



## APPENDIX **F**

# Using the `vcds_send_file` Command

This appendix provides overview information on network-based per-client configuration of the VQE Client (VQE-C). It also explains how to use the `vcds_send_file` command to send the client database file and group attribute file to one or more VQE Client Configuration Delivery Servers (VCDSs).

## VQE CDI and VQE-C Network-based Per-Client Configuration

The VQE configuration delivery infrastructure (CDI) is used to deliver a channel configuration file and per-client network configuration file to the VQE-Cs on the set-top boxes (STBs). With the CDI, a VCDS or an RTSP server sends these two files to the VQE-Cs.

To create the network configuration files for the VQE-Cs, VCDS requires the following files:

- *Client database file*—In this file, each STB VQE-C has a unique identity (for example, MAC address) that is associated with a group identifier (group ID) for the specific network configuration that should be applied to the VQE-C system. Each VQE-C is associated with one group ID. The client database file can be a complete set of all STBs or a subset which adds to or modifies a previous set that exists on the VCDS.
- *Group attribute file*—In this file, different sets of per-client network configurations are defined. Each set of attributes is identified by a group ID.

The client database file and the group attribute file are XML-based and follow a schema specified by a specification defined by Cisco.

- Schema for the client database file is located at `/usr/share/tomcat5/webapps/vcds-amt/WEB-INF/db_schema.xsd`. The example file `/etc/opt/vqes/groupmap_sample.xml` contains an example of how to do group mapping.
- Schema for the group attribute file is located at `/usr/share/tomcat5/webapps/vcds-amt/WEB-INF/grp_cfg_schema.xsd`. The example file `/etc/opt/vqes/clientcfg_sample.xml` contains an example with all VQE-C attributes that are allowed.



### Note

The example client database and group attribute files are not preserved during an upgrade of the VQE-S. Any changes made to either file are lost.

A VQE-C system configuration provisioning server or the `vcds_send_file` command is used to send the client database file and the group attribute file to one or more VCDS servers. The `vcds_send_file` command is included with the VQE Tools software.

For more information on the roles VCDS and the VQE-C system configuration provisioning server, see the [“VCDS Delivery of the Per-Client Network Configuration File”](#) section on page 18.

# The vcds\_send\_file Command

The **vcds\_send\_file** command can be used to send the client database file and the group attribute file to a VCDS.

The syntax for the **vcds\_send\_file** command is as follows:

**vcds\_send\_file** *type hostname filename*

Syntax Description	<i>type</i>	Specifies the type of file that is sent to the VCDS. The following values are allowed: <ul style="list-style-type: none"><li>VQE-GROUPMAP—Client database file</li><li>VQE-GROUPATTR—Group attribute file</li></ul>
	<i>hostname</i>	Specifies the hostname or IP address of the VCDS to which the file is sent. If the VCDS to which the file is sent resides on the same VQE Tools server as the sending <b>vcds_send_file</b> command, localhost can be used for <i>hostname</i> .
	<i>filename</i>	Specifies the full pathname of the file that is sent to the VCDS. The file contents (a client database file or a group attribute file) must match the value given in the <i>type</i> argument.

**Usage Guidelines**

The **vcds\_send\_file** command sends the client database file and the group attribute file to the VCDS using HTTPS. The VCDS to which the files are sent can be located on the same VQE Tools server where the **vcds\_send\_file** command is issued or can be located on a different VQE Tools server. On the VQE Tools server, the **vcds\_send\_file** executable is located at /opt/vqes/bin/vcds\_send\_file.



**Note** You must log in as root to execute the **vcds\_send\_file** command.

To have the operating system find the **vcds\_send\_file** executable, you must set the PATH environment variable to include the location of the /opt/vqes/bin directory, or use the full path to **vcds\_send\_file** when executing the command.

**Examples**

The following examples show how to use the **vcds\_send\_file** command to send a client database file and a group attribute file.

```
[root@system ~]# /opt/vqes/bin/vcds_send_file VQE-GROUPMAP localhost
/etc/opt/vqes/groupmap_sample.xml

Status Code: 200
Status Message: Succeeded -- Received a new group map file for VQE-C
```

  

```
[root@system ~]# /opt/vqes/bin/vcds_send_file VQE-GROUPATTR localhost
/etc/opt/vqes/clientcfg_sample.xml

Status Code: 200
Status Message: Succeeded -- Received a new attribute file for VQE-C
```

  

```
[root@system ~]#
```