



**Dialogic<sup>®</sup> IMG 1010/1004 Integrated Media  
Gateway  
Upgrading System Software**

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## Technical Support

Technical Support Number: 781-433-9600

Technical Support Fax: 781-449-9520

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## IMPORTANT NOTE:

Please be aware that the following terminology and abbreviations are used throughout this document. Please also be sure to consult the legal notice for other important details.

When used herein, the term "IMG 1010" refers to the "Dialogic<sup>®</sup> IMG 1010 Integrated Media Gateway" product.

When used herein, the term "IMG 1004" refers to the "Dialogic<sup>®</sup> IMG 1004 Integrated Media Gateway" product.

When used herein, the term "GCEMS" refers to the "Dialogic<sup>®</sup> Gate Control Element Management System"

## Upgrading to System Software 10.5.1

**Topic Location:** Introduction

For latest revision of this procedure, see online documentation at <http://www.dialogic.com/manuals>

### Overview:

#### Summary of Topic:

- Upgrade GCEMS Software from (10.3.3:x or 10.5.0:x) to Software 10.5.1:x and above
- Upgrade IMG switch software from (10.3.3:x or 10.5.0.x) to Software 10.5.1.x and above

**IMPORTANT NOTE: Upgrading directly from Software Version 10.3.2 to 10.5.0 or beyond is not supported. When upgrading from software 10.3.2 to a 10.5.x or beyond, first upgrade from Software version 10.3.2 to 10.3.3. Once this is accomplished, you can then upgrade to the 10.5.x software.**

#### Time Requirements:

- Time required to execute upgrade - Approximately 1 hour
- Call processing downtime - Approximately 10 minutes

### Preliminary:

Prior to upgrading the IMG software perform the following:

1. Observe the status of each of the entities listed below. Entities that were not in service before the upgrade should not be expected to be in service after the upgrade.
  - Spans
  - Channels
  - ISDN D-Channels
  - SS7 Links
  - Network Interfaces
  - ClientView users that are logged in. Notify them of the pending upgrade and have them log off.
2. Acquire the desired IMG system software from the Dialogic Support Technical website located at <http://www.dialogic.com/support>.
3. Select '**Downloads**'. You will require a logon username and password to access the downloads site. (A support contract is needed to access this site.) Within this site will be two software binary files. Download the latest version of these files. If access to the downloads site is needed contact the Dialogic Technical Support Team through one of the sources below:

Email -- [americas.support@dialogic.com](mailto:americas.support@dialogic.com)

Phone -- +1-781-433-9600

4. Backup system software and system configuration before upgrading. If upgrading from system software version 10.5.0: x the configuration piece can be automatically backed up using the [ClientView Support Object](#). Once backed up continue to Step 7. If upgrading from software 10.3.x the backing up of files will need to be done manually. Follow Steps 5 and 6 below to back up files manually.

**NOTE:**

Copy all Configuration Files, System Software Files, and license files to another location on the GCEMS server or to another server.

5. In ClientView, select **File --> Save Configuration File**. This will save the .csa file located in the config directory.
6. Make a copy of the current configuration file by renaming the present configuration file to "configurationfile\_old". Follow steps below to rename.
  - A. In ClientView, select the Configuration Object. The configuration object is the first entry in the configuration pane located on the left side of the ClientView screen
  - B. Once selected double click in the text box marked User-Specified in the filename field
  - C. When text box becomes white, edit the file with the new title.
  - D. Commit and then save the new file by selecting File --> Save from main menu
  - E. If there are any other files stored in /opt/dialogic/common/config directory it is wise to back them up also.
  - F. Backup any license files located in /opt/dialogic/common/license
7. Verify that the config and license directories in /opt/dialogic/common folder are archived also.

**Note:**

Installing new software will automatically create a local backup by simply renaming the entire /opt/dialogic folder to /opt/dialogic\_<timestamp>. However, It is advisable to backup the files explained above before attempting the upgrade.

## Installation:

### Transfer/Copy System Software Files:

Transfer via FTP the new software to the GCEMS server. Software files must be transferred in binary mode and the Username and Password for FTP are as follows:

Username: excelsw

Password: excelsw

1. Transfer the file IMG\_10.5.1.xx.bin to the /home/excelsw/ftpBuilds directory.
2. Transfer the file IMGUserInterface\_10.5.1.xx.bin to /home/excelsw/ftpBuilds.
3. Transfer img1010\_ver1051xxx\_id0101.bin to either the /home/excelsw/ftpBuilds directory or the location indicated in the dhcpd.conf file. The dhcpd.conf file is located in the /etc directory. Within this file there is a line which states <filename "ftpBuilds/IMG1010\_id0101.bin">. This is the directory path to the IMG software.
4. If using an SD Card to load system software, appropriate files must be transferred to the card. Files can be transferred to the SD card in one of two ways:
  - 10.5.2, 10.5.1, and 10.5.0 software gives you the ability to transfer files to and from the SD Card through FTP. See **IMG 1010-SD Card Remote Provisioning** or **IMG 1004-SD Card Remote Provisioning** in online documentation.
  - The second way is to use an SD Card Reader and copy the files through use of the reader. See **IMG 1010-Downloading IMG System Software from an SD Card** or **IMG 1004-Downloading IMG System Software from an SD Card** in online documentation.

