

Deploy

FAQs

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1 Hosts

1.1 What Are the Troubleshooting Methods for Host and Proxy Connectivity Verification Failures

Host connectivity verification failures can be handled by the following host types:

- [Linux Hosts](#)
- [Self-Hosted Resource Pool](#)
- [Windows Hosts](#)
- [Cloud Hosts](#)

Linux Hosts

Step 1 Verify whether the IP address, username, and password are correct.

Step 2 Check whether the port enabled on the target host is an SSH port (port 22 by default).

How to enable the port:

1. Enable the firewall.

```
systemctl start firewalld.service  
systemctl stop firewalld.service #Disable the firewall.
```
2. Enable the port.

```
firewall-cmd --zone=public --add-port=22/tcp --permanent
```

NOTE

- zone #Application zone.
 - add-port=22/tcp #Port, in the format of port number/communication protocol.
 - permanent #Takes effect permanently. If this parameter does not exist, it becomes invalid after the system is restarted.
3. Restart the firewall.

```
firewall-cmd --reload
```

Step 3 Check the network status.

Run the **tcpdump** command to check the network connection.

```
tcpdump -n "tcp port 22 and host xxx.xxx.xxx.xxx"  
#This command is executed on the local PC to check whether the execution host is connected.  
xxx.xxx.xxx.xxx indicates the public IP address of CodeArts Deploy.
```

#Or

```
tcpdump -n "tcp port 22" | grep -v "xxx.xxx.xxx.xxx"  
#This command is executed on the local PC to check whether the host is connected. xxx.xxx.xxx.xxx  
indicates the IP address of the target host.
```

If no command output is displayed, the network connection is normal.

```
# tcpdump -n "tcp port 22" | grep -v [REDACTED]  
tcpdump: verbose output suppressed, use -v[v]... for full protocol decode  
listening on eth0, link-type EN10MB (Ethernet), snapshot length 262144 bytes
```

NOTE

The public IP addresses of CodeArts Deploy are as follows:

```
Singapore:  
114.119.185.21  
Sao Paulo:  
159.138.214.24  
Mexico:  
122.8.183.54  
110.238.80.148  
Santiago:  
119.8.154.190  
Türkiye:  
101.44.36.238  
Riyadh:  
101.46.48.174
```

- Step 4** Choose **Settings > General > Basic Resources** from the main menu. Click the cluster name to go to its details page. In the host list, verify the target host connectivity and check whether the server has established SSH connections to this host. The following information indicates that the server has established SSH connections to this host.

```
root@localhost log1# tcpdump -n "tcp port 22 and host 10.0.2.2"  
tcpdump: verbose output suppressed, use -v or -vv for full protocol decode  
listening on enp0s3, link-type EN10MB (Ethernet), capture size 262144 bytes  
1:24:43.368466 IP [REDACTED] > [REDACTED].ssh: Flags [S], seq 2439185489, w  
65535, options [mss 1460], length 0  
1:24:49.378333 IP [REDACTED] > [REDACTED].ssh: Flags [S], seq 2439185489, w
```

Cause analysis:

- **SSH connections exist between the server and the target host.**
The target host is not configured properly or tcpdump is not installed.
Perform the following operations to check the host configurations:
 - a. For details, see [Configuring the IP Address Blacklist and Whitelist](#) in the *User Guide*.
 - b. Run the following command to check whether a firewall is configured (**iptables** is used as an example):

```
iptables -L
```
- **No SSH connections exist between the server and the target host.**
The target host is unreachable because the network may have access restrictions.
Check whether the source and destination IP addresses are restricted by the firewall, and check the SSH protocol configurations.

Step 5 Check permissions on the SSH key file.

Log in to the host as the **root** user and run the following commands to check permissions on the SSH key file:

```
cd /root/.ssh  
ll
```

Check whether the file permission is **rw**.

```
[root@host-... .ssh]# cd /root/.ssh/  
[root@host-... .ssh]# ll  
total 16  
-rw----- 1 root root 576 Feb 8 09:39 authorized_keys  
-rw----- 1 root root 2459 Feb 8 09:36 id_rsa  
-rw----- 1 root root 576 Feb 8 09:36 id_rsa.pub
```

If the file permission is incorrect, run the following command to modify it:

```
chmod 600 File name.
```

Step 6 Check the operations on the **`\${HOME}** directory. If the user who carries the host connectivity verification fails to operate the **`\${HOME}** directory, do as follows:

1. Check whether the disk where the **`\${HOME}** directory of the host is located is full.
 - Run the **df -h** command to check whether the disk where the **`\${HOME}** directory is located is full.
 - Run the **ll -ld `\${HOME}** and **lsattr -d `\${HOME}** commands to check the permission setting and hidden attributes of the **`\${HOME}** directory of the user.

2. Check whether the user has the read and write permissions on the **`\${HOME}** directory.

Run the **chmod** and **chattr** commands to grant the user the permissions required to read from and write into the **`\${HOME}** directory.

3. Check whether the user's default shell is set to nologin mode.
 - Run the **grep *username* /etc/passwd** command. Replace "username" with the actual user name to be checked.
 - In the file, if **/usr/sbin/nologin** or **/sbin/nologin** is displayed in the shell column of a user, the user is set to the nologin mode.
 - If the user is in nologin mode, run the **sudo usermod -s /bin/bash *username*** command to allow the user to log in. Replace "username" with the actual user name.

Step 7 If the connectivity test of a proxy associated with a host fails or an error message indicating that the host connection timed out, locate the fault by performing the following operations.

1. Test the connectivity of the proxy host.
2. Run the following command to check whether **AllowTcpForwarding** has been enabled for SSH on the proxy host:

```
grep "AllowTcpForwarding" /etc/ssh/sshd_config
```

```
[root@ubuntu-1df ~]# grep "AllowTcpForwarding" /etc/ssh/sshd_config  
AllowTcpForwarding yes
```

If the value is **no**, set it to **yes** and run the following command to restart the sshd service:

The self-hosted resource pool needs to use Docker to pull images. The script execution error occurs because Docker is not installed in the self-hosted resource pool or cannot be used properly. You can perform the following operations to troubleshoot the error:

Troubleshooting method

1. Run the following command to check whether Docker is installed:

```
docker --version
```

```
[root@ecs-proxy-lu /]# docker --version
Docker version 18.09.9, build 039a7df9ba
```

If the version number is displayed in the command output, Docker has been installed.

If no version number is displayed in the command output, Docker is not installed.

NOTE

If Docker is not installed, install it by referring to [Installing/Uninstalling Docker](#), and then perform the following operations to verify the connectivity:

1. Log in to CodeArts Deploy and click the target application name. In the target project, choose **Settings** > **General** > **Basic Resources**. The **Host Clusters** page is displayed by default.
 2. Click the name of the target cluster. On the cluster details page that is displayed, click **Proxy Hosts** or **Target Host**.
 3. Click  in the same row as the host, and modify the host information to verify the host again in the dialog box displayed.
2. Run the following command to check whether Docker can be used properly:

```
docker images
```

```
[root@ecs-proxy-lu /]# docker images
REPOSITORY          TAG                 IMAGE ID            CREATED
SIZE
swr.cn-north-7.mjhuacloud.com/devcloud_devcloud_100490255_01/gao_jar  v1                 bfbb1fd5e93f      3 months ago
516MB
swr.cn-north-6.mjhuacloud.com/clouddeploy/docker-ansible-euleros-china  9.7.8.001         20e678a8d12a      7 months ago
2.31GB
You have mail in /var/spool/mail/root
```

If the preceding information is displayed, Docker can be used properly. Otherwise, you need to uninstall Docker, and reinstall it by referring to [Installing/Uninstalling Docker](#).

----End

Windows Hosts

- Step 1** Verify whether the IP address, username, and password are correct.
- Step 2** Configure a proxy host. For details, see [Configuring a Proxy Host](#) in the *User Guide*.
- Step 3** Enable the WinRM function. For details, see [Configuring a Target Host](#) in the *User Guide*.
- Step 4** Run the following command on PowerShell to check whether the WinRM function has been enabled:

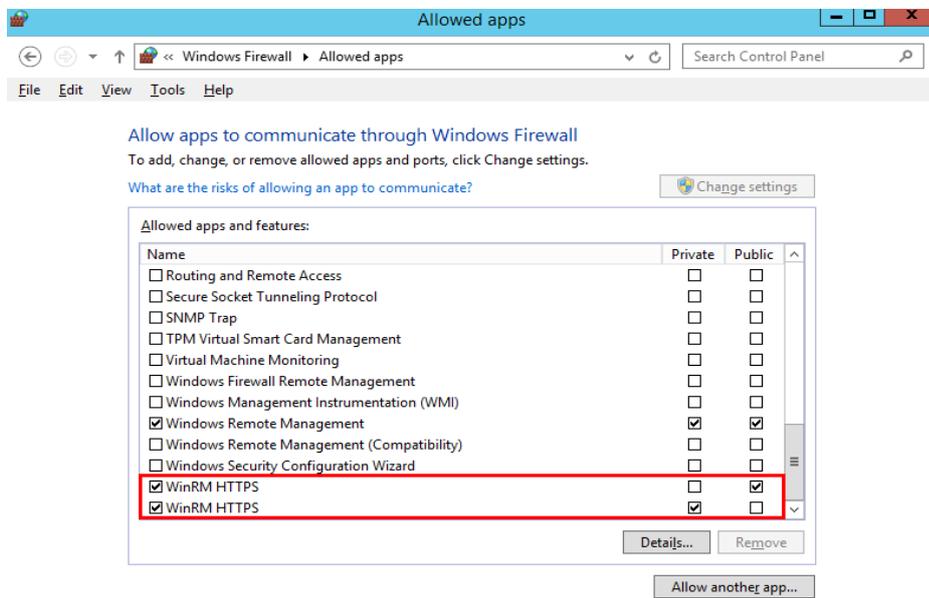
```
winrm e winrm/config/listener
```

```

PS C:\Users\Administrator> winrm e winrm/config/listener
Listener
  Address = *
  Transport = HTTP
  Port = 5985
  Hostname
  Enabled = true
  URLPrefix = wsman
  CertificateThumbprint
  ListeningOn = [redacted], [redacted], ::1

Listener
  Address = *
  Transport = HTTPS
  Port = 5986
  Hostname = [redacted]
  Enabled = true
  URLPrefix = wsman
  CertificateThumbprint = DF D7 02 1D F6 AB E2 78 C2 0D 87 4C FC 15 5F 16 D3 33 24 2A
  ListeningOn = [redacted], [redacted], ::1
    
```

Step 5 Check whether the Windows firewall allows external hosts to access the WinRM service.



----End

Cloud Hosts

Locate the fault in the same way as you would do for a Windows or Linux host. Configure the security group for the cloud host to allow access from the public IP addresses of CodeArts Deploy. (For details see [Configuring a Security Group](#) in the *User Guide*.)

1.2 What Should I Do If Application Deployment Fails with "tomcat | Download War in url path" Displayed in Logs?

Symptom 1

Application deployment fails, the log information shows **tomcat | Download War in url path**, and the **stderr** line displays **curl: option --tlsv1.2: is unknown\ncurl: try 'curl --help' or 'curl --manual' for more information**.

Cause Analysis

The software package fails to be downloaded due to an incorrect **curl** version.

NOTE

The problem often occurs on new hosts, because new hosts usually use the same image to install OSs, and the **curl** may not be the latest version.

Solution

Log in to the cloud host, run the **yum update curl -y** command to update the **curl**, and then deploy the application again.

Symptom 2

Application deployment fails, the log information shows **tomcat | Download War in url path**, and the **stderr** line displays **getaddrinfo(3) failed for XXXX.com:443\n**.

Cause Analysis

The software package cannot be downloaded because the cloud host cannot connect to the CodeArts Build.

Solution

Log in to the cloud host, and run the **ping** or **traceroute** command to check whether the host can connect to the domain name of CodeArts Build mentioned in the **stderr** line and the domain names and IP addresses of Baidu or Google.

1. If both the domain names and IP addresses cannot be connected, the cloud host does not have access to the Internet.
2. If the IP addresses can be connected but domain names cannot, there is something wrong with domain name resolution. Modify the **/etc/resolv.conf** file on the host, as shown in following figure.

```
root@openstacklocal:~# cat /etc/resolv.conf
; generated by /sbin/dhclient-script
search openstacklocal
nameserver 114.114.114.114
nameserver 114.114.115.115
```

3. If only the CodeArts Build cannot be connected, the CodeArts Build may be faulty.

1.3 Why Does a Task Fail on an Ubuntu Host After Being Successfully Run on a CentOS Host?

Symptoms

The following log information is displayed.

Figure 1-1 Log information

```
"failed": true,  
"rc": 1,  
"start": "2017-12-20 19:59:25.059562",  
"stderr": "/bin/sh: 1: source: not found\n/tmp/shell_template.sh: 30: /tmp/shell_template.sh: function: not found\n/tmp/shell_template.sh: 32: [: =: unexpected  
"stdout": null,
```

Cause Analysis

By default, CentOS uses **bash** and Ubuntu OS uses **dash**. **Bash** and **dash** are incompatible with each other. In CodeArts Deploy, the default script generated can only run on a host that uses **bash**. Therefore, an error will be reported if the script is run on an Ubuntu host.

Solution

Log in to the target host, run the **sudo dpkg-reconfigure dash** command, and select **no** to switch the shell of the Ubuntu OS to bash.

1.4 What Should I Do If the No Host or Environment Whose Connectivity Has Been Verified?

Symptoms

A pipeline or an application mounted to a pipeline failed to run, and an error message is displayed, indicating that no host or environment whose connectivity has been verified.

Cause Analysis

The host configured for the application has been deleted or failed to be verified for the connectivity.

Solution

Log in to CodeArts Deploy, click the target application name, switch to the **Environment Management** page, check whether the host exists, and check the host connectivity verification status.

Choose either of the following methods based on the host status:

- If the host exists but fails to be verified for its connectivity, modify the host information and verify the host again by performing the following steps:

- a. In the target project, choose **Settings > General > Basic Resources**. The **Host Clusters** page is displayed.
 - b. Click the name of the target cluster. On the cluster details page that is displayed, click **Proxy Hosts** or **Target Host**.
 - c. Click  in the same row as the host, and modify the host information to verify the host again in the dialog box displayed.
 - d. After the modification, click **Save**. The host list page is displayed.
- If the host does not exist, add a host for the application and ensure that the host has been verified for its connectivity.

