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## Contents

VMware vFabric Application Director Troubleshooting 5

1 Collecting Logs to Troubleshoot Failures 7
   - Retrieve Logs from the User Interface 7
   - View Failed Virtual Machine Tasks 8
   - Collect Logs from the vFabric Application Director Appliance 8
   - Retrieve Logs for API Calls 8
   - Collect Log Files from Deployed Virtual Machines 9

2 Troubleshooting Common Errors During Deployment 11
   - vFabric Application Director Agent Bootstrap Problems Cause Deployment Error 12
   - Hyperic Agent Does Not Start 13
   - A Task in the Execution Plan Failed 13
   - Deployment Failed But Task Still Running 14
   - Deployment in Progress Indefinitely 15
   - Custom Task in Progress Indefinitely 15
   - Join Domain Custom Task Fails to Run 16
   - Deployment Fails with a Timeout Error 16
   - Error in the vCloud Director Cloud Environment 16
   - Cloud Template EULA Not Accepted 17
   - Virtual Machines Cannot be Created in the vCloud Director Environment 17
   - Powered Off vCloud Director Virtual Machines Cause Provisioning Error 17
   - vCloud Director Windows Virtual Machine Login Problems 18
   - vCenter Server Instance Not Connected to vCloud Director 18
   - vSphere DRS Fails to Move Virtual Machine 18
   - Insufficient Resources in the Cloud Environment 19
   - Network Connection to the Cloud Timed Out 19
   - Cannot Log In to the Cloud Provider 20
   - Action Scripts Running Beyond the Default Time Cause Errors 20
   - Overriding Blueprint Property Values and Resetting Them Causes an Error 21
   - Invalid Property Value Causes Deployment Error 21
   - PowerShell Background Job Is Unresponsive 21
   - Cannot Extract Files to the Windows System Directory 22
   - Invalid Amazon EC2 Cloud Tunnel IP Address Causes Deployment Failure 22
   - Deployment to the Amazon EC2 Environment Fails 22
   - Continuous Deployments to Amazon EC2 Causes Error 23

3 Troubleshooting Common Errors During an Update Process 25
   - Update Process to Scale Deployments Fails 25
   - Update Process to Modify Configuration Fails 26
   - Network Connection to the vFabric Application Director Server Timed Out 26
Update Configuration CLI command Fails 27
Application Deployment Not Found 27
Redis Server Connection Problems Cause Update Error 27
RabbitMQ Server Connection Problems Causes Update Error 28

4 Troubleshooting vFabric Application Director Errors 29
New Cloud Provider Registration Fails with an Authentication Error 29
Error Messages You Can Safely Ignore 30
Invalid URL Error 31
Blank vFabric Application Director Web Interface 31
Hyperic Agent Fails with an Error 31
CentOS Logical Template Error 32
Sample Clustered DotShoppingCart Application Not Loading 32
Sample Zimbra Clustered Application Not Loading 32
Application Version Cannot be Saved 33
CLI Session Status Error 33
LDAP Server Connectivity Problems 34
Unknown LDAP Server Error 34
PowerShell Script Does Not Run 35
Appliance User Interface Problems 35

Index 37
vFabric Application Director Troubleshooting

vFabric Application Director Troubleshooting provides procedures for troubleshooting problems that might occur when you provision application deployments to a cloud environment.

Intended Audience

This information is intended for anyone who wants to troubleshoot problems such as common errors, deployment failures, update process failures, and LDAP errors in the product. This audience includes application infrastructure administrators and application deployers who work in collaboration with application architects and cloud administrators.
Collecting Logs to Troubleshoot Failures

Collecting Logs to Troubleshoot Failures

vFabric Application Director creates virtual machine-specific logs and an overall deployment log to aid in troubleshooting.

You can use the log pages in the vFabric Application Director user interface to find and correct some problems on your own. If a technical support representative requests more logs, you can retrieve them from the file system of the vFabric Application Director virtual appliance or the virtual machines that were created as part of an application deployment.

This chapter includes the following topics:

- “Retrieve Logs from the User Interface,” on page 7
- “View Failed Virtual Machine Tasks,” on page 8
- “Collect Logs from the vFabric Application Director Appliance,” on page 8
- “Retrieve Logs for API Calls,” on page 8
- “Collect Log Files from Deployed Virtual Machines,” on page 9

Retrieve Logs from the User Interface

With vFabric Application Director, you can use the user interface to copy the action script logs.

Prerequisites

- Verify that you have access to the virtual machine where vFabric Application Director is installed and have the password for logging in with the darwin_user user account. This password was set during installation. See Using VMware vFabric Application Director guide.
- Verify that you have credentials for logging in to the Linux-based virtual machine with root privileges or a Windows-based virtual machine with administrator privileges.

Procedure

1. On the vFabric Application Director title bar, click the drop-down menu and select Deployments.
2. Click the name of the deployment and expand the Execution Plan status window.
3. (Optional) If the node is clustered, click the Expand Cluster button .
4. On the failed node, click the View Task Information button .
5. From the drop-down menu, select View Virtual Machine Logs and copy all of the text in the log window.
What to do next
You can paste the log into a text file or email, or create a bug report to send it to a technical support engineer.

View Failed Virtual Machine Tasks
You can use the vFabric Application Director user interface to view and troubleshoot failed tasks on a specific virtual machine.

Prerequisites
- Verify that you have access to the virtual machine where vFabric Application Director is installed and have the password for logging in with the darwin_user user account. This password was set during installation. See Using VMware vFabric Application Director guide.
- Verify that you have credentials for logging in to the Linux-based virtual machine with root privileges or a Windows-based virtual machine with administrator privileges.

Procedure
1. On the vFabric Application Director title bar, click the drop-down menu and select Deployments.
2. Click the name of the deployment and expand the VM Details status window.
3. Locate the virtual machine and click the icon in the VM Log column.

