Installation Requirements

Before installing Prime Service Catalog, review the licensing and the installation requirements described in this chapter.

About Prime Service Catalog Licensing

Cisco ONE Enterprise Cloud Suite is a part of the Cisco ONE for Data Center solution and consists of four components: Infrastructure Automation, Cloud Management, Big Data Automation and Service Management. Each component can be used individually, or all components can be used together to create an integrated hybrid cloud solution. All components were designed to work together, providing you with an incremental approach to hybrid cloud automation.

The Cisco ONE ECS Service Management package which includes Cisco Prime Service catalog and Cisco Process Orchestrator is sold as a one-year, three-year, or five-year subscription and a customer can order the Service Management Base bundle with an option to add-on the Service Management

For more information about licensing contact your account manager.

Software Requirements

The following table lists the supported third-party software for this release of Cisco Prime Service Catalog. Also refer to the "*Cisco Prime Service Catalog Compatibility Matrix*" document.

Table 2-1   Supported Software

Browser
Internet Explorer 11
Mozilla Firefox ESR 49.0.2 (or later ESR)
Chrome 54 (or later)-(*supported for the following modules only: Service Catalog, Order Management, My Services, Service Portal, Demand Management, Service Manager, Tenant Management*)
Safari 10.0.x(on MAC OS only) (*supported for the following modules only: Service Catalog, Order Management, My Services, Service Portal, Demand Management, Service Manager, Tenant Management*)
Browser Plugin

Table 2-1   Supported Software (continued)

The graph on the Service Link Home Page is optional and for informational purpose only. Adobe® Flash® Player is required to display the graph on the Service Link Home Page.
Web Server
Apache Http Server 2.4.6 or RedHat Http Server 2.4.6
Microsoft Internet Information Services (IIS) 8.5
Application Server + Java Development Kit
WildFly 8.2.0.Final + Oracle JDK 8 Update 91 (or higher Update) + JCE Unlimited Strength Policy Jars (on Windows Server)
Oracle WebLogic 12c (12.2.1.2) + Oracle Hotspot JDK 8 Update 91 (or higher Update) + JCE Unlimited Strength Policy Jars
WildFly 8.2.0.Final + Red Hat OpenJDK 1.8.0_77 (or higher 1.8.0_x) (on Red Hat Enterprise Linux)
Application Server Operating System
Red Hat Enterprise Linux Server 7.2 (64 bit)
Microsoft Windows Server 2012 R2 (64 bit)
Database
Oracle 12c, version 12.1.0.2 (Express Edition of Oracle Database is not supported)
Microsoft SQL Server 2012, with SP3 (Express Edition of SQL Server is not supported)
LDAP
Microsoft Active Directory Server 2012
IBM Cognos® (Note: IBM Cognos software is only supported on Microsoft Windows Server 2012 R2 64-bit Operating System.)
IBM Cognos Business Intelligence Server, version 10.2.1, plus Fix Pack 2
IBM Cognos Data Manager, version 10.2.1, plus Fix Pack 2

Software Configuration Prerequisites

This section describes how to configure the software listed above for use with Prime Service Catalog.

Browser

The following settings must be configured on the web browser used to connect to the Prime Service Catalog application:

- Popup blocker is turned OFF.

- Cookies are enabled.

- Adobe Reader® is required on your web browser machine, if you plan to view and print reports.

Application Server

If you choose Wildfly as your application server, you do not need to install Wildfly software as a prerequisite. The Cisco Prime Service Catalog installer will automatically install the Wildfly Application Server and deploy the Service Catalog applications. Follow the instructions in the Preinstallation Tasks for WildFly to prepare your machine for installing Prime Service Catalog with the Wildfly Application Server.

If you choose WebLogic as your application server, you need to install the Oracle WebLogic Application Server software as a prerequisite on your machine. This guide does not contain instructions for installing the WebLogic software. However you will need to follow the instructions in the Preinstallation Configuration for WebLogic to prepare your WebLogic Server for use with Prime Service Catalog.