1.5 What Are Possible Causes of a Host verification failure?

If connectivity verification fails for a host, check the following items:

1. Username and password.
2. Startup status.
3. Ports: Check that ports on the host have been enabled.
4. Firewall policy: Run the **iptables -L -n** command to check whether access over port **22** is restricted.
5. The IP address must be accessible from the public network. If you are using a private IP address, an SSH proxy is required.
6. CentOS version: If the host is running CentOS, ensure that the CentOS version is 6.0 or later.
7. Windows version: If the host is running Windows, ensure that the Windows version is supported by CodeArts Deploy and you have configured the host. For details, see [Configuring a Host](#) in the *User Guide*.

2 Application Deployment

2.1 What Should I Do If a Draft Application Cannot Be Deployed?

Symptoms

During application deployment, a message is displayed, indicating that CodeArts Deploy cannot deploy draft applications.

Cause Analysis

An application in draft state cannot be called by the pipeline.

Solution

1. On the CodeArts Deploy homepage, click ******* in the same row as the target application and click **Edit**.
2. Click **Save**. The application will change from the draft state to the pending state and can be called by the pipeline.

2.2 What Are Error Messages Displayed During Application Deployment?

The following table describes the error messages that may be displayed if application deployment fails.

Error Message	Description
The host ip is invalid, Please check	The host is unavailable, or the host IP address cannot be 127.0.0.1 or localhost .

Error Message	Description
[group_vars/all] is not found, Please check	The [group_vars/all] file is not found. Check whether the directory of the entry file contains the [group_vars/all] file.
The parameter value is invalid, Please check!	The parameter value can contain only ASCII characters, except {{, {%, or {#.
The parameter value is invalid, Please check!	The parameter value can contain only letters, digits, and underscores (_).

2.3 How Do I Find the Cause of an Application Deployment Error in Logs?

View the logs from the bottom to top, and find the statement containing **FAILED**.

- The previous line of the **FAILED** statement indicates the action in which application deployment fails.
- View the lines after the **FAILED** statement, and find the **stderr** line. This line contains the script execution output and the description of the cause.

2.4 What Should I Do If Error 403 Displayed During Application Deployment That Requires CCE Resources, Indicating Insufficient Permission?

Symptoms

1. When the CCE API is called during application deployment or pipeline deployment, error 403 and the message **Policy doesn't allow cce:cluster:get tb performed** are displayed.
2. The error message **The IAM user is not authorized to access the API** is displayed when the pipeline runs a Kubernetes application.

Cause Analysis

You do not have permissions to view and execute CCE deployment.

Solution

Use an account with the required CCE permissions and delegate your AK ID/SK to the account used for application deployment. The following uses the Kubernetes application as an example.

Step 1 Edit the application, select **Authorized User**, and create an authorized IAM user.

Step 2 In the displayed **Create Service Endpoint: IAM** dialog box, enter the AK ID/SK of the account authorized to deploy CCE. [For details about how to create a service endpoint, see "Creating an IAM Account Service Endpoint"](#).

- Step 3** Use the new service endpoint and save the task.
- Step 4** Choose **Settings > General > Service Permissions** of the current project, and switch to the **Permissions** tab page.
- Step 5** Select the role to which the account for deploying the application belongs, expand **DevMarket**, click **Edit** and enable the **read** permission.
- End

2.5 How Do I Roll Back a Deployed Version?

Symptoms

This section describes how to roll back a version on CodeArts Deploy.

Guideline

In the application deployment records, select the application whose version you want to roll back.

Procedure

- Step 1** Click the target application name in the application list. The application deployment records are displayed.
- Step 2** Select the target version and click **Roll Back to This Version**. In the displayed dialog box, click **OK**.
- End

CAUTION

If the **Build No.** in the deployment source is **Latest**, you need to manually modify the build number. (The same applies to software packages.)

2.6 What Should I Do If an Endpoint Fails to Be Obtained?

Symptoms

If an endpoint fails to be obtained during application deployment, the following information is displayed:

- "Failed to get endpoint information. null"
- "Failed to obtain the service endpoint. Check whether it is available."

Cause Analysis

Scenario 1: When IAM authorization is performed during application deployment, the current user (role) is not granted the view permission for a high-privilege user's service endpoint instance.

Scenario 2: The service endpoint does not exist or is incorrectly configured.

Solution

Step 1 Edit the application and click **Manage** in the **Authorized User** area to go to the **Service Endpoints** page.

Step 2 On the **Service Endpoints** page, select the endpoint required for application deployment. In the permission matrix, enable the view permission for the role of the account that does not have the permission.

For details about how to create an AK/SK service endpoint, see [Error 403 Displayed During Application Deployment That Requires CCE Resources, Indicating Insufficient Permission](#).

----End

2.7 What Should I Do If an Application Deployment Times Out?

Symptoms

An application fails to be deployed, and the log information **Task execution timed out. Stop the task. Start time: ***** , end time: ******* is displayed.

Cause Analysis

The maximum duration for deploying an application at a time is 30 minutes. If the duration exceeds 30 minutes, the application fails to be deployed.

Solution

- If application deployment times out due to too many deployment steps, split the application into multiple applications and deploy them in sequence.
- If application deployment times out due to synchronous waiting (for example, waiting for action **Run Shell Commands**), run a command to change the execution mode to asynchronous.

2.8 Does CodeArts Deploy Provide Batch and Incremental Deployment Policies?

No. CodeArts Deploy does not provide any deployment policies. However, you can configure relevant settings to achieve different deployment purposes. For example:

1. Batch deployment: When configuring hosts for an application, you can select multiple hosts as the target host.

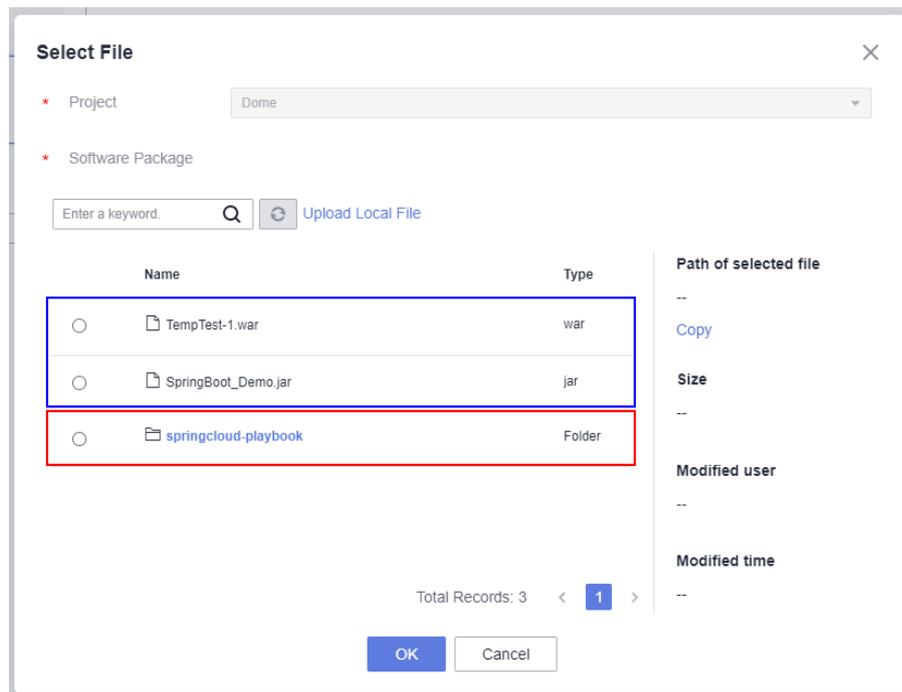
2. Incremental deployment: Add actions or disable one or more actions.

2.9 Do I Need to Upload a Software Package to CodeArts Artifact Before Deployment?

Not necessarily. The software package can be downloaded from CodeArts Artifact or using a build task. Therefore, you can select a file in CodeArts Artifact or use the output of a build task for deployment..

Set Deployment Source to Artifact

- Step 1** In the action **Select Deployment Source**, set **Source** to **Artifact**, and click  on the right of **Software Package**.
- Step 2** In the **Select File** dialog box displayed, select the target software package downloaded from CodeArts Artifact.
 - For a software package in the folder format, all files in the folder are downloaded by default in the action **Select Deployment Source**.
 - For a software package in the file format, the file is downloaded by default in the action **Select Deployment Source**.



----End

Setting the Source to Build Task

- Step 1** In the action **Select Deployment Source**, set **Source** to **Build task**.
- Step 2** Click the **Build Task** drop-down list box. All build tasks under the current project are displayed.

Figure 2-1 Selecting a build task



Step 3 Select the **Default Version**.

Figure 2-2 Selecting the default version



Step 4 Set **Build No.**.

Figure 2-3 Setting build No.



NOTICE

You must select a build task and then select a build No.

Step 5 After application deployment, download the software package generated based on the build record to the specified path on the target host.

----End

2.10 Can I Deploy Web Pages Written in HTML or JS?

Yes. Package the local project code and deploy the project using CodeArts Deploy.

If you want E2E build and deployment, use Java Web Demo provided in the code repository to upload the code to the cloud repository, and then use Maven to build and package the code, and use Tomcat scripts for deployment.

2.11 How Do I Upload an Image for Container Deployment?

There are two image sources:

- Source 1: Container images generated using CodeArts Build. These images will be automatically uploaded to [SWR](#) once generated.
- Source 2: Local images uploaded to SWR.

During container deployment, you can select an image only from SWR.

3 Common FAQs

3.1 Can I Use a Host to Deploy Multiple Projects?

Yes.

After you add and verify a host, the host can be found in all projects of the account. To deploy multiple projects on a host, configure different installation paths and listening ports to prevent the projects from overwriting each other.

3.2 Do I Need to Install a Running Environment (Tomcat, Python, etc.) on the Target Host Before Deploying an Application?

No. Only Python needs to be installed before template-based deployment. Other running environments, such as Tomcat and JDK, can be added by adding application actions.

3.3 What Should I Do If Application Deployment Fails, with the Message "AnsibleUndefinedVariable: 'xxxx' is undefined" Displayed?

Cause Analysis

The xxxx parameter is not configured in the custom parameters of the application.

Solution

Check whether the xxxx parameter is configured for the application that fails to be deployed.

- If this parameter is not configured, create the custom parameter xxxx.

- If this parameter has been configured, contact technical support.

3.4 What Should I Do If Application Deployment Fails Due to a DNS Resolution Error?

The error occurs because **bind-utils** is not installed on the host. Run the **yum install bind-utils** command on the host to install **bind-utils**.

3.5 What Should I Do If a Draft Application Cannot Be Deployed?

Symptoms

During application deployment, a message is displayed, indicating that CodeArts Deploy cannot deploy draft applications.

Cause Analysis

An application in draft state cannot be called by the pipeline.

Solution

1. On the CodeArts Deploy homepage, click ******* in the same row as the target application and click **Edit**.
2. Click **Save**. The application will change from the draft state to the pending state and can be called by the pipeline.

3.6 What Should I Do If JDK Has Been Installed and Environment Variables Have Been Configured, But Application Deployment Fails with the Error Message "please configure JDK environment variables" Displayed?

Symptoms

JDK has been installed and environment variables have been configured. But application deployment fails with the error message **please configure JDK environment variables** is displayed.

Cause Analysis

Environment variables are not configured in the **\$HOME/.bashrc** and **\$HOME/.bash_profile** files.

Solution

Add the following code segment to the end of the **\$HOME/.bashrc** and **\$HOME/.bash_profile** files:

```
export JAVA_HOME=/usr/local/java/jdk1.8.0_144
export JRE_HOME=/usr/local/java/jdk1.8.0_144/jre
export CLASSPATH=.:$JAVA_HOME/lib/dt.jar:$JAVA_HOME/lib/tools.jar:$JAVA_HOME/lib:$CLASSPATH
export PATH=$JAVA_HOME/bin:$PATH
```

3.7 What Should I Do If the Log Indicates Insufficient Permissions?

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add **'user ALL=(ALL) ALL'** to the **/etc/sudoers** file. **user** indicates a user account.

3.8 What Should I Do If the Path Is Invalid?

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

3.9 What Should I Do If the System Displays a Message Indicating That No Hosts Are Found in the Environment?

Symptoms

No hosts are found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

Step 1 Select the target application, click **...**, and click **Edit**. The **Deployment Actions** page is displayed.



Step 2 Click the **Environment Management** tab.

Step 3 Click the target environment name, switch to the **Resource** page, and click **Import Host**.

Step 4 After the host is added and verified, deploy the application again.

----End

3.10 What Should I Do if an Error Is Reported When the Sudo Permission Is Used?

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
##      user    MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root    ALL=(ALL)    ALL
allen   ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

3.11 What Should I Do If the File or File Path Does Not Exist?

Symptoms

The error message **The file or file path does not exist** is displayed.

Cause Analysis

The possible causes are as follows:

- The file does not exist.
- The file path is not an absolute path.

Solution

Perform the following operations based on the failure causes:

- Run the shell command to check whether the source file exists.
- Check whether the file path is an absolute path starting with a forward slash (/).

3.12 What Should I Do If I Have Insufficient Permissions?

"msg": "chown failed: [Errno 1] Operation not permitted: '/home'"

Symptoms

The error message **"msg": "chown failed: [Errno 1] Operation not permitted: '/home'"** is displayed.

Cause Analysis

You do not have permissions to perform this operation.

Solution

Enable the sudo permission or modify the permission of the directory file.

User is not Administrator

Symptoms

During the deployment of the action **Copy Files**, when files are copied across hosts, the error message **User is not Administrator** is displayed.

Cause Analysis

The administrator account is not used to log in to the target host.

Solution

Log in to the host using the administrator account.

3.13 What Should I Do If the File Path Does Not Exist?

Symptoms

An error message is displayed, indicating that the file path does not exist.

Cause Analysis

The entered configuration file path does not exist.

Solution

Enter a correct file path.

3.14 What Should I Do If the Action "Create and Start Container" Fails on Ubuntu 22 OS When Using Template "Deploy a Docker Application for Linux"?

Symptoms

The action "Create and Start Container" fails on Ubuntu 22 OS when using template "Deploy a Docker Application for Linux".

```
cgroups: cgroup mountpoint does not exist: unknown
```

Cause Analysis

The Linux kernel version is incompatible with the Docker version.

