

3.2.1 List of available EMS commands

For a list of available commands for EMS, type:

```
# service ems
```

The following list is returned:

```
Usage: service ems  
{start|stop|restart|status|validate|backup|restore|collect}
```

3.2.2 Starting the EMS service

To start EMS, type:

```
# service ems start
```

The command returns messages similar to the following:

```
Starting Concert EMS service...  
Concert EMS started with pid [pid number]
```

Note:

The *pid* is the process identification number.

3.2.3 Stopping the EMS service

To stop EMS, type:

```
# service ems stop
```

The command returns messages similar to the following:

```
Stopping Concert EMS service...  
Concert EMS is stopped.
```

3.2.4 Restarting the EMS service

To restart (stop and then start) the EMS service, type:

```
# service ems restart
```

The command returns messages similar to the following:

```
Stopping Concert EMS service...  
Starting Concert EMS service...  
Concert EMS started with pid [pid number]
```

3.2.5 Discovering the status of the EMS service

To discover the status of the EMS, type

```
# service ems status
```

The command returns messages that tell you if EMS is **running**, **started**, or **stopped**.

3.2.6 Validating the EMS service

The validate command is a diagnostic tool that can help you debug the EMS application. Use the validate command to validate an installation of EMS when the application is not operating properly.

To validate EMS, type:

```
# service ems validate
```

Where validation fails, messages similar to the following are returned:

```
-----  
Concert EMS Validation FAILED  
-----
```

3.2.7 Backing up EMS (the PostGreSQL database)

The PostGreSQL database application is installed with the EMS.

When you back up EMS, you are backing up the Concert database, including user accounts, conference and channel configurations.

The default location for database backups is `/var/lib/pgsql/backups/`.

To back up EMS (the Concert system), type:

```
# service ems backup
```

A message similar to the following example is returned:

```
Dumping database contents to file
'/var/lib/pgsql/backups/[yyyymmdd]_[hhmm].sql.gz
```

Note:

The name of the backup file contains the date (`[yyyymmdd]`) and time (`[hhmm]`) of the backup.

3.2.8 Restoring EMS

To restore EMS (and the Concert database) to the last backup, type:

```
# service ems restore
```

Messages similar to the following are returned. As in the following example, enter the full path of the backup file you want to restore when prompted. The line highlighted in **red** is typed by the user.

```
Existing backups include...
-----
-rw-r- -r- - 1 postgres postgres 9242 Nov 25 17:30
/var/lib/pgsql/backups/[yyyymmdd]_[hhmm].sql.gz
-rw-r- -r- - 1 postgres postgres 9242 Nov 25 17:33
/var/lib/pgsql/backups/[yyyymmdd]_[hhmm].sql.gz
.....
Enter the full path of the backup file to restore from:
/var/lib/pgsql/backups/[yyyymmdd]_[hhmm].sql.gz

Stopping Concert EMS service...
Stopping postgresql service: [ OK ]
Starting postgresql service: : [ OK ]
DROP DATABASE
CREATE DATABASE
Starting Concert EMS service
Concert EMS started with pid 4282
* restore from '/var/lib/pgsql/backups/[yyyymmdd]_[hhmm].sql.gz'
completed successfully
```

3.2.9 Collecting EMS logs

The collect command collects the log files (trace logs, config files, startup scripts, database logs and package versions) for EMS, places them in a tar.gz file and tells you where the tar.gz file is located.

Collecting and compressing the log files in this way makes it easier to send this information to your technical support team.

To collect the EMS log files, type:

```
# service ems collect
```

A message similar to the following example is returned:

```
Initiating Collect Procedure...
* collecting trace logs...
* collecting config files...
* collecting startup scripts...
* collecting database logs...
* collecting Package versions...
* archiving files...
* the generated file '[file name].tar.gz' can be found in
'/usr/local/clearcom/concert'
Collect operation completed successfully.
```

3.2.10 EMS web interface

The majority of Concert configuration and administration tasks (including user management, configuring conferences and channels, and updating your license), are carried out in the EMS web interface.

The IV-R and Interface Gateway are also managed through the EMS web interface.

To access the EMS web interface:

1. Open a web browser on the network. In the address field, enter the server IP address.
2. The login dialog is displayed. Enter the default **username (admin)** and **password (admin)**.

The Clear-Com Concert EMS web interface is displayed.

For more information about configuring the Concert system using the EMS web interface, see the **Concert Administrator Guide**.

3.2.11 EMS config file

You are only required to modify the EMS config file (**ems.conf**) when modifying the TCP and UDP ports used by Concert. For more information, see **4 Advanced configuration**.

3.3 Controlling the IV-R application

The IV-R (*Instant Voice-Router*) application is the Concert media router. The IV-R:

- Maintains a dynamic connection with all the Concert Clients in the system.
- Maintains conference routing tables for the Concert Clients.
- Forwards incoming audio or text messages for participants in direct calls, chats, conferences and channels.

