Chapter 21
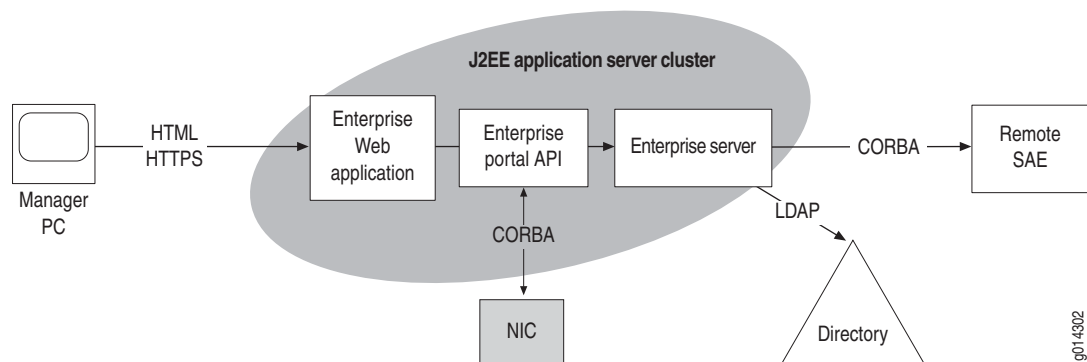# Planning Deployment for Enterprise Service Portals

This chapter provides information to help you plan a deployment for enterprise service portals. The chapter contains the following sections:

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- Deciding Which Enterprise Service Portal to Use on page 330

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Architecture of Enterprise Service Portals

Figure 31 shows the basic elements and communication protocols of an enterprise service portal.

Figure 31: Elements and Communication Protocols for an Enterprise Service Portal

Elements for an Enterprise Service Portal

An enterprise service portal consists of a server cluster that communicates with the following network elements:

■ Directory system—A distributed set of directories with information shadowing and chaining agreements between master and slave servers

■ (Optional) Network information collector

For SRC implementations that use more than five SAEs, an enterprise service portal requires a NIC to identify which SAE is managing a subscriber. This NIC takes the distinguished name (DN) of an access as the key and returns the corresponding SAE as the value. For SRC implementations that use five or fewer SAEs, you can use directory eventing to identify the SAEs.

■ Remote SAE

■ Manager PC—A client PC on which a person managing an enterprise runs a Web browser to communicate with an enterprise service portal

Internally, an enterprise service portal consists of a J2EE application server cluster that implements an Enterprise API or Enterprise Tags Library, an enterprise Web application that uses one of these interfaces, and an enterprise server. The enterprise server requires persistent sessions in the cluster. That is, the cluster member that receives the first manager session request must receive all subsequent requests for the same session.

Communication Protocols

Table 31 describes the communication protocols that are used between elements in the enterprise service portal network.
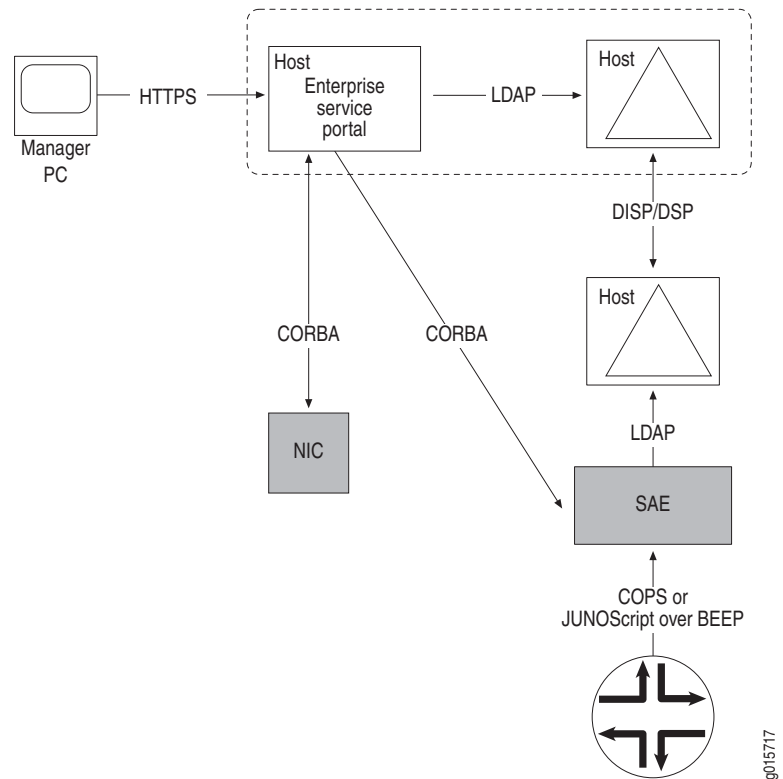
Table 31: Communication Protocols for an Enterprise Service Portal