Solution

You can manually mount the cgroup file to temporarily solve the problem.

```
sudo mkdir /sys/fs/cgroup/systemd
sudo mount -t cgroup -o none,name=systemd cgroup /sys/fs/cgroup/systemd
```

3.15 What Should I Do If the Connection Times Out Occasionally During a Deployment on a Windows Host?

Symptoms

During a deployment on a Windows host, the "Connection to `***.***.***.**` timed out." message is occasionally displayed.

```
2024/06/13 11:04:08.767 GMT+08:00] TASK [configure environment variables] *****
2024/06/13 11:04:08.767 GMT+08:00] fatal: [***.***.***.**]: UNREACHABLE => {
2024/06/13 11:04:08.767 GMT+08:00]   "changed": false,
2024/06/13 11:04:08.767 GMT+08:00]   "msg": "Attn: HTTPSConnectionPool(host='***.***.***.**', port=5985): Max retries exceeded with url: /admin (caused by ConnectTimeoutError(CurlLib3.connection.HTTPSConnection object at 0x0000000000000000)): Connection to ***.***.***.** timed out. (connect timeout=30)"}
2024/06/13 11:04:08.767 GMT+08:00]   "retries": 1,
2024/06/13 11:04:08.772 GMT+08:00] }
```

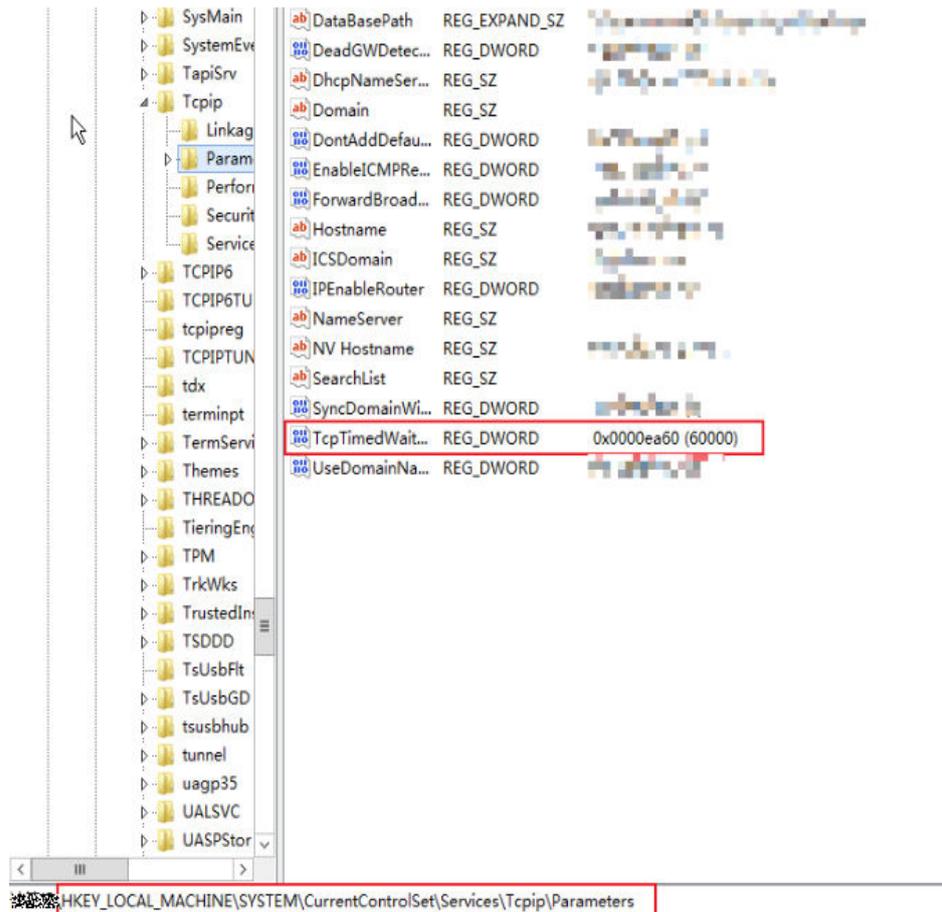
Cause Analysis

Possible cause:

During TCP connect scan, the port is occupied and is not released in time.

Solution

1. Press **Win+R** to open the **Run** window, enter **regedit** to open the **Registry Editor** window, and locate the following path:
2. HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip\Parameters



3. In the right pane, find the **DWORD** value of **TcpTimedWaitDelay**. Create one if it does not exist.
4. Change the value of **TcpTimedWaitDelay** to a required value (in milliseconds). For example, set the **TcpTimedWaitDelay** value to 1 minute (60,000 milliseconds).
5. Restart the PC to validate the configuration.

 **NOTE**

Changing the value of **TcpTimedWaitDelay** may affect network performance and security. Make the change based on your service requirements. For multiple target Windows hosts in the same environment, batch deployment is recommended to avoid unknown impact caused by changing the value of **TcpTimedWaitDelay**.

4 Custom Application Actions

4.1 Health Test via URLs

4.1.1 Incorrect URL

Status code was -1 and not [200]: Request failed: urlopen error [Errno -2] Unknown name or service

Symptoms

The error message "**msg**": "**Status code was -1 and not [200]: Request failed: urlopen error [Errno -2]** " is displayed.

Cause Analysis

The URL is incorrect. As a result, the system cannot parse the URL.

Solution

Check whether the URL in the action is correct.

Status code was -1 and not [200]: Request failed: urlopen error timed out

Symptoms

The error message "**msg**": "**Status code was -1 and not [200]: Request failed: urlopen error timed out**" is displayed.

Cause Analysis

- The domain name in the URL is correct but the URL does not exist.
- The requested service does not exist.
- No inbound rule is added to the security group for the port in the URL.

Solution

Check whether the URL in the action is correct.

NOTE

For details, see [Configuring a Security Group](#) in the *User Guide*. Add an inbound rule to the security group for the port in the URL and verify deployment again.

Status code was -1 and not [200]: Request failed: <urlopen error [Errno 111]> Access denied

Symptoms

The error message "msg": "Status code was -1 and not [200]: Request failed: <urlopen error [Errno 111]> " is displayed.

Cause Analysis

The service is not started.

Solution

1. Manually start the service and check whether it can be started properly.
2. Increase the waiting time of the URL health test to ensure that the service can be started successfully.

4.1.2 URL Does Not Exist

Symptoms

The error message "msg": "Failed to access, please make sure that the service is properly started." is displayed.

```
29 [2022/12/02 17:36:49.415] "content": "{\"timestamp\":\"1669973809353\",\"status\":404,\"error\":\"Not Found\",\"message\":\"No message available\",\"path\":\"...\"}"
30 [2022/12/02 17:36:49.415] }, "content_type": "application/json;charset=UTF-8", "date": "Fri, 02 Dec 2022 09:36:49 GMT", "elapsed": 0, "item": {"url_path": "..."}
31 [2022/12/02 17:36:49.415] ... ignoring
32 [2022/12/02 17:36:49.443]
33 [2022/12/02 17:36:49.444] TASK [Test result] *****
34 [2022/12/02 17:36:49.444] fatal: [100.95.158.58]: FAILED! => {
35 [2022/12/02 17:36:49.444]   "changed": false,
36 [2022/12/02 17:36:49.444]   "msg": "Failed to access, please make sure that the service is properly started."
37 [2022/12/02 17:36:49.444] }
38 [2022/12/02 17:36:49.444]
39 [2022/12/02 17:36:49.444] PLAY RECAP *****
40 [2022/12/02 17:36:49.444] 100.95.158.58 : ok=6 changed=0 unreachable=0 failed=1 skipped=3 rescued=0 ignored=1
41 [2022/12/02 17:36:49.444]
42 [2022/12/02 17:36:49.573] [ERROR] Deploy task execution failed
43 [2022/12/02 17:36:49.580] [ERROR] : Deploy task execution failed.
```

Cause Analysis

The path of the URL is incorrect.

Solution

- Step 1** Use **Xshell** to log in to the host where the deployment is performed.
- Step 2** Deploy the action **Start Spring Boot** again (that is, running the same shell command) and view the printed log details.

```
36 [2022/12/02 17:35:18.221] TASK [Print the command to be executed] ***** Shell command run for starting the Spring Boot service
37 [2022/12/02 17:35:18.221] ok: [100.95.158.58] => {
38 [2022/12/02 17:35:18.221]   "msg": "The command to be executed is: java -jar /usr/local/SpringBoot_01-0.0.1-SNAPSHOT/SpringBoot_01-0.0.1-SNAPSHOT.jar --server.port=8090"
39 [2022/12/02 17:35:18.221] }
40 [2022/12/02 17:35:18.285]
```

Step 3 Run the preceding command on the remote hosts connected to the local host.

Step 4 View the Spring Boot startup logs.

The path of the URL deployed using this version package is **/hello01**.

Step 5 Return to the action deployment page and update the URL path.

----End

NOTE

The Spring Boot service is started by the JAR package, and the Tomcat service is started by the WAR package.

4.1.3 Invalid URL

Symptoms

The error message **"msg": "Status code was -1 and not [200]: Request failed: urlopen error no host given"** is displayed.

Cause Analysis

The URL may contain backslashes (\).

Solution

Change backslashes (\) to forward slashes (/) in the URL.

4.1.4 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in `ClientAliveInterval` for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of `ClientAliveInterval` in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.1.5 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add `'user ALL=(ALL) ALL'` to the `/etc/sudoers` file. **user** indicates the user to grant higher permissions to.

4.1.6 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the `\b` characters.

Figure 4-1 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ba' specified."]
```

- The deployment fails due to the `\f` characters.

Figure 4-2 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\fa' specified."]
```

- The deployment fails due to the `\r` characters.

Figure 4-3 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D\\ra' specified."]
```

- The deployment fails due to the `\t` characters.

Figure 4-4 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D\\ta' specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-5 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D\\na' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.1.7 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click `***`, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.1.10 Error Occurs During Application Deployment with the sudo Privileges

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
## user MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root    ALL=(ALL)    ALL
allen   ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys  ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.1.11 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.1.12 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.1.13 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.1.14 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.1.15 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"/usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"/usr/bin/unzip\" could not handle archive. Command \"/usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.2 Selecting Deployment Sources

4.2.1 Software Package Not Found in CodeArts Artifact

Symptoms

An error message is displayed, indicating that a file path does not exist.

Cause Analysis

The possible causes are as follows:

- The software package does not exist in CodeArts Artifact or has been deleted.
- The **filename** value corresponding to the **demo** parameter in the software package path is incorrect.

Solution

1. Go to CodeArts Artifact of the current project and search for the target software package. If it does not exist, add it.
2. Search for the software package corresponding to the value referenced by the **`\${demo}** parameter. If it does not exist, add it.
3. Deploy the action again.

4.2.2 No Software Package Available for a Build Task

Symptoms

An error message is displayed, indicating that a file path does not exist.

Cause Analysis

The build task does not exist , or no software package is defined in the build task.

Solution

Go to the build service of the current project.

- Check whether the current build task exists. If not, create a task, build the software package, and deploy the step.
- Check whether the software package exists in the build task. If not, rebuild the software package and deploy the step.

4.2.3 URL Domain Name Resolution Failure

Symptoms

The error message **urlopen error [Errno -2] Name or service not known** is displayed.

Cause Analysis

Your host fails to resolve the domain name of the release repository. As a result, the file fails to be downloaded.

Solution

If you have a DNS server, you can add the following domain names to the DNS server to resolve the domain names of the release repository:

If you do not have a DNS server, add the domain names to the **hosts** file on a local host so that the host can resolve the domain names of the release repository.

NOTE

Take a 64-bit Windows 10 host as an example. The path of the **hosts** file is **C:\Windows\System32\drivers\etc**.

```
# Singapore
devrepo.devcloud.ap-southeast-3.huaweicloud.com 114.119.184.199
# Mexico
devrepo.devcloud.la-north-2.huaweicloud.com 110.238.85.119
# Sao Paulo
devrepo.devcloud.sa-brazil-1.huaweicloud.com 119.8.87.118
```

4.2.4 File Download Times Out

Symptoms

The error message **Request failed: urlopen error timed out** is displayed, indicating that the file download times out.

Cause Analysis

The host cannot access the domain name **devrepo.devcloud.huaweicloud.com**. As a result, downloading a file from the URL containing this domain name times out.

Solution

1. Configure host security. For details, see [Security Configuration](#).
2. Deploy tasks using a proxy host. For details, see [Deploying Tasks Using a Proxy Host](#).

4.2.5 Inconsistent SHA256 Values in a File

Symptoms

During file download, the error message **File sha256 different, packages may be modified!** is displayed.

Cause Analysis

When the host attempts to download a software package for application deployment, this software package in CodeArts Artifact is updated. As a result, the SHA256 values in the file are inconsistent.

Solution

Deploy the application again and do not update the software package in CodeArts Artifact during application deployment.

4.2.6 Inconsistent MD5 Values in a File

Symptoms

During file download, the error message **File MD5 different, packages may be modified!** is displayed.

Cause Analysis

When the host attempts to download a software package for application deployment, this software package in CodeArts Artifact is updated. As a result, the MD5 values in the file are inconsistent.

Solution

Deploy the application again and do not update the software package in CodeArts Artifact during application deployment.

4.2.7 Error "More than 100 build files"

Symptoms

During file download, the error message **More than 100 build files** is displayed.

Cause Analysis

When **Build task** is selected for **Source**, if more than 100 software packages are generated by the build task, the download may time out.

Solution

The following workarounds are available:

- Retry the build task and compress the generated software packages into one. Then, download the package using the action **Select Deployment Source**, and decompress the package using the action **Decompress File**.
- In the action **Select Deployment Source**, select **Artifact** as **Source**, select the folder where the build package is located, and download the folder.

4.2.8 "HTTP Error 403" Is Displayed When the CodeArts Artifact Software Package Is Downloaded

Symptoms

During application deployment, the message "HTTP Error 403" is displayed when you download a software package from CodeArts Artifact.

