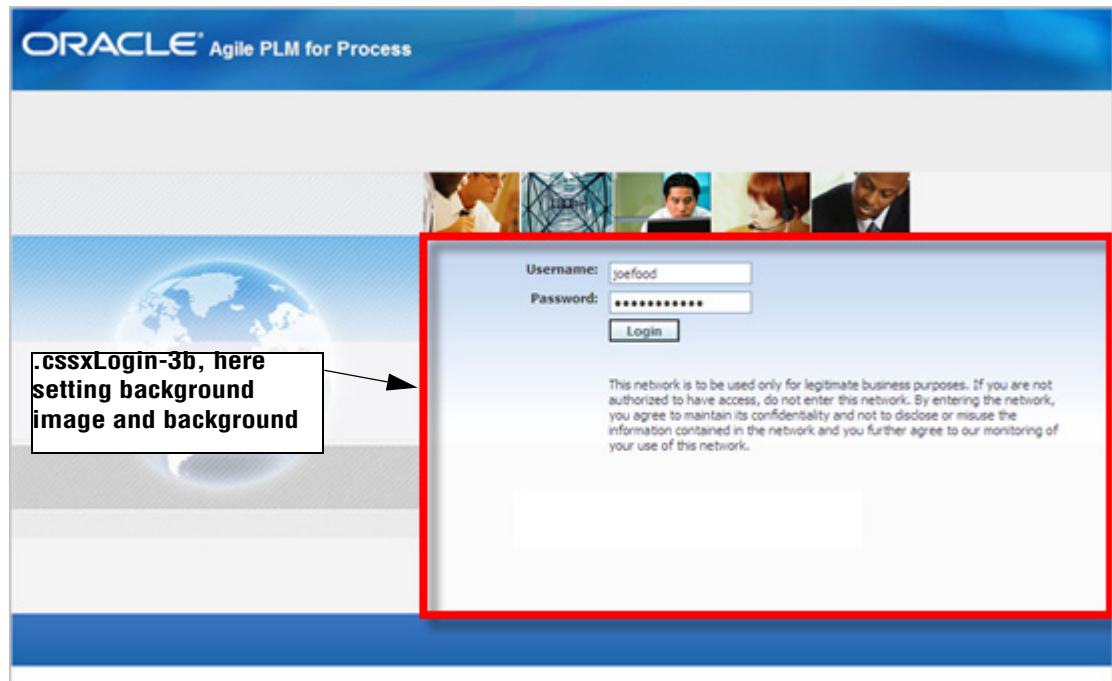
NPD Map Section

In the NPD Map section, shown in figure 2-31 below, you can modify the appearance of the workflow map that you can view from within the New Product Development (NPD) application. Specifically, you can control the appearance of the current (highlighted) workflow step and the past and future (non-highlighted) steps. Figure 2-32, on page 2-30 shows a sample of an NPD map for reference.

Figure 2-31: NPD Map section of Brand.css

```
/*NPD MAP
------------------------------------------------------------- */
.cssxHiMapStep /*NPD Map - Highlighted Workflow Step*/
{
color: #333;
background-color: #CCCCCC;
background-image:url(../images/brand/NPDHiMapStep.gif);
background-repeat:repeat-x;
}

.cssxMapStep  /*NPD Map - Workflow Step*/
{
color: #333;
background-image:url(../images/brand/NPDMapStep.gif);
background-repeat:repeat-x;
background-color: #b6b6b6;
}
```

Figure 2-32: Map of an NPD activity showing highlighted and non-highlighted workflow steps
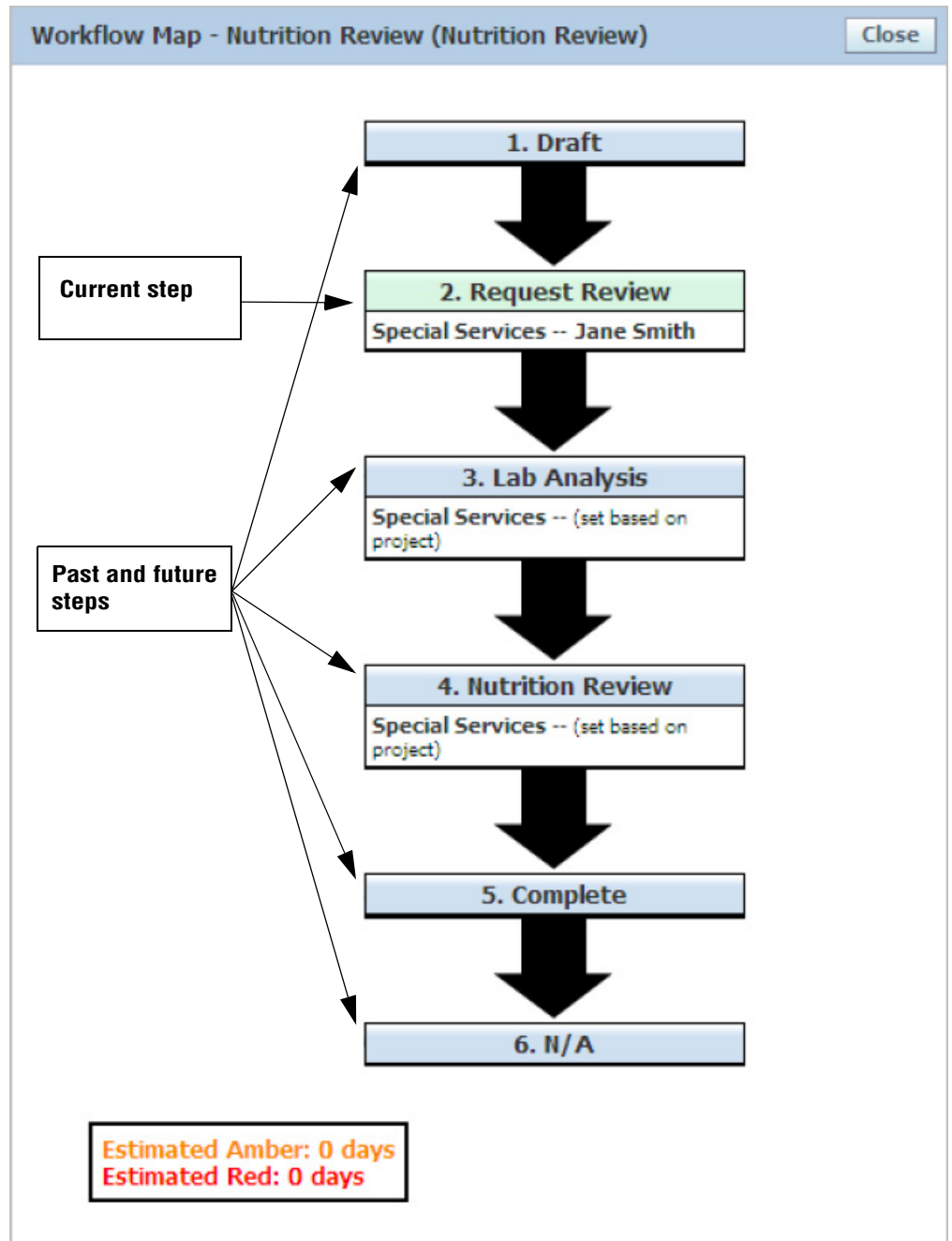
Updating the Sort Order of the Left Navigation Panel

You can use the `SiteMap-DisplayOrder.xml` file to change the menu item ordering for existing menus that come with the product. All the menu items have a `SortOrder` property that is evaluated and ordered in ascending order.

