HP Continuous Delivery Automation

for the Microsoft Windows and Linux operating systems

Software Version: 1.00

Troubleshooting Guide

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1 About This Guide

Purpose of This Document

This document provides troubleshooting information for HP Continuous Delivery Automation (HP CDA), including basic triage information.

Triage

HP CDA integrates with several other products. First, you must determine which product or integration has failed. In order to triage issues in HP Continuous Delivery Automation, see the following table that provides the log file location details. The list includes the details of products that integrate with HP Continuous Delivery Automation.

Product	Location of Log Filed	Additional Information
HP Continuous Delivery Automation	General product logging: <InstallDir>\ <jboss version>\standalone\log\cda_debug .log	*HP Continuous Delivery Automation Installation and Configuration Guide*
HP Continuous Delivery Automation Installer	Installer Log: <InstallDir>\ log\install.log	*HP Continuous Delivery Automation Installation and Configuration Guide*
HP SiteScope	<InstallDir>\SiteScope\logs\error.lo g	HP SiteScope Documentation available at: **http:// h20230.www2.hp.com/ selfsolve/manuals**
HP Diagnostics	<InstallDir>\MercuryDiagnostics\S erver\log\server.logs	HP Diagnostics Documentation available at: **http:// h20230.www2.hp.com/ selfsolve/manuals**
Nagios	/usr/local/nagios/var/nagios.log	Nagios documentation

Determine Where the Integration is Failing

In some cases, you can determine quickly which product has failed. If the problem source is not obvious, you can check log files or run verification tests to isolate the cause. If the source of the failure is one of the integrated products, see the HP CDA Support Matrix for resource information. The HP Continuous Delivery Automation Support Matrix can be found on the **http://h20230.www2.hp.com/selfsolve/manuals/** web site.

Check Log Files

Log files exist for most of the integrated products. Check the log files to identify the cause of the failure.

Verify Individual Products

The *HP Continuous Delivery Automation Installation and Configuration Guide* contains installation checkpoints prior to product integration and end-to-end verification after configuration. Verification tasks for individual products are provided in the respective product documentation.

2 Troubleshooting HP Continuous Delivery Automation Access Errors

Problem: Errors While Accessing the HP Continuous Delivery Automation Console

Symptoms	Errors while accessing the HP Continuous Delivery Automation console or while executing the startup script for HP Continuous Delivery Automation:
	• You might see the following error when accessing HP Continuous Delivery Automation through a browser: Your browser must support Java script in order to use this application.
	• You might see the following message when you execute the startup script serverstart.bat: JAVA_HOME must be set!
Primary Software Components	HP Continuous Delivery Automation
Failure Message	• Your browser must support Java script in order to use this application.
	• JAVA_HOME must be set!
Probable Cause	JAVA_HOME variable is not present or defined in the system PATH variable on the computer where HP Continuous Delivery Automation is installed.
For More Information	See the *HP Continuous Delivery Automation Installation and Configuration Guide* for more details regarding HP Continuous Delivery Automation configuration.

Solution:

Add a valid JAVA_HOME path to the system PATH variable as follows:

1 On the system where HP Continuous Delivery Automation is installed, right-click **Computer** and select **Advanced System Settings** > **Environment Variables** > **System Variables** > **Path**.

2   Click **New** and provide the **Path** name as `JAVA_HOME` and the **Variable** as the `< JDK installation location >`

Problem: Logging on to HP Continuous Delivery Automation Displays a Blank Page

Symptoms	HP Continuous Delivery Automation application times out and presents a login screen. On providing the credentials, the application displays a blank screen.
Primary Software Components	HP Continuous Delivery Automation
Failure Message	Not Applicable
Probable Cause	Session time out
For More Information	Not applicable

Solution:

1   Make sure that the HP CDA service is running by going to the `<Install_Dir>\bin` directory. `<Install_Dir>` refers to the directory where HP CDA is installed.

2   If the HP CDA service is not running, start the service by running the `serverstart.bat` script.

3   Log on to the HP Continuous Delivery Automation application by switching to a new tab or instance of the browser.

Deleted Parameter Values Retained While Editing a New Parameter

Symptoms	This issue occurs when you delete an existing parameter, add a new parameter, and then try to modify the values of the newly added parameter. HP Continuous Delivery Automation retains the values of a deleted parameter in the user interface at times when you try to modify the values of a newly added parameter.
Primary Software Components	HP Continuous Delivery Automation

Symptoms	This issue occurs when you delete an existing parameter, add a new parameter, and then try to modify the values of the newly added parameter. HP Continuous Delivery Automation retains the values of a deleted parameter in the user interface at times when you try to modify the values of a newly added parameter.
Failure Message	Not Applicable
Probable Cause	Not Applicable
For More Information	Not applicable

Solution:

You can click **Cancel** to close the dialog box and try to modify the values of the parameter again.

Importing a User Causes Exception

Symptoms	After installing HP CDA with LDAP support, when you try to import a user using the **Search** feature a `java.lang.ClassCastException` is generated. This also results in a failure when you try to delete the imported user.
Primary Software Components	HP Continuous Delivery Automation
Failure Message	`java.lang.ClassCastException`
Probable Cause	Not Applicable
For More Information	See the solution provided.