What to do next
You can copy and paste the virtual machine log file to a text file or email, or create a bug report to send the log file to a technical support engineer.

Collect Logs from the vFabric Application Director Appliance
You can access the catalina.out log file or the local host log file from the vFabric Application Director appliance.

Prerequisites
- Verify that you have access to the virtual machine where vFabric Application Director is installed and have the password for logging in with the darwin_user user account. This password was set during installation. See Using VMware vFabric Application Director guide.
- Verify that you have credentials for logging in to the Linux-based virtual machine with root privileges or a Windows-based virtual machine with administrator privileges.

Procedure
1. Log in to the virtual machine.
2. Send catalina.out or localhost.$(date).log output from the /home/darwin/tcserver/darwin/logs directory.

What to do next
Send the logs to a technical support representative.

Retrieve Logs for API Calls
You can retrieve detailed logs for API calls made to the vCloud Director and Amazon EC2 back end from vFabric Application Director.
Prerequisites

- Verify that you have access to the virtual machine where vFabric Application Director is installed and have the password for logging in with the darwin_user user account. This password was set during installation. See Using VMware vFabric Application Director guide.
- Verify that you have credentials for logging in to the Linux-based virtual machine with root privileges or a Windows-based virtual machine with administrator privileges.

Procedure

1. Log in to vFabric Application Director.
2. Open the /home/darwin/tcserver/darwin/webapps/darwin/WEB-INF/classes/logback.xml file.
3. Locate the comment line <!-- Begin - Cloud Provider Config --> and navigate to the <logger> ... </logger> section.
4. Change the value attribute for the level tag to DEBUG or INFO.
5. Restart the vFabric Application Director server.
   
   ```
   sudo service vmware-darwintcserver restart
   ```

What to do next

Access the API call logs from the /home/darwin/tcserver/darwin/logs directory.

Collect Log Files from Deployed Virtual Machines

You can collect the log files of a virtual machine that was created as part of an application deployment from the directory where the temporary files are stored.

Prerequisites

- Verify that you have access to the virtual machine where vFabric Application Director is installed and have the password for logging in with the darwin_user user account. This password was set during installation. See Using VMware vFabric Application Director guide.
- Verify that you have credentials for logging in to the Linux-based virtual machine with root privileges or a Windows-based virtual machine with administrator privileges.

Procedure

1. At the command line, locate the deployed virtual machine.
2. Copy all of the log files on the deployed virtual machine.

<table>
<thead>
<tr>
<th>Option</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linux-based virtual machine</td>
<td>Navigate to the /opt/vmware-appdirector/agent/log directory.</td>
</tr>
<tr>
<td>Windows-based virtual machine</td>
<td>Navigate to the \opt\vmware-appdirector\bootstrap.log and \windows\system32\darwin-agentDate.log files.</td>
</tr>
</tbody>
</table>

3. Open the directory where the temporary files are stored.
   This directory contains several log files relating to application components.

<table>
<thead>
<tr>
<th>Option</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linux-based virtual machine</td>
<td>Navigate to the /tmp/runid subdirectory and tar the subdirectory.</td>
</tr>
<tr>
<td>Windows-based virtual machine</td>
<td>Navigate to the /Users/darwin/AppData/Local/Temp subdirectory.</td>
</tr>
</tbody>
</table>
What to do next

Send the log files to a technical support representative.
Troubleshooting Common Errors During Deployment

If an application deployment fails, the deployment summary page shows a reason for the failure. For the most common errors, you can correct the problem and redeploy the application.


This chapter includes the following topics:

- “vFabric Application Director Agent Bootstrap Problems Cause Deployment Error,” on page 12
- “Hyperic Agent Does Not Start,” on page 13
- “A Task in the Execution Plan Failed,” on page 13
- “Deployment Failed But Task Still Running,” on page 14
- “Deployment in Progress Indefinitely,” on page 15
- “Custom Task in Progress Indefinitely,” on page 15
- “Join Domain Custom Task Fails to Run,” on page 16
- “Deployment Fails with a Timeout Error,” on page 16
- “Error in the vCloud Director Cloud Environment,” on page 16
- “Cloud Template EULA Not Accepted,” on page 17
- “Virtual Machines Cannot be Created in the vCloud Director Environment,” on page 17
- “Powered Off vCloud Director Virtual Machines Cause Provisioning Error,” on page 17
- “vCloud Director Windows Virtual Machine Login Problems,” on page 18
- “vCenter Server Instance Not Connected to vCloud Director,” on page 18
- “vSphere DRS Fails to Move Virtual Machine,” on page 18
- “Insufficient Resources in the Cloud Environment,” on page 19
- “Network Connection to the Cloud Timed Out,” on page 19
- “Cannot Log In to the Cloud Provider,” on page 20
- “Action Scripts Running Beyond the Default Time Cause Errors,” on page 20
- “Overriding Blueprint Property Values and Resetting Them Causes an Error,” on page 21
- “Invalid Property Value Causes Deployment Error,” on page 21
- “PowerShell Background Job Is Unresponsive,” on page 21
- “Cannot Extract Files to the Windows System Directory,” on page 22
vFabric Application Director Agent Bootstrap Problems Cause Deployment Error

vFabric Application Director agent bootstrap problems causes a deployment to fail.

Problem
One of the following error message appears when you deploy or update an application to the cloud environment and the deployment or update process fails.

- Run failed due to failure of task (node name, agent_bootstrap).
- Agent did not respond while running task agent_bootstrap on the node LoadBalancer. Please check the agent logs located at /opt/vmware-appdirector/agent/logs/ on the VM LoadBalancer.
  - Agent did not respond while running task agent_bootstrap on the node LoadBalancer.
  - In the Event Viewer of the Windows-based virtual machine, another error message appears.
    - A timeout was reached (30000 milliseconds) while waiting for the VMware vFabric Application Director agent bootstrap service service to connect.
- During the deployment or update process, the error appears if the password within the template has expired.
  - The VMware vFabric Application Director agent bootstrap service failed to start due to the following error:
    - The service did not start due to a logon failure.