Clustering Considerations

To deploy Prime Service Catalog in a clustered environment, WildFly and WebLogic Application Server must be set up in a clustered configuration before you install Prime Service Catalog. Additionally, if you want to provide full fail-over capability, then you must configure cluster-able sessions on one or more of the clustered nodes. See your application server documentation for information on clustered configuration.

Web Server

As a prerequisite, your web server must already be installed and running. Your web server does not have to be installed on the same machine as your application server, or on the machine where you plan to execute the Service Catalog installer.

The web server must have the plugin configuration necessary to communicate with your application server. For example, if you choose to use Apache web server with WebLogic Application Server for your deployment topology, then as a prerequisite, you need to manually configure the plugin for your Apache server to connect to your WebLogic server. The plugin between the web server and the application server will not be configured by the Service Catalog installer.

To ensure that the web server (in this case, Apache) does not disclose the web server type, version, and other vulnerable information, you must configure Apache to provide custom error responses.

For details, see:

http://httpd.apache.org/docs/current/custom-error.html

Internet Information Service (IIS) with WildFly

If you select Wildfly as your application server on a Windows Operating System, the Service Catalog installer can configure the Tomcat plugin for the IIS web server automatically for you, if it detects that the IIS web server is already installed on the same Windows machine where you execute the installer.

You will see the "Configure IIS" option on the installation wizard during the installation for both Service Catalog and Service Link. You can select or deselect that option as you desire. To enable this feature, the IIS web server must meet the following required settings:

- IIS Web Server is installed on the same Windows machine where you execute the Service Catalog installer

- IIS Web Server has the following Role Services: ISAPI Filters, ISAPI Extensions

- IIS must be stopped prior to executing the Prime Service Catalog installer

- You can use a customized website. To add a customized website, first add the customized website in the Internet Information Services (IIS) Manager and bind them to appropriate port, for example: Port 88, 90.

Note   After you install Prime Service Catalog for Wildfly, refer to the section Configuring Plugin for IIS Web Server for additional instructions on how to configure IIS Plugin.

Java Development Kit

Java Development Kit is a prerequisite software on your application server machine. As listed in Table 2-1, only specific versions (and vendors) of JDK are supported for each type of application server. More information about how to configure Java for your application server is described in the Preinstallation Tasks for WildFly, or the Preinstallation Configuration for WebLogic.

Java 1.8 is also a prerequisite for the Cisco Prime Service Catalog installer. Therefore, if you plan to execute the Service Catalog installer on a machine different from your application server, then you need to install Oracle Java or OpenJDK on that machine. If you plan to execute the Service Catalog installer on the same machine where your application server is installed, then just set JAVA_HOME environment variable to the same Java that is used by your application server.

Prime Service Catalog supports AES algorithm and 256 bit symmetric keys. Therefore, if you use Oracle Java, you must also install the "JCE Unlimited Strength Crypto Policy" jar files on the JAVA_HOME directory to enable 2048 bit encryption. If you do not install JCE Unlimited Strength Crypto Policy for Oracle Java, the Application Server displays an error message and aborts the installation. For instructions on how to install the JCE Unlimited Strength Policy jar files, see the Oracle Website.

Note   Red Hat OpenJDK already comes with unlimited strength policy so you don't need to install any additional jar files for OpenJDK.

Database

If you choose Oracle 12c as your RDBMS, you need to install the Oracle 12c Database Server software as a prerequisite (see Table 2-1 for specific version).

For database connection failover scenarios, you can use Oracle RAC 12C for your databases. For more information on configuring Oracle RAC 12C, see Configuring Oracle RAC 12C.

If you choose SQL Server 2012 as your RDBMS, then you need to install the Microsoft SQL Server 2012 software as a prerequisite (see Table 2-1 for specific version).

Do not install any SQL Server Client or Oracle Client connectivity software on your application server. You must use the JDBC driver that is bundled with the Cisco Prime Service Catalog product. For the WildFly application server, the Cisco Prime Service Catalog installer automatically installs the appropriate JDBC driver and configures the JDBC datasource to use this driver. For WebLogic, you will need to manually copy the appropriate JDBC driver jar file (included in the Cisco Prime Service Catalog

product image) to your WebLogic directory, and manually configure the JDBC datasource to use that driver. The instructions for configuring JDBC datasource for WebLogic are described later in this document.