Solution:

You can import the user from LDAP or Active Directory.

HP CDA Does Not Validate the Parameters

Symptoms	In the **Software** > **Parameters** screen, when you edit an existing parameter that has references to a deleted parameter and save the parameter, HP CDA does not validate the edited parameter. HP CDA does not show an error regarding reference to a deleted parameter.
Primary Software Components	HP Continuous Delivery Automation
Failure Message	Not applicable
Probable Cause	Not Applicable
For More Information	See the solution provided.

Solution:

Switch to a new tab to make HP CDA initiate the parameter validation process.

Events by all Users are not Visible for a Domain Administrator

Symptoms	Logging on as a domain administrator does not show you the events from all the users.
Primary Software Components	HP Continuous Delivery Automation
Failure Message	Not applicable
Probable Cause	Not Applicable
For More Information	Not applicable

Solution:

You can see the events for all the users if you log in as a administrator in HP CDA.

HP CDA Stops Responding

Symptoms	HP CDA stops responding in the following scenario:
	The Remote Desktop Protocol (RDP) used to access HP CDA gets terminated during an operation and HP CDA times out the current login session.
Primary Software Components	HP Continuous Delivery Automation
Failure Message	Not applicable
Probable Cause	Not Applicable
For More Information	Not applicable

Solution:

You can open a new session in a browser to resolve this issue.

The cdaexec Command Generates an SSLHandshakeException

Symptoms	The `cdaexec` command generates an `SSLHandShakeException` when you run model-related commands and job-related commands. This error occurs when HP CDA is configured to be accessed using SSL.
Primary Software Components	HP Continuous Delivery Automation
Failure Message	`SSLHandShakeException`
Probable Cause	Usage of HTTPS-based URL with the command.
For More Information	See the solution provided.

Solution:

You can configure non SSL based access for HP CDA and use an HTTP-based URL with the command.

Unable to Access Resources Outside the Local Network Using HP CDA

Symptoms	Unable to access resources outside the local network by using HP CDA.
Primary Software Components	HP Continuous Delivery Automation
Failure Message	Not applicable
Probable Cause	This problem occurs if you have not configured an HTTP proxy in HP CDA using the `server.bat` file.
For More Information	See the solution provided for resolving this issue.

Solution:

Configure an HTTP proxy in HP CDA to access resources outside the local network as follows:

1   Open the `serverstart.bat` or the `serverstart.sh` file depending on the operating system you are using to run HP CDA.

2   Add the required HTTP proxy configuration to your environment as follows:

```
set JAVA_OPTS=%JAVA_OPTS% -Dhttp.proxyHost=<proxy-server fqdn>
-Dhttp.proxyPort=<proxy port>
```

3 Troubleshooting Integration Issues with Other HP Applications

Integration with HP MOE Stops Working when an HTTP Proxy is Configured in HP CDA

Symptoms	HP CDA fails to connect to the HP SiteScope server deployed in a public cloud environment while importing the monitoring templates. This issue occurs when an HTTP proxy is configured in HP CDA, which results in an integration failure with the HP MOE server.
Primary Software Components	HP Continuous Delivery Automation, HP Matrix Operating Environment. HP SiteScope.
Failure Message	ERROR [com.hp.mon.sis.importer.SitescopeConfigurationImportor] (HPSOASystinetAsyncExecutor20) Sitescope remote API error: java.net.ConnectException: Connection timed out: connect at org.apache.axis.AxisFault.makeFault(AxisFault.java:10
Probable Cause	This problem occurs if an HTTP proxy is configured in HP CDA using the `serverstart.bat` file (for Microsoft Windows platforms) or the `serverstart.sh` file (for Linux platforms) and when HP CDA uses the HTTP proxy to access resources in the local network.
For More Information	See the solution provided for resolving this issue.

Solution:

To resolve this problem, you can add the following line in the `serverstart.bat` file or the `serverstart.sh` file to configure HP CDA to ignore the HTTP proxy configured when accessing resources in the local network: `set JAVA_OPTS=%JAVA_OPTS% set JAVA_OPTS=%JAVA_OPTS% -Dhttp.proxyHost=<proxy-server fqdn> -Dhttp.proxyPort=<proxy port> -Dhttp.nonProxyHosts=<fqdn for MOE server>`

Connection Failure Between HP MOE and HP CDA

Symptoms	Connection fails between HP MOE and HP CDA
Primary Software Components	HP Continuous Delivery Automation, HP Matrix Operating Environment
Failure Message	`apache.cxf.jaxws.ServiceImpl.initializePorts(ServiceImpl.java:207) at org.apache.cxf.jaxws.ServiceImpl.(ServiceImpl.java:150) ... 16 more Caused by: javax.wsdl.WSDLException: WSDLException: faultCode=PARSER_ERROR: Problem parsing 'https://exampleio:51443/hpio/controller/soap/v4?wsdl'.: java.io.IOException: HTTPS hostname wrong: should be at com.ibm.wsdl.xml.WSDLReaderImpl.getDocument(WSDLReaderImpl.java:2111) at com.ibm.wsdl.xml.WSDLReaderImpl.readWSDL`  IP Address  `faultCode=PARSER_ERROR: Problem parsing 'https://1.1.1.1:51443/hpio/controller/soap/v4?wsdl'.:`  `Expecting fully qualified name.`  `'https://exampleio.ctc.example.qa.example.com:51443/hpio/controller/soap/v4?wsdl'`
Probable Cause	The problem might be due to one of the following reasons: • The Fully Qualified Domain Name (FQDN) of the HP MOE server is not configured in HP CDA. • The MOE Server URL in HP CDA, specified to connect HP CDA to HP MOE, does not include the name of the HP MOE server for which the HP MOE certificate is issued.
For More Information	See the following guides for more information: • *HP Continuous Delivery Automation Installation and Configuration Guide.* • *HP Continuous Delivery Automation User Guide.*