### Installing GCEMS System Software Files:

**Note:** Up-revving the GCEMS Software does not contain any specific service-affecting steps. Calls will continue to process on the IMG while the GCEMS software is being up-revved.

### IMPORTANT!

All GCEMS applications must be stopped before upgrading.

1. Shutdown the current GCEMS Applications.
  - Close the ClientView GUI.
  - Close the AdminView Application Terminal (If AdminView is open)
  - Run 'StopGCEMS' to shutdown all GCEMS processes (double click on the StopGCEMS icon)

### Note:

If there isn't a StopGCEMS desktop ICON, the GCEMS application can be stopped by running StopGCEMS from the installs folder located at opt/dialogic/installs/IMG\_10.5.1.XX/GateControlEMS/bin. (./StopGCEMS)

2. Open a terminal on the GCEMS server and become a root/superuser by entering the command:

```
$ su  
Password: excel2
```

3. Change the mode to executable for the following files. This is accomplished by executing the following commands

```
# chmod +x IMG_10.5.1.xxx.bin  
# chmod +x IMGUserInterface_10.5.1.xxx.bin
```

4. Install GCEMS software.

```
# ./IMG_10.5.1.xxx.bin (xxx=build number) (Follow the prompts.)
```

IMG\_10.5.1.xxx.bin will be installed in the directory /opt/dialogic/installs/IMG\_10.5.1.xxx. You will be prompted to log out and then log back in. Do not log out yet, you will be prompted to log out later in installation process.

5. Install the IMG User Interface

```
# ./IMGUserInterface_10.5.1.xxx.bin (xxx=build number) (Follow the prompts)
```

IMGUserInterface\_10.5.1.xxx.bin will be installed in the directory /opt/dialogic/installs/IMGUserInterface\_10.5.1.xxx

6. At the end of the previous step you will be prompted to log out. Log out as root user by entering the "exit" command.
7. If you are using RADIUS, replace the existing dictionary and dictionary.cantata files in /usr/share/freeradius with the updated files located in /opt/dialogic/common/radius and restart the RADIUS server.

**Note:**

A new license file will be required if upgrading from version 10.3.x:x to 10.5.x

## Installing IMG System Software

1. The FTP server (usually residing on the GCEMS host computer) needs to be configured to allow ftping the files. Use one of the following methods below which configures GCEMS to allow loading of latest system software into the IMG.
  - A pathname to the specific file that is to be installed **-or-**
  - Have a common link (img1010\_id0101.bin) in the ftp server that points to the specific file.

### Note:

Creating a common/symbolic link will reduce upgrade time by eliminating the need to edit the /etc/dhcpd.conf file and restart the host FTP services. Create the symbolic link using one of the two methods explained below:

### Method 1: (Create link manually)

1. In the GCEMS server, go to the ftpBuilds folder located at /home/excelsw/ftpBuilds. In this folder will be a file titled img1010\_ver1051xxx\_id0101.bin. (1051=10.5.1 software and xxx=build number of the software). Execute the following commands within this folder.

```
$ ln -sf img1010_ver1051123_id0101.bin img1010_id0101.bin
```

The command above will create a link connecting software 10.5.1 and software build 123 to the filename img1010\_id0101.bin)

2. To confirm the link has been created, enter the command

```
$ ls -la
```

3. The Response below will be displayed in the ftpBuilds list:

```
lrwxrwxrwx 1 root root 27 Jun 21 09:27 img1010_id0101.bin ->  
img1010_ver1051123_id0101.bin
```

This verifies that the link created points to the correct .bin file.

### Method 2: (Use Inimg script)

1. A time saving script has been written that will also create the symbolic link described above. Follow the procedure below to create the symbolic link using this tool.
2. Copy file Inimg located in /opt/dialogic/common/osconfig to /home/excelsw/ftpBuilds.
3. From the ftpBuilds run the Inimg script

```
./Inimg
```
4. Follow the instructions and enter the 1051xxx (1051 = 10.5.1) for version and build number.
5. A response "Link Created --> img1010\_ver1051123\_id0101.bin  
img1010\_id0101.bin" will be output.
6. Executing the ls -la command as shown above, verify that the link was created.

## Re-Start IMG System Software:

1. If changes were made to the dhcpd.conf file it will be necessary to restart the dhcpd service. The service can be restarted by root user only.

```
# /sbin/service dhcpd restart
```

2. If you are installing the IMG software from an SD card, insert the card into the SD slot on the IMG. See SD Card information in the links above or in the IMG online documentation.
3. Restart GCEMS. See **Start GateControlEMS** in online documentation
4. Restart ClientView. See **Starting ClientView** in online documentation
5. Load the desired configuration file. Click the load button to open and commit the configuration file (.csa)

### **Note:**

At this point all IMG's will be reset.

### **IMPORTANT:**

If upgrading from 10.3.x make certain the correct license file is loaded

6. Verify that all nodes return to online state.
7. Verify all spans that were in service prior to upgrade return to in-service state.
8. Verify calls are being processed to all trunk groups

## Post-Installation:

### **File Clean-Up**

Backup and remove all unused log, license and configuration files from the /opt/dialogic folders.