

Managing Reports

This chapter explains how to manage the Cisco Prime Network Registrar address space reporting tool, which is available from a regional cluster by using the web UI. Before you proceed with this chapter, become familiar with the concepts in the previous chapters of this part of the User's Guide.

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ARIN Reports and Allocation Reports

Using the Cisco Prime Network Registrar web UI, you can generate:

- American Registry of Internet Numbers (ARIN) reports, including:
 - Organization and point of contact (POC) reports
 - IPv4 address space utilization reports
 - Shared WHOIS project (SWIP) allocation and assignment reports
- Allocation reports that show how addresses are deployed across the routers and router interfaces of your network, including:
 - Allocation by owner reports
 - Allocation by router interface or by network reports

Managing ARIN Reports

ARIN, which is one of the five Regional Internet Registries (RIRs), manages IP resources in Canada, the United States of America, and many Caribbean and North Atlantic islands.

ARIN allocates blocks of IP addresses to Internet Service Providers (ISPs), which, in turn, reassign blocks of address space to their customers. ARIN distinguishes between *allocating* IP address space and *assigning* IP address space. It allocates address space to smaller IRs for subsequent distribution to the IRs' members and customers. It assigns address space to an ISP, or other organization, for use only within the network of that organization and only for the purposes documented in its requests and reports to ARIN.



Note

ARIN manages IP address resources under the auspices of the Internet Corporation for Assigned Names and Numbers (ICANN). In other geographies, ICANN has delegated authority for IP resources to different regional Internet Registries (IRs). Cisco Prime Network Registrar does not currently support the reports that these registries might require, nor does it now support IPv6 reports or autonomous system (AS) numbers.

ARIN maintains detailed documentation about its policies and guidelines on its website.

http://www.arin.net

Be sure that you are familiar with these policies and guidelines before proceeding with ARIN reports.

The three options that you can specify for ARIN reports are:

- New—For a newly added POC or organization.
- Modify—Includes changed POC or organization data, such as phone numbers and addresses.
- Remove—Signals that you want to remove the POC or organization from the ARIN database.

Managing Point of Contact and Organization Reports

Cisco Prime Network Registrar provides reports that can submit Points of Contact (POC) and organizational information to ARIN. After you fill in these reports, you need to e-mail the information to ARIN. Submit the POC report (also called a template) to ARIN before preparing other reports.

Each POC is uniquely identified by a name called a POC handle and is associated with one or more Organization Identifiers (Org IDs) or resource delegations, such as an IP address space allocation or assignment. A POC handle, which ARIN assigns, can represent either an individual or a role.

The Organization report creates an Org ID and associates POC records with it. Create the Organization report after you create the POC report.

To manage POC and organization reports, log in to the Cisco Prime Network Registrar regional web UI as a member of an administrator group assigned to the regional-addr-admin role.

Creating a Point of Contact Report

You create POCs so that managers can interact with ARIN to request and administer IP resources and so that network professionals can manage network operation issues.

Regional Advanced Web UI

- **Step 1** From the **Administration** menu, choose **Contacts** under the **Settings** submenu to open the List/Add ARIN Points of Contact page.
- **Step 2** Click the **Add Contact** icon in the Contacts pane on the left to open the Add Point of Contact page.
- **Step 3** Enter data in the fields on the page:
 - Name—A unique identifier for the POC (required).
 - First Name—The first name of the point of contact (required).
 - Last Name—The last name of the point of contact (required).
 - **Type**—From the drop-down list, choose Person or Role (optional, with preset value Person).

Step 4 Click Add Point of Contact.

Registering a Point of Contact

You must register the POC with ARIN to receive a POC handle.

Regional Advanced Web UI

- **Step 1** From the **Administration** menu, choose **Contacts** under the **Settings** submenu to open the List/Add ARIN Points of Contact page.
- **Step 2** Click the required contact in the Contacts pane on the left.
- **Step 3** Click the **Register Report** tab to view the ARIN template file.
- **Step 4** Copy and paste the template file into an e-mail and send the file to ARIN.

Editing a Point of Contact Report

Edit a POC report after ARIN returns a POC handle to your organization or if your POC has changed.

Regional Advanced Web UI

- **Step 1** From the **Administration** menu, choose **Contacts** under the **Settings** submenu to open the List/Add ARIN Points of Contact page.
- **Step 2** Click the required contact in the Contacts pane on the left. The Edit Point of Contact page opens.
- **Step 3** Enter values for Middle Name, Handle, and Description (optional).
- **Step 4** In the Emails section:
 - a) Click **Add** to open the Add Email Address window.
 - b) Enter the Email address and click **Add**.
- **Step 5** In the Phones section:
 - a) Click **Add** to open the Add Phone window.
 - b) Enter a phone number and extension, if applicable, then choose a type (Office, Mobile, Fax, or Pager) from the drop-down list.
 - c) Click Add.
- **Step 6** Enter the additional attributes as strings or lists of text in the Miscellaneous Settings section.
- **Step 7** After making the changes, click **Save**.