```
TASK [Download the package] *****
fatal: [192.168.1.103]: FAILED! => {
  "attempts": 3,
  "changed": false,
  "dest": ".ansible/tmp/41287demwww.txt",
  "elapsed": 0,
  "failed_when_result": true,
  "msg": "Request failed",
  "response": "HTTP Error 403: ",
  "status_code": 403,
  "url": "https://[redacted]/DevRepoServer/v1/files/download?filename=9292443ef09b4ef99de9df369da6fb9f/demwww.txt"
```

Cause Analysis

- You do not have permission to download the corresponding software package.
- Your CodeArts Artifact traffic in the current month exceeds the specifications of the purchased package.

Solution

- Contact the project administrator to grant you the corresponding permission.
- Check whether the download traffic of CodeArts Artifact has been used up. If the traffic has been used up and you still need to use the download function, upgrade your package.

4.2.9 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in `ClientAliveInterval` for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of `ClientAliveInterval` in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.2.10 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add '**user ALL=(ALL) ALL**' to the **/etc/sudoers** file. **user** indicates the user to grant higher permissions to.

4.2.11 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the **\b** characters.

Figure 4-7 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ba' specified."]
```

- The deployment fails due to the **\f** characters.

Figure 4-8 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\fa' specified."]
```

- The deployment fails due to the **\r** characters.

Figure 4-9 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ra' specified."]
```

- The deployment fails due to the **\t** characters.

Figure 4-10 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ta' specified."]
```

- The deployment fails due to the **\n** characters.

Figure 4-11 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\na' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.2.12 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
 - Step 2** Click the **Environment Management** tab.
 - Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
 - Step 4** After the host is added and verified, deploy the application again.
- End

4.2.13 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
 - Step 2** Click the **Environment Management** tab.
 - Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
 - Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.
- End

4.2.16 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.2.17 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.2.18 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:

- a. The network between the target host and the YUM repository is disconnected.
- b. The firewall restricts outbound access.
- c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.2.19 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.2.20 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \\"usr/local/python/Python-3.5.4.tgz\\". Make sure the required command to extract the file is installed. Command \\"usr/bin/unzip\\" could not handle archive. Command \\"usr/bin/gtar\\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.3 Stopping a Service

4.3.1 Incorrect Port Number

Symptoms

The error message **The port **** is not listening. Please check!** is displayed.

Cause Analysis

The port number is not in use, that is, no process is running over the port.

Solution

Check the listening port of the service to be stopped, and enter a correct port number.

4.3.2 Action Stop Service Deployed Successfully, But the Service Is Still in Started State

Symptoms

On a Windows host, the result shows that the action **Stop Service** is successfully deployed, but the service is still detected in **Started** state.

Figure 4-13 Log information

```
SUCCESS: The process with PID 3112 has been terminated.
```

Cause Analysis

The service is registered as a Windows service, with the startup mode set to automatic startup.

Solution

Change the startup mode of this Windows service, or stop this service in other ways.

4.3.3 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in `ClientAliveInterval` for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of `ClientAliveInterval` in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.3.4 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.

- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add 'user ALL=(ALL) ALL' to the `/etc/sudoers` file. `user` indicates the user to grant higher permissions to.

4.3.5 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the `\b` characters.

Figure 4-14 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***] FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ba' specified."]
```

- The deployment fails due to the `\f` characters.

Figure 4-15 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***] FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\fa' specified."]
```

- The deployment fails due to the `\r` characters.

Figure 4-16 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***] FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ra' specified."]
```

- The deployment fails due to the `\t` characters.

Figure 4-17 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***] FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ta' specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-18 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***] FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\na' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.3.6 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click ******* , and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.3.7 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click ******* , and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
- Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.

----End

4.3.10 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.3.11 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.3.12 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:

- a. The network between the target host and the YUM repository is disconnected.
- b. The firewall restricts outbound access.
- c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.3.13 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.3.14 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"/usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"/usr/bin/unzip\" could not handle archive. Command \"/usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.4 Copying a File

4.4.1 File to Be Copied Does Not Exist

Symptoms

The error message **cannot find path ... because it does not exist.** is displayed.

Cause Analysis

The file to be copied does not exist.

Solution

Check whether the source path and file exist.

4.4.2 Invalid File Path

Symptoms

The error message **ERROR! failed at splitting arguments, either an unbalanced jinja2 block or quotes: replace_param=...** is displayed.

Cause Analysis

The file path may contain backslashes (\).

Solution

Replace backslashes (\) with forward slashes (/).

 NOTE

File paths on both Linux and Windows OSs use forward slashes (/).

4.4.3 File or File Path Does Not Exist

Symptoms

The error message **The file or file path does not exist** is displayed.

Cause Analysis

The possible causes are as follows:

- The file does not exist.
- The file path is not an absolute path.

Solution

Perform the following operations based on the failure causes:

- Run the shell command to check whether the source file exists.
- Check whether the file path is an absolute path starting with a forward slash (/).

4.4.4 Action Copy Files Deployed Successfully, But the Expected Result Is Not Achieved

Symptoms

The result shows that the action **Copy Files** is successfully deployed, but the expected result is not achieved.

After the deployment is complete, a new file is generated in the destination path. The file name is the same as the destination path and does not have a file name extension.

Figure 4-20 Task template path

No.	Source Path	Destination Path	Operation
1	/usr/local/fabu.zip	/usr/local/helloworld/new	+ 

Figure 4-21 New file generated on the target host

```
-rwxr-xr-x. 1 root root 3594 Jan 13 17:32 new
```

As a result, the following situations occur:

- If the source file to be copied is a text file, you can still edit the new file after the copy is complete.
- If the source file to be copied is not a text file, garbled characters are displayed when you edit the new file after the copy is complete.

Cause Analysis

If the destination path of the file to be copied does not end with a forward slash (/), the system copies the file by renaming it. If the file name already exists, the existing file will be overwritten.

Solution

- If the name and format of the source file are determined, specify the directory, file name, and file format in the destination path.
- If you want to copy multiple files or copy them to a directory, the destination path must end with a forward slash (/).

4.4.5 Insufficient Permissions

"msg": "chown failed: [Errno 1] Operation not permitted: '/home'"

Symptoms

The error message **"msg": "chown failed: [Errno 1] Operation not permitted: '/home'"** is displayed.

Cause Analysis

You do not have permissions to perform this operation.

Solution

Enable the sudo permission or modify the permission of the directory file.

User is not Administrator

Symptoms

During the deployment of the action **Copy Files**, when files are copied across hosts, the error message **User is not Administrator** is displayed.

Cause Analysis

The administrator account is not used to log in to the target host.

Solution

Log in to the host using the administrator account.

4.4.6 Log Contains "copy File Failed" When Copying Files Between Linux Environment

Symptoms

The error message **copy file failed** is displayed.

Cause Analysis

- The file does not exist in the source path or the user does not have the permissions required to access the file.
- You do not have the permissions required to access the destination path.

Solution

Enter the correct, accessible source path and destination path.

4.4.7 Log Contains "Windows does not support copying files between hosts" When Copying Files Between Windows Environment

Symptoms

The error message **Windows does not support copying files between hosts** is displayed.

Cause Analysis

The selected hosts contain Windows hosts. Currently, files cannot be copied between Windows hosts.

Solution

Ensure that the source and target host groups contain only Linux hosts.

4.4.8 Log Contains "Hosts using secret key credit do not support copying files between" When Copying Files Between Environment

Symptoms

The error message **Hosts using secret key credit do not support copying files between** is displayed.

Cause Analysis

The selected target host is a host that can be accessed using a secret. Currently, files cannot be copied to such hosts.

Solution

Change the target host to be accessible by using a password.

4.4.9 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in **ClientAliveInterval** for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of **ClientAliveInterval** in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.4.10 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add **'user ALL=(ALL) ALL'** to the `/etc/sudoers` file. **user** indicates the user to grant higher permissions to.

4.4.11 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the `\b` characters.

Figure 4-22 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ba' specified."]
```

- The deployment fails due to the `\f` characters.

Figure 4-23 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\fa' specified."]
```

- The deployment fails due to the `\r` characters.

Figure 4-24 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ra' specified."]
```

- The deployment fails due to the `\t` characters.

Figure 4-25 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ta' specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-26 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\na' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.4.12 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click `***`, and click **Edit**. The **Deployment Actions** page is displayed. 11

- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.4.13 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
- Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.

----End

4.4.14 Failed to Deploy an Application on a Windows Host

Symptoms

The following log information is displayed.

Figure 4-27 Log information

```
37 [2019-02-19 14:35:35.650] TASK [Install 7zip] *****
38 [2019-02-19 14:35:35.656] fatal: [***.***.***.***]: FAILED! => [changed]: true, "cmd": "cmd.exe /c start /wait C:\\Users\\Administrator\\Downloads\\7z1805-x64.exe /S", "delta": "0:00:01.531201", "end": "2019-02-19 06:35:35.675437", "msg": "non-zero return code", "rc": 3702504530, "start": "2019-02-19 06:35:34.144230", "stderr": "\nUnhandled Exception: System.IO.FileLoadException: Could not load file or assembly 'System.Data, Version=***.***.***.***, Culture=neutral, PublicKeyToken=87759654244689' or one of its dependencies. The paging file is too small for this operation to complete. (Exception from HRESULT: 0x80070049)"\n at System.Management.Automation.PSObject.GetInternalAdapterSet(Object obj)\n at System.Management.Automation.PSObject.GetMappedAdapter(Object obj, TypeTable typeTable)\n at System.Management.Automation.PSObject.get_InternalTypeNames()\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParametersPrivate(PSObject inputToOperateOn)\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameters(PSObject inputToOperateOn)\n at System.Management.Automation.CommandProcessor.Read()\n at
```

Cause Analysis

The corresponding patch is missing when the Windows host is verified for its connectivity.

Solution

Verify the connectivity again according to the [Windows configuration document](#).

4.4.15 Error Occurs During Application Deployment with the sudo Privileges

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
## user MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root ALL=(ALL) ALL
allen ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.4.16 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.

4. After the configuration is complete, deploy the application.

4.4.17 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.4.18 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.4.19 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.4.20 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"/usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"/usr/bin/unzip\" could not handle archive. Command \"/usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.5 Deleting a File

4.5.1 Cannot Delete Files on a Linux Host

Symptoms

After the action **Delete Files** is run on a Linux host, no error message is displayed, but files are not deleted.

Cause Analysis

An incorrect file path is entered. The host does not find the files and considers that the files have been deleted by default.

Solution

Use a correct file path.

4.5.2 File Path Does Not Exist on a Windows Host

Symptoms

When the action **Delete Files** is run on a Windows host, the error message **"stderr": "del : Cannot find path 'C:\\nodendoenodeno' because it does not exist.** is displayed.

Cause Analysis

The path of the files to be deleted does not exist.

Solution

Check whether the entered path is correct. Note that the colon in the path must be an English colon.

4.5.3 Incorrect File Path on a Windows Host

Symptoms

When the action **Delete Files** is run on a Windows host, the error message **"stderr": "Remove-Item : A positional parameter cannot be found that accepts argument 'est\r\n1'.** is displayed.

Cause Analysis

Ansible is used when deleting a file. The Windows path incorrectly contains a backslash (\) instead of a forward slash (/).

Solution

Check whether the file path is correct. If the file path is a Windows path, ensure that the path contains forward slashes (/).

4.5.4 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in `ClientAliveInterval` for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of `ClientAliveInterval` in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.5.5 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add `'user ALL=(ALL) ALL'` to the `/etc/sudoers` file. **user** indicates the user to grant higher permissions to.

4.5.6 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the `\b` characters.

Figure 4-28 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ba' specified."]
```

- The deployment fails due to the `\f` characters.

Figure 4-29 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\fa' specified."]
```

- The deployment fails due to the `\r` characters.

Figure 4-30 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ra' specified."]
```

- The deployment fails due to the `\t` characters.

Figure 4-31 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ta' specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-32 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\na' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.5.7 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click ******* , and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.5.8 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click ******* , and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
- Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.

----End

4.5.9 Failed to Deploy an Application on a Windows Host

Symptoms

The following log information is displayed.

Figure 4-33 Log information

```

37 [2019-02-19 14:35:35.650] TASK [Install Teip] *****
38 [2019-02-19 14:35:35.650] fatal: [***.***.***]: FAILED! =>[changed]: true, "cmd": "cmd.exe /c start /wait C:\\Users\\Administrator\\Downloads\\Te1805-ed4.exe /S, "delta": "0:00:01.531201", "end": "2019-
02-19 06:35:35.675437", "msg": "non-zero return code", "rc": 3762504530, "start": "2019-02-19 06:35:34.144230", "stderr": "\r\nUnhandled Exception: System.IO.FileNotFoundException: Could not load file or assembly
'System.Data, Version=***.***.***, Culture=neutral, PublicKeyToken=b77a5c561934e689' or one of its dependencies. The paging file is too small for this operation to complete. (Exception from HRESULT:
0x800705af)\r\n   at System.Management.Automation.PSObject.MappedInternalAdapterSet(Object obj)\r\n   at System.Management.Automation.PSObject.GetMappedAdapter(Object obj, TypeTable typeTable)\r\n   at
System.Management.Automation.PSObject.get_InternalAdapterSet() \r\n   at System.Management.Automation.PSObject.get_InternalTypeNames() \r\n   at
System.Management.Automation.CmdletParameterBinderController.BindPipelineParametersPrivate(PSObject inputToOperateOn)\r\n   at
System.Management.Automation.CmdletParameterBinderController.BindPipelineParameters(PSObject inputToOperateOn)\r\n   at System.Management.Automation.CommandProcessor.Read() \r\n   at

```

Cause Analysis

The corresponding patch is missing when the Windows host is verified for its connectivity.

Solution

[Verify the connectivity again according to the Windows configuration document.](#)

4.5.10 Error Occurs During Application Deployment with the sudo Privileges

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
## user MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root    ALL=(ALL)    ALL
allen   ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.5.11 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.

2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.5.12 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.5.13 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.

- Contact the network administrator to modify the outbound rules of the security group.

4.5.14 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.5.15 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"usr/bin/unzip\" could not handle archive. Command \"usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.6 Decompressing a File

4.6.1 File to Be Decompressed Does Not Exist

Symptoms

The error message **unzip: cannot find or open...** is displayed.

Cause Analysis

- The file to be decompressed does not exist.
- You do not have permissions to perform this operation.

Solution

- On Windows, check whether the file path contains a backslash (\). If so, replace it with a forward slash (/).
- Check whether the source path (file) or destination path (file) exists.
- Check whether the file type is correct and ensure that the file ends in the correct compression format.
- Enable the sudo permission or modify the permission of the directory file.

4.6.2 Backslashes (\) Are Used as Path Separators in the Native Command Compress-Archive

Symptoms

The error message **appears to use backslashes as path separators...** is displayed.