Solution:

To resolve this issue, try the following options:

- After specifying the connection parameters required to connect HP CDA to HP MOE, use the **Test Connection** option in HP CDA to validate all the connection parameters.

- Make sure that you have specified the FQDN of the HP MOE server in the MOE Server URL parameter.

- Make sure that you have included the name of the HP MOE server for which the HP MOE certificate is issued in the MOE Server URL parameter. For example, if the HP MOE certificate is issued to the server named MOE75, make sure that the MOE Server URL in HP CDA includes the server name as follows: **https://MOE75:51443/hpio**

Problem: HP MOE Test Connection Option Fails with Error

Symptoms	The **Test Connection** option for the configured HP MOE server fails with the Connection Failed message.
Primary Software Components	HP CDA, HP MOE
Failure Message	Connection Failed: sun.security.provider.certpath.SunCertPathBuilderException: unable to find valid certification path to requested.
Probable Cause	The HP MOE host certificate is not present in the client.truststore
For More Information	Not applicable

Solution:

When HP Continuous Delivery Automation is installed with the **Verify Certificates** option enabled, the code validates the complete hierarchy of the certificates involved in any HTTPS connection. This directly affects the HP MOE connectivity due to the way the default certificate is created in HP MOE.

Endpoint Properties

Hostname:		
Port Numbers:	☑ HTTP	8080
	☑ HTTPS	8443
Enforce HTTPS:	☐ Only generate HTTPS links	
Verify Certificates:	☐ Verify server certificates in initiated HTTPS connections	
Web Context:	cda	

To resolve this error, you must import the HP MOE certificate into the client.truststore in HP CDA. This establishes the trust between HP CDA and HP MOE. You can do as follows to import the HP MOE certificate:

1   Access the HP MOE server from a browser by going to the following URL: **https://<hpio server fqdn>:51443/hpio**

2   Click **Certificate Error** and then click the **Details** tab.

3   Click **Copy to File** and complete the wizard to save this file in a DER-encoded binary format.

4   On the HP Continuous Delivery Automation server, stop the application server by executing `serverstop.bat` or `serverstop.sh` depending on whether you use Microsoft Windows platforms or Linux platforms.

5   Open the command prompt or the command terminal based on the operating system you are using and change the directory to the `CDA_HOME/conf` (for Linux platforms) or the `CDA_HOME\conf` (for Microsoft Windows platforms) directory.

6   Run the following command to import the HP MOE certificate into the client.truststore:
    ```
    keytool -import -alias <some name> -keystore client.truststore -file <full
    path to the.cer file>
    ```

▶   This command prompts you for a trust store password. The default password is **changeit**.

7   After completing this operation, start the HP CDA application server by executing `serverstart.bat` or `serverstart.sh`.

8   Log on to HP Continuous Delivery Automation and go to **Administration** > **Servers** and access the HP MOE server configuration.

9   Run the **Test Connection** option and confirm that the option works.

Launching the HP ALM Execution Report Displays a Blank Page

Symptoms	Launching the HP ALM execution report from a remote machine using the host name of the HP ALM server displays a blank page.
Primary Software Components	HP CDA, HP ALM
Failure Message	Blank page
Probable Cause	Presence of hyphen (-) or underscore (_) symbols in the host name of the Microsoft Windows 2008 server that hosts the HP ALM server.
For More Information	See the solution provided.

Solution:

If you have the hyphen or the underscore symbols in the host name of the Microsoft Windows 2008 server that hosts the HP ALM server, you can access the server from a remote machine using the IP address of the server.

Deployment Failure When Using the HP Server Automation Deployer

Symptoms	Deployment fails when you use the HP Server Automation deployer.
Primary Software Components	HP CDA, HP SA
Failure Message	Encountered issue when attempting to execute a step......
Probable Cause	The realized platform gets a new IP address after a reboot operation.
For More Information	See the solution provided.

Solution:

Manually remove the HP Server Automation Agent and install the HP Server Automation Agent again as follows:

1   Launch the HP SA Client (SA NGUI)

2   Select **Devices - All managed Servers**

3   Right click the server and select **Deactivate Server and Delete Server** from the options listed in the context menu.

4   Log on to the virtual machine and select **Uninstall Program: SA Agent** from the Control Panel.

5   Scan for the new IP address from the **SA NGUI, Devices- Unmanaged Servers**, right click the server, and select **Manage Server** from the context menu.

This completes the procedure.

4 Troubleshooting Application Deployment and Provisioning

Read Timed Out Error During Provisioning

Symptoms	HP Continuous Delivery Automation might display a `Read Timed Out` error occasionally during a provisioning operation.
Primary Software Components	HP Continuous Delivery Automation
Failure Message	`Read Timed Out`
Probable Cause	This problem might occur due to a network communication issue.
For More Information	See the solution provided to resolve this issue.

