

Enterprise Service Portals Provided with the SRC Software

We provide several enterprise service portals in the in the SDK+AppSupport+Demos+Samples.tar.gz file on the Juniper Networks Web site at: <https://www.juniper.net/support/csc/swdist-erx/src.html> Some of the enterprise service portals we provide are intended for demonstration purposes or as a basis for developing a customized enterprise service portal for your SRC implementation. Other enterprise service portals are intended to serve a specific purpose and require little customization. The WAR files for the enterprise service portals contain all required libraries and Web contents.

The following enterprise service portals are available:

- Sample enterprise service portal
- Enterprise Manager Portal
- NAT Address Management Portal

Sample Enterprise Service Portal

The sample enterprise service portal incorporates many of the features that the enterprise service portal API offers. You can use the sample enterprise service portal to demonstrate the functionality available, and you can customize the sample enterprise service portal to create a portal for your own SRC implementation. The source code for the sample enterprise service portal is in its JSP pages; the code was created with the tags in the enterprise portal tag library.

For information about the JSP tags that you can use to customize an enterprise service portal, see the documentation for the enterprise tag library on the Juniper Networks Web site at <http://www.juniper.net/techpubs/software/management/src/api-index.html>

Enterprise Manager Portal

Service providers can deploy Enterprise Manager Portal to provision services for enterprise subscribers. IT managers can access the SRC network through this portal and select the services they require. Enterprise Manager Portal is a complete application for which you need to customize only style sheets and icons.

NAT Address Management Portal

Service providers can deploy this enterprise service portal to manage public IP addresses for use with NAT services on JUNOS routing platforms. IT managers make requests about public IP addresses through Enterprise Manager Portal. The service provider responds to these requests through NAT Address Management Portal. This enterprise service portal is a complete application for which you need to customize only style sheets and icons.

When an IT manager makes a request about public IP addresses through Enterprise Manager Portal, Enterprise Manager Portal sends an e-mail to a human administrator or a machine. For small installations or demonstration purposes, a human administrator can manage the public IP addresses; however, for large installations, public IP addresses are managed by machines. NAT Address Manager handles two

operations: the supply of new IP addresses and the return of unwanted public IP addresses.

If a human administrator provides the IP addresses, the administrator can access the Address Manager portal by clicking the portal address that is included in the e-mail from Enterprise Manager Portal. The administrator can then use NAT Address Management Portal to make a change to the IT manager's public IP addresses in the directory. The IT manager can view the changes through Enterprise Manager Portal and can use the assigned IP addresses in subscriptions to NAT services.

If you use a machine to manage public IP addresses, you must write an application that allows the machine to handle the e-mails that Enterprise Manager Portal sends. The e-mails contain XML code that NAT Address Management Portal and the machine must interpret. The following sequence of events describes how the machine interacts with the portals.

1. The IT manager requests one or more IP addresses through Enterprise Manager Portal.
2. Enterprise Manager Portal sends an e-mail to the machine that administers IP addresses.

The subject line of the e-mail contains the URL of NAT Address Management Portal. The body of the e-mail contains an SDXNATStatusRequest message—XML code that contains a request for information about the status of a particular access.

3. The machine forwards the e-mail to the URL in the subject line of the e-mail.
4. The machine extracts the SDXNATStatusRequest message from the e-mail and sends it by means of HTTP to NAT Address Management Portal.
5. NAT Address Management Portal analyzes the SDXNATStatusRequest message and returns an SDXNATStatusResponse message to the machine.
6. The machine analyzes the response and determines the next action, such as providing an IP address for the enterprise.
7. The machine sends the appropriate information in an SDXNATOperationRequest message to NAT Address Management Portal.
8. NAT Address Management Portal updates the directory and returns an SDXNATOperationResponse message to the machine.

When NAT Address Management Portal updates the directory, the IT manager can view the new status in Enterprise Manager Portal and can use the assigned IP addresses in subscriptions to NAT services.

The XML messages described above contain subordinate elements that depend on whether the IT manager's request is to obtain or return IP addresses. The document type definition (DTD) for the XML messages describes these subordinate elements. You can find the DTD in the in the **SDK+AppSupport+Demos+Samples.tar.gz** file on the Juniper Networks Web site at: <https://www.juniper.net/support/csc/swdist-erx/src.html>. The file is located in the folder **SDK/dtd**.