Cause Analysis

When the native PowerShell command **Compress-Archive** or the action **Build with MSBuild** is used for packaging, the file path in the PowerShell command uses backslashes (\) as separators. This packaging mode has poor platform compatibility. As a result, the preceding problem occurs.

Solution

1. Run the following script to build a package:

```
nuget restore
msbuild /p:OutputPath=../buildResult/Release/bin
powershell Invoke-WebRequest -UseBasicParsing https://www.7-zip.org/a/7z1900-x64.exe -OutFile ./7zip.exe
7zip.exe /S
"C:/Program Files/7-Zip/7z.exe" a ./archive.zip ./buildResult/Release/bin/*
```
2. Use the 7-Zip packaging tool to create a customized package.

4.6.3 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in **ClientAliveInterval** for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of **ClientAliveInterval** in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.6.4 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add **'user ALL=(ALL) ALL'** to the `/etc/sudoers` file. **user** indicates the user to grant higher permissions to.

4.6.5 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the `\b` characters.

Figure 4-34 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ba' specified."]
```

- The deployment fails due to the `\f` characters.

Figure 4-35 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\fa' specified."]
```

- The deployment fails due to the `\r` characters.

Figure 4-36 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ra' specified."]
```

- The deployment fails due to the `\t` characters.

Figure 4-37 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ta' specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-38 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\na' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.6.6 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click `***`, and click **Edit**. The **Deployment Actions** page is displayed. 11

- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.6.7 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
- Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.

----End

4.6.8 Failed to Deploy an Application on a Windows Host

Symptoms

The following log information is displayed.

Figure 4-39 Log information

```
37 [2019-02-19 14:35:35.650] TASK [Install 7zip] *****
38 [2019-02-19 14:35:35.656] fatal: [***.***.***]: FAILED! => [changed]: true, "cmd": "cmd.exe /c start /wait C:\\Users\\Administrator\\Downloads\\7z1805-x64.exe /S", "delta": "0:00:01.531201", "end": "2019-02-19 06:35:35.675437", "msg": "non-zero return code", "rc": 3702504530, "start": "2019-02-19 06:35:34.144230", "stderr": "\nUnhandled Exception: System.IO.FileLoadException: Could not load file or assembly 'System.Data, Version=***.***.***, Culture=neutral, PublicKeyToken=877a5c501344688' or one of its dependencies. The paging file is too small for this operation to complete. (Exception from HRESULT: 0x80070049) \n\n   at System.Management.Automation.PSObject.get_InternalAdapterSet(Object obj) \n\n   at System.Management.Automation.PSObject.get_InternalTypeNames() \n\n   at System.Management.Automation.CmdletParameterBinderController.BindPipelineParametersPrivate(PSObject inputToOperateOn) \n\n   at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameters(PSObject inputToOperateOn) \n\n   at System.Management.Automation.CommandProcessor.Read() \n\n   at
```

Cause Analysis

The corresponding patch is missing when the Windows host is verified for its connectivity.

Solution

Verify the connectivity again according to the [Windows configuration document](#).

4.6.9 Error Occurs During Application Deployment with the sudo Privileges

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
## user MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root ALL=(ALL) ALL
allen ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.6.10 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.

4. After the configuration is complete, deploy the application.

4.6.11 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.6.12 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.6.13 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.6.14 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"/usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"/usr/bin/unzip\" could not handle archive. Command \"/usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.7 Modifying a Configuration File

4.7.1 File Path Does Not Exist

Symptoms

An error message is displayed, indicating that a file path does not exist.

Cause Analysis

The entered configuration file path does not exist.

Solution

Enter a correct file path.

4.7.2 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in `ClientAliveInterval` for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of `ClientAliveInterval` in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.7.3 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add '**user ALL=(ALL) ALL**' to the **/etc/sudoers** file. **user** indicates the user to grant higher permissions to.

4.7.4 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the **\b** characters.

Figure 4-40 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ba' specified."]
```

- The deployment fails due to the **\f** characters.

Figure 4-41 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\fa' specified."]
```

- The deployment fails due to the **\r** characters.

Figure 4-42 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ra' specified."]
```

- The deployment fails due to the **\t** characters.

Figure 4-43 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ta' specified."]
```

- The deployment fails due to the **\n** characters.

Figure 4-44 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\na' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.7.5 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
 - Step 2** Click the **Environment Management** tab.
 - Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
 - Step 4** After the host is added and verified, deploy the application again.
- End

4.7.6 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
 - Step 2** Click the **Environment Management** tab.
 - Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
 - Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.
- End

4.7.9 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.7.10 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.7.11 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:

- a. The network between the target host and the YUM repository is disconnected.
- b. The firewall restricts outbound access.
- c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.7.12 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.7.13 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"usr/bin/unzip\" could not handle archive. Command \"usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.8 Starting or Stopping Tomcat

4.8.1 Invalid Tomcat Path

Invalid Path

Symptoms

During the deployment of the startup command in the action **Start/Stop Tomcat**, an error message is displayed, indicating an invalid path.

Cause Analysis

The path contains invalid characters, such as Chinese colons and backslashes (\\).

Solution

Check whether the entered path contains invalid characters. If so, modify the path and perform the deployment again.

The path does not exist

Symptoms

During the deployment of the startup command in the action **Start/Stop Tomcat**, the error message **The path does not exist** is displayed.

Cause Analysis

The entered path is incorrect and does not exist on the target host.

Solution

Enter the absolute path of the service to be started or stopped, and perform the deployment again.

4.8.2 Stopping Failed

Symptoms

For a Windows host, after you set **Operation** to **Stop** in the action **Start/Stop Tomcat**, the error message **org.apache.catalina.startup.Catalina.stopServer Could not contact [localhost:****]. Tomcat may not be running.** is displayed.

Cause Analysis

If **Service Shutdown Port** (used to listen to and shut down the port for the Tomcat service) is changed when **Operation** is set to **Start** (start command) in the **Start/Stop Tomcat** deployment action, the shutdown port in the Tomcat **server.xml** file is updated accordingly. If these two shutdown ports are different, the command for stopping Tomcat will fail to be deployed.

Solution

Log in to the host, go to **Tomcat installation path/conf**, find the **server.xml** file, change its shutdown port number to that configured in the latest **Start/Stop Tomcat** action with **Operation** set to **Start**, and perform the deployment again.

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limitations under the License.

-->

<!-- Note: A "Server" is not itself a "Container", so you may not
define subcomponents such as "Valves" at this level.
Documentation at /docs/config/server.html

-->

```
<Server port="8080" shutdown="SHUTDOWN">  
<Listener className="org.apache.catalina.startup.VersionLoggerListener" />  
<!-- Security listener. Documentation at /docs/config/listeners.html  
<Listener className="org.apache.catalina.security.SecurityListener" />  
-->  
<!--APR library loader. Documentation at /docs/apr.html -->
```

4.8.3 Startup Failed

Symptoms

During the deployment of the Tomcat startup command in the action **Start/Stop Tomcat**, the error message **The Tomcat service startup failed** is displayed.

Cause Analysis

The possible causes are as follows:

- The port is occupied.
- JDK is not installed or environment variables are incorrectly configured.
- The JDK version does not match the Tomcat version.
- The entered absolute path is incorrect.

Solution

Perform the following steps to rectify the fault:

1. Run the following command to check whether the port is occupied. If the port is occupied, change the port number and perform the deployment again.
 - Linux
lsof -i:8080
netstat -an|grep 8080
 - Windows
netstat -ano|findstr "8080"
2. Run the following command to check the Java environment. If JDK is not installed, install it through the action **Install JDK**.
 - Linux
java -version
which java
 - Windows
java -version

NOTE

Scenario 1: If the Linux OS is in use and JDK is manually installed, add the JDK environment variables to the following files because the current startup operation is **no_login**:

- **Ubuntu:** ~/.bashrc and ~/.profile
- **Centos:** ~/.bashrc and ~/.bash_profile

The following is a configuration example of the environment variables:

- export JAVA_HOME=/usr/local/jdk/jdk1.8.0_151
- export CLASS_PATH=\$JAVA_HOME/lib:\$JAVA_HOME/jre/lib
- export PATH=\$JAVA_HOME/bin:\$PATH

Scenario 2: If the Linux OS is in use and JDK of the version openjdk-1.8.0 is installed using the action **Install JDK**, you do not need to manually configure JDK. However, you must delete the JDK environment variables from the following files:

- **Ubuntu:** ~/.bashrc and ~/.profile
- **Centos:** ~/.bashrc and ~/.bash_profile

3. Install JDK that matches the Tomcat version.
4. Check whether the entered path is correct. If not, modify it and perform the deployment again.
5. If the problem persists, check the Tomcat startup logs and locate the fault based on the logs. The logs are saved in the following directories:
 - \${HOME}/tomcat/logs/catalina.out
 - \${HOME}/tomcat/logs/catalina.log

4.8.4 Environment Variables Are Not Configured

Symptoms

The error message **please configure JDK environment variables** is displayed.

Cause Analysis

1. JDK is not installed.
2. Environment variables are not configured or are incorrectly configured.
3. When **openjdk-1.8.0** is selected for **JDK Version** in the action **Install JDK**, JDK environment variables are manually configured and the path is set incorrectly.

Solution

1. If JDK is not installed, install it through the action **Install JDK**.
2. Configure the environment variables correctly.

NOTE

The current startup/stop mode is **no_login**. If the Linux OS is used, you need to manually install **JDK** and add the JDK environment variables to the following files:

- **Ubuntu:** ~/.bashrc and ~/.profile
- **Centos:** ~/.bashrc and ~/.bash_profile

The following is a configuration example of the environment variables:

- export JAVA_HOME=/usr/local/jdk /jdk1.8.0_151
- export CLASS_PATH=\$JAVA_HOME/lib:\$JAVA_HOME/jre/lib
- export PATH=\$JAVA_HOME/bin:\$PATH

3. If the Linux OS is in use and JDK of the version openjdk-1.8.0 is installed using the action **Install JDK**, you do not need to manually configure JDK. However, you must delete the JDK environment variables from the following files:
 - **Ubuntu:** ~/.bashrc and ~/.profile
 - **Centos:** ~/.bashrc and ~/.bash_profile

4.8.5 Service Is Not Started Despite Successful Action Deployment

Symptoms

The command for starting Tomcat is successfully deployed during the deployment of the action **Start/Stop Tomcat**, but the service is not started.

Cause Analysis

1. The waiting time is too short. As a result, the service is not started when the waiting time ends.
2. If the service startup still fails after the waiting time is set to a proper value, check whether the service exits unexpectedly after being started.

Solution

1. Adjust the waiting time.
2. Log in to the server where the service is deployed to manually start the service or view logs to locate the service fault.

4.8.6 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in **ClientAliveInterval** for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of **ClientAliveInterval** in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.8.7 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add **'user ALL=(ALL) ALL'** to the `/etc/sudoers` file. **user** indicates the user to grant higher permissions to.

4.8.8 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the `\b` characters.

Figure 4-46 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ba' specified."]
```

- The deployment fails due to the `\f` characters.

Figure 4-47 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\fa' specified."]
```

- The deployment fails due to the `\r` characters.

Figure 4-48 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ra' specified."]
```

- The deployment fails due to the `\t` characters.

Figure 4-49 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ta' specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-50 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\na' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.8.9 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click `***`, and click **Edit**. The **Deployment Actions** page is displayed. 11

- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.8.10 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
- Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.

----End

4.8.11 Failed to Deploy an Application on a Windows Host

Symptoms

The following log information is displayed.

Figure 4-51 Log information

```
37 [2019-02-19 14:35:35.650] TASK [Install 7zip] *****
38 [2019-02-19 14:35:35.650] fatal: [***.***.***] FAILED! => [changed]: true, "cmd": "cmd.exe /c start /wait C:\\Users\\Administrator\\Downloads\\7z1805-x64.exe /S", "delta": "0:00:01.531201", "end": "2019-02-19 06:35:35.075437", "msg": "non-zero return code", "rc": 3702504530, "start": "2019-02-19 06:35:34.144230", "stderr": "\nUnhandled Exception: System.IO.FileLoadException: Could not load file or assembly 'System.Data, Version=***.***.***, Culture=neutral, PublicKeyToken=877595c511434230' or one of its dependencies. The paging file is too small for this operation to complete. (Exception from HRESULT: 0x80070049) \n\n at System.Management.Automation.PSObject.GetInternalAdapterSet(Object obj) \n\n at System.Management.Automation.PSObject.GetMappedAdapter(Object obj, TypeTable typeTable) \n\n at System.Management.Automation.PSObject.get_InternalTypeNames() \n\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParametersPrivate(PSObject inputToOperateOn) \n\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameters(PSObject inputToOperateOn) \n\n at System.Management.Automation.CommandProcessor.Read() \n\n at
```

Cause Analysis

The corresponding patch is missing when the Windows host is verified for its connectivity.

Solution

Verify the connectivity again according to the [Windows configuration document](#).

4.8.12 Error Occurs During Application Deployment with the sudo Privileges

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
## user MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root    ALL=(ALL)    ALL
allen   ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys  ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.8.13 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.

4. After the configuration is complete, deploy the application.

4.8.14 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.8.15 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.8.16 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.8.17 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"/usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"/usr/bin/unzip\" could not handle archive. Command \"/usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.9 Start/Stop Go Service

4.9.1 The Go Service Path Is Incorrect

The path does not exist, please verify the Go service path

Symptoms

During the deployment of the startup command in the action **Start/Stop Go Service**, the error message **The path does not exist** is displayed.

Cause Analysis

The entered path is incorrect and does not exist on the target host.

Solution

Enter the absolute path of the Go service to start or stop, and perform the deployment again.

4.9.2 Startup Failed

Symptoms

When the startup command in **Start/Stop Go Service** is deployed, the log shows **"The Go service has been started. If you need to restart, please stop the service first! "**, which means that the startup fails".

Analysis

The service has been started. When the startup command is executed again, an error is reported.

Solution

Stop the service by executing **Stop Go Service**, and then run the startup command again.

Or log in to the server to stop the started services, and then run the startup command again.

4.9.3 Environment Variables Are Not Configured

Symptoms

"Unable to start the Go service, please configure Go environment variables!" is displayed, prompting you to configure the environment variable.

Cause Analysis

1. Go is not installed.

2. Environment variables are not configured or are incorrectly configured.

Solution

1. If Go is not installed, install it by following the instructions provided in [Installing Go](#).
2. Configure the environment variables correctly.