For example:

```
<MenuItem ID="Menu1" SortOrder="10" configChildKey="ID"/>
<MenuItem ID="Menu2" SortOrder="20" configChildKey="ID"/>
```

The above menus are displayed as in the order Menu1, Menu2. If the sort order is transposed, then Menu2 gets displayed before Menu1. The actual number or the spacing between these tags does not matter. In the above example, 10 menu items could be inserted between Menu1 and Menu2 and yet be sorted deterministically. If two menus have the same sort order, then the display order is not guaranteed between those two elements.

Extending the Left Navigation Panel

With the `SiteMap-Extensions.xml` file you can add new menu items that are not part of the core product. In general a menu item would look like the following:

```
<MenuItem ID="translation Id" DisplayText="Generally note
        used… just to indicate what gets displayed"
        SecurityProfileRef="Security Profile Name"
        SkinRef="Skin Profile Name"
        TranslationRef="Translation Profile Name"
        SortOrder="Some number" NavigateUrl="http://
        SomeUrl.com"  />
```

Menu items can be nested to create menu hierarchies, as shown below:

Application Wide Menu
    Applications
        GSM

...then the menu definition would look like this:

```
<MenuItem ID="ApplicationWideMenu" DisplayText="**Application Wide
Menu" >
     <MenuItem ID="Applications" DisplayText="**Applications">
          <MenuItem ID="GSMSideNav" DisplayText="**GSM">
               <MenuItem ID="[translation Id]"
                    DisplayText="[Generally note used… just to indicate
                    what gets displayed]"
                    SecurityProfileRef="[Security Profile Name]"
                    SkinRef="Default Skin"
                    TranslationRef="Application Menu"
                    SortOrder="[Some number]"
                    NavigateUrl="[http://SomeUrl.com]"  />
          </MenuItem>
     </MenuItem>
</MenuItem>
```

The values in [ ] need to be changed.

For more information, see *Setting Security on the Left Navigation Panel Items* below. Other than that, the NavigateUrl indicates the url to navigate to when a user clicks a menu item.

Setting Security on the Left Navigation Panel Items

This section discusses how to use the MenuConfig-Extensions.xml file to secure left navigation items.

More than likely, only the security settings for new menu items will need to be modified. Every SiteMap entry has three properties that determine how the menu item is rendered in terms of security, appearance, and the translated text that is shown to the users. These properties are SkinRef, SecurityRef and TranslationRef. All of these properties except the SkinRef cascade to child elements; so if a menu item does not have a SecurityRef property, then it inherits the security profile of its parents.

Security Profile

Below is a snippet of the security provider configuration in MenuConfig.xml:

```
<Provider ID="SecurityProvider" …>
      <SecurityProfiles…>
            <SecurityProfile ID="Default" Mode="Visibility">
                  <Allow Roles="*"/>
            </SecurityProfile>
            <SecurityProfile ID="PQSReportViewer" Mode="Visibility"
Application="PQS">
                  <Allow Roles="[PQS_ADMIN],[PQS_Reporter]"/>
            </SecurityProfile>
            …
      </SecurityProfiles>
</Provider>
```

The SiteMap menu items have security profiles associated with every menu. For example, if a menu item were set up with a profile of PQSReportViewer, it would evaluate to the above security profile. What this security profile describes is "Any PQS user with the roles [PQS_ADMIN] OR [PQS_Reporter] has visibility to the menu item."

If Application were blank or not defined, then it would mean "Any user with the roles [PQS_ADMIN] OR [PQS_Reporter] has visibility to the menu item."

Wild card of "*" is allowed on Users, Roles and Applications, and it signifies "all."

Translation Profile

Typically all pipelines are configured with a dynamic translation provider, which usually looks like this:

```
<Provider ID="ApplicationWideMenuTranslationProvider" …>
    <TranslationCaches…>
      <TranslationCache ID="GSMSideBar" Path="frmMaster/ctlNavMenu1"/>
      <TranslationCache ID="NDPSideBar" Path="frmNPD/ctlSidebar"/>
    </TranslationCaches>
...
</Provider>
```

If the menu item has a translation profile, it looks up the cache from the translation caches collection. If a menu item has a TranslationRef of "GSMSideBar", then it maps to the frmMaster/ctlNavMenu1 translation cache.

The translation caches specified in the Translation Profile allow for translation extension. For more information, please see the Extensions chapter of the *Agile Product Lifecycle Management for Process Configuration Guide*.

Reconfiguring and Restarting Remote Container Service and Web Application Server

Reconfigure the Remote Container Service

As of version 6.0, it is not necessary to reconfigure the Remote Container service.

Restart the Remote Container Service

Using IIS Computer Management, restart the remote container service:
1 Right-click **My Computer** and select **Manage** from the shortcut menu to display the Computer Management dialog box.
2 Under Services and Applications, select **Service** to display a list of services in the right pane.
3 Locate the RemoteContainer Service and click it.
4 Select the **Start the Service** option in the top left portion of the Services pane.

Restart the Web Application Server

Using a command prompt, restart the IIS Web application server:
1 Open a command prompt.
2 Enter the following command:
    `C:\Documents and Settings\Administrator>iisreset`
    The Web application server restarts.

Verifying the Installation

Log in to the Agile user portal and verify that the installation is functioning correctly. We recommend that you perform a variety of post-installation tests to ensure that all the applications are functioning correctly. For more information, see Installation Verification Tests on page 1-39.

Working with Multiple Servers

This chapter provides guidance for working with multiple servers.
Topics in this chapter include:

- ❑ *Architecture Environment Strategy*
- ❑ *Topology Example of Production Environment*
- ❑ *Multiple Server Configuration*

Architecture Environment Strategy

A good environment strategy supports the following project/business needs:

- ❑ Support the application upgrade process.
- ❑ Provide a structured process for migration (development, test, user acceptance) of bug fixes, new features, functionality, and configurations. Specifically focusing on allowing reasonable access to environments during migration.
- ❑ Provide a means for preparing/staging data for transfer into a production environment.

Figure 3-1 below shows a sample environment.