Cause
The deployment failed because of one of the following reasons. The cause corresponds to a solution in the subsequent section.

- Agent bootstrap script is not present on the virtual machine template. See Using VMware vFabric Application Director guide.
- vFabric Application Director does not limit the amount of memory that you can allocate for virtual machines during deployment.
  - Insufficient memory allocation might disrupt the virtual machine operating system boot sequence.
- The agent bootstrap service on the Windows-based virtual machine does not restart within the 30 seconds limit causing a time out error message.
- The darwin user password within the template has expired.
- Agent does not have network connectivity with the vFabric Application Director server and provisioned virtual machine.
- The NAT networking rules are not configured properly on the routed organization network in vCloud Director.
Chapter 2 Troubleshooting Common Errors During Deployment

Solution
- View the vFabric Application Director agent logs.
  - For a deployed Linux-based virtual machine, navigate to the /opt/vmware-appdirector/agent/logs directory.
  - For a Windows-based virtual machine, navigate to the \opt\vmware-appdirector\bootstrap.log and \windows\system32\darwin-agentDate.log files.
- Resolve the resource allocation problem.
  - Increase the CPU or RAM resources on the virtual machine.
    For specific hardware and system requirements, see the operating system documentation.
- Deploy the application to a cloud environment with adequate resources.
- For the VMware vFabric Application Director agent bootstrap service, set the Windows Recovery actions for the First failure, Second failure, and Subsequent failures to Restart the Service.
- Update the darwin user password in the template.
  You can also create a password that does not expire.
- Run network diagnostics to verify that you can ping the vFabric Application Director server from the virtual machine.
- For the routed organization network, see the vCloud Director documentation to configure SNAT rules.

Hyperic Agent Does Not Start
The Hyperic Agent does not start but the application deployment status is successful.

Problem
Unable to automatically setup: Invalid username/password

Cause
The Hyperic Agent server username and password might be incorrect, causing the hq-agent.sh script to fail.

Solution
1. Type the correct Hyperic Agent server username and password in the configure script.
2. Redeploy the application.

   See Using VMware vFabric Application Director guide.

A Task in the Execution Plan Failed
During an application deployment, one of the tasks in the execution plan failed.

Problem
Run failed due to failure of
task (node
     name,task
     name).

Cause

An execution plan task might fail for one of the following reasons.

- A property of type content is not set to a valid URL. The agent log displays the following message:
  Exception while running task (<node name>,<task name>), message Cannot fetch content, url http://192.0.2.255:8443/darwin/api/file/download/123 is not accessible or invalid. cause IOException: Server returned HTTP response code: 500 for URL: http://192.0.2.255:8443/darwin/api/file/download/123 Run failed due to failure of task (<node name>,<task name>)

- A property name contains hyphens and other characters that are not valid for shell scripts.

- The repository URL is not set to the correct operating system version.

- Action scripts might need Java installed on the cloud template and Java is not installed in the cloud template.

Solution

1. Expand the Execution Plan status window on the deployment summary page and identify the task that failed.

2. If the node is clustered, click the Expand Cluster button first.

3. Click the View Task Information button and select View Virtual Machine Logs from the drop-down menu.

4. If the task log does not indicate the failure, examine the agent logs in the deployed virtual machine.
   Agent logs are in the logs directory in the /opt/vmware-appdirector/agent folder.

Deployment Failed But Task Still Running

An application deployment has failed but a task is still running in the execution deployment summary.

Problem

Task is still running in a failed deployment. This problem does not generate an error message.

Cause

In some cases, one of the tasks in the application deployment is running. At the same time, another task fails to deploy. vFabric Application Director immediately marks the entire deployment as failed. The task that is in progress continues to run until it finishes or times out.

Solution

1. Expand the Execution Plan status window on the deployment summary page.

2. Diagnose the cause of the long running task and fix the application blueprint.
   If you do not do so, network connectivity problems might occur.

3. If the problem is intermittent, you can tear down the failed deployment from the cloud.
   See Using VMware vFabric Application Director guide.
Deployment in Progress Indefinitely

An application deployment is in progress indefinitely and does not show either a pass or fail deployment status.

Problem
Deployment is running indefinitely. This problem does not generate an error message.

Cause
Intermittent loss of connection with the Tomcat service, the server restarts during a deployment process, or the agent bootstrap fails.

Note This problem does not occur for all connection failures. It happens based on the state of the deployment when the connection failure occurred.

Solution
1. Expand the Execution Plan status window on the deployment summary page.
2. Diagnose the cause of the long-running task and fix the application blueprint or network connectivity problems.
3. If the problem persists, cancel the deployment. This action marks the deployment as failed without stopping provisioning so that you can interact with the application. See Using VMware vFabric Application Director guide.
4. If the problem is intermittent, you can tear down the failed deployment from the cloud. See Using VMware vFabric Application Director guide.

Custom Task in Progress Indefinitely

An application deployment with one or more custom tasks is in progress indefinitely and the vCloud Director deployment cannot be stopped from vFabric Application Director.

Problem
A custom task is running indefinitely and the deployment cannot be stopped. This problem does not generate an error message.

Cause
The deployment cannot be stopped because of one of the following reasons.

- One or more custom tasks in the deployment might not have been given names.
- A custom task has an infinite loop or is running a long process.

Solution
1. In vCloud Director, stop the vApp corresponding to the deployment.
   You can also reclaim the cloud resources from the vCloud Director application, if you have the appropriate privileges and delete the vApp corresponding to the deployment.
2. In the Deployment Profile wizard, verify that the custom tasks have names and redeploy the application.
   See Using VMware vFabric Application Director guide.
If the problem persists, cancel the deployment.

