



# CHAPTER 1

## Starting and Shutting Down the BTS

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Revised: September 25, 2009, OL-12797-09

### Introduction

This chapter tells you how to startup and shutdown the BTS.

### Meeting Power Requirements

To meet high availability requirements:

- Do *not* have common parts in the power feeds to the redundant hardware that could be a common single point of failure.
- Use uninterruptible power supply (UPS) for both AC and DC systems. It must be designed to support system operation through any possible power interruption. Power must have battery backup to maintain service in the event of commercial power failure (both power supplies of the redundant pair must be able to do this).
- For AC-powered installations have two separate (redundant) circuits. Source AC circuits from separate transformer phases on separate breakers so a single breaker trip does not disable both.
- For DC-powered installations have power from two separate dedicated DC branches (redundant A and B feeds) for each DC-powered BTS.

### Starting BTS Hardware

The time it takes to complete this procedure varies with system type and database size. System types include:

- EMS—Element Management System
- BDMS—Bulk Data Management System
- CA—Call Agent
- FS—Feature Server

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**Step 1** Ensure all power cables connect to the correct ports.

- Step 2** Plug in Catalyst switch routers.
  - Step 3** Power on EMS/BDMS sides A and B.
  - Step 4** Power on CA/FS sides A and B.
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## Shutting Down BTS Hardware

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- Step 1** Ensure CA Side A and EMS Side A are active.
  - Step 2** Ensure CA Side B CA and EMS Side B EMS are standby.
  - Step 3** Log into CA Side A and B and EMS Side A and B using Secure Shell (SSH).
  - Step 4** Shut down the system in order:
    1. EMS Side B
    2. CA Side B
    3. CA Side A
    4. EMS Side A
  - Step 5** To begin platform shutdown: `platform stop all`
  - Step 6** When `#>` returns, enter `nodestat` to ensure the operating system is ready for shutdown.
  - Step 7** To shut down the servers, enter one of the following commands for each node (Sun Microsystems recommends both as graceful shutdowns).
 

```
shutdown -i5 -g0 -y
```

Or:

```
sync;sync; init5
```

Observe when the SSH sessions disconnect. The unit is ready to power off when the light on the front panel reads “HALTED” or “Coma.” When all are in HALTED or Coma state, continue to [Step 8](#).
  - Step 8** To power off primary and secondary CAs and FSs find the switch to the left of the LEDs and flip it to OFF.
  - Step 9** When the fans stop, release the switch to neutral.
  - Step 10** To power off primary and secondary EMSs find the switch to the left of the LEDs and flip it to OFF.
  - Step 11** When the fans stop, release the switch to neutral.
  - Step 12** To power off the Catalysts, unplug them.
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## Starting BTS Software

BTS automatically starts when you power on the server. Repeat this procedure for each server.

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- Step 1** Enter `nodestat`.
- Step 2** Log in as `root`.
- Step 3** Enter `platform start`.

**Step 4** Once all components start, enter `noreset` to ensure proper startup.

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