Solution:

To resolve this issue, you can increase the values for the `connection time out` and the `receive time out` parameters while configuring the provisioning in HP Continuous Delivery Automation.

Problem: The Opscode Chef bootstrap Process Fails with a HostKeyMismatch Error

Symptoms	When you perform a provisioning operation immediately after a de-provision operation, the Opscode Chef bootstrap process fails with a `HostKeyMismatch` error.
Primary Software Components	Opscode Chef, HP Continuous Delivery Automation

Symptoms	When you perform a provisioning operation immediately after a de-provision operation, the Opscode Chef bootstrap process fails with a `HostKeyMismatch` error.
Failure Message	`HostKeyMismatch`
Probable Cause	During the de-provision operation, HP CDA un-registers the nodes from the Opscode Chef server, but does not clean up the information from the `known_hosts` file. During a subsequent provisioning, the IP address gets reused causing a `HostKeyMismatch` error.
For More Information	See the sample solution provided to resolve this issue. You can also see the latest Opscode Chef documentation for more information.

Solution:

Add the following lines to the file: `/usr/lib/ruby/gems/1.9.1/gems/chef-0.10.8/lib/chef/knife/bootstrap.rb`

```
begin
knife_ssh.run
rescue Net::SSH::AuthenticationFailed
unless config[:ssh_password]
puts "Failed to authenticate #{config[:ssh_user]} - trying password auth"
knife_ssh_with_password_auth.run
end
rescue Net::SSH::HostKeyMismatch => e
e.remember_host!
puts "Caught a HostKeyMismatch.  Retrying after calling remember_host!()"
knife_ssh.run
end
```

Problem: Running a Script on Microsoft Windows Platforms Generates an Error

Symptoms	When running a script on Microsoft Windows platforms, the following error might occur: `File cannot be loaded because the execution of scripts is disabled on this system. Please see "get-help about_signing" for more details..`
Primary Software Components	HP Continuous Delivery Automation, HP Server Automation
Failure Message	`File cannot be loaded because the execution of scripts is disabled on this system. Please see "get-help about_signing" for more details..`
Probable Cause	Windows PowerShell is not enabled to run the scripts.
For More Information	See the Windows PowerShell documentation.

Solution:

Change the PowerShell execution policy strategy on the target system as follows:

From PowerShell, run the following command to remove all the restrictions on PowerShell: `Set-ExecutionPolicy Unrestricted`

Problem: Unable to Register Servers with Deployers During Platform Provisioning

Symptoms	While provisioning a platform, the step to register servers with the deployer is reported as failed in the job report.
Primary Software Components	HP CDA, Opscode Chef
Failure Message	com.hp.arm.intg.deployer.api.DeploymentExc eption: Failed to register node(s): <node name(s)>. See the log file for details.
Probable Cause	Failure during the Opscode Chef bootstrap process executed by HP Continuous Delivery Automation.
For More Information	Not applicable

Solution:

Some of the reasons that might cause this failure along with the possible workaround options are as follows:

- HP Continuous Delivery Automation is unable to connect to the Opscode Chef server.

  Workaround: Make sure that a configuration for the Opscode Chef plug in is present under the **Administration** > **Plugin Configuration** section. Confirm that the Opscode Chef plug-in configuration details are correct and run **Test Connection** to confirm that HP Continuous Delivery Automation can access the Opscode Chef server.

- User name or password required for connecting to the provisioned servers is incorrect.

  Workaround: Make the required changes in the **Platform** > **Designer** tab for each server group and run the provision operation again.

- The Opscode Chef server is unable to connect to the target servers, which could be due to network issues or DNS issues.

  Workaround: Make sure that the SSH communication is working from the Opscode Chef server to the target nodes and run the provision operation again.

- The Opscode Chef server is unsuccessful in bootstrapping the target nodes.

  Workaround: Run the bootstrap operation manually from the Opscode Chef server and note if there are any errors during the operation. Based on the errors, you might want to review the **Opscode** website for solutions or refer to the section *Configuring the VM Templates with Opscode Chef-client Specific Files*.

Problem: The Platform Provisioning Process or the Application Deployment Process Runs for a Long Period of Time Without Getting Completed

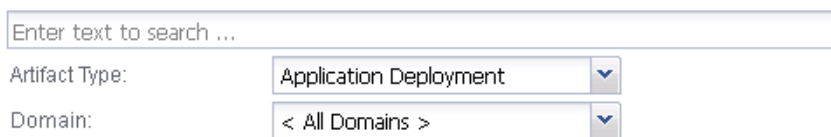|	
Symptoms	Platform provisioning or application deployment runs for a long period of time without getting completed.
Primary Software Components	HP Continuous Delivery Automation
Failure Message	Not Applicable
Probable Cause	If any of the steps for the platform provisioning process or the application deployment process includes a placed file component that is configured to use an external URL and if the URL is not accessible from the HP Continuous Delivery Automation server, the processes go into an infinite time out loop.
For More Information	Not applicable

Solution:

Cancel the platform provisioning process or the application deployment process. Configure the placed file component again to use the file from DSL and run the operation again.