Your database must be configured to enable TCP/IP for client connectivity.

The Configuring the Service Catalog Database contains instructions on how to create a database or schema for use with Prime Service Catalog.

LDAP

Prime Service Catalog can be integrated with your corporate LDAP server to access your company's employee directory. This integration feature is optional, so an LDAP server is not a prerequisite software for installing Prime Service Catalog.

If you plan to use the LDAP integration feature, see the *Cisco Prime Service Catalog Integration Guide.* Ensure that you use only one of the supported LDAP software listed in Table 2-1.

IBM Cognos

OEM IBM Cognos software is available as an additional purchase, which is used for the (optional) Reporting module. To enable all Reporting and Advanced Reporting features in the Prime Service Catalog application, the Cognos software must be installed in your deployment topology. This software can be installed after the Prime Service Catalog software is installed. The instructions for installing and configuring Cognos software can be found in Chapter 7, "Installing and Upgrading Reporting Module"

Other Miscellaneous Settings

X-Window or Xvfb

The Service Catalog installer is a GUI program. Therefore if you are on a Linux Operating System, you must have either an X-Window Server or an X11 emulator to display the installation wizard. The Service Catalog installer does not support console mode or CLI mode.

You must also have either X-Window Server or Xvfb (virtual framebuffer X server) installed and running on your application server machine, in order for the KPI Charts in the Reporting module to be displayed properly on the browser. If you are not using the KPI Charts feature in the Reporting module, then X-Window Server is not required for the application server machine.

Unzip Utility

You need to have an Unzip program (on Windows) or a GNU-compatible tar utility (on Linux) available on your machine to extract the Cisco Prime Service Catalog software installer package.

Network – TCP/IP

TCP/IP must be configured on all host computers.

SMTP

You should have access to an SMTP server that listens to port 25, and a valid email address, for email notifications from the Service Catalog to send out alerts to the system administrator. You must provide the SMTP address and a valid email address during the installation of the Prime Service Catalog software.The SMTP Server must not require user authentication.

Hardware Requirements

Sizing

We recommend a minimum of three computers for a typical (nonclustered) deployment topology:

- Web Server + Application Server together
- Database Server
- Reporting Server

Note   If you have a clustered application server environment, the hardware requirements specified above are applicable for each node (that is, each machine) in your clustered environment.

Your hardware configuration depends on site-specific factors. Contact the Cisco Technical Assistance Center (TAC) if you need more sizing recommendations.

The variables that can affect your hardware configuration include the following:

- the number of people who will use the system
- the number and frequency of service requests that the installed product will handle
- the nature of the service requests (complexity, type, and so on)
- reporting frequency
- systems integration and system availability requirements

Minimum Hardware Requirements for Application Server Host

Your application server machine must meet the following minimum hardware requirements:

- 6 Core, 2 GHz (or faster) processor
- 10 GB RAM
- 50 GB *free* hard disk space
- There must be at least 2 GB of free disk space on the drive that contains the %TEMP% directory, if this is different from the drive when you plan to install the Cognos software.

Minimum Hardware Requirements for Web Server Host

If your web server resides on a different machine from your application server, then your web server machine must meet the following minimum hardware requirements:

- 4 Core, 2 GHz (or faster) processor

- 4 GB RAM

- 2 GB *free* hard disk space

Minimum Hardware Requirements for Database Host

Your database server machine must meet the following minimum hardware requirements:

- 8 Core, 2 GHz (or faster) processor

- 30 GB RAM

- Two hard disks with 500 GB *free* space. (Disk space requirement is dependent on the *projected* size of your Prime Service Catalog databases over time, to account for the growth in user data, service definitional data, transactional data, and reporting data.)

Minimum Hardware Requirements for Reporting Server Host

Your Cognos machine must meet the following minimum hardware requirements:

- 4 Core, 2 GHz (or faster) processor

- 8 GB RAM

- 50 GB *free* hard disk space

Note   The IBM Cognos 10.2.1 software bundled with Prime Service Catalog can be installed only on a Microsoft Windows Server 2012 R2 (64-bit) Operating System.

Hardware Requirements