Figure 3-1: Sample architecture
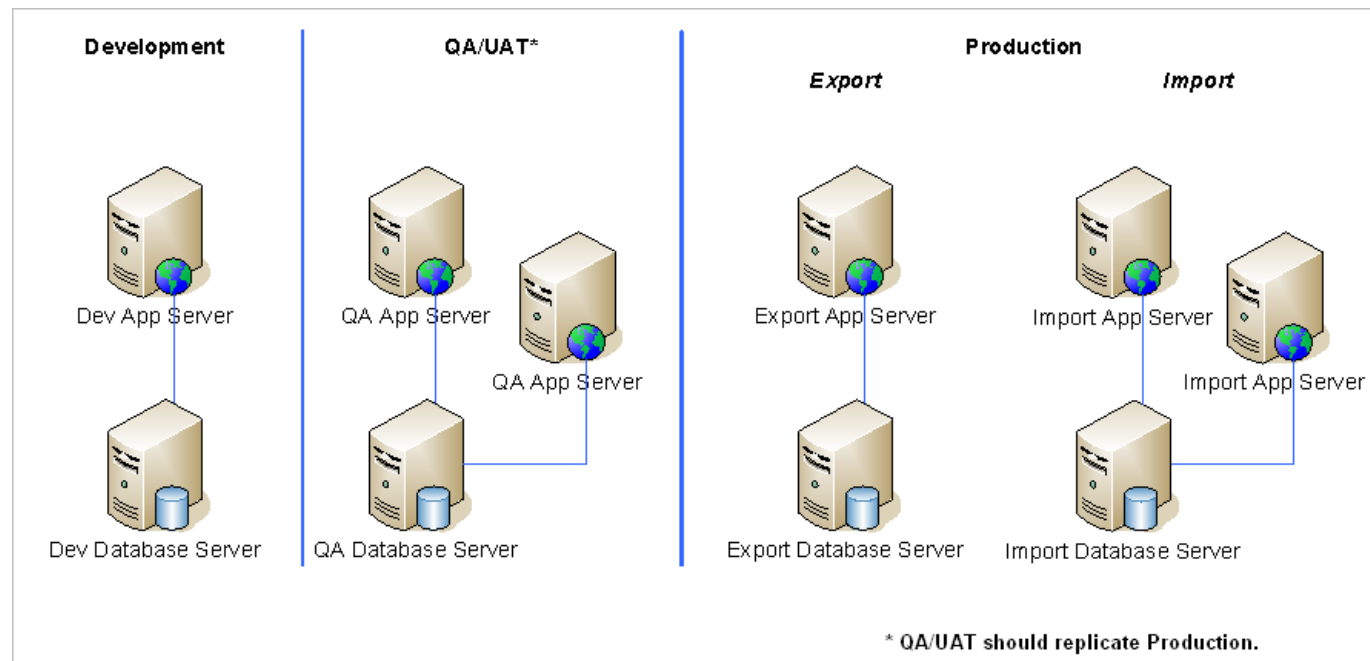
Verifying Environment Strategy

Use the following questions to help verify your environment strategy:

- What is the path for upgrading the application from version x to version y?
- What is the process for testing production issues? Which environments will be available for testing: Development, QA/UAT, and/or Production?
- Where will end users be trained on the application?
- Where will extensible solutions be developed?
- Where will hot fixes be initially applied? What is the path for migrating hot fixes to production?
- Where will data loading be tested/verified?
- How will multiple tasks be supported?

Also consider the following:

- Migrating from version x to version y **and** configuring the application to support new functionality.
- Testing new functionality **and** supporting production configurations and hot fixes.
- If the implementation is split into multiple projects, how will different project teams share environments?

Development

The development environment typically is used as a place to:

- ❑ Deploy new releases (first place)
- ❑ Develop extensible solutions
- ❑ Use for initial test and troubleshooting
- ❑ Use for prototyping and discovery
- ❑ Make configuration changes, which are then applied in QA

Quality Assurance/User Acceptance Testing

The Quality Assurance (QA)/User Acceptance Testing (UAT) environment typically is deployed to closely match the Production environment, and is used as a place to:

- ❑ Include load balancers, etc.
- ❑ Formally test configuration changes
- ❑ Perform periodic refreshes from the Production environment
- ❑ Consider data security/access
- ❑ Perform training tasks

Production/Export

The Production/Export environment typically is used as a place to:

- ❑ Perform data/user/workflow administrative tasks
- ❑ Act as the data staging/acceptance environment
- ❑ Complete administrative data changes , then export the changes to other environments

> **Note** The Production/Import environment must be on same version as import environments

Production/Import

The Production/Import environment typically is used as a place where:

- ❑ The user community interacts with data on a day to day basis.
- ❑ Administrative data changes are pushed from the export environment to the import environment
- ❑ Configuration changes are pushed from QA

Export/Import

If an environment has applications servers to support the export and import structure, then note the following:

The general business process:

- Admin creates records via the export application.
- Admin exports records via the export application.
- Admin imports record via the import application.

Applications that support the export/import process:

- User Group Manager (UGM)—Users and groups are exported and imported
- Workflow Administration (WFA)—Workflows are exported and imported
- Data Admin (ADMN)—Allergens, additives, extended attributes, and other administrative data are exported and imported

When managing the Export/Import structure the databases must be kept synchronized. If changes are made directly in the import application environment, and the exact changes (including primary keys) are not applied to the production environment as well, the Export/Import relationship is broken.

To reestablish the Export/Import relationship the following steps must be performed:

1 Copy or backup the import database.
2 Restore the import database to the export database.

The relationship is now restored. Make changes to data via the export application and import via the import application.

Imports and Exports are only possible if both environments use the same version.

Example 1—Export v5.2 can push to Import v5.2

Example 2—Export v5.2 cannot push to Import v5.1.2

These examples demonstrate that users, workflows and administrative data cannot be updated or moved when application versions are different.

Topology Example of Production Environment

Figure 3-2 depicts the hardware/software topology options for a production environment.

Figure 3-2: Topology example, Production environment
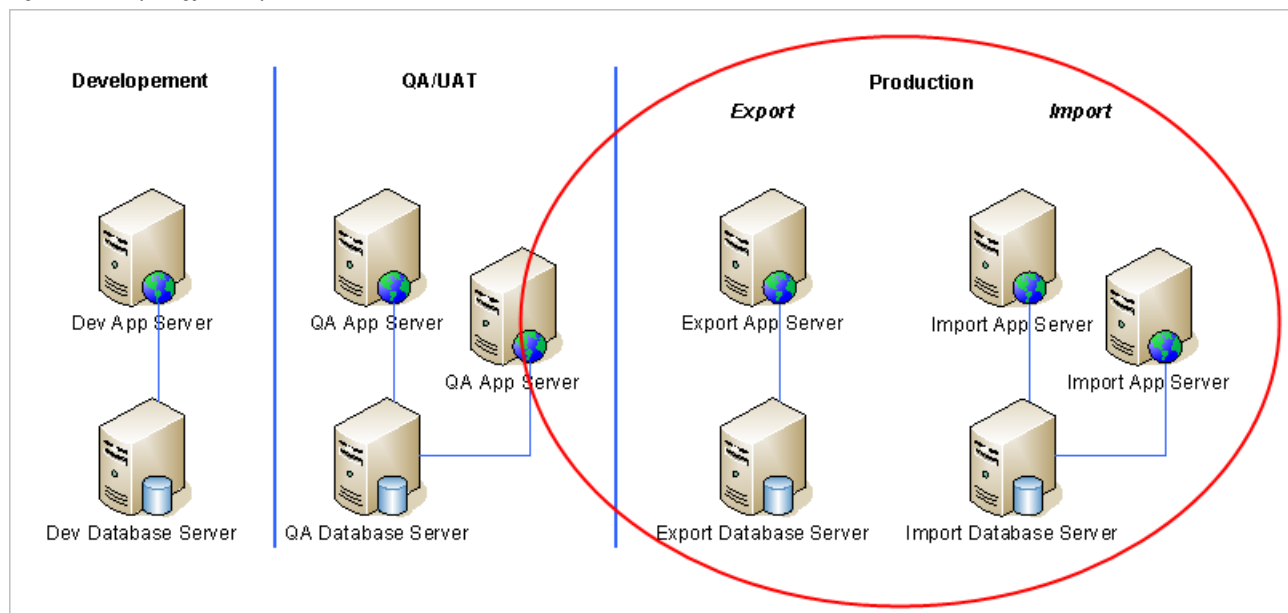
Topology Example A