Problem: Invoking the De-provision Operation Displays an Error Message

Symptoms	Unable to de-provision a provisioned platform.
Primary Software Components	HP Continuous Delivery Automation
Failure Message	De-provision is not possible as following realized topologies for this platform were found. <Realized Topology Name>
Probable Cause	A failed application deployment might have changed the state of the realized topology to an inconsistent state.
For More Information	Not applicable

Solution:

1   Click the **Applications** tab and click **Search**.

2   Select **Application Deployment** present under the **Artifact Type** and click **Search**.

Search

Enter text to search ...

Artifact Type: Application Deployment

Domain: < All Domains >

3   After the search process is complete, select the record which has the same name as the realized topology in the failure message and click **Delete**.

4   Click **Advanced Options** and clear the **Include Subartifacts** option and click **OK**.

Confirm Delete Operation

⚠ Are you sure you want to **delete** selected artifacts?

Advanced Options ▲

☐ Include Subartifacts
☐ Ignore Usage

OK   Cancel
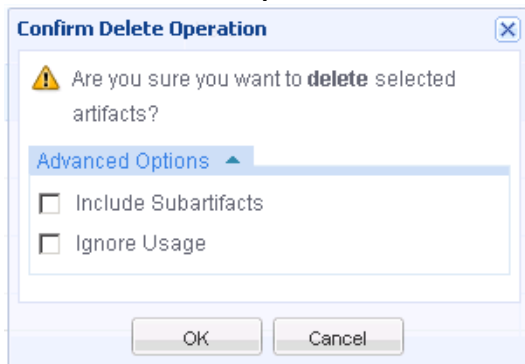
► If you do not clear the **Include Subartifacts** option, HP Continuous Delivery Automation deletes the application and platform components.

Problem: Failure in Deploying or Un-deploying an Application or Failure During Platform Provisioning

Symptoms	After installing HP Continuous Delivery Automation for the first time and configuring HP MOE, when you try to synchronize the HP MOE templates, the HP Continuous Delivery Automation server logs display the following SQLServerException:
	com.microsoft.sqlserver.jdbc.SQLServerException: Transaction (Process ID 90) was deadlocked on lock resources with another process and has been chosen as the deadlock victim. Rerun the transaction. This also results in a failure when you try to deploy or un-deploy an application or a failure when you try to provision a platform.
Primary Software Components	MS SQL Server 2008 R2
Failure Message	com.microsoft.sqlserver.jdbc.SQLServerException: Transaction (Process ID 90) was deadlocked on lock resources with another process and has been chosen as the deadlock victim. Rerun the transaction.
Probable Cause	Deadlock
For More Information	See the solution provided.

Solution:

Run the following queries in MS SQL Database to resolve this issue.

1 `alter database db_name set allow_snapshot_isolation on;`

2 `alter database db_name set read_commited_snapshot on;`

Problem: The Test Connection Operation for the Opscode Chef Server Plug-in Fails

Symptoms	**Test Connection** operation for the Opscode Chef server plugin fails
Primary Software Components	HP CDA, Opscode Chef
Failure Message	Test Connection failed: Failed to connect to Chef Server <server name\IP> for user <username>. Verify hostname, username, and password are entered correctly, that the Chef server is available over the network via SSH, and that the user is a valid Knife API client.
Probable Cause	`Knife node list` command failure with error
For More Information	Not applicable

Solution:

1   Log on to the Opscode Chef server using the credentials specified in the Opscode Chef server plugin.

2   Run the `knife node list` command and make sure that the results are correct with no errors reported.

3   Run the **Test Connection** operation again.

Problem: Failure to Register Nodes in Opscode Chef Server

Symptoms	Clock error in the server log and failure to register nodes in the Opscode Chef server.
Primary Software Components	HP CDA, Opscode Chef
Failure Message	See the following screen capture.
Probable Cause	Time mismatch between the Opscode Chef server and the Target server.
For More Information	Not applicable
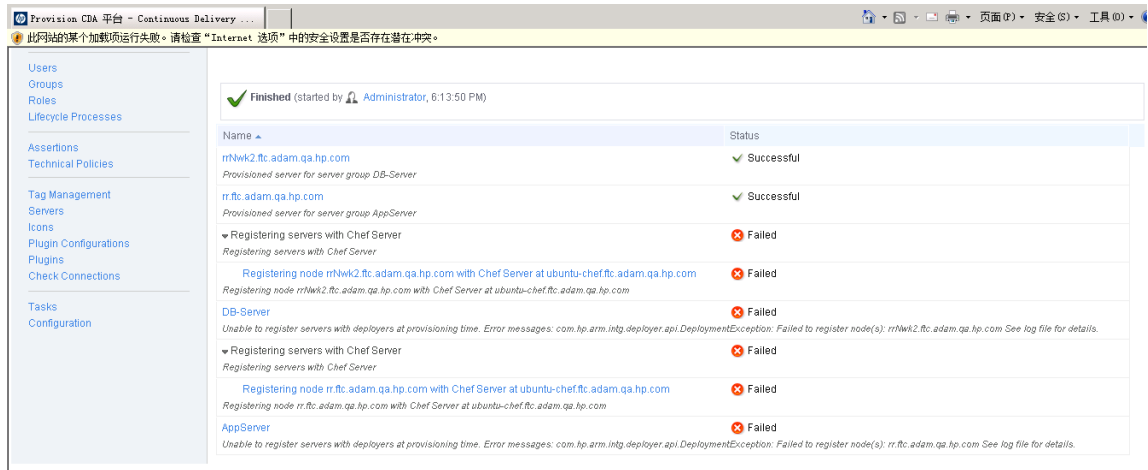
Solution:

Perform the steps listed to resolve this issue:

1 Connect to both the Opscode Chef server and the target server.

2 Identify the time and time zone for both the servers.

3 If there is a time and time zone mismatch between both the servers, set the time and the time zone on the target server to the time and the time zone of the Opscode Chef server.