This action marks the deployment as failed without stopping tasks so that you can interact with the application. See Using VMware vFabric Application Director guide.

Join Domain Custom Task Fails to Run

The installation life cycle stage fails when you deploy the Microsoft SQL Server 2008 R2 Express service on a Windows virtual machine that is configured to join a domain during deployment.

**Problem**
The Join Domain installation life cycle stage fails during deployment.

**Cause**
The domain name begins with darwin.

This is also a known issue in the Microsoft SQL Server installation program.

**Solution**
- Rename the domain without using darwin as the prefix.
- Create a Windows template.
  - Name the bootstrap service account something other than darwin.
  - Configure the service to run as that account.

Deployment Fails with a Timeout Error

One or more custom tasks or action scripts run indefinitely and the deployment fails with a timeout error.

**Problem**
A custom task is running indefinitely and the deployment fails with a timeout error.

**Cause**
Processes prompting for user interaction might pause the custom task or action script.

**Solution**
- Close all of the processes that prompt for user interaction before running a custom task or action script.

Error in the vCloud Director Cloud Environment

An application deployment to the vCloud Director cloud environment fails and an error message appears.

**Problem**
An error occurred in the cloud: com.vmware.darwin.cal.api.exceptions.CALOperationException: createVapp: Unable to perform this action. Contact your cloud administrator.

**Cause**
The deployment failed because of one of the following reasons.
- The virtual machine template used for deployment is not correct.
- The virtual machines cannot be created in the cloud environment.
- The password in the virtual machines cannot be set.
Solution

Follow the instructions for creating a vCloud Director custom virtual machine template in the *Using VMware vFabric Application Director* guide. If you are using a predefined template, contact your vCloud Director administrator to verify that the template is correctly uploaded to the cloud.

**Cloud Template EULA Not Accepted**

The vCloud Director cloud templates do not require a EULA for application provisioning.

**Problem**

Error in vCloud: The EULA of the entity must be accepted for it to be instantiated.

**Cause**

The Create EULA option is enabled.

**Solution**

Disable the Create EULA check box, because cloud templates should not have EULAs.

**Virtual Machines Cannot be Created in the vCloud Director Environment**

New virtual machines for a vFabric Application Director application deployment cannot be created because the default virtual machine limit for the cloud environment is exceeded.

**Problem**

Error in vCloud: The operation was aborted because you would exceed your stored virtual machine quota. 1 new virtual machine would have been created, and you are already using 100 of a limit of 100.

**Cause**

The deployment error occurred because the cloud user exceeded the available virtual machine quota.

**Solution**

Stop unwanted virtual machines in vCloud Director.

**Powered Off vCloud Director Virtual Machines Cause Provisioning Error**

A deployment or update process fails because some virtual machines in the vCloud Director vApp are powered off.

**Problem**

An error occurred when provisioning the cloud: Not all VMs in deployment 'appd-xxx-3.0.8-admin-9-9a7bd508-daf4-44e4-98f9-7c862758507f' are on. 4 are powered off.

**Cause**

Some of the virtual machines in the vApp might be powered off.

**Solution**

1. Log in to vCloud Director.
2. Locate the deployment in vCloud Director.
3 Power on all of the virtual machines in the vApp.
   See the vCloud Director documentation.

vCloud Director Windows Virtual Machine Login Problems

A randomly generated password replaced the administrator password when the Windows virtual machine
instantiated.

**Problem**

Error in vCloud: The parameter is not supported in the current context: AdminPassword

**Cause**

The administrator password was replaced with a randomly generated password.

**Solution**

1 Log in vCloud Director.
2 Shut down the Windows virtual machine and open the properties.
3 Click the Guest Customization tab.
4 In the Password Reset section, deselect Allow local administrator password.
5 Click OK to save your changes.

vCenter Server Instance Not Connected to vCloud Director

Application deployment to vCloud Director fails because the vCenter Server instance is not connected to
vCloud Director.

**Problem**

An error occurred in the cloud: createVapp: The operation failed because VirtualCenter “Darwin-
vCenter-5.0” is not connected.

**Cause**

The vCenter Server instance is not connected to vCloud Director.

**Solution**

* Request your cloud administrator to connect the virtual center to the vCloud Director instance.

vSphere DRS Fails to Move Virtual Machine

An application deployment error occurs.

**Problem**

An error occurred in the cloud: sendPowerOn: Unable to perform this action. Contact your cloud
administrator.

**Cause**

The vSphere Distributed Resource Scheduler failed to move a virtual machine from one ESX host to another.

**Solution**

* Contact your cloud administrator.
Insufficient Resources in the Cloud Environment

Deployment fails because of the lack of sufficient resources in the cloud environment.

Problem
You might see the following error messages.

- `com.vmware.darwin.exceptions.CloudException:
  com.vmware.darwin.cal.api.exceptions.CALOperationException: Unable to compose vapp 'appd-xxx-1.0.0-admin-1028-0b37d0cf-1b8d-42a2-8212-0848e01bcb'

- An error occurred in the cloud:
  sendPowerOn: There are insufficient CPU or memory resources to complete the operation.

- Error in vCloud: There are insufficient IP addresses to complete the operation. You need to add IP addresses to the network that is associated with the object being created or deployed.

Cause
The deployment error occurs because of one of the following reasons.

- Insufficient resources, such as IP addresses or storage, in the cloud.
- The virtual machine in vCloud Director has exceeded the available CPU or memory.
- Insufficient IP addresses in the vCloud Director network.

Solution

- Designate sufficient IP addresses or storage.
  a Check the virtual machine logs or the vFabric tc Server log in the vFabric Application Director appliance for more detailed error messages from the cloud.
  b Assign additional IP addresses to the network where the application is being deployed.
  c For vCloud Director, check if the organization vDC has enough storage.
  d Delete unwanted deployments from vFabric Application Director to free some IP addresses and storage space.