3.3.1 List of available IV-R commands

For a list of available commands for the IV-R, type:

```
# service ivr
```

The following list is returned:

```
Usage: service ivr {start|stop|restart|status|validate|collect}
```

3.3.2 Starting the IV-R service

To start the IV-R, type:

```
# service ivr start
```

The command returns messages similar to the following:

```
Starting Concert IVR service...  
Concert IVR started with pid [pid number]
```

Note:

The *pid* is the process identification number.

3.3.3 Stopping the IV-R service

To stop the IV-R, type:

```
# service ivr stop
```

The command returns messages similar to the following:

```
Stopping Concert IVR service...  
Concert IVR is stopped.
```

3.3.4 Restarting the IV-R service

To restart (stop and then start) the IV-R service, type:

```
# service ivr restart
```

The command returns messages similar to the following:

```
Stopping Concert IVR service...  
Starting Concert IVR service...  
Concert IVR started with pid [pid number]
```

3.3.5 Discovering the status of the IV-R service

To discover the status of the IV-R, type:

```
# service ivr status
```

The command returns messages that tell you if the IV-R is **running**, **starting /started**, or **stopping /stopped**.

3.3.6 Validating the IV-R service

The validate command is a diagnostic tool that can help you debug the IV-R application. Use the validate command to validate an installation of the IV-R when the application is not operating properly.

To validate the IV-R, type:

```
# service ivr validate
```

3.3.7 Collecting IV-R logs

The collect command collects the log files (trace logs, config files, startup scripts, database logs and package versions) for the IV-R, places them in a zip file and tells you where the zip file is located.

Collecting and zipping up the log files in this way makes it easier to send this information to your technical support team.

To collect the IV-R log files, type:

```
# service ivr collect
```

3.3.8 Managing the IV-R in the EMS web interface.

You can use the EMS web interface to perform a range of IV-R management and configuration tasks, including:

- Adding and removing IV-Rs.
- Modifying the hostname and description of the IV-R.
- Viewing Server information and configuration parameters.
- Monitoring IV-R statistics for Clients and channels.

For more information, see:

- **3.2.10 EMS web interface.**
- The **Concert Administrator Guide.**

3.3.9 IV-R config file

You are only required to modify the IV-R config file (**ivr.conf**) when modifying the TCP and UDP ports used by Concert. For more information, see **4 Advanced configuration.**

3.4 Controlling the Interface Gateway application

The Interface Gateway application is the processing interface to the four-wire card on the server. The Interface Gateway uses a PCI audio device to bring four-wire audio into the Concert system.

Clear-Com currently supports the M-Audio - Delta 1010 © PCI audio device. The settings for this device are provided in **5 Interface Gateway: PCI audio device**.

© 2011 Avid Technology, Inc. Used with permission.

Important note:

You can use an M-Audio – Delta-44 © or M-Audio – Delta-66 © device in place of an M-Audio – Delta 1010 © device. However, you may be required to run a script to modify the audio levels if you install either card after installing EMS. For more information, see

5.2 Audio levels for the M-Audio – Delta-44 © and M-Audio – Delta-66 ©.

3.4.1 List of available Interface Gateway commands

For a list of available commands for the Interface Gateway, type:

```
# service ifgateway
```

The following list is returned:

```
Usage: service ifgateway {start|stop|restart|status|collect}
```

3.4.2 Starting the Interface Gateway service

To start the Interface Gateway, type:

```
# service ifgateway start
```

The command returns messages similar to the following:

```
Starting Concert ifgateway service...  
Concert ifgateway started with pid [pid number]
```

Note:

The **pid** is the process identification number.

3.4.3 Stopping the Interface Gateway service

To stop the Interface Gateway, type:


```
# service ifgateway stop
```

The command returns messages similar to the following:

```
Stopping Concert ifgateway service...  
Concert ifgateway is stopped.
```

3.4.4 Restarting the Interface Gateway service

To restart (stop and then start) the Interface Gateway service, type:

```
# service ifgateway restart
```

The command returns messages similar to the following:

```
Stopping Concert ifgateway service...  
Starting Concert ifgateway service...  
Concert ifgateway started with pid [pid number]
```

3.4.5 Discovering the status of the Interface Gateway service

To discover the status of the Interface Gateway, type:

```
# service ifgateway status
```

The command returns messages that tell you if the Interface Gateway is **running**, **starting /started**, or **stopping / stopped**.

3.4.6 Collecting Interface Gateway logs

The collect command collects the log files (trace logs, config files, startup scripts, database logs and package versions) for the Interface Gateway, places them in a zip file and tells you where the zip file is located.

Collecting and zipping up the log files in this way makes it easier to send this information to your technical support team.