Example A, show in figure 3-4 below, highlights:

- Database clustering
- Load balancing
- Separate and centralized file server

Figure 3-3: Topology Example A

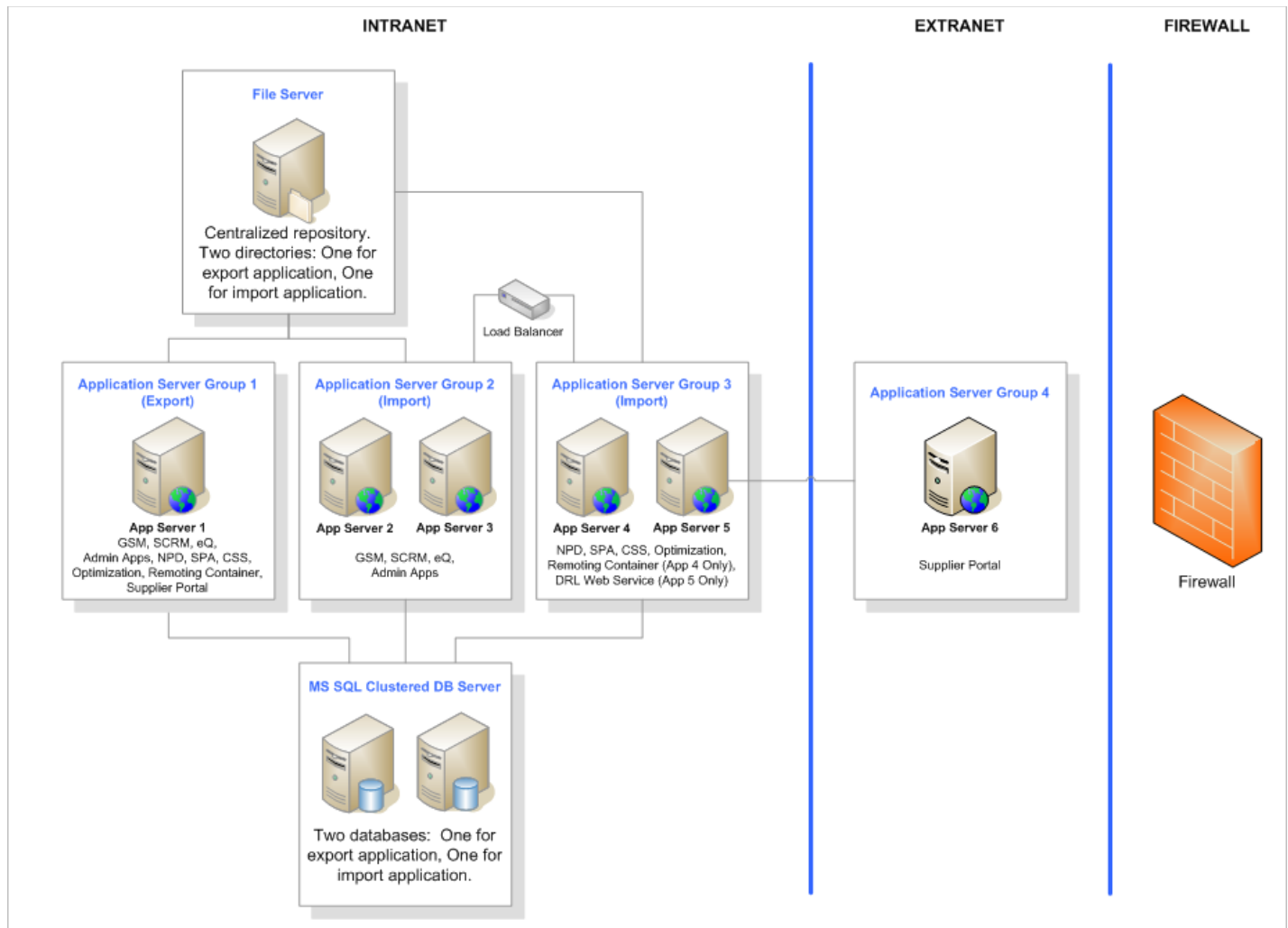## Topology Example B

Topology B example, shown in figure 3-4 below, highlights:

- Standard database
- Logically distributed applications
- Centralized file server shared with application server

Figure 3-4: Topology example B
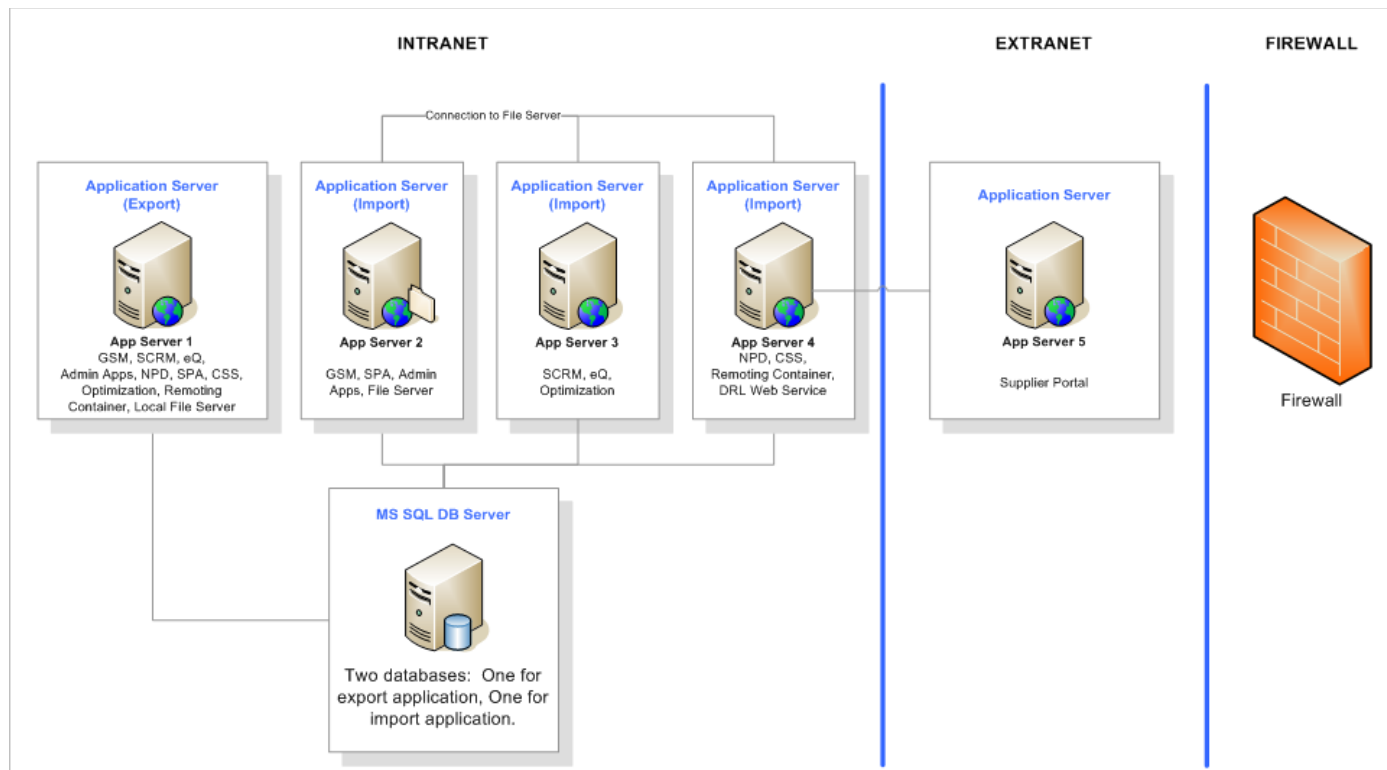
Multiple Server Configuration