- Allocate sufficient CPU or memory.
  a Reconfigure CPU or memory allocation in the vCloud Director.
  b Delete unwanted virtual machines that are consuming the same pool of resources in vCloud Director.

Network Connection to the Cloud Timed Out

During an application deployment, the connection to the cloud environment times out, which causes the deployment to fail.

Problem
Timed out while connecting to the cloud

Cause
The DHCP server might have become unresponsive.
Solution
◆ Verify that the DHCP server is running properly.

**Cannot Log In to the Cloud Provider**

The vCloud Automation Center server timed out during the application deployment.

**Problem**

An error occurred in the cloud: Unable to login to cloud provider. Please verify the user credentials as well as other parameters you entered.

**Cause**

The deployment error occurred because the vCloud Automation Center server timed out while processing the request.

**Solution**

◆ Increase the vCloud Automation Center IIS timeout property value.

**Action Scripts Running Beyond the Default Time Cause Errors**

During an application deployment or an update process, a service is set to reboot so that the agent bootstrap can restart the virtual machine after an action script runs successfully. If the action script runs beyond the default deployment time, the deployment or update process fails.

**Problem**

Action scripts in the application that take more than 15 minutes to provision and reboot might cause the deployment or an update process to fail.

**Cause**

The task scheduler that pings the server times out after 15 minutes.

**Solution**

1. Use the SSH client to log in to the vFabric Application Director appliance as the user darwin_user.
2. Open a command prompt.
3. Switch user to root.
   ```
   sudo su -
   ```
4. Open the `/etc/init.d/vmware-darwin-tcserver` file.
5. In the CATALINA_OPTS section, change the java system nodetask.time out property to more than 15 minutes.
6. Restart the vFabric Application Director server.
   ```
   sudo service vmware-darwin-tcserver restart
   ```
Overriding Blueprint Property Values and Resetting Them Causes an Error

When you override a blueprint property value in the Deployment Profile wizard and reset that value, it is not converted as an expression and causes an error.

Problem

Overriding a blueprint property value in the Deployment Profile wizard and resetting the blueprint property value to the original version causes the value to be converted to a string as opposed to expressions.

Cause

Blueprint property values reset to the original values in the Deployment Profile wizard are not evaluated as expressions.

Solution

1. Reload the deployment profile.
2. Deploy the application without resetting the blueprint value.

Invalid Property Value Causes Deployment Error

A deployment error occurs.

Problem

Exception while running task (node name, task name), message Cannot fetch content, url https://192.0.2.255:8443/darwin/api/file/download/ is not a accessible or invalid. cause SunCertPathBuilderException: unable to find valid certification path to requested target

Cause

The URL value for the content property might not have a valid value assigned to it or the value is not accessible.

Solution

1. If the content property value is invalid, add a valid URL value.
2. If the content property value is inaccessible, make the value accessible.
3. Redeploy the application.

See Using VMware vFabric Application Director guide.

PowerShell Background Job Is Unresponsive

Windows deployment running a PowerShell background job is unresponsive.

Problem

The PowerShell script that includes a Start-Job command for running jobs in the background is unresponsive.

Cause

The PowerShell script exits because the Start-Job command is not running the jobs in the background successfully.
Solution

- Use the `Start-process` command in the PowerShell script with the appropriate parameters to start the job in a separate process.

Cannot Extract Files to the Windows System Directory

The `C:\Windows\System32` Windows system directory does not allow files to be extracted to it and the application deployment is not marked as failed.

Problem

The Media application component does not extract files to the `C:\Windows\System32` directory for a Windows-based application deployment and the deployment is not marked as failed.

This problem does not generate an error message.

Cause

The `C:\Windows\System32` directory is a Windows protected directory that prohibits unauthorized file creation. The deployment is not marked as failed because the file extraction utility is not exiting with an error status.

Solution

1. Set full Administrator privileges for the Windows system directory to allow files to be extracted to the `C:\Windows\System32` folder.
2. Redeploy the Windows-based application.

See Using VMware vFabric Application Director guide.

Invalid Amazon EC2 Cloud Tunnel IP Address Causes Deployment Failure

Deployment fails if the Amazon EC2 deployment environment has an invalid cloud tunnel IP address.

Problem

Application deployment to the Amazon EC2 environment fails.

Cause

The deployment error occurred because the cloud tunnel IP address in the deployment environment is inaccurate.

Solution

1. Verify that the IP address for the cloud tunnel is valid.
2. Verify that the Endpoint VM is correctly set up.

See Using VMware vFabric Application Director guide.

Deployment to the Amazon EC2 Environment Fails

Deployments to the Amazon EC2 environment from within a corporate network fail.

Problem

Application deployment to the Amazon EC2 environment fails.
Cause
The deployment fails because of one of the following reasons.

- A network problem might cause the cloud tunnel connection to be lost.
- The Endpoint VM is selected in the wrong VPC.
- Security group or internal IP address settings for the Endpoint VM are incorrect.

Solution

1. Reestablish the lost cloud tunnel network connection.
2. Assign the Endpoint VM to the correct VPC in the Amazon Region.
3. Determine whether the Endpoint VM has the correct security group or internal IP address settings.

See Using VMware vFabric Application Director guide.

Continuous Deployments to Amazon EC2 Causes Error
When you continuously deploy applications to the Amazon EC2 environment, you might exceed the default limits for the number of Amazon EC2 instances, Elastic IP addresses for an account, or API requests.

Problem
When you deploy several applications to Amazon EC2 continuously, the deployments fail and a request limit exceeded error appears. When you attempt to tear down the deployment, the process seems to be successful in vFabric Application Director, but the applications still exist in the Amazon EC2 environment.

Cause
You might have exceeded the allocated Elastic IP address limit, the number of Amazon EC2 instances, or the number of API requests allowed in an hour.