NOTE

The current startup and stop operations are performed in **no_login** mode. If the operating system is Linux and Go is manually installed, add environment variables to the following files:

- **Ubuntu:** ~/.bashrc and ~/.profile
- **Centos:** ~/.bashrc and ~/.bash_profile

The following is a configuration example of the environment variables:

- export GOROOT=/usr/local/go/go_install_dir/go
- export GOPATH=/usr/local/go/go_workpath
- export PATH= \$GOROOT/bin:\$PATH

4.9.4 Deployment Is Successful, But the Service Is Not Started

Symptoms

The command for starting Go is successfully deployed during the deployment of the action **Start/Stop Go Service**, but the service is not started.

Analysis

1. The waiting time is too short. As a result, the service is not started when the waiting time ends.
2. If the service still fails to be started after the waiting time is adjusted to a longer time, check whether any other causes exist.

Solution

1. Adjust the waiting time.
2. Log in to the server where the service is deployed to manually start the service or view logs to locate the service fault.

4.9.5 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in `ClientAliveInterval` for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of `ClientAliveInterval` in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.9.6 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add `'user ALL=(ALL) ALL'` to the `/etc/sudoers` file. **user** indicates the user to grant higher permissions to.

4.9.7 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the `\b` characters.

Figure 4-52 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ba' specified."]
```

- The deployment fails due to the `\f` characters.

Figure 4-53 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\fa' specified."]
```

- The deployment fails due to the `\r` characters.

Figure 4-54 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D[\\ra]' specified."]
```

- The deployment fails due to the `\t` characters.

Figure 4-55 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D[\\ta]' specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-56 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D[\\na]' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.9.8 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click `***`, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.9.11 Error Occurs During Application Deployment with the sudo Privileges

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
## user MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root    ALL=(ALL)    ALL
allen   ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys  ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.9.12 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.9.13 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.9.14 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.9.15 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.9.16 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"/usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"/usr/bin/unzip\" could not handle archive. Command \"/usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.10 Starting or Stopping Spring Boot

4.10.1 Start/Stop Spring Boot

In the action **Start/Stop Spring Boot**, the Spring Boot service can be started in background mode by running the **java -jar** command and stopped by stopping the service process.

The background assembles the command based on the content you entered.

4.10.2 Invalid Spring Boot Path

Invalid Path

Symptoms

An error message is displayed, indicating an invalid path.

Cause Analysis

The path contains invalid characters, such as Chinese colons and backslashes(\).

Solution

Check whether the entered path contains invalid characters. If so, modify the path and perform the deployment again.

The path does not exist

Symptoms

The error message "**The path does not exist**" is displayed.

Cause Analysis

The entered path is incorrect and does not exist on the target host.

Solution

Enter the absolute path of the service to be started or stopped, and perform the deployment again.

4.10.3 Startup Failed

Symptoms

During the deployment of the Spring Boot startup command in the action **Start/Stop Spring Boot**, the error message **The SpringBoot service startup failed** is displayed.

Cause Analysis

The possible causes are as follows:

- The port is occupied.
- JDK is not installed or environment variables are incorrectly configured.
- The value of a parameter is improper or the parameter is incorrectly used.
- The entered absolute path is incorrect.

Solution

Perform the following steps to rectify the fault:

1. Run the following command to check whether the port is occupied. If the port is occupied, change the port number and perform the deployment again.
 - Linux

```
lsof -i:8080  
netstat -an|grep 8080
```
 - Windows

```
netstat -ano|findstr "8080"
```
2. Run the following command to check the Java environment. If JDK is not installed, install it through the action **Install JDK**.
 - Linux

```
java -version  
which java
```
 - Windows

```
java -version
```

NOTE

Scenario 1: If the Linux OS is in use and JDK is manually installed, add the JDK environment variables to the following files because the current startup operation is **no_login**:

- **Ubuntu:** `~/.bashrc` and `~/.profile`
- **Centos:** `~/.bashrc` and `~/.bash_profile`

The following is a configuration example of the environment variables:

- `export JAVA_HOME=/usr/local/jdk/jdk1.8.0_151`
- `export CLASS_PATH=$JAVA_HOME/lib:$JAVA_HOME/jre/lib`
- `export PATH=$JAVA_HOME/bin:$PATH`

Scenario 2: If the Linux OS is in use and JDK of the version `openjdk-1.8.0` is installed using the action **Install JDK**, you do not need to manually configure JDK. However, you must delete the JDK environment variables from the following files:

- **Ubuntu:** `~/.bashrc` and `~/.profile`
- **Centos:** `~/.bashrc` and `~/.bash_profile`

3. Set Java running parameters properly, and enter correct command line parameters in the corresponding text boxes. For details about the differences between system variables and command line parameters, see [Start/Stop Spring Boot](#).
4. Check whether the entered path is correct. If not, modify it and perform the deployment again.
5. In the action **Select Deployment Source**, select a JAR file to download.

6. If the problem persists, check the service startup logs and locate the fault based on the logs.

4.10.4 Environment Variables Are Not Configured

Symptoms

During the deployment of the Spring Boot startup command in the action **Start/Stop Spring Boot**, the error message **please configure JDK environment variables** is displayed.

Cause Analysis

1. JDK is not installed.
2. Environment variables are not configured or are incorrectly configured.
3. When **openjdk-1.8.0** is selected for **JDK Version** in the action **Install JDK**, JDK environment variables are manually configured and the path is set incorrectly.

Solution

1. If JDK is not installed, install it through the action **Install JDK**.
2. Configure the environment variables correctly.

NOTE

The current startup mode is **no_login**. If the Linux OS is used, you need to manually install JDK and add the JDK environment variables to the following files:

- **Ubuntu:** ~/.bashrc and ~/.profile
- **Centos:** ~/.bashrc and ~/.bash_profile

The following is a configuration example of the environment variables:

- export JAVA_HOME=/usr/local/jdk /jdk1.8.0_151
- export CLASS_PATH=\$JAVA_HOME/lib:\$JAVA_HOME/jre/lib
- export PATH=\$JAVA_HOME/bin:\$PATH

3. If the Linux OS is in use and JDK of the version openjdk-1.8.0 is installed using the action **Install JDK**, you do not need to manually configure JDK. However, you must delete the JDK environment variables from the following files:
 - **Ubuntu:** ~/.bashrc and ~/.profile
 - **Centos:** ~/.bashrc and ~/.bash_profile

4.10.5 Service Is Not Started Despite Successful Action Deployment

Symptoms

The command for starting Spring Boot is successfully deployed during the deployment of the action **Start/Stop Spring Boot**, but the service is not started.

Cause Analysis

1. The waiting time is too short. As a result, the service is not started when the waiting time ends.

2. If the service startup still fails after the waiting time is set to a proper value, check whether the service exits unexpectedly after being started.

Solution

1. Adjust the waiting time.
2. Log in to the server where the service is deployed to manually start the service or view logs to locate the service fault.

4.10.6 Spring Boot Can Still Be Detected After Being Stopped (on Windows)

Symptoms

The command for stopping Spring Boot is successfully deployed during the deployment of the action **Start/Stop Spring Boot**, but the Spring Boot process can still be detected.

Cause Analysis

Spring Boot in the current path is registered as a Windows service and the startup mode is automatic startup.

Solution

1. Run the following command to open the Windows service list:
`services.msc`
2. Search for service names similar to **devployMan_SpringBoot_01-0.0.1-SNAPSHOT.jar**.
If a similar service name exists, run the following two commands in sequence:
`nssm stop devployMan_SpringBoot_01-0.0.1-SNAPSHOT.jar`
`nssm remove devployMan_SpringBoot_01-0.0.1-SNAPSHOT.jar`

4.10.7 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in **ClientAliveInterval** for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of **ClientAliveInterval** in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.10.8 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add **'user ALL=(ALL) ALL'** to the `/etc/sudoers` file. **user** indicates the user to grant higher permissions to.

4.10.9 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the **\b** characters.

Figure 4-58 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ba' specified."]
```

- The deployment fails due to the **\f** characters.

Figure 4-59 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\fa' specified."]
```

- The deployment fails due to the **\r** characters.

Figure 4-60 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ra' specified."]
```

- The deployment fails due to the **\t** characters.

Figure 4-61 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D[\\ta] specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-62 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D[\\na] specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.10.10 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click `***`, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.10.11 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
 - Step 2** Click the **Environment Management** tab.
 - Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
 - Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.
- End

4.10.12 Failed to Deploy an Application on a Windows Host

Symptoms

The following log information is displayed.

Figure 4-63 Log information

```
37 [2019-02-19 14:35:35.650] TASK [Install Tzip] *****
38 [2019-02-19 14:35:35.650] fatal: [***.***.***]: FAILED! => [changed]: true, "cmd": "cmd.exe /c start /wait C:\\Users\\Administrator\\Downloads\\Tzi1805-w64.exe /S", "delta": "0:00:01.531201", "end": "2019-02-19 06:35:35.675437", "msg": "non-zero return code", "rc": 3702504530, "start": "2019-02-19 06:35:34.144230", "stderr": "\nUnhandled Exception: System.IO.FileLoadException: Could not load file or assembly 'System.Data, Version=***.***.***, Culture=neutral, PublicKeyToken=87855c501344889' or one of its dependencies. The paging file is too small for this operation to complete. (Exception from HRESULT: 0x800705d9) \r\n at System.Management.Automation.PSObject.get_InternalAdapterSet(Object obj)\r\n at System.Management.Automation.PSObject.get_MappedAdapter(Object obj, TypeTable typeTable)\r\n at System.Management.Automation.PSObject.get_InternalTypeAdapter()\r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParametersPrivate(PSObject inputToOperateOn)\r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameters(PSObject inputToOperateOn)\r\n at System.Management.Automation.CommandProcessor.Read()\r\n at
```

Cause Analysis

The corresponding patch is missing when the Windows host is verified for its connectivity.

Solution

Verify the connectivity again according to the Windows configuration document.

4.10.13 Error Occurs During Application Deployment with the sudo Privileges

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
## user MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root    ALL=(ALL)    ALL
allen   ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.10.14 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.10.15 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (`\`).

4.10.16 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.10.17 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.

- c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.10.18 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"usr/bin/unzip\" could not handle archive. Command \"usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.11 Starting or Stopping Nginx

4.11.1 Nginx Gets Restarted Repeatedly

Symptoms

An error message containing **Address already in use** is displayed.

```
nginx: [emerg] bind() to ***.***.***.0:80 failed (98: Address already in use)
```

Cause Analysis

Nginx has been started and the port has been occupied.

Solution

Deploy the action for stopping Nginx and restart it.

4.11.2 Invalid Windows Host Path

Symptoms

An error message containing **has an invalid path** is displayed.

```
"msg": "Get-AnsibleParam: Parameter 'chdir' has an invalid path 'C:\\xxx\\nginx\\nginx-1.16.1' specified."
```

Cause Analysis

When the host runs a Windows OS, if the path uses backslashes (\), rather than forward slashes (/), this error will occur.

Solution

Change the backslash (\) in the path to a forward slash (/).

4.11.3 Deploying the Command for Stopping Nginx When Nginx Is Not Started

Symptoms

An error message containing **nginx.pid** is displayed.

```
"nginx: [error] open() \"/home/xxx/nginx/logs/nginx.pid" failed (2: No such file or directory)"
```

Cause Analysis

After Nginx is started, the process ID is saved in **nginx.pid**. Nginx can be stopped based on the process ID. If the Nginx process does not exist, an error message indicating that the **nginx.pid** file cannot be found will be displayed when you deploy the **stop** and **quit** commands.

Solution

Do not deploy the command for stopping Nginx if it is not started.

4.11.4 Incorrect Format of the Nginx Configuration File

Symptoms

An error message containing **unexpected end of file** is displayed.

```
"nginx: [emerg] unexpected end of file, expecting ";" or "\" in /usr/local/nginx/conf/nginx.conf:1"
```

Cause Analysis

The format of the nginx configuration file is incorrect. As a result, an error is reported when the nginx process is started.

Solution

Edit the nginx configuration file using a local editor and copy the file to the text box after verification.

4.11.5 Configuration File Backup Path Does Not Exist

Symptoms

An error message containing **cp: cannot create regular file** is displayed.

```
"cp: cannot create regular file '/udsds/dsds.conf': No such file or directory"
```

Cause Analysis

The path specified for backing up the configuration file does not exist.

Solution

Change the backup path and ensure that all directories in the path exist.

4.11.6 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {  
  "changed": false,  
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",  
  "unreachable": true  
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in **ClientAliveInterval** for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of **ClientAliveInterval** in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.11.7 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add **'user ALL=(ALL) ALL'** to the **/etc/sudoers** file. **user** indicates the user to grant higher permissions to.

4.11.8 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the **\b** characters.

Figure 4-64 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ba' specified."]
```

- The deployment fails due to the **\f** characters.

Figure 4-65 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\fa' specified."]
```

- The deployment fails due to the **\r** characters.

Figure 4-66 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ra' specified."]
```

- The deployment fails due to the **\t** characters.

Figure 4-67 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ta' specified."]
```

- The deployment fails due to the **\n** characters.

Figure 4-68 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\na' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.11.9 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
 - Step 2** Click the **Environment Management** tab.
 - Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
 - Step 4** After the host is added and verified, deploy the application again.
- End

4.11.10 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
 - Step 2** Click the **Environment Management** tab.
 - Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
 - Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.
- End

4.11.11 Failed to Deploy an Application on a Windows Host

Symptoms

The following log information is displayed.

Figure 4-69 Log information

```
37 [2019-02-19 14:35:35.650] TASK [Install Teip] *****
38 [2019-02-19 14:35:35.650] fatal: [***.***.***]: FAILED! => [changed: true, cmd: "cmd.exe /c start /wait C:\\Users\\Administrator\\Downloads\\7z1805-x64.exe /S", "delta": "0:00:01.531201", "end": "2019-02-19 06:35:35.675437", "arg": "non-zero return code", "rc": 3762504530, "start": "2019-02-19 06:35:34.144230", "stderr": "Unhandled Exception: System.IO.FileLoadException: Could not load file or assembly 'System.Data, Version=***.***.***, Culture=neutral, PublicKeyToken=b77a5c5619346089' or one of its dependencies. The paging file is too small for this operation to complete. (Exception from HRESULT: 0x800705af)\r\n at System.Management.Automation.FSObject.MappedInternalAdapterSet(Object obj)\r\n at System.Management.Automation.FSObject.GetMappingAdapter(Object obj, TypeTable typeTable)\r\n at System.Management.Automation.FSObject.get_InternalAdapterSet() \r\n at System.Management.Automation.FSObject.get_InternalTypeNames() \r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParametersPrivate(PSObject inputToOperateOn)\r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameters(PSObject inputToOperateOn)\r\n at System.Management.Automation.CommandProcessor.Read() \r\n at
```

Cause Analysis

The corresponding patch is missing when the Windows host is verified for its connectivity.

