



Office of Information Technology  
**SDSD Support Branch**

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# **Upgrading the G6 Firmware for Decentralized Servers**

Product Code SW1208FRW

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## Text Conventions

All SDSD documents use the following conventions to provide instructions and convey information:

Item	Convention	Example
Information you type	Bold; monospace	<b>compress /tmp/outside.tar</b>
Variables for which you supply a value	Bold italic monospace	<b>passwd <i>password</i></b>
Information displayed by system	Monospace	Installation was successful!
Directory and file names; field names	Bold	<b>/tmp/outside.tar</b>
Key names and combinations	Small caps	ENTER; ALT+TAB
Menu names	Bold; title case	<b>File</b> menu
Information that we want to highlight	Yellow highlight	<b>cacbapp.cacb.circ9.dcn cacbapp</b>

## CM/ECF Conventions

CM/ECF documents use variables and naming conventions to standardize how CM/ECF-related information is presented.

### Variables

CM/ECF documents use the following variables:

Variable	Description	Example
<i>courtID</i>	A unique identifier for your court unit that is comprised of the court's three-character abbreviation followed by one of the following: <ul style="list-style-type: none"><li>The first letter of the court type (Bankruptcy=b and District=d).</li><li>The court's circuit number.</li></ul>	<ul style="list-style-type: none"><li>deb</li><li>txnd</li><li>ca1</li></ul>
<i>circ#</i>	Your court's circuit number	circ1
DBNAME	The Informix database for the <b>test</b> , <b>live</b> , or <b>train</b> application.	<ul style="list-style-type: none"><li>txwb_live</li><li>ca1_test</li></ul>

## Naming Conventions

The CM/ECF project has adopted a set of standard naming conventions to identify servers and databases.

### FQDN

The CM/ECF project uses the following naming conventions to identify the Fully Qualified Domain Name (FQDN) of the server:

Server	FQDN	Example
DB	<i>courtID</i> db. <i>courtID</i> . <i>circ#</i> .dcn	testdb.test.circ#.dcn
Web	<i>courtID</i> web. <i>courtID</i> .uscourts.gov	testweb.test.uscourts.gov

### Alias/URL

The following naming conventions identify the alias (also called the URL) of the database on each server:

Server	Alias/URL	Example
DB	ecf. <i>courtID</i> . <i>circ#</i> .dcn ecf-[ live   test   train ]. <i>courtID</i> . <i>circ#</i> .dcn	ecf.test.circ#.dcn ecf-test.test.circ#.dcn or ecf-train.test.circ#.dcn
Web	ecf. <i>courtID</i> .uscourts.gov ecf-[ live   test   train ]. <i>courtID</i> .uscourts.gov	ecf.test.uscourts.gov ecf-test.test.uscourts.gov or ecf-train.test.uscourts.gov

# Contents

<b>Overview .....</b>	<b>1</b>
<b>System Availability .....</b>	<b>1</b>
<b>Installing the Firmware .....</b>	<b>1</b>

# Overview

This document provides instructions for upgrading the firmware on decentralized *Backup (BU)*, *Database (DB)*, and *Web* DL380 G6 HP servers after you upgrade System Management Homepage (SMH).



**CAUTION** These instructions are not intended for use on centralized servers.

## System Availability

The *BU* server firmware can be upgraded during operational hours, after backups complete. However, the firmware for the *DB* and *Web* servers must be upgraded during scheduled downtime.



**IMPORTANT** It takes approximately 1 hour to download the firmware DVD ISO image, about 10 minutes to burn the image onto DVDs, and 30 to 70 minutes to run the DVDs on each server.

## Installing the Firmware

This section provides instructions for installing the firmware upgrade on a server. You should install this upgrade on all three servers, but you should start with the *BU* server first.

### To install the firmware upgrade

1. From the console, log on to the server as the **root** user.



**NOTE** You cannot perform steps 2-5 from the *Web* server. You can perform them from the *Live DB* server. However, the IT Systems Deployment and Support Division, Support Branch (SDSD-SB) recommends you use the *BU* server to avoid any extra load on the production server.