Solution

1. Open the AWS management console.
2. Release the Elastic IP addresses.
3. Remove the Amazon EC2 instances.
4. Contact Amazon support to request an increase in the instance, Elastic IP address, or API request limit.
If an update process fails, the deployment summary page shows a reason for the failure. For the most common errors, you can use the recommended solutions and initiate another update process.

**NOTE** vFabric Application Director 5.2 does not support updating existing deployments in Amazon EC2.


This chapter includes the following topics:

- “Update Process to Scale Deployments Fails,” on page 25
- “Update Process to Modify Configuration Fails,” on page 26
- “Network Connection to the vFabric Application Director Server Timed Out,” on page 26
- “Update Configuration CLI command Fails,” on page 27
- “Application Deployment Not Found,” on page 27
- “Redis Server Connection Problems Cause Update Error,” on page 27
- “RabbitMQ Server Connection Problems Causes Update Error,” on page 28

### Update Process to Scale Deployments Fails

You might attempt to initiate an update process to scale a deployment that has previously failed to scale.

**Problem**

An error occurred when

- provisioning the cloud: Virtual Machine 'vmName_2_' already exists

The error appears on the Deployments page when you select a failed deployment and try to initiate an update process.

**Cause**

A previously failed scaled deployment exists in the cloud environment.

**Solution**

- Locate the vApp in vCloud Director and delete the failed virtual machine.
Update Process to Modify Configuration Fails

An update process to modify configuration fails and an error message appears.

**Problem**

A value must be provided for
  
  property 'PropertyName' of
  
  component 'PropertyName' because
  
  the previous update task was unsuccessful in the update wizard.

**Cause**

The update process failed because of the following reasons.

- You might be attempting to initiate an update process to modify configuration on a previously failed update by resetting the failed property, such as port number, and trying to proceed.

- You might be trying to initiate an update process to modify configuration by changing a property that has a dependent property. The task on the changed component succeeds, but the task on the dependent component fails. When you initiate another update process to modify configuration, the dependent property is highlighted as failed as you try to proceed with the update process.

**Solution**

- Add new values to all of the failed properties.
  
  If you do not want to change the properties, modify the action script to ignore the failed properties.

- Add new value to the property of the failed update.
  
  If you do not want to change the properties, modify the action script to ignore the failed properties.

Network Connection to the vFabric Application Director Server Timed Out

When you initiate an update process on a failed update deployment, the connection to the vFabric Application Director server times out, which causes the update process to fail.

**Problem**

Error communicating with the server. Please contact the administrator

The error appears when you update a failed deployment on the Deployments page and the network connection times out.

**Cause**

The vFabric Application Director server times out during the update process.

**Solution**

- Use the CLI to initiate an update process of the failed deployment.
  
  See Using VMware vFabric Application Director guide.
Update Configuration CLI command Fails

An update process using the CLI command to modify configuration generates an error message because the appliance license edition version does not support the update process feature.

**Problem**

The update configuration CLI command fails and a *No properties are specified for this update.* error appears.

**Cause**

The vFabric Application Director appliance is running a license edition that does not support updating the configuration of a deployed application.

**Solution**

1. Create a vFabric Application Director appliance.
   
   See *Using VMware vFabric Application Director*.


3. Deploy an application successfully.

4. Use the update configuration CLI command to modify configurations of existing services or application components in a deployed application.

Application Deployment Not Found

You cannot update an application deployment that does not exist in the cloud environment.

**Problem**

The deployment no longer exists on the cloud

The error message appears when you click a deployed application from the Deployments page.

**Cause**

The application deployment might have been deleted from the cloud.

**Solution**

1. In the supported cloud environment, verify whether the deployment is deleted.

   If it is deleted, you cannot initiate an update process.

2. Successfully deploy another application.

3. Initiate an update process to scale or modify the configuration of the deployment.

Redis Server Connection Problems Cause Update Error

If the Redis server is not available, an update process for a deployed application fails with an error message.

**Problem**

The Redis server throws this error message when it is unavailable.

An error occurred while connecting to the data storage
Cause
The Redis server might be unavailable.

Solution
1. At the command prompt, type `service redis status` to verify that the Redis server is running.
2. Troubleshoot any Redis server connection problems.

RabbitMQ Server Connection Problems Causes Update Error
If the RabbitMQ server is not available, an update process for a deployed application fails with an error message.

Problem
Could not connect to messaging server

Cause
vFabric Application Director is not able to connect to the RabbitMQ server.

Solution
1. At the command prompt, type `service rabbitmq-server status` to verify that the RabbitMQ server is running.
2. Troubleshoot any RabbitMQ server connection problems.
Known vFabric Application Director troubleshooting information can assist you in solving common problems.


This chapter includes the following topics:

- “New Cloud Provider Registration Fails with an Authentication Error,” on page 29
- “Error Messages You Can Safely Ignore,” on page 30
- “Invalid URL Error,” on page 31
- “Blank vFabric Application Director Web Interface,” on page 31
- “Hyperic Agent Fails with an Error,” on page 31
- “CentOS Logical Template Error,” on page 32
- “Sample Clustered DotShoppingCart Application Not Loading,” on page 32
- “Sample Zimbra Clustered Application Not Loading,” on page 32
- “Application Version Cannot be Saved,” on page 33
- “CLI Session Status Error,” on page 33
- “LDAP Server Connectivity Problems,” on page 34
- “Unknown LDAP Server Error,” on page 34
- “PowerShell Script Does Not Run,” on page 35
- “Appliance User Interface Problems,” on page 35

New Cloud Provider Registration Fails with an Authentication Error

For some users, when they register a new cloud provider to a vCloud Director organization or a vCloud Automation Center provisioning group, a peer authentication error appears.