Deployment Wizard does not Provide Sufficient Information

Symptoms	The deployment wizard does not provide sufficient information to identify the cause when the wizard fails to locate a realized platform.
Primary Software Components	HP CDA
Failure Message	Not applicable
Probable Causes	• No realized platform found for the configured stage. • No applicable package found for the stage.
For More Information	Not applicable

Solution:

Not applicable.

Unable to Add Steps to a New Workflow

Symptoms	After creating a new workflow, HP CDA does not allow you to add steps to the workflow.
Primary Software Components	HP Continuous Delivery Automation
Failure Message	java.lang.IndexOutOfBoundsException
Probable Causes	Not applicable
For More Information	See the solution provided.

Solution:

After creating a new workflow, you can log out and login again to add steps to the new workflow.

Provisioning Fails with HostKeyMisMatch Error

Symptoms	Provisioning fails with `HostkeyMismatch: fingerprint` error. The step to register the node fails.
Primary Software Components	HP Continuous Delivery Automation, Amazon EC2
Failure Message	STDERR: ERROR: Net::SSH::HostKeyMismatch: fingerprint....
Probable Causes	There might be an entry already present in the `known_ hosts` file. A mismatch in the information during the validation generates this error.
For More Information	See the solution provided.

Solution:

You can do as follows to resolve this issue:

1 Connect to the Opscode Chef server.

2 Delete the entry in the `/root/.ssh/known_hosts` file

3 Perform the provisioning again.

Deployment of Placed File Component Fails when Using HP Server Automation Deployer

Symptoms	Deployment of placed file component fails when using HP Server Automation Deployer.
Primary Software Components	HP Continuous Delivery Automation, HP Server Automation
Failure Message	Deployment of 'place file' failed with Exception: ID: HPSA-1106 Code: com.opsware.fido.FidoMessageSpec.AUTHOR IZATION_DENIED Details: You do not have permission to perform this operation against the object(s). Operation: DefaultOperations.writeFolder Object(s): [{type=folder,id=1950001}].
Probable Causes	The user defined folder in HP Server Automation client does not have the required access privileges enabled.
For More Information	See the solution provided.

Solution:

Follow the steps listed to grant the required privileges to the user defined folder in HP Server Automation client:

1 Log on to the HP SA Client (SA NGUI) as a system administrator.

2 Select **Library** > **By Folder** > **Home** > **<User_Defined_Folder>**

3 Right click **<User_Defined_Folder>** and select **Folder Properties**.

4 Select **Grant Read, Write, or Execute Objects Within Folder Permissions to User Group**.

This completes the procedure.

Provisioning or Deployment Operations Result in a Null Pointer Exception

Symptoms	The provisioning or the deployment operations result in a null pointer exception.
Primary Software Components	HP Continuous Delivery Automation
Failure Message	NullPointerException.
Probable Causes	See the list of verification steps listed in the *Solution* section to identify the probable causes for this exception.
For More Information	See the solution provided.

Solution:

Check the following points for failed provision operations:

- Verify that you have defined the platform software for the platform that was attempted to be provisioned. See the stack trace and log files to troubleshoot the root cause of the failure.

- Verify that there is a valid configuration defined in the Administration-Plugins screen for your deployer (for example, Opscode Chef, HP SA, and so on). If there is no configuration defined, you must define a valid configuration.

- Verify that the deployer is selected in the **Deployer** tab of the Properties dialog box in the Platform Designer screen. Select the correct deployer if no deployers are currently selected and click **Save**.

Check the following points for failed deployment operations:

- Repeat the last two verification steps listed in the points to be checked for failed provision operations.

- Verify that a valid topology is defined for the application software in the **Deployment Topologies** tab in the Application Model screen. If there is no topology defined, you must define a topology.

5 Troubleshooting Monitoring

Problem: Deployment does not Provide Links for HP Diagnostics Monitors

Symptoms	Deployment does not provide links for HP Diagnostics monitors
Primary Software Components	HP Continuous Delivery Automation, HP Diagnostics
Failure Message	In the HP Continuous Delivery Automation `cda_debug.log` file, look for any error messages after the `Prepare to deploy` statement.
Probable Cause	The possible causes might be one of the following: • Configuration problem in HP Continuous Delivery Automation • HP Diagnostics server is not running
For More Information	See the *HP Continuous Delivery Automation Installation and Configuration Guide* for more details regarding HP Continuous Delivery Automation configuration.