Following are the settings for configuring an environment with multiple servers running different application modules. Currently, two scenarios are provided. This includes one for multiple servers with NO reverse proxy, and one for multiple servers with a reverse proxy.

Files Modified

❏ %PRODIKA_HOME%\Config\EnvironmentVariables.config

❏ %PRODIKA_HOME%\Config\Custom\EnvironmentSettings.config

Scenario 1

Customer does not have or has chosen not to use a reverse proxy or a hardware load balancer. Application URLs should be configured in `EnvironmentVariables.config` as **Client-Server**, meaning it is the URL the client will see and use in Internet Explorer. Web Service URLs should be configured in `EnvironmentVariables.config` as **Server-Server**, meaning the web service call will NOT be passed to the client.

Table 3-1: Scenario 1

Server Name	Friendly URL	App Modules
AppServer001	plm.xenodev.com	GSM, SCRM, Portal
AppServer002	plmapp2.xenodev.com	NPD, DRL
AppServer003	plmapp3.xenodev.com	WFA, UGM

Note Main application URL is https://plm.xenodev.com

SSL Configuration (Optional)

An SSL certificate will need to be purchased and installed on each application server, corresponding to the friendly URL provided.

App Configuration

The following is an example, only. There are additional application URLs that are not listed below.

1 Open the `%PRODIKA_HOME%\Config\EnvironmentVariables.config` file:

```
# Server Topology Information
Prodika.Server1.URL = https://plm.xenodev.com
Prodika.Server2.URL=https://plmapp2.xenodev.com
Prodika.Server3.URL=https://plmapp3.xenodev.com
Prodika.SCHEME =https

# Application URL Information
Prodika.GSM.URL=@@VAR:Prodika.Server1.URL@@/gsm
Prodika.GSMInterApp.URL=@@VAR:Prodika.Server1.URL@@/gsm
Prodika.SCRM.URL=@@VAR:Prodika.Server1.URL@@/scrm
Prodika.NPD.URL=@@VAR:Prodika.Server2.URL@@/npd
Prodika.Portal.URL=@@VAR:Prodika.Server1.URL@@/portal
# DRL Attachment is used for file upload by the WebApp and
WebService
```

```
Prodika.DRLService.URL=@@VAR:Prodika.Server2.URL@@/drl
```
(see note)

```
Prodika.DRLAttachment.URL=@@VAR:Prodika.Server2.URL@@/drl
```

```
Prodika.DRL.URL=@@VAR:Prodika.Server2.URL@@/drl
```

```
Prodika.WFA.URL=@@VAR:Prodika.Server3.URL@@/wfa
```

```
Prodika.UGM.URL=@@VAR:Prodika.Server3.URL@@/ugm
```

> **Note** `DRLService.URL` is only available if hot fix 5.2.1.27 is installed and configured.

2 Open the
`%PRODIKA_HOME%\Config\Custom\EnvironmentSettings.config`
file:

Search and replace the following keys:

- ```
  "<add key="ActionMenuImageOnClickJScript"
  value="javascript:window.location.href='https://
  plm.xenodev.com/portal';return false;" />
  ```

- ```
  "<Item id="navlogo" prepend="&lt;div align=center&gt;"
  append="&lt;/div&gt;" cssClass="None" labelID="Image"
  href="&lt;img src='../images/navlogo.gif' /&gt;"
  onClick="javascript:openSiteHome('https://
  plm.xenodev.com/portal');return false;" />
  ```

- ```
  "<config key="HomeURL" value="https://plm.xenodev.com/
  portal" />
  ```

- ```
  "<config key="SiteMapURL" value="https://
  plm.xenodev.com/portal" />
  ```

Result

The application suite is separated on multiple servers. GSM and Portal run on AppServer001, NPD runs on AppServer002, etc. The user will see the corresponding URL based on the app that is opened. For example, when the user opens GSM, the user will see **https://plm.xenodev.com/GSM** as the URL in their browser. Subsequently, when the user opens NPD, the user will see **https://plmapp2.xenodev.com/NPD** as the URL in their browser. No matter what application is opened, the user will always see **https://plm.xenodev.com** as the URL in their browser. Web Service calls, as such for GSMInterApp and DRL, will be passed internally, from server to server.

Scenario 2

Customer has chosen to use a reverse proxy or hardware load balancer. Application URLs should be configured in `EnvironmentVariables.config` as **Client-Server**, meaning it is the URL the client will see and use in Internet Explorer. Web Service URLs should be configured in `EnvironmentVariables.config` as **Server-Server**, meaning the web service call will NOT be passed to the client.

Table 3-2: Scenario 2

Server Name	Friendly URL	App Modules
RPServer001	plm.xenodev.com	n/a
AppServer001	plmapp1.xenodev.com	GSM, SCRM, Portal
AppServer002	plmapp2.xenodev.com	NPD, DRL
AppServer003	plmapp3.xenodev.com	WFA, UGM

Note Main application URL is https://plm.xenodev.com

SSL Configuration (Optional)

A single SSL certificate will need to be purchased and installed on the reverse proxy or load balancer, corresponding to the main application URL.

App Configuration

The following is an example, only. There are additional application URLs that are not listed below.