Problem

Could not connect to the cloud provider at 192.0.2.255: An error occurred with the cloud provider: peer not authenticated

Cause

The certificate of the cloud provider is signed by a certificate authority that is not in the openssl trusted list of the vFabric Application Director server.
Solution

1. Use the OrgAdmin credentials to connect to the organization in vCloud Director.
2. Export and save the certificate file of the vCloud Director server from a supported Web browser.
   - If you are using the Firefox browser, save the top-level certificate authority and all of the intermediary certificate authorities.
3. Import the certificate to the vFabric Application Director appliance.
   - Verify that the certificate is not expired.
4. From the command prompt, log in as root and add the certificate file to the vFabric Application Director appliance trusted list.
   ```
   keytool -importcert -trustcacerts -alias UniqueAlias -file CertFilePath.crt -storepass "" -
   keystore /home/darwin/keystore/appd.truststore
   ```
5. Restart the vFabric Application Director server.
   ```
   sudo service vmware-darwin-tcserver restart
   ```

Error Messages You Can Safely Ignore

You can safely ignore some error messages that appear in the vFabric Application Director user interface without negative effects.

Problem

You might see the following error messages.

- **ERROR** in ch.qos.logback.core.joran.spi.ConfigurationWatchList@158f9d3 - URL [jar:file:/opt/vmware-appdirector/agent/nobel-agent.jar!/logback.xml] is not of type file
- /usr/lib/python2.4/site-packages/Cheetah/Compiler.py:1508:
  UserWarning: You don't have the C version of NameMapper installed! I'm disabling Cheetah's useStackFrames option as it is slow with the Python version of NameMapper. You should get a copy of Cheetah with the compiled C version of NameMapper. warnings.warn(
- ![Warning] option 'max_join_size': unsigned value 18446744073709551615 adjusted to 4294967295
- ![Warning] option 'max_join_size': unsigned value 18446744073709551615 adjusted to 4294967295 OK Filling help tables... ![Warning] option 'max_join_size': unsigned value 18446744073709551615 adjusted to 4294967295 ![Warning] option 'max_join_size': unsigned value 18446744073709551615 adjusted to 4294967295 OK

Cause

The following possible causes correspond to the error messages that you might experience.

- If you deploy a vFabric tc Server on a node with a Linux operating system, an error message mistakenly appears in the log file /opt/vmware-appdirector/agent/logs/agent_bootstrap.log.
- After you deploy the Clustered Dukes Bank application, an error message mistakenly appears in the JBoss install and configure log file.
- If you deploy a MySQL predefined service in a CentOS5.6 64-bit logical template, an error message mistakenly appears in the MySQL configure log file.
Solution
◆ You can safely ignore the error message.

Invalid URL Error
In some instances, when you type the vFabric Application Director Web interface URL in the browser, you receive an invalid URL error message.

Problem
An invalid URL error message appears in the Web browser.

Cause
The Adobe Flash Player plug-in might not be supported.

Solution
◆ Verify that you are running the supported version of the Adobe Flash Player plug-in in your Web browser.

See the system requirement information in the Using VMware vFabric Application Director guide.

Blank vFabric Application Director Web Interface
Typing the vFabric Application Director Web interface URL without HTTPS renders a blank page in the Web browser.

Problem
The vFabric Application Director Web Interface appears as a blank page in the Web browser.

Cause
The cause of this problem is unknown.

Solution
1 Change HTTP to HTTPS in the URL.
2 (Optional) Change the port number in the URL to 8080.

https://ApplicationDirectorIP:8080/darwin.

Hyperic Agent Fails with an Error
The Hyperic Agent fails and the error appears in the Execution Plan log file.

Problem
The Hyperic Agent fails with a java.io.EOFException error

Cause
The error might appear intermittently in the Execution Plan log file.

Solution
◆ Redeploy the application.

See Using VMware vFabric Application Director guide.
CentOS Logical Template Error

For CentOS logical templates, guest customization does not successfully finish, which causes a failure in the agent bootstrap script and the overall deployment fails.

**Problem**

Agent did not respond while running task agent_bootstrap on the node CentOS_x32_5.6. Please check agent logs.

**Cause**

The guest customization failed because of one of the several reasons.

- Having more than five NICs on a node in a CentOS virtual machine might cause the problem.
- The network used for the application deployment does not have connectivity to the vFabric Application Director appliance.
- VMware Tools is not installed in the vCloud Director template.
- The vFabric Application Director agent bootstrap service or JRE is not installed properly.

**Solution**

- Reduce the number of NICs for an individual node on the CentOS virtual machines.
  
  See Using VMware vFabric Application Director guide.
- Check the application deployment network and infrastructure settings.
- Install VMware Tools in your vCloud Director template.
- Verify that the agent bootstrap service or JRE is installed properly on the vCloud Director template or Amazon EC2 AMI.

Sample Clustered DotShoppingCart Application Not Loading

When you deploy a Clustered DotShoppingCart application using vCloud Automation Center, the application does not load but the deployment status is successful.

**Problem**

The Clustered DotShoppingCart application does not load in the Web browser.

**Cause**

The Asp.net v4.0 IIS Application Pool is not available in the vCloud Automation Center Windows template.

**Solution**

1. Install the Asp.net v4.0 IIS Application Pool in the Windows template.
2. Deploy the Clustered DotShoppingCart application from vFabric Application Director.
3. Open the Clustered DotShoppingCart application in a Web browser.

Sample Zimbra Clustered Application Not Loading

In some cases, the Zimbra Clustered application does not load but the deployment status is successful.

**Problem**

The Zimbra Clustered application does not load in the Web browser.
**Cause**
The zimbra_nfs_path property value might point to an unavailable NFS server.

**Solution**
1. Add a valid Zimbra path value to an NFS server.
2. Redeploy the Zimbra Clustered application.
   See *Using VMware vFabric Application Director* guide.

**Application Version Cannot be Saved**
An application version cannot be saved if an application architect is updating the blueprint or a deployer is deploying the application in one session and another application architect is attempting to update and save the same application blueprint in a different session.