Solution:

Verify that you have configured the following in HP Continuous Delivery Automation correctly:

- Check if the Topology Maps have associated policies.
- Check if the policies have the required monitors specified with HP Diagnostics deployer
- Verify that the topology has an HP Diagnostics provider configured.
- Verify that the provider has the correct HP Diagnostics host and port configured.
- Verify from a browser that the port of the host can be reached and that the HP Diagnostics UI shows up. You must also check if you can log on to HP Diagnostics using the same credentials configured from the HP CDA host.

Problem: Deployment does not Provide Links for HP SiteScope Monitors

Symptoms	Deployment does not provide links for HP SiteScope monitors.
Primary Software Components	HP Continuous Delivery Automation, HP SiteScope
Failure Message	In the HP Continuous Delivery Automation `cda_debug.log` file, look for any error messages after the Prepare to deploy statement.
Probable Cause	The possible causes might be one of the following: • Configuration problem in HP Continuous Delivery Automation • HP SiteScope server is not running
For More Information	See the *HP Continuous Delivery Automation Installation and Configuration Guide* for more details regarding HP Continuous Delivery Automation configuration.

Solution:

Verify that you have configured the following in HP Continuous Delivery Automation correctly:

- Check if the Topology Maps have associated policies.

- Check if the policies have the required monitors specified with HP SiteScope deployer

- Verify that the topology has HP SiteScope provider configured.

- Verify that the provider has the correct HP Site Scope host and port configured.

- Verify from the HP CDA host that the port of the host can be reached and that the HP Site Scope UI opens. You must also check if you can log on to HP SiteScope using the same credentials configured for the provider.

- Verify that the template used in the policy exists in HP SiteScope and the parameters in the HP Continuous Delivery Automation SiteScope template match the variables in the SiteScope template.

Try deploying the template to a known host to verify that the template is functional in HP SiteScope.

Problem: HP CDA does not Display the Present Monitoring Status when Using HP Diagnostics as the Monitoring Provider

Symptoms	HP CDA does not display the present monitoring status on the Application Deployment Overview page when using HP Diagnostics as the monitoring provider.
Primary Software Components	HP Continuous Delivery Automation, HP Diagnostics
Failure Message	Not Applicable
Probable Cause	Incorrect configuration of HP Continuous Delivery Automation with HP Diagnostics.
For More Information	See the *HP Continuous Delivery Automation Installation and Configuration Guide* for more details regarding HP Continuous Delivery Automation configuration.

Solution:

Check the following details in the configuration:

- Verify that the application (for example, Pet Clinic) is running. The application includes a probe and the application must be running to report to HP Diagnostics.

- Verify that the probe directory exists under the following directory: `/opt/HPDiagnostics`. This is applicable to deployment on Linux environments.

- Verify that the `/opt/HPDiagnostics/etc/dispatcher.properties` file has an entry named `registrar` that points to your HP Diagnostics server: port. This is applicable to deployments on Linux environments.

HP CDA does not Display the Present Monitoring Status when Using HP SiteScope as the Monitoring Provider

Symptoms	HP CDA does not display the present monitoring status on the Application Deployment Overview page when using HP SiteScope as the monitoring provider.
Primary Software Components	HP Continuous Delivery Automation, HP SiteScope
Failure Message	Not Applicable
Probable Cause	Incorrect configuration of HP Continuous Delivery Automation with HP SiteScope.
For More Information	See the *HP Continuous Delivery Automation Installation and Configuration Guide* for more details regarding HP Continuous Delivery Automation configuration.

Solution:

Check the following details in the configuration:

- Verify that the alerts are being recorded in HP SiteScope in the log file (`generic_event_integration.log`) by going to **Server Statistics** > **Log Files**. If the log file is not present, you can enable the log file by following the procedure:

  — Copy the `Generic Event Integration` strings from `log4j.properties.debug` to `log4j.properties` file. The `log4j properties` file is present at the following location: `%SITESCOPE_HOME%\conf\core\Tools\log4j\PlainJava`

- Verify that the **Preferences** > **HTTP Preferences** has an entry for HP Continuous Delivery Automation and has the URL set to **http://<CDA-HOST>:8080/mon-sis-wer/ sisreceiver**

- Verify that there is an entry for HP Continuous Delivery Automation under **Preferences** > **Search/Filter Tags**

- Verify that there is an entry for HP Continuous Delivery Automation under **Preferences** > **Integration Preferences** and this entry

  — references a connector that is the entry (**HTTP Preferences**) listed in the second bullet in this section.

  — references the tag (**Search/ Filter Tags**) listed in the third bullet in this section.

- Verify that the tag listed in the third bullet in this section is used in the template **Search / Filter Tags**

- Verify that you have configured HP CDA event mapping under **Preferences** > **Common Event Mappings** and associated the mapping with the HP SiteScope template used. This enables HP SiteScope to send event related details to HP CDA.

HP CDA does not Display the Present Monitoring Status when Using Nagios as the Monitoring Provider

Symptoms	HP CDA does not display the present monitoring status on the Application Deployment Overview page when using Nagios as the monitoring provider.
Primary Software Components	Nagios, HP Continuous Delivery Automation
Failure Message	Not applicable
Probable Cause	Configuration issue in HP CDA.
For More Information	See the *HP Continuous Delivery Automation Installation and Configuration Guide* for more details regarding HP Continuous Delivery Automation configuration.