1 Open the `%PRODIKA_HOME%\Config\EnvironmentVariables.config` file:

```
# Server Topology Information
Prodika.Server1.URL = https://plm.xenodev.com
Prodika.Server2.URL=http://plmapp1.xenodev.com
Prodika.SCHEME =https

# Application URL Information
Prodika.GSM.URL=@@VAR:Prodika.Server1.URL@@/gsm
Prodika.GSMInterApp.URL=@@VAR:Prodika.Server2.URL@@/gsm
Prodika.SCRM.URL=@@VAR:Prodika.Server1.URL@@/scrm
Prodika.NPD.URL=@@VAR:Prodika.Server1.URL@@/npd
Prodika.Portal.URL=@@VAR:Prodika.Server1.URL@@/portal
# DRL Attachment is used for file upload by the WebApp and
WebService
Prodika.DRLService.URL=@@VAR:Prodika.Server2.URL@@/drl
```
(see note)
```
Prodika.DRLAttachment.URL=@@VAR:Prodika.Server1.URL@@/drl
Prodika.DRL.URL=@@VAR:Prodika.Server1.URL@@/drl
Prodika.WFA.URL=@@VAR:Prodika.Server1.URL@@/wfa
```

```
Prodika.UGM.URL=@@VAR:Prodika.Server1.URL@@/ugm
```

> **Note** DRLService.URL is only available if hot fix 5.2.1.27 is installed and configured.

2 Open the
`%PRODIKA_HOME%\Config\Custom\EnvironmentSettings.config`
file:

Search and replace the following keys:

- <add key="ActionMenuImageOnClickJScript" value="javascript:window.location.href='https://plm.xenodev.com/portal';return false;" />

- <Item id="navlogo" prepend="<div align=center>" append="</div>" cssClass="None" labelID="Image" href="" onClick="javascript:openSiteHome('https://plm.xenodev.com/portal');return false;" />

- <config key="HomeURL" value="https://plm.xenodev.com/portal" />

- <config key="SiteMapURL" value="https://plm.xenodev.com/portal" />

Result

The application suite is separated on multiple servers. GSM and Portal run on AppServer001, NPD runs on AppServer002, etc. No matter what application is opened, the user will always see **https://plm.xenodev.com/<module>** as the URL in their browser. Web Service calls, as such for GSMInterApp and DRL, will be passed internally, from server to server.
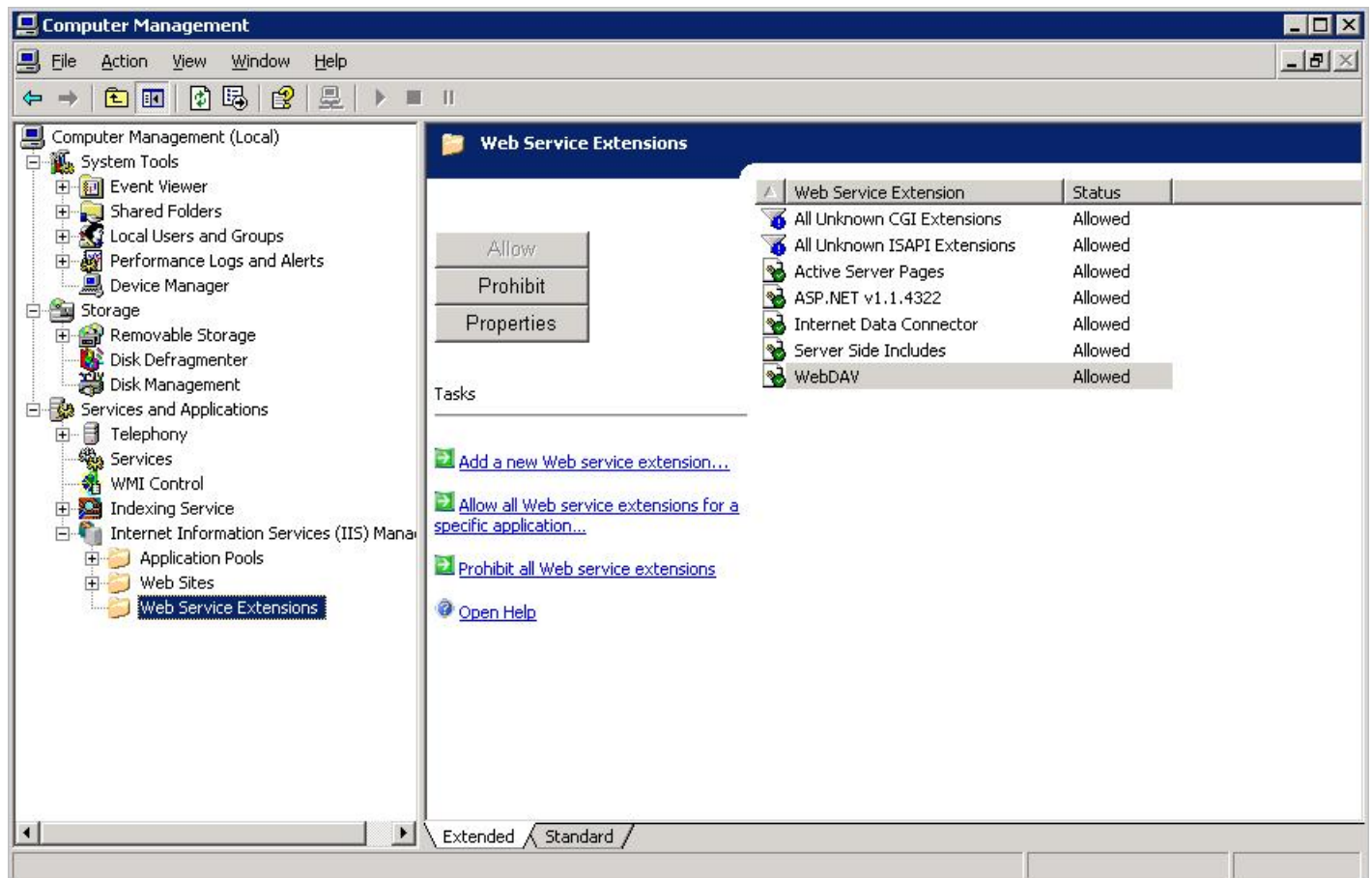
APPENDIX A
Installing WebDAV

This appendix contains instructions for installing and configuring WebDAV.

Enabling WebDAV

To make sure that Web Sharing is enabled in IIS:

1 Open the IIS Manager, and then select **Web Service Extensions**.
2 Enable WebDAV if it is not already set to "Allowed," as figure A-1 shows below:

Figure A-1: Enabling WebDAV

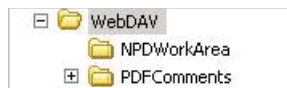# Creating the Directory Structure

To configuring WebDAV:

1 Create the directory structure as follows:

WebDAV\

WebDAV\PDFComments
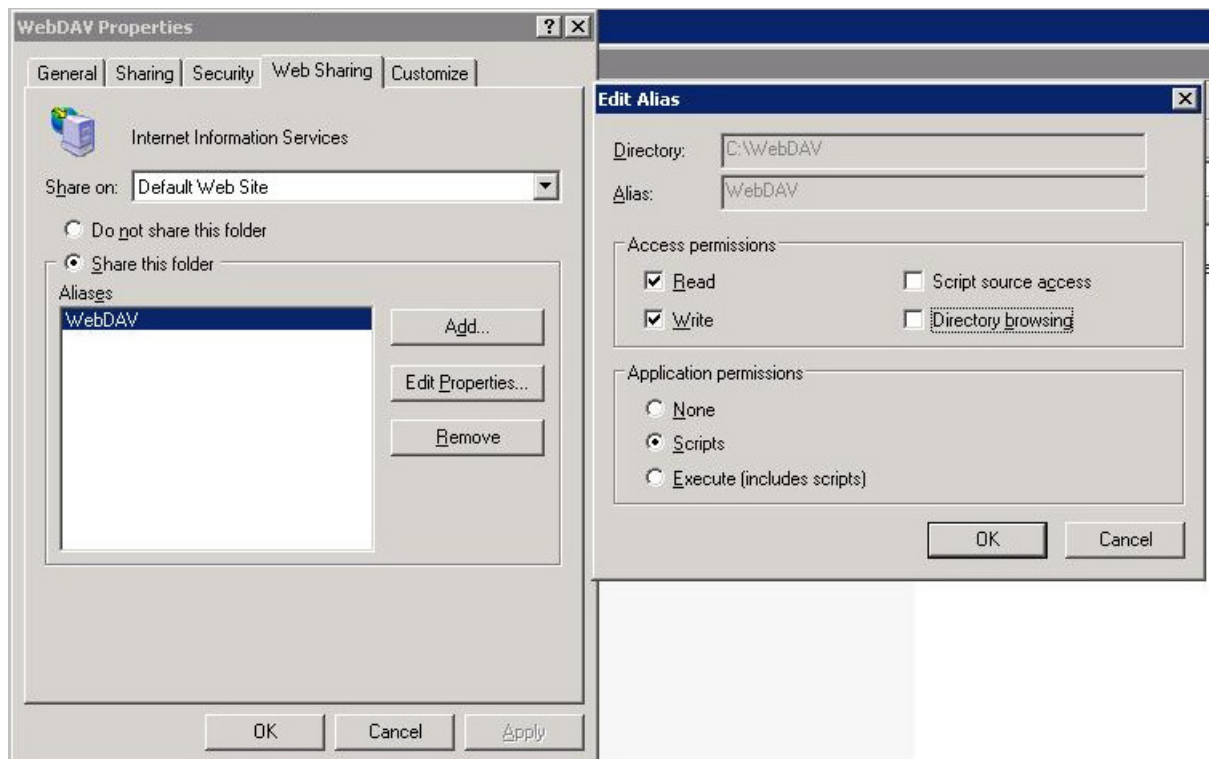
WebDAV\NPDWorkArea

Figure A-2: Directory Structure

Sharing the WebDAV Directory

To share the WebDAV directory:

1 Right click on the WebDAV Directory and select **Properties**.

2 Select the Web Sharing tab.

3 Share the folder as WebDAV.

4 Click **Edit Properties**.

5 Check **Read**, **Write** and allow **Scripts**, as figure A-3 shows below.
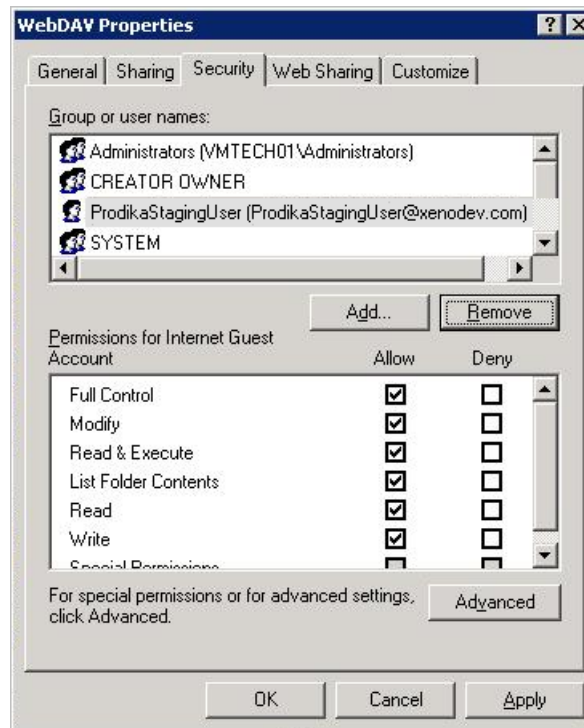
Figure A-3: Properties

Editing Folder Permissions

To edit folder permissions:

1 Click on the **Security** tab.
2 Give the user that the Application Pool runs as full control, and apply to all sub directories, as figure A-4 shows below.
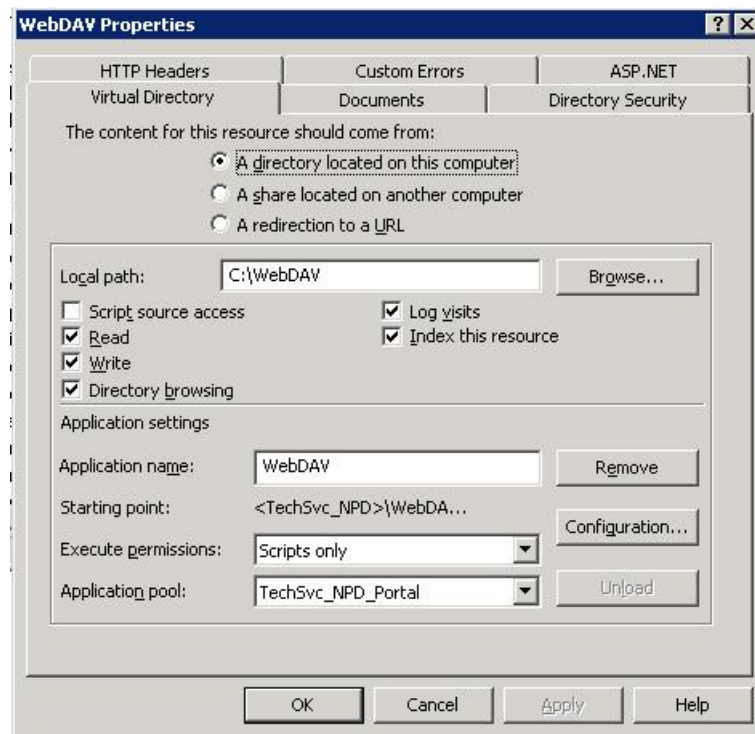
Figure A-4: Properties

Verifying the IIS Directory Security is Configured Correctly

To verify IIS directory security:

1 Locate the WebDAV virtual directory, then right click and select **Properties**.
2 Verify that the directory has Write permission, as figure A-5 shows below.

Figure A-5: Virtual Directory

3 Click the **Directory Security** tab.
4 Select **Edit** under Authentication and access control.
5 Verify that Anonymous access is enabled, as shown in figure A-6 below.