**Problem**
An error message appears when an application architect tries to modify and save an application blueprint.

*Could not save Application version because another session has modified it.*

**Cause**
While an application architect is saving an application blueprint or a deployer is deploying an application, if another application architect attempts to access the same blueprint, the error message appears in the browser of the second application architect.

**Solution**
- Click **Refresh** to reload the application blueprint.

  **Note** Refreshing the application blueprint might cause you to lose the current changes made to the blueprint.

**CLI Session Status Error**
When you type the CLI session status command, it shows that you are logged in. However, you receive an error when you use the CLI.

**Problem**
Your session has expired or been invalidated, please login again.

**Cause**
The CLI session has timed out.

**Solution**
1. Log out of the CLI session.
2. Log in to resume.
LDAP Server Connectivity Problems

When you interact with the LDAP directory to verify the existence of a user name, you might experience some connectivity problems with the LDAP server.

Problem

You might see the following LDAP error messages.

- Retrieval of user information from the LDAP server failed. Error messages follow: [ERROR]
  Incorrect result size: expected 1, actual 2
- Retrieval of user information from the LDAP server failed. Error messages follow: [ERROR]
  Root DNs must be the same when using multiple URLs

Cause

The following possible causes correspond to the error messages.

- When you run the command to check the existence of a user name in the LDAP directory to confirm server connectivity, you might not have specified the User Search Base DN.
- When you run the command to check the existence of a user name in the LDAP directory to confirm server connectivity, you might have added a space in the Server Base DN.

Solution

- Specify the User Search Base DN in the LDAP command.
  In the sample command, test-named-ldap-config --configname test-slave.test.com --name user1
  user1 specifies the User Search Base DN.
- Remove the space in the Server Base DN.

Unknown LDAP Server Error

In some cases, the LDAP configuration might have problems such as an invalid LDAP configuration name, which triggers an error message.

Problem

An unknown error has occurred: 500 Internal Server Error

Cause

The LDAP server error occurred because of several reasons.

- The LDAP configuration name might include a period. For example, in ldap.test.com, the period in the configuration name is not supported.
- Duplicate LDAP user or group names might exist among different users or groups.
- The LDAP user or group name has the same UID in two different LDAP configurations.

Solution

- Rename the LDAP configuration without periods and delete the LDAP user.
- Log in to the LDAP server and check whether the group name or user name are unique.
- Determine whether your LDAP configuration is created correctly.
  See Using VMware vFabric Application Director guide.
PowerShell Script Does Not Run

When you run a batch file using a PowerShell script in vFabric Application Director, the script might not run but the task completes successfully.

**Problem**
the PowerShell script in vFabric Application Director is not running.

**Cause**
The PowerShell script might need an expression to run successfully.

**Solution**
- Add an invoke-expression expression to the PowerShell script.
  
  For example, to start and stop a Windows vFabric tc Server, add invoke-expression $service_stop and invoke-expression $service_start expressions to the script.

Appliance User Interface Problems

When you perform certain operations in the vFabric Application Director appliance, you might experience user interface problems.

**Problem**
While you are initiating an update process to scale out a clustered node, on the execution plan page of the wizard, when you attempt to add a task to a clustered node, you are prompted to expand the node. If you resize the information panel, you might not be able to add a custom task to the execution plan.

**Cause**
The information panel, which is in HTML 5 code, and the Flex code are not properly interacting.

**Solution**
1. Click the X icon to close the information panel.
2. Add a custom task to the clustered node.
3. Proceed with the update process.
Index

A
agent bootstrap service 12
agent bootstrap 12

B
blank, web interface 31

C
CentOS 32
CLI, update configuration 27
cloud template, EULA 17
cloud tunnel, IP 22
cloud tunnel connection 22
Clustered DotShoppingCart application 32
custom task 16

D
deployment
not found 27
time out 20

E
Endpoint VM 22
error
application version 33
CLI session status 33
invalid URL 31
LDAP server 34
log in 20
logical template 32
PowerShell script 35
user interface 35
virtual machine template 16
ESX host 18
execution plan 7
extract file 22

G
guest customization 32

H
Hyperic Agent 13, 31

I
ignore, error message 30
insufficient
CPU 19
IP address 19
memory 19
resources 19
storage 19
invalid, property value 21

L
LDAP server connectivity 34
limit
Amazon EC2 instances 23
API requests 23
Elastic IP address 23
log
API calls 8
catalina.out 8
local host 8
temp directory 9
log in, error 18
log files for troubleshooting 7–9

N
network, time out 19, 26

O
override, blueprint property 21

P
peer authentication error 29
PowerShell
background job 21
script 21

R
RabbitMQ server connection 28
Redis server connection 27
register, cloud provider 29
reset, blueprint property 21
run indefinitely, deployment 15
run indefinitely, custom task 15, 16

S
security group 22
<table>
<thead>
<tr>
<th>Letter</th>
<th>Term</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>task</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>fail 13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>running 14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>troubleshoot, update errors 25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>troubleshooting, common deployment errors 11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>troubleshooting audience 5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>troubleshooting common errors 29</td>
<td></td>
</tr>
<tr>
<td>U</td>
<td>update, time out 20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>update process, fail 25, 26</td>
<td></td>
</tr>
<tr>
<td></td>
<td>user interface 7</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>vCenter Server, instance 18</td>
<td></td>
</tr>
<tr>
<td></td>
<td>vFabric Application Director, agent bootstrap 12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>view, failed tasks 8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>virtual machine, powered off 17</td>
<td></td>
</tr>
<tr>
<td></td>
<td>virtual machine quota 17</td>
<td></td>
</tr>
<tr>
<td></td>
<td>vSphere DRS 18</td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>Windows system directory 22</td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td>Zimbra Clustered application 32</td>
<td></td>
</tr>
</tbody>
</table>