2. From the **root** user's home directory, download the ISO zip file:

```
wget --limit-rate=1M ftp://path/hpSPP-2012.08.iso.zip
```



**IMPORTANT** The `--limit-rate` parameter is included because the file is 2.2 gigabytes (GB).



**TIP** You can also download the ISO zip file from a PuTTY session, unzip it, burn it to a disk, and then go to the console.

- Unzip the file you downloaded in step 2:

```
unzip hpSPP-2012.08.iso
```

- Ensure the hash for the ISO file you unzipped in step 3 is **hpSPP-2012.08.iso**:

```
md5sum -c hpSPP-2012.08.iso.md5sum
```

The following output should appear:

```
hpSPP-2012.08.iso: OK
```



**NOTE** If the MD5 hashes are different, the file is corrupt or the versions are different. Download the file again and retry.

- Scan all Small Computer System Interface (SCSI) devices on all SCSI buses:

```
cdrecord -scanbus
```

- Find your CD device ID.

- Burn two copies of the DVD-R disc:

```
cdrecord -v -dao driveopts=burnfree dev=cd_device /sofile_path_and_filename
```



**NOTE** Burning two discs now, before the scheduled downtime, allows you to run both Web and DB server firmware upgrades at the same time, minimizing downtime.



**IMPORTANT** You must use DVD-R disks. If you use DVD+R discs, the following message appears:

```
cdrecord: Found DVD+ media but DVD+R/DVD+RW support code is missing.
cdrecord: If you need DVD+R/DVD+RW support, ask the Author for cdrecord-ProDVD.
cdrecord: Free test versions and free keys for personal use are at
ftp://ftp.berlios.de/pub/cdrecord/ProDVD/
cdrecord: Sorry, no CD/DVD-Recorder or unsupported CD/DVD-Recorder found on
this target.
```

- With the second copy of the DVD-R that you just burned still in the drive, reboot the server:

```
shutdown -r now
```

The system reboots from the DVD-R disc and prompts you to choose between performing an automatic or interactive update (after 30 seconds automatic is selected by default).



**TIP** If the DVD fails to boot properly and causes an error message about not being able to mount the file system to appear, press the power button and reboot the system with the DVD in the drive.



**TIP** Maintenance windows present a good time to cold boot a system. Try unplugging the power cables from the back of the system for about five minutes.

9. Press ENTER.

The **HP Smart Update Manager** automatically performs the installation. After about 40 minutes, the server ejects the CD and reboots back into the Operating System (OS).



**IMPORTANT** You do not have to press ENTER. If you wait for a few seconds, the **HP Smart Update Manager** automatically selects the default value and begins the installation.

10. Remove the DVD-R disc from the drive.

11. Ensure the appropriate firmware versions were installed for each component:

Component to Check	Command to Run	Expected Output
System BIOS	<code>dmi decode   grep "Release Date"   head -n1   awk '{print \$3}'</code>	5/5/2011
Broadcom	<code>ethtool -i eth0   grep firmware</code>	firmware-version: bc 5.2.3 NCSI 2.0.12
iLO2 <sup>1</sup>	<code>hponcfg -g   grep Firmware   awk '{print \$4}'</code>	2.12
Smart Array P410i Controller	<code>cat /proc/driver/cciss/cciss0   grep Firm   awk '{print \$3}'</code>	5.70
Smart Array P212 Controller* (BU Server only)	<code>cat /proc/driver/cciss/cciss1   grep Firm   awk '{print \$3}'</code>	5.70

1. This component requires that hponcfg be installed. For installation instructions, see *Upgrading and Configuring SMH*, which is available at: <http://support.sdsd.ao.dcn/books/CM/SW/SMH/Upgrade/SW0000SMH/intro.asp>

12. Insert the DVD-R discs you burned in step 7 into both of the remaining servers (DB and Web), and then reboot them:

```
shutdown -r now
```

13. The systems reboot from the DVD-R discs and prompt you to choose between performing an automatic or interactive update (after 30 seconds automatic is selected by default).
14. Log on to the server, and then run the following command to notify SDSD-SB that you completed the upgrade:

```
curl http://path/$HOSTNAME
```



**TIP** This notification is important because it enables SDSD-SB to proactively plan for future hardware upgrades

15. Repeat steps 9-11 for each remaining server (such as *DB* or *Web*).