To collect the Interface Gateway log files, type:

```
# service ifgatway collect
```

3.4.7 Managing the Interface Gateway in the EMS web interface.

You can use the EMS web interface to perform a range of Interface Gateway management and configuration tasks, including:

- Adding an Interface Gateway (includes selecting the IV-R, defining the IV-R and management ports, and configuring the audio QoS settings for the Interface Gateway).
- Removing the Interface Gateway.
- Updating Interface Gateway settings
- Configuring and managing Port – Channel connections


For more information, see:

- **3.2.10 EMS web interface.**
- The *Concert EMS User Guide*.

3.4.8 Interface Gateway config file

You are only required to modify the Interface Gateway config file (**ifgateway.conf**) when modifying the TCP and UDP ports used by Concert. For more information, see **4 Advanced configuration**.

7 Troubleshooting

Issue	Cause(s)	Solution(s)
<p>When trying to uninstall the EMS and/or IV-R rpms, an error message is displayed:</p> <p>error: Failed dependencies</p>	<p>May occur if other installed software is utilizing the same shared libraries as either the IV-R or EMS.</p> <p>This error has only been observed when a conflict exists with the base installation of gstreamer-plugins-good-0.10.4-2.el5.i386.</p>	<p>To force the IVR or EMS uninstall, specify “-nodeps” in the rpm command:</p> <pre># rpm -e -nodeps concert-ems</pre>
<p>Instead of the EMS web UI, the Apache 2 Test Page is shown.</p>	 <p>Figure 2: Apache 2 Test Page</p> <p>Apache has been installed, but the EMS server application has either:</p> <ul style="list-style-type: none"> • Been uninstalled. • Has not yet been installed. 	
<p>EMS web UI is either completely or partially unreachable.</p>	<p>Verify your ability to contact the EMS web server. After entering the hostname of the EMS, an authentication dialog should be displayed requesting administrator credentials to access the UI.</p> <p>If this authentication dialog does not appear, then one of the following conditions may exist:</p> <ul style="list-style-type: none"> • Hostname or IP address entered for the EMS server is incorrect. 	<p>Enter the correct hostname or IP address.</p>

	<ul style="list-style-type: none"> • Concert server address is not reachable from your current network. • Apache web server running on the Concert server has not started. 	<p>To determine if the server is reachable, use the ping or telnet command.</p> <p>To verify that HTTP services are running on the Concert Server, execute the command:</p> <pre>service httpd restart</pre>
<p>Concert management web UI can be accessed, but EMS unreachable notification is displayed.</p>	<p>Condition may exist for the following reasons:</p> <ul style="list-style-type: none"> • EMS application is not started on the Concert Server. • Firewall and/or SELinux have been enabled but not properly configured on the Concert Server. 	<p>Execute the command:</p> <pre>service ems status.</pre> <p>If the EMS service is not started, then start EMS by executing the command:</p> <pre>service ems start.</pre> <p>Try disabling both the firewall and SELinux.</p>
<p>Concert management web UI can be accessed, but the IV-R statistics page states that the IV-R is unreachable.</p>	<p>Condition may exist for the following reasons:</p> <ul style="list-style-type: none"> • IV-R application is not started on the Concert Server. • IV-R is running on a different server than EMS, but the /usr/local/clearcom/concert/bin/concert_server.pem file has not been copied to the same directory on the remote server. • Firewall and/or SELinux have been enabled but not properly configured on the Concert Server. 	<p>Execute the command: <code>service ivr status.</code></p> <p>If the IV-R service is not started, then start the IV-R by executing the command:</p> <pre>service ivr start.</pre> <p>Copy the file to the correct location. For the settings to take effect, reboot IV-R on the remote server.</p> <p>Try disabling both the firewall and SELinux.</p>

<p>Uninstalling concert-pgsq1 rpm deleted the database.</p>	<p>Uninstalling concert-pgsq1 rpm removes the database, destroying all data.</p>	<p>Back up the database before uninstalling using the following scripts in the application folder:</p> <ul style="list-style-type: none"> • backup.bash • restore.bash
<p>Interface Gateway application fails to start.</p>	<p>May be caused by missing ALSA dependency within your Linux distribution.</p>	<p>Enter the following command:</p> <pre># rpm -q alsa-lib</pre> <p>You should receive a response similar to the following:</p> <pre>alsa-lib-1.0.17-1.e15</pre> <p>If the ALSA dependency is missing, you receive the following result instead:</p> <pre>package alsa-lib is not installed</pre> <p>Use yum to install the missing ALSA dependency (you require an internet connection):</p> <pre># yum install alsa-lib.i386 alsa-lib.i386 0:1.0.17-1.e15 base 412 k</pre> <p>Then reboot:</p> <pre># reboot</pre>

Table 14: Troubleshooting