Protocol	Used for Communication Between
HTML/HTTPS (HyperText Markup Language over Secure HyperText Transmission Protocol)	Enterprise manager's Web browser and the enterprise portal Web application running in the enterprise service portal
Enterprise Portal API	Enterprise Web application and the enterprise server
CORBA	Enterprise server and remote SAEs running in a different Web application server than the enterprise server
LDAP	Enterprise server and SRC directories

Deployment Scenario for an Enterprise Service Portal

Figure 32 shows component interactions for a sample deployment of an enterprise service portal.

Figure 32: Deployment for an Enterprise Service Portal

The directory servers are synchronized by means of server-to-server protocols, such as DISP and DSP in the case of X.500 directories, and DirX and equivalent protocols in the case of native LDAP directories, such as Sun ONE Directory Server.

In this configuration, bulk service session requests and implicit subscription reactivation caused by substitution changes are made through replication of directory information. The enterprise service portal writes new information to its local directory, and the server-to-server protocols transfer the information to the SAE's local directory. Then the SRC directory eventing system notifies the SAE of the new information, and the SAE reacts by activating and deactivating subscriptions.

The enterprise service portal receives feedback on the session state and parameter values of a session using remote procedure calls through the CORBA connection directly to the SAE managing the session.

Deciding Which Enterprise Service Portal to Use

Table 32 describes which application to use in your organization.

Table 32: Enterprise Service Applications

To Perform This Task	Use This Application
Provide services to a number of enterprises, and let IT managers at the enterprises manage services for their enterprise	Enterprise Manager Portal
Manage address allocation	NAT Address Management Portal with Enterprise Manager Portal
Provide custom management functions through an enterprise service portal	Customized version of the sample Enterprise Service Portal

Planning Number of Instances of an Enterprise Service Portal

When you are planning an SRC network that uses enterprise service portals, consider how many instances of the enterprise service portal you need. For example, if your network has multiple points of presence (POPs), you may want to install an enterprise service portal in each POP.

Planning Namespace Hierarchy for an Enterprise Service Portal

Each enterprise service portal that you install must have a namespace that defines the location of its configuration in the directory. The namespaces form a hierarchy of LDAP entries, and a namespace inherits all the properties defined in its parent namespaces. Properties defined in subordinate namespaces override properties of the same name inherited from parent namespaces. Multiple enterprise service portals can use the same namespace if all the properties in the configurations are identical.

For example, in the sample data, the namespaces for Enterprise Manager Portal and NAT Address Management Portal are subordinate to the namespace for the sample Enterprise Service Portal (see Table 33). Consequently, the subordinate configurations inherit property definitions from the sample Enterprise Service Portal configuration, unless specific settings in the subordinate configurations override those in the sample Enterprise Service Portal configuration.

Table 33: Namespaces for Enterprise Service Portals

Name of Enterprise Service Portal	Namespace
Sample Enterprise Service Portal	$l = EASP, ou = staticConfiguration, ou = Configuration, o = Management, o = umc$
Enterprise Manager Portal	$l = ENT\text{-}MGR, l = EASP, ou = staticConfiguration, ou = Configuration, o = Management, o = umc$
NAT Address Management Portal	$l = ADDR\text{-}MGR, l = EASP, ou = staticConfiguration, ou = Configuration, o = Management, o = umc$

You can use the hierarchy of namespaces to minimize the number of properties you configure for a particular instance of an enterprise service portal. For example, suppose you want to deploy two instances of Enterprise Manager Portal in different POPs—Ottawa and Montreal. The POPs use the same directory for services; however, each POP uses its own directory for subscribers.

To minimize the number of properties you configure for the enterprise service portal, you can:

1. Create the following two namespaces subordinate to *l = ENT-MGR, l = EASP, ou = staticConfiguration, ou = Configuration, o = Management, o = umc:*

    ■   *l = ENT-MGR-Ottawa*

    ■   *l = ENT-MGR-Montreal*

2. Configure information about the service directory in *l = ENT-MGR, l = EASP, ou = staticConfiguration, ou = Configuration, o = Management, o = umc.*

3. Configure information about the respective subscriber directories in *l = ENT-MGR-Ottawa* and *l = ENT-MGR-Montreal.*