Solution

[Verify the connectivity again according to the Windows configuration document.](#)

4.11.12 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.12 Starting or Stopping IIS

4.12.1 Startup or Stopping Failed

Symptoms

The error message **The service does not exist** is displayed.

Cause Analysis

The IIS service is not installed or the service name is incorrect.

Solution

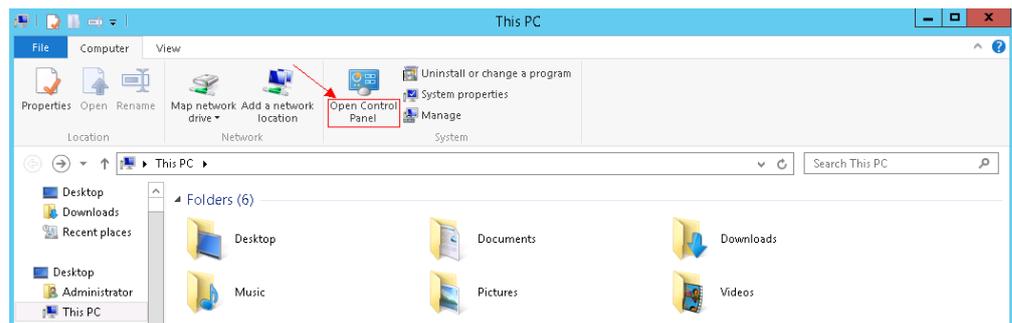
Step 1 View the IIS service name set in the task.

On the page for editing an application, click the **Deployment Actions** tab to view the service name.

Step 2 View the IIS service name on the local computer.

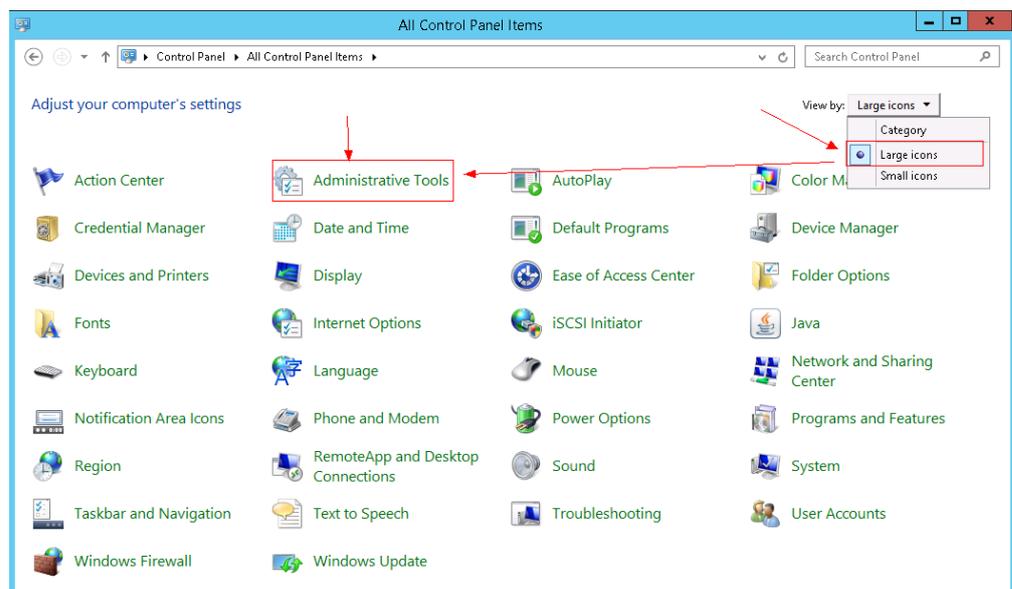
1. Start the computer and open the control panel.

Figure 4-70 Opening the Control Panel page



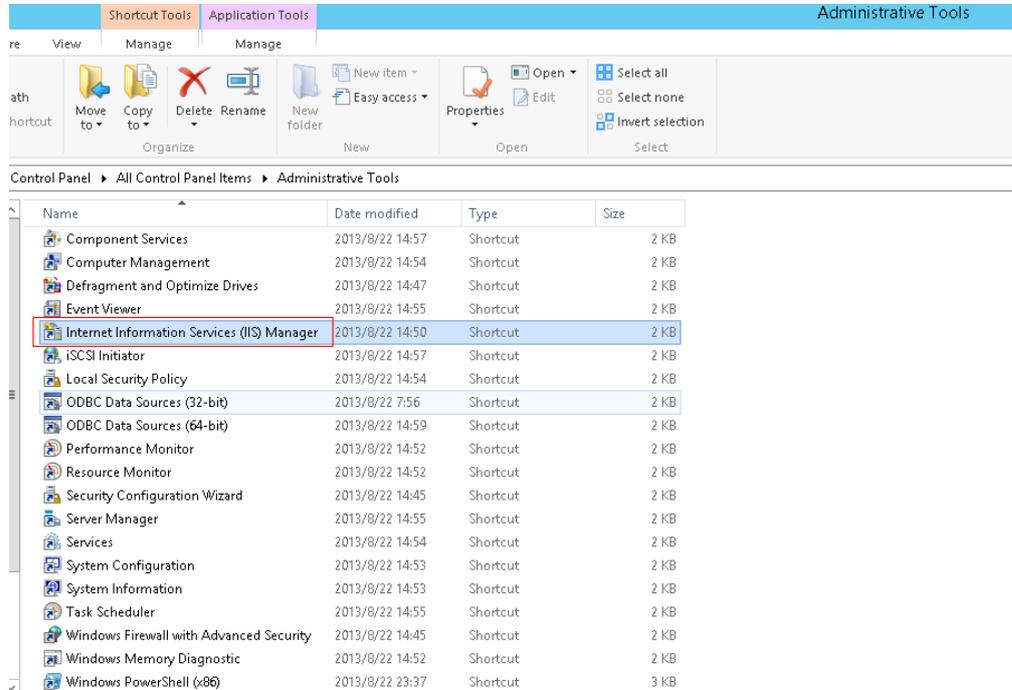
2. Select **Large icons** and click **Administrative Tools**.

Figure 4-71 Selecting the management tool



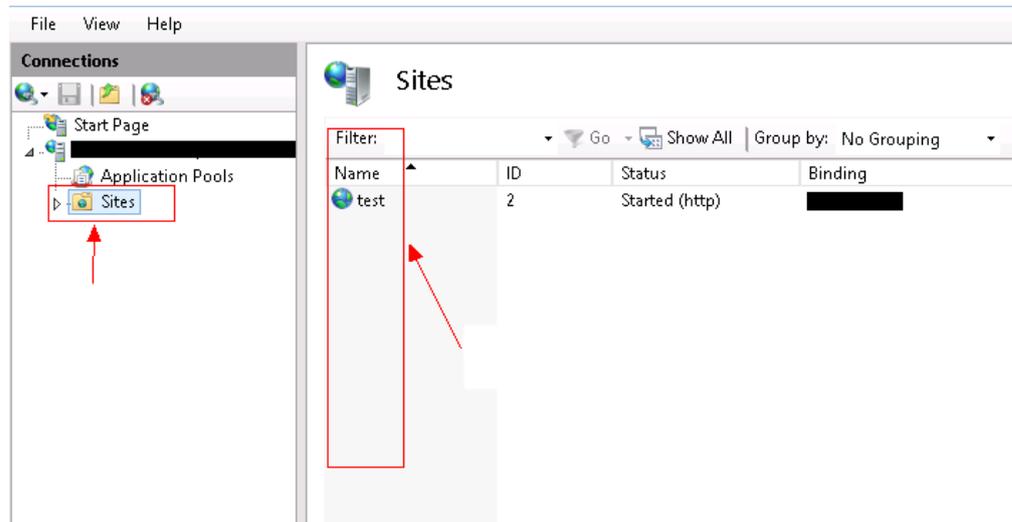
- In the window displayed, double-click **Internet Information Services (IIS) Manager**. (If this item is not displayed, the IIS service is not installed on the local computer.)

Figure 4-72 Searching for the IIS Manager



- Click **Sites**. The **Name** column displays the service name.

Figure 4-73 Viewing the service name



Step 3 Compare the IIS service name set in the task with the actual service name. If the names are consistent, ensure that the IIS service has been installed on the host.

----End

4.12.2 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in `ClientAliveInterval` for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of `ClientAliveInterval` in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.12.3 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the `\b` characters.

Figure 4-74 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ba' specified."]
```

- The deployment fails due to the `\f` characters.

Figure 4-75 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\fa' specified."]
```

- The deployment fails due to the `\r` characters.

Figure 4-76 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ra' specified."]
```

- The deployment fails due to the `\t` characters.

Figure 4-77 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D[\\ta] specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-78 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D[\\na] specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.12.4 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click `***`, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.12.5 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
- Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.

----End

4.12.6 Failed to Deploy an Application on a Windows Host

Symptoms

The following log information is displayed.

Figure 4-79 Log information

```
37 [2019-02-19 14:35:35.656] TASK [Install Tsip] *****
38 [2019-02-19 14:35:35.656] fatal: [***.***.***.***]: FAILED! => [changed: true, "cmd": "cmd.exe /c start /wait C:\Users\Administrator\Downloads\Tzi1805-64.exe /S", "delta": "0:00:01.551201", "end": "2019-02-19 08:35:35.716437", "msg": "non-zero return code", "rc": "378204630", "start": "2019-02-19 08:35:34.144239", "stderr": "Unhandled Exception: System.IO.FileNotFoundException: Could not load file or assembly 'System.Data.Version***.***.***, Culture=neutral, PublicKeyToken=877a565619344089' or one of its dependencies. The parsing file is too small for this operation to complete. (Exception from HRESULT: 0x8007054F)\r\n   at System.Management.Automation.PSObject.MappedInternalAdaptersSet(Object obj)\r\n   at System.Management.Automation.PSObject.GetMappedAdapter(Object obj, TypeTable typeTable)\r\n   at System.Management.Automation.PSObject.get_InternalAdaptersSet()\r\n   at System.Management.Automation.PSObject.get_InternalTypeNames()\r\n   at System.Management.Automation.CmdletParameterBinderController.BindPipelineParametersPrivate(PSObject inputToOperateOn)\r\n   at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameters(PSObject inputToOperateOn)\r\n   at System.Management.Automation.CommandProcessor.Read()\r\n   at
```

Cause Analysis

The corresponding patch is missing when the Windows host is verified for its connectivity.

Solution

Verify the connectivity again according to the Windows configuration document.

4.12.7 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.12.8 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.13 Starting or Stopping Node.js

4.13.1 Node.js Fails to Be Started or Stopped on a Linux Host

Symptom 1

The deployment of the command for starting Node.js fails during the deployment of the action **Start/Stop Node.js**, and the error message **Cannot start forever** is displayed.

Cause Analysis

The startup file is not found in the service path.

Solution

Enter the correct service path.

Symptom 2

The deployment of the command for stopping Node.js fails during the deployment of the action **Start/Stop Node.js**.

Cause Analysis

The service has been stopped or the service path is incorrect.

Solution

Cancel the operation of stopping the service, or enter the correct service path.

Symptom 3

On a Linux host, the deployment of the command for starting Node.js fails during the deployment of the action **Start/Stop Node.js**.

Cause Analysis

Node.js has been started, but the deployment status is **STOPPED**.

Figure 4-80 Deployment status

```
info: Forever processes running
lat : uid process script forever pid id logfile uptime
lat : [0] YksC /usr/local/node/node v8.9.0 linux x64 /bin/node /usr/local/node/node test.js 102477 102537 /root/.forever/YksC.log STOPPED
```

Solution

View the service startup log to check whether the service can be started properly. If the service can be started properly, deploy the startup command again.

Symptom 4

The error message **Node service not installed, service start failed!** is displayed.

Cause Analysis

The Node.js service is not installed on the host.

Solution

Install Node.js before action deployment.

Symptom 5

The deployment of the action **Start/Stop Node.js** does not respond for a long time and then fails, with the error message **Install forever failure!** displayed.

Cause Analysis

The host cannot connect to the platform.

Solution

Ensure that the host can connect to the external network and the DNS is correctly configured.

4.13.2 Node.js Fails to Be Started or Stopped on a Windows Host

Symptom 1

On a Windows host, the deployment of the command for starting Node.js fails during the deployment of the action **Start/Stop Node.js**, and the error message **start service failed** is displayed.

Cause Analysis

The startup file is not found in the service path.

Solution

Enter the correct service path.

Symptom 2

The error message **Node service not installed, service start failed!** is displayed.

Cause Analysis

The Node.js service is not installed on the host.

Solution

Install Node.js before action deployment.

Symptom 3

The deployment of the action **Start/Stop Node.js** does not respond for a long time and then fails, with the error message **Install forever failure!** displayed.

Cause Analysis

The host cannot connect to the platform.

Solution

Ensure that the host can connect to the external network and the DNS is correctly configured.

4.13.3 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in **ClientAliveInterval** for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of **ClientAliveInterval** in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.13.4 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add '**user ALL=(ALL) ALL**' to the **/etc/sudoers** file. **user** indicates the user to grant higher permissions to.

4.13.5 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the **\b** characters.

Figure 4-81 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! ={"changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ba' specified."}]
```

- The deployment fails due to the **\f** characters.

Figure 4-82 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! ={"changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\fa' specified."}]
```

- The deployment fails due to the **\r** characters.

Figure 4-83 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! ={"changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ra' specified."}]
```

- The deployment fails due to the **\t** characters.