Figure A-6: Authentication
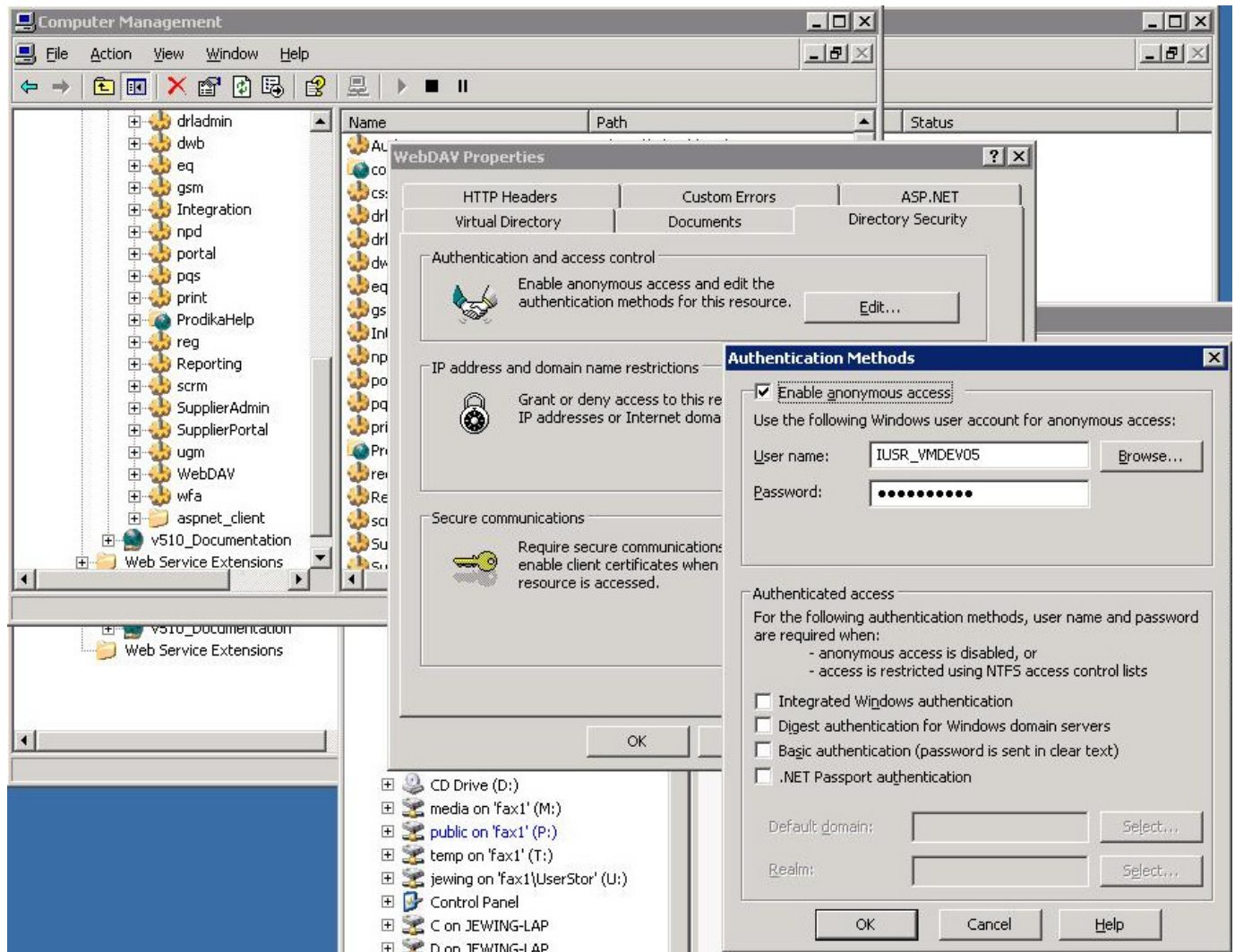
Configuring the Application

To configure WebDAV for a single server setup:

1 Edit Environment Settings under
   `<prodikahome>\config\EnvironmentSettings.config`

2 Map the following settings in the config to the appropriate directories/
   URLS. To test, you can enable directory browsing on the web dav virtual
   directory.

   • <config key="PDFWorkArea" value="https://demo.prodika.com/
     WebDAV/npdworkarea/"; />

   • <config key="PDFWorkAreaUNC"
     value="C:\WebDAV\NPDWorkArea\" />

   • <config key="PDFCommentRepository" value="https://
     demo.prodika.com/WebDAV/PDFComments"; />

   • <config key="PDFCommentRepositoryUNC"
     value="C:\WebDAV\PDFComments\" />

   • <config key="OfficeDocWorkArea" value="https://demo.prodika.com/
     WebDAV/npdworkarea/"; />

   • <config key="OfficeDocWorkAreaUNC"
     value="C:\WebDAV\NPDWorkArea\" />

To configure WebDAV for a multiple server setup:

1 Share the web dav directory as webdav on server A resulting in `\\<server`
   `a>\webdav`

2 Set appropriate share and security permissions as follows:

   The user running app pool on server B must have RW share and security
   access to \\<server A>\webdav.

3 Use `\\<hostname>\webdav\pdfcomments\` and `\\<server`
   `A>\webdav\npdworkarea` for UNC paths in config on server B.

APPENDIX B
Troubleshooting

This appendix contains a list common issues that may occur after installation.

Troubleshooting Tips

The following list details common issues and suggestions for solving them.

1 How can I compare my recent build with an older build to see if configuration values have changed?

Tip: Use the Config Rollup URL to check the rolled up configuration settings for various applications. The URL is:

```
http://<serverName>/<appName>/WebCommon/AdminForms/
ConfigRollup.aspx
```

2 Clicking upload when adding a DRL attachment causes the window to simply blink.

Tip: Ensure you've waited at least 30 seconds on the first attempt.

Tip: Ensure the machine.config for your .NET version has the machine key entry.

3 Message displayed is "trust relationship could not be established".

Tip: Verify that the Web site your using has a signed certificate.

Tip: If not testing SSL DRL attachments, configure them to use HTTP and ensure the "Prodika.GSMInterApp.URL" property is using HTTP.

4 Message displayed is "The remote certificate is invalid according to the validation procedure."

Tip: Ensure the credentials in the "EnvironmentVariables.config" file are correct for the "Prodika.DRLService.SysUser" user.

5 NPD edit-in-place documents are read-only.

Tip: The user connecting to the IIS share does not have permissions to the underlying folder on the server. Grant full permissions by assigning the 'Everyone' permission setting on that folder. If that solves the problem, lock down the folder with tighter permissions.

6 The Browser keeps redirecting to incorrect URLs or keeps jumping from HTTPS to HTTP.

Tip: Make sure that the environmentvariables.config file has the right URLs.

Tip: You can only have one HTTPS site on one machine. If you have more than one, it bounces back and forth between the two sites

Tip: Make sure that you are not using HTTPS in the URL to access a http Web site. Using https in your URL will make the Server redirect your request to the default https Web site.

Tip: Conversely, if the environmentvariables.config file is using https to access a http Web site, you would be redirected to the default https Web site incorrectly

7 Navigation to any page in the application results in a blank page after migrating to another version or a new version of .NET is installed.

Tip: The wrong ASP.NET version may be registered with IIS. Run the "aspnet_regiis.exe" utility with the "-r" flag.

8 The rich text dialog box is prompting me with security issues concerning scripts.

Tip: Ensure the page event and request validation are turned off .

9 What is drl.prodika.com?

Tip: Make sure that you have the new URLs and https:.

10 I am prompted to login to every application.

Tip: Is the remoting container running?

Tip: Ensure you are using the trust bridge in "EnvironmentSettings.config".