



APPENDIX C

Manage the Prime Network Registry

The following topics provide an introduction to the Prime Network registry and common settings you may want to change:

- [Overview of the Prime Network Registry, page C-1](#)
- [Changing Registry Settings Using runRegTool.sh, page C-2](#)

Overview of the Prime Network Registry

The Prime Network registry is a collection of xml files (called hives) that comprise and control the Prime Network system configuration. The registry contains almost all definitions and configurations used by Prime Network. A copy of the registry is located on the gateway server and every unit in the following location:

NETWORKHOME/Main/registry/

Registry files are made up of *key names* and *entry names*. The following file fragment shows some key and entry names in the pollinggroups.xml registry file:

```
<key name="pollinggroups">
  <key name="default">
    <key name="buffering">
      <entry name="interval">190000</entry>
    </key>
    <key name="configuration">
      <entry name="interval">900000</entry>
    </key>
  </key>
</key>
```

In this example, the registry key path for the buffering interval would be:

pollinggroups/default/buffering/interval

where pollinggroups is the name of the hive, default is a subkey of the root key, buffering is a subkey of buffering, and so forth.

The registry files on the gateway server and units are replicas of the *Golden Source registry*. The Golden Source registry is the master registry that is responsible for maintaining, distributing, and updating registry configuration files to all units and the gateway server. The Golden Source registry is centrally located on the gateway server. Whenever a unit or gateway restarts, it accesses the Golden Source registry to retrieve any updates to the configuration. If a unit cannot connect to the gateway, it uses its local copy of the registry files.

The master copy of the Golden Source files is centrally located on the gateway server at:

NETWORKHOME/Main/registry/ConfigurationFiles

The contents are:

Subdirectory	Description
/0.0.0.0	Template directory, which is used by the system. This directory on the gateway server is the Golden Source registry.
/127.0.0.1	Gateway directory
<i>/unit-IP-address</i>	Unit directory (one for each unit)

The subfolders are created during the installation procedure. Each subfolder contains the relevant registry .xml files. These files can be edited as described in [Changing Registry Settings Using runRegTool.sh](#), page C-2.

All Golden Source subdirectories contain a file called site.xml. This file contains registry settings that have been changed. When the system restarts, these settings are copied to (and override) all other Golden Source directories. For this reason, it is important to make change to site.xml so that in case of restart, your changes are not overwritten by the system defaults. Every key and entry in the Golden Source can be overridden by an entry in site.xml.

The Golden Source mechanism enables consistent management of the entire system. Each unit and gateway has its own set of registry configuration files and parameters. The registry files are replicated automatically during the installation of the unit and gateway.

Each time a unit and gateway process starts, it accesses the Golden Source and retrieves the updated configuration. All additions and changes to the Golden Source are automatically sent to the relevant units servers. Each unit keeps a local copy of its relevant registry files. When a unit cannot connect to the gateway, the unit's local copy of the registry is used.

Changing Registry Settings Using runRegTool.sh



Note

Changes to the registry should only be carried out with the support of Cisco. For details, contact your Cisco account representative.

You can change registry settings using the **runRegTool.sh** script, which is located in *NETWORKHOME/Main*, using the following command format:

```
runRegTool.sh -gs hostname-IP command unit-IP key [value]
```

The **runRegTool.sh** script takes the following options.

Argument/ Option	Description
-gs	Performs a registry command using the Golden Source.
hostname-IP	IP address of the gateway server or unit server where the golden source is located. In most cases the golden source is on the gateway server; you can use the gateway IP address or the address 127.0.0.1 .
command	<p>The runRegTool.sh script registry command:</p> <ul style="list-style-type: none"> • set—Sets a registry key named <i>key</i> to a new value of <i>value</i> • setEncrypted—Sets and encrypts the registry key named <i>key</i> to <i>value</i> • unset—Returns a registry key named <i>key</i> to its default value • add—Adds a new registry key named <i>key</i> with a value of <i>value</i> • remove—Deletes a registry key named <i>key</i> • list—Lists all registry keys under a given <i>key</i> • get—Retrieves the value of a registry key named <i>key</i>
unit-IP	<p>IP address of the destination to which the changes should be written, according to these guidelines:</p> <ul style="list-style-type: none"> • Gateway server changes (<i>hostname-ip</i> is the gateway server): <ul style="list-style-type: none"> – Use <i>unit-IP</i> 127.0.0.1 for get commands. – Use <i>unit-IP</i> 127.0.0.1 for all commands on AVMs (reserved AVMs or user-created AVMs). – Use <i>unit-IP</i> 0.0.0.0 for all other command instances. • Unit server changes (for example, an AVM on a unit), <i>unit-IP</i> should be the unit IP address.
key	<p>Registry entry name consisting of the XML file name, the key name(s), and entry.</p> <ul style="list-style-type: none"> • For all user-created AVMs, use this format, where <i>avmxxx</i> is the AVM on which the VNE resides, and <i>vne-key</i> is the VNE name used by Prime Network. The site/ prefix is not required for reserved AVMs. avmxxx/agents/da/vne-key/... • For all other registry keys, precede the key string with site/ so that changes are made to (or values are checked against) the local <i>site.xml</i> file: site/key
value	The new value for the registry entry.



Note

Registry changes should be made to the *site.xml* file, except for changes being made to AVM XML files. Therefore, your command syntax should always include **site** as the first part of the key name (this is not required for **get** or **list** commands):

The following are some examples of how to use the **runRegTool.sh** script:

- This **get** command returns the current settings for all polling groups on the unit with the IP address *unit-IP*. It uses the **site/** prefix in case any changes have already been configured:

```
# ./runRegTool.sh -gs hostname-IP get unit-IP site/pollinggroups
```

- This **set** command configures the LDP Neighbor Down event to *not* persist its alarm information. Note that **site** precedes the key so that change are made locally:

```
# ./runRegTool.sh -gs gateway-IP set unit-IP
"site/event-persistency-application/events/LDP neighbor loss/sub-types/LDP neighbor
down/alarm-persistency" unpersist
```

- This **get** command returns the current adaptive polling settings for a VNE with the ID CRS1-local, that runs on AVM 521. Because the change is made to a user-created VNE, the key is not preceded with **site**.

```
# ./runRegTool.sh -gs hostname-IP get unit-IP
"avm521/agents/da/CRS1-local/dcs/type/com.sheer.metrocentral.coretech.common.dc.Manage
dElement/adaptivePolling"
```