Solution:

Check the following details in the configuration

1   Check for any error in the Diagnostics alerting log by selecting **Maintenance** > **Logging** > **View Log Files** > …./Nagios

2   Check that the metric has an **Alert Rule (**a red alarm bell in the user interface) specified that includes the **Optional Actions** option including the execute the following scripts option. Make sure that the script set to execute is the postToCDA.groovy script.

3   If *step 2* in this procedure failed, follow the steps listed to check whether the monitors are deployed:

   a   Verify that the **Topology Maps** include attached policies.

   b   Verify that the policies include the required monitors specified with a Nagios deployer.

   c   Verify that the Topology has a Nagios provider configured.

You can also verify the following details:

- Make sure that the provider has the correct Nagios host and port details configured.

- Verify from a browser the host port can be reached, the Nagios UI shows up, and that you can log on with the same credentials as configured with the provider.

- Verify the following details in the configuration:

  — Verify that the application (such as Pet clinic) is running. The application includes a probe and must be running to report to Nagios.

  — Verify that the probe directory exists under the /opt/Nagios directory and includes the software. This is applicable only to deployments on Linux environments.

- Verify that the /opt/Nagios/etc/dispatcher.properties includes a registrar that points to the Nagios server: port. This is applicable only to deployments on Linux environments.

Problem: Page Not Found Error when Accessing the Nagios URL

Symptoms	Accessing the Nagios server **http://<nagios-server>/nagios** gives a `Page Not Found` error.
Primary Software Components	Nagios, HP Continuous Delivery Automation
Failure Message	Page Not Found
Probable Cause	The required monitors are not added to the Nagios configuration.
For More Information	See the *HP Continuous Delivery Automation Installation and Configuration Guide* for more details regarding HP Continuous Delivery Automation configuration.

Solution:

Verify the following to resolve this issue:

- Configuration issue with Nagios. To check, use the following command:

  `/usr/local/nagios/bin/nagios -v /usr/local/nagios/etc/nagios.cfg`

- Security-Enhanced Linux (SELinux) is enabled on Red Hat Enterprise Linux or Community ENTerprise Operating System (CentOS).

  Check the following file: `cat /etc/selinux/config` and check the value of `SELINUX`. The value of `SELINUX` must be as follows: `SELINUX=disabled`

- The Nagios service is not started. To start the service, run the following command:

  `/etc/init.d/nagios restart`

Problem: Contextual URL for Nagios does not Show the Status of the Monitored Host

Symptoms	After a successful deployment of the Nagios monitor from HP Continuous Delivery Automation, the contextual URL for Nagios does not show the status of the actual monitored host.
Primary Software Components	Nagios, HP Continuous Delivery Automation

Symptoms	After a successful deployment of the Nagios monitor from HP Continuous Delivery Automation, the contextual URL for Nagios does not show the status of the actual monitored host.
Failure Message	It appears as though you do not have permission to view information for this host..
Probable Cause	Monitors are not added to the Nagios configuration.
For More Information	See the *HP Continuous Delivery Automation Installation and Configuration Guide* for more details regarding HP Continuous Delivery Automation configuration.

Solution:

Perform the following verification steps to resolve the problem:

- Check the `/usr/local/nagios/var/objects.cache` file for the hostname configuration as follows:

  ```
  grep  -i "<ip-address | hostname >" /usr/local/nagios/var/objects.cache
  ```

  This command returns a value if the configuration files are created and are being used by Nagios.

- Check the configuration file in the following directory using the command listed: `/usr/local/nagios/etc/mal/hosts/`

  ```
  grep -ir "<ip-address | hostname > " /usr/local/nagios/etc/mal/hosts/
  ```

  If the command returns the value, check the configuration file associated with the hostname.

- Check the permissions for the files in the following directory using the command shown: `ls -ltrh /usr/local/nagios/etc/mal/hosts/`

  All the files in this directory must be accessible for the Nagios user and the Nagios group.

- Reload the Nagios server configuration using the following command: `/etc/init.d/nagios reload`

  If the monitors are not available or created, this indicates an issue with the HP Continuous Delivery Automation Nagios monitor deployer.

Problem: Unable to Deploy the Nagios Monitor

Symptoms	Deployment of the Nagios monitor is successful, but the Nagios URL does not show the host monitored.
Primary Software Components	Nagios, HP Continuous Delivery Automation
Failure Message	It appears as though you do not have permission to view information for this host..
Probable Cause	Monitors are not added to the Nagios configuration.
For More Information	See the *HP Continuous Delivery Automation Installation and Configuration Guide* for more details regarding HP Continuous Delivery Automation configuration.

Solution:

Perform the following steps to resolve this issue:

- "Check if the `/usr/local/nagios/var/remote_config` directory contains any files. For a working integration, this directory must be empty.

- Check for the required file permission using the following command: `ls -ltrh /usr/local/nagios/var/remote_config`

  All the files must have the owner and group set to Nagios.

- If the owner and group is not set to Nagios for all the files, use the command:

  `chown nagios.nagios *` to set the ownership to Nagios.

- Check for the HTTPD / Apache2 web server and php5 status on the Nagios server.

- Verify if the link h**ttp://<nagios-server>/nrdp** is accessible from HP Continuous Delivery Automation.