Creating an Organization Report

Each organization is represented in the ARIN WHOIS database by a unique Org ID, consisting of an organization name, its postal address, and its POCs. While organizations may have more than one Org ID, ARIN recommends consolidating IP address resources under a single Org ID.

If you do not have an Org ID with ARIN, or you are establishing an additional Org ID, you must first create and submit a POC report. When ARIN confirms it has received your POC information, use Cisco Prime Network Registrar to complete an Organization form and submit that information.

Regional Advanced Web UI

- **Step 1** From the **Administration** menu, choose **Organizations** under the **Settings** submenu to open the List/Add ARIN Organizations page.
- **Step 2** Click the **Add Organization** icon in the Organizations pane on the left to open the Add Organization page.
- **Step 3** Enter data in the fields on the page:
 - Organization Name—Name of the organization that you want to register with ARIN.
 - **Description**—A text description of the organization.
 - **Organization Admin POC**—From the drop-down list, choose the POC who administers IP resources from the drop-down list.
 - Organization Technical Points Of Contact—From the drop-down list, choose one or more POCs who manage network operations, or click Add Point of Contact to add new contact information.
- **Step 4** Click **Add Organization**. This opens the Edit Organization page where you can add more details.

Registering an Organization

You must register your Organization with ARIN to receive an Organization ID.

Regional Advanced Web UI

- **Step 1** From the **Administration** menu, choose **Organizations** under the **Settings** submenu to open the List/Add ARIN Organizations page.
- **Step 2** Click the required organization in the Organizations pane on the left.
- **Step 3** Click the **Register Report** tab to view the ARIN template file.
- **Step 4** Copy and paste the template file into an e-mail and send the file to ARIN.

Editing an Organization Report

You might need to change organizational information that you have registered with ARIN.

Regional Advanced Web UI

- **Step 1** From the **Administration** menu, choose **Organizations** under the **Settings** submenu to open the List/Add ARIN Organizations page.
- **Step 2** Click the required organization in the Organizations pane on the left.
- **Step 3** Enter or change data in the fields.
 - Miscellaneous Settings—Add these additional attributes as strings or lists of text.

- Organization Abuse Points of Contact—From the drop-down list, choose one or more POCs who handle network abuse complaints, or click Add Point of Contact to add new contact information.
- Organization NOC Points of Contact—From the drop-down list, choose one or more POCs in network operations centers, or click **Add Point of Contact** to add new contact information.
- Step 4 Click Save.
- **Step 5** Submit the updated report to ARIN as described in Registering an Organization, on page 4.

Managing IPv4 Address Space Utilization Reports

Address space utilization reports serve two purposes:

- To make an initial request for IPv4 address space after you receive a POC handle and an Org ID.
- To support a request for an additional allocation of IPv4 addresses when your business projections show that you are running out of IP addresses.



Note

The ARIN website contains extensive information about how it initially allocates address space and its threshold criteria for requesting additional address space. In general, for a single-homed organization, the minimum allocation from ARIN is a /20 block of addresses. For a multihomed organization, the minimum allocation is a /22 block of addresses. ARIN recommends that an organization requiring a smaller block of addresses contact an upstream ISP to obtain addresses.

The Cisco Prime Network Registrar utilization report corresponds to the ARIN ISP Network Request template (ARIN-NET-ISP-3.2.2).

Regional Advanced Web UI

- **Step 1** From the **Operate** menu, choose **ARIN Address Space Usage** under the **Reports** submenu to open the Select Address Space Report page.
- **Step 2** In the Select the Report Type field, choose **Utilization** from the drop-down list. The Select the Filter Type field is updated with the value, *by-owner*. The browser redisplays the Select Address Space Report page with two new fields: Network Name and Network Prefix Length.
- **Step 3** In the Select Owner field, choose the owner of this address block from the drop-down list.
- **Step 4** Enter values for the Network Name and Network Prefix Length.
- **Step 5** Click **Generate Report**. The browser displays an ARIN template file (ARIN-NET-ISP-3.2.2).

Several sections of the report require that you manually enter data because the information is generated and maintained outside the Cisco Prime Network Registrar application.

- **Step 6** Click **Save Report**. The browser displays the Address Space Utilization Report as an unformatted text file.
- **Step 7** Copy the Address Space Utilization Report to a text editor to manually enter the data that Cisco Prime Network Registrar does not generate.

Step 8 Copy and paste the edited report into an e-mail and send the file to ARIN.

Managing Shared WHOIS Project Allocation and Assignment Reports

The ARIN shared WHOIS project (SWIP) provides a mechanism for finding contact and registration information for resources registered with ARIN. The ARIN database contains IP addresses, autonomous system numbers, organizations or customers that are associated with these resources, and related POCs.

The ARIN WHOIS does not locate any domain- or military-related information. Use whois.internic.net to locate domain information, and whois.nic.mil for military network information.

The regional web UI also provides two allocation and assignment report pages:

- View ARIN SWIP Reallocated Report
- View ARIN SWIP Reassigned Report