



# **Restore and verify the system configuration - AFF A400**

ONTAP Systems

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# Table of Contents

- Restore and verify the system configuration - AFF A400 . . . . . 1
  - Step 1: Set and verify system time after replacing the controller . . . . . 1
  - Step 2: Verify and set the HA state of the controller module . . . . . 1
  - Step 3: Run diagnostics . . . . . 2

# Restore and verify the system configuration - AFF A400

After completing the hardware replacement and booting to Maintenance mode, you verify the low-level system configuration of the replacement controller and reconfigure system settings as necessary.

## Step 1: Set and verify system time after replacing the controller

You should check the time and date on the replacement controller module against the healthy controller module in an HA pair, or against a reliable time server in a stand-alone configuration. If the time and date do not match, you must reset them on the replacement controller module to prevent possible outages on clients due to time differences.

### About this task

It is important that you apply the commands in the steps on the correct systems:

- The *replacement* node is the new node that replaced the impaired node as part of this procedure.
- The *healthy* node is the HA partner of the *replacement* node

### Steps

1. If the *replacement* node is not at the LOADER prompt, halt the system to the LOADER prompt.
2. On the healthy node, check the system time: `show date`

The date and time are given in GMT.

3. At the LOADER prompt, check the date and time on the *replacement* node: `show date`

The date and time are given in GMT.

4. If necessary, set the date in GMT on the replacement node: `set date mm/dd/yyyy`
5. If necessary, set the time in GMT on the replacement node: `set time hh:mm:ss`
6. At the LOADER prompt, confirm the date and time on the *replacement* node: `show date`

The date and time are given in GMT.

## Step 2: Verify and set the HA state of the controller module

You must verify the HA state of the controller module and, if necessary, update the state to match your system configuration.

1. In Maintenance mode from the new controller module, verify that all components display the same HA state: `ha-config show`

The HA state should be the same for all components.

2. If the displayed system state of the controller module does not match your system configuration, set the HA state for the controller module: `ha-config modify controller ha-state`

The value for HA-state can be one of the following:

- ha
  - mcc
  - mcc-2n
  - non-ha
3. If the displayed system state of the controller module does not match your system configuration, set the HA state for the controller module: `ha-config modify controller ha-state`
  4. Confirm that the setting has changed: `ha-config show`

## Step 3: Run diagnostics

After you have replaced a component in your system, you should run diagnostic tests on that component.

Your system must be at the LOADER prompt to start diagnostics.

All commands in the diagnostic procedures are issued from the node where the component is being replaced.

1. If the node to be serviced is not at the LOADER prompt, reboot the node: `system node halt -node node_name`

After you issue the command, you should wait until the system stops at the LOADER prompt.

2. At the LOADER prompt, access the special drivers specifically designed for system-level diagnostics to function properly: `boot_diags`
3. Select **Scan System** from the displayed menu to enable running the diagnostics tests.
4. Select **Test system** from the displayed menu to run diagnostics tests.
5. Select the test or series of tests from the various sub-menus.
6. Proceed based on the result of the preceding step:
  - If the test failed, correct the failure, and then rerun the test.
  - If the test reported no failures, select Reboot from the menu to reboot the system.



During the boot process, you might see the following prompts:

- A prompt warning of a system ID mismatch and asking to override the system ID.
- A prompt warning that when entering Maintenance mode in an HA configuration you must ensure that the healthy node remains down. You can safely respond `y` to these prompts.

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