Figure 4-84 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! ={"changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ta' specified."}]
```

- The deployment fails due to the **\n** characters.

Figure 4-85 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! -["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D\\ud' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.13.6 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
 - Step 2** Click the **Environment Management** tab.
 - Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
 - Step 4** After the host is added and verified, deploy the application again.
- End

4.13.7 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11

- Step 2** Click the **Environment Management** tab.
- Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
- Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.
- End

4.13.8 Failed to Deploy an Application on a Windows Host

Symptoms

The following log information is displayed.

Figure 4-86 Log information

```
37 [2019-02-19 14:35:35.056] TASK [Install Tzip] *****
38 [2019-02-19 14:35:35.056] fatal: [***.***.***.***] FAILED: true, cmd: cmd.exe /c Start /wait C:\Users\Administrator\Downloads\Tz12005-04.exe /S, "data": "0:00:01.531201", "msg": "2019-02-19 06:35:35.075437", "tags": "non-zero return code", "rc": 3762504530, "start": "2019-02-19 06:35:34.144236", "stderr": "Unhandled Exception: System.IO.FileNotFoundException: Could not load file or assembly 'System.Data, Version=***.***.***.***, Culture=neutral, PublicKeyToken=877a5c5619944089' or one of its dependencies. The paging file is too small for this operation to complete. (Exception from HRESULT: 0x800705AF)\r\n at System.Management.Automation.PSObject.MappedInternalAdapterSet(Object obj)\r\n at System.Management.Automation.PSObject.GetMappedAdapter(Object obj, TypeTable typeTable)\r\n at System.Management.Automation.PSObject.get_InternalAdapterSet()\r\n at System.Management.Automation.PSObject.get_InternalTypeNames()\r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameterPrivate(PSObject inputToOperateOn)\r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameter(PSObject inputToOperateOn)\r\n at System.Management.Automation.CommandProcessor.Read()\r\n at
```

Cause Analysis

The corresponding patch is missing when the Windows host is verified for its connectivity.

Solution

[Verify the connectivity again according to the Windows configuration document.](#)

4.13.9 Error Occurs During Application Deployment with the sudo Privileges

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
## user MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root ALL=(ALL) ALL
allen ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.13.10 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.13.11 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.13.12 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.13.13 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.

- c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.13.14 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"/usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"/usr/bin/unzip\" could not handle archive. Command \"/usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.14 Running Shell Commands

4.14.1 A Message Indicating an Operation Failure Is Displayed During Action Run Shell Commands Deployment

Symptoms

During action deployment, an error message is displayed, indicating that the operation fails.

Cause Analysis

Some commands entered in the text box are intercepted by cloud firewalls. As a result, the deployment fails. The following figure uses the shell command as an example.

```
cat /etc/hosts
cat /etc/passwd
cat /etc/shadow
cat /etc/fstab
mount -l || echo hello world
...
```

Solution

Solution 1: Parameterization

1. Add the parameter **Path** and set its value to **/etc/hosts**.
2. Reference the parameter **Path** in the **Shell Commands** text box.

```
cat ${Path}
cat /etc/passwd
cat /etc/shadow
cat /etc/fstab
mount -l || echo hello world
.....
```

Solution 2: Using the Shell Script

1. Upload the script to CodeArts Artifact.
2. Use the action **Select Deployment Source** to download the script to the target host.
3. Deploy the action **Run Shell Script**.

4.14.2 Service Is Not Started But the Log Shows That Shell Commands Are Successfully Executed

Symptoms

The log shows that the deployment of the shell command **/usr/local/tomcat/bin/startup.sh** is successful, but no process corresponding to the service is found on the server.

Cause Analysis

When Ansible deploys a shell command, the corresponding process is forcibly stopped after the deployment is complete. As a result, the service process cannot be found.

Solution

Make the shell command run in the background.

```
nohup /usr/local/tomcat/bin/startup.sh &
```

4.14.3 Unidentified Shell Commands Are Used

Docker Not Installed on the Host

Symptoms

When the shell command **docker version** is deployed, an error message is displayed, indicating that the command deployment fails.

Cause Analysis

Docker is not installed on the host.

Solution

Install the Docker service on the host and run the shell command again.

docker: command not found

Symptoms

When the shell command **docker version** is deployed, the error message **docker: command not found** is displayed.

Cause Analysis

Docker is not installed on the host.

Solution

Install the Docker service on the host and run the shell command again.

4.14.4 Shell Command References a File or Folder That Does Not Exist

Symptoms

When the shell command **cd /abcd/** is deployed, an error message is displayed, indicating that the deployment fails.

Cause Analysis

The **/abcd/** folder does not exist on the computer.

Solution

Modify the path or file name in the shell command.

4.14.5 How Does a Shell Command Reference Parameters?

The specific procedure is as follows:

- Step 1** Add required parameters on the **Parameters** tab page.
- Step 2** In the **Run Shell Commands** area, use **\${}** to reference these parameters.
- Step 3** View the deployment result.

----End

4.14.6 Deployment of the Action Run Shell Commands Times Out

Symptoms

When the shell command **java -jar jenkins.war --httpPort=8088** is deployed, the progress is stuck in deploying state until timeout occurs.

Cause Analysis

The host waits for the deployment result after a shell command is deployed. If the command is executed continuously, the deployment will time out. In this case, a message is displayed indicating that the deployment fails due to timeout.

Solution

Run the shell command that is continuously executed in the background.

```
nohup java -jar jenkins.war --httpPort=8088 &
```

4.14.7 Interactive Shell Commands Are Used

Symptoms

When a shell command that requires users to enter the next instruction is deployed, for example, **yum install**, **cat \${filename}**, or **awk '{print \$0}' \$ {filename}**, the progress is stuck in deploying state until timeout occurs.

Cause Analysis

The shell command is remotely pushed to the target host for deployment and interactive operations are not allowed. If an interactive operation is required in the command, the host keeps waiting for subsequent input instructions until the deployment times out. In this case, the deployment fails and a message indicating deployment timeout is displayed.

Solution

When deploying the action **Run Shell Commands**, add subsequent operation instructions, for example, **yum -y install**, to the command in advance.

4.14.8 Shell Command Deployment Times Out After the su Command Is Executed to Switch the User

Symptoms

When the shell command **sudo su - test && echo hello** is deployed, the progress is stuck in deploying state until timeout occurs.

Cause Analysis

After the **su** command is executed to switch to another user, the operation window of the **test** user is displayed and the deployment of subsequent

commands stops. The commands can continue to be deployed only after the **test** user exits. However, the **test** user cannot exit during application deployment. As a result, the deployment times out.

Solution

Change the command to **sudo -u test /bin/bash -c "shell command"**.

4.14.9 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in **ClientAliveInterval** for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of **ClientAliveInterval** in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.14.10 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add **'user ALL=(ALL) ALL'** to the `/etc/sudoers` file. **user** indicates the user to grant higher permissions to.

4.14.11 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the `\b` characters.

Figure 4-87 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ba' specified."]
```

- The deployment fails due to the `\f` characters.

Figure 4-88 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\fa' specified."]
```

- The deployment fails due to the `\r` characters.

Figure 4-89 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ra' specified."]
```

- The deployment fails due to the `\t` characters.

Figure 4-90 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ta' specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-91 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\na' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.14.12 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click ******* , and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.14.13 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click ******* , and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
- Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.

----End

4.14.14 Error Occurs During Application Deployment with the sudo Privileges

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
## user MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root ALL=(ALL) ALL
allen ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.14.15 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.14.16 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.14.17 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.14.18 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:

- a. The network between the target host and the APT repository is disconnected.
- b. The firewall restricts outbound access.
- c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.14.19 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"/usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"/usr/bin/unzip\" could not handle archive. Command \"/usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.14.20 Other FAQs

Service Started Normally But Exits Abnormally Upon Application Deployment Completion

Symptoms

After a command or script for starting a service is deployed, the service is started. However, the service exits unexpectedly when application deployment is complete.

Cause Analysis

The possible cause is that the service is started in synchronous mode, which means that the child process will also end when the parent process ends. As a

result, the session for starting the service is disconnected when application deployment is complete.

Solution

Run the following command to start the service in asynchronous mode:

```
nohup ${command} > ${log_file} 2>&1 &
```

In the preceding command, **`\${command}`** indicates the service startup command, and **`\${log_file}`** indicates service startup logs. If you do not want to export log files, use **/dev/null** instead.

Application Deployment Is Complete, But the Service Fails to Be Stopped

Symptoms

The result shows that the command or script for stopping a service has been deployed successfully, but the service fails to be stopped.

Cause Analysis

The possible cause is that the service is stopped in asynchronous mode. In this case, an error may be reported, or a message indicating that the deployment is complete is displayed even though the deployment is actually not complete.

Solution

Deploy the command for stopping a service in synchronous mode. If an error is reported, rectify the fault as prompted.

Timeout Caused by Continuous Application Deployment

Symptoms

After the deployment of the action **Run Shell Commands**, application deployment continues and causes a timeout.

Cause Analysis

- The deployment efficiency of commands in applications is low, so the deployment requires a long time.
- Interactive commands are contained in the script, and these commands require user inputs on the client.

Solution

- Manually run the commands in the application on the target host, and check whether the script deployment duration exceeds the timeout interval (30 minutes).
- Check whether interactive commands, such as **read**, **sudo**, **su**, and **yum**, are contained. If there are no interactive commands, you can manually run the script on the target host.

Command That Exists on the Target Host Fails to Be Found During Application Deployment

Symptoms

A command exists on the target host, but during application deployment, a message indicating that the command does not exist is displayed.

Cause Analysis

The installation directory corresponding to the command is not added to the environment variable file **/etc/profile**.

Solution

1. Log in to the target host and run the following command to view the command installation directory:

```
type ${command}
```
2. Modify the application. Specifically, use the absolute path to call the corresponding command, or add the command installation directory to the environment variable file **/etc/profile** of the target host.

Shell Script Deployment Is Complete, But Expected Result Is Not Achieved

Symptoms

Deployment of the shell script is complete, but it does not achieve the expected result.

Cause Analysis

The script fails to be executed.

Solution

During the deployment of the shell script, the script execution result is displayed. You can use the following two execution options provided by the shell script to facilitate fault locating:

- **set -e** option: The script execution exits upon the first command execution failure, and an error message is returned.
- **set -x** option: Debug information is generated for the execution of each command during script execution.

4.15 Running Shell Scripts

4.15.1 Running Shell Scripts Failed

Symptoms

The error message **File or directory does not exist** is displayed.

Cause Analysis

The path of the shell script is incorrect.

Solution

Check the path of the shell script and ensure that both the path and file name are correct.

4.15.2 Deployment Is Successful But Does Not Achieve the Expected Result

Symptoms

The action deployment is successful, but it does not achieve the expected result.

Cause Analysis

- The script is incorrectly compiled.
- The script contains the operation of starting a process, but is run in **common execution mode**.

Solution

Perform the following operations based on the failure causes:

- Check the script, and run the script on the local host first. After confirming that the script is correct, perform the deployment again.
- If the script contains the operation of starting a service or process, select **Background** for **Running Mode**.
- If the expected result is not achieved after the preceding operations are performed, for example, the deployment is successful, but the service is not started, perform the following steps:
 - The following uses the script for starting Tomcat as an example:
 - i. Add the shell command **ps -ef|grep tomcat** in the action **Run Shell Commands** and check whether the Tomcat process is started successfully.
 - ii. If no Tomcat process is found, check the startup failure log in the Tomcat log directory and analyze the cause.

4.15.3 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in **ClientAliveInterval** for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of **ClientAliveInterval** in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.15.4 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add **'user ALL=(ALL) ALL'** to the `/etc/sudoers` file. **user** indicates the user to grant higher permissions to.

4.15.5 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the **\b** characters.

Figure 4-92 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ba' specified."]
```

- The deployment fails due to the **\f** characters.

Figure 4-93 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\fa' specified."]
```

- The deployment fails due to the **\r** characters.

Figure 4-94 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ra' specified."]
```

- The deployment fails due to the **\t** characters.

Figure 4-95 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D[\\ta] specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-96 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D[\\na] specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.15.6 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click `***`, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.15.7 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click ******* , and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
- Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.

----End

4.15.8 Error Occurs During Application Deployment with the sudo Privileges

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
## user MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root ALL=(ALL) ALL
allen ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.15.9 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.15.10 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.15.11 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.

3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.15.12 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.15.13 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"usr/bin/unzip\" could not handle archive. Command \"usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.16 Running PowerShell Commands

4.16.1 Deployment of the Action Run PowerShell Commands Times Out

Symptoms

When the PowerShell command **java -jar jenkins.war --httpPort=8088** is deployed, the progress is stuck in deploying state until timeout occurs. This problem always occurs when the PowerShell command is used for service startup.

Cause Analysis

The host waits for the deployment result after a PowerShell command is deployed. If the command is executed continuously, the deployment will time out. In this case, a message is displayed indicating that the deployment fails due to timeout.

Solution

Run the PowerShell command that is continuously executed in the background.

4.16.2 Unidentified PowerShell Commands Are Used

Symptoms

When the PowerShell command **docker version** is deployed on a host that does not have Docker installed, the deployment is successful, but the log shows that Docker is not installed.

Cause Analysis

The Windows host has an error correction mechanism when deploying the action **Run PowerShell Commands**. Therefore, the deployment will not fail. However, the log shows that no Docker service is available.

Solution

Install the Docker service on the host and run the PowerShell command again.

4.16.3 PowerShell Command References a File or Folder That Does Not Exist

Symptoms

During the deployment of the PowerShell command **cd C:/abcd/**, an error message is displayed.

Figure 4-97 Log information

```
TASK [PowerShell script messages] *****
ok: [***, ***, ***, ***] = {
  "msg": {
    "changed": true,
    "cmd": ".\\628904template.ps1",
    "delta": "0:00:01.421492",
    "end": "2019-01-11 06:32:32.734678",
    "failed": false,
    "rc": 0,
    "start": "2019-01-11 06:32:31.313185",
    "stderr": "cd : Cannot find path 'C:\\abcd\\' because it does not exist.\r\nAt C:\\Users\\Administrator\\Downloads\\628904template.ps1:1 char:1\r\n+ cd C:/abcd/\r\n+ ~~~~~\r\n+ CategoryInfo          : ObjectNotFound: (C:\\abcd\\:String) [Set-Location] \r\n+ ItemNotFoundException\r\n+ FullyQualifiedErrorId : PathNotFound,Microsoft.PowerShell.Commands.SetLo\r\n+ cationCommand",
    "stderr_lines": [
      "cd : Cannot find path 'C:\\abcd\\' because it does not exist.",
      "At C:\\Users\\Administrator\\Downloads\\628904template.ps1:1 char:1",
      "+ cd C:/abcd/",
      "+ ~~~~~",
      "+ CategoryInfo          : ObjectNotFound: (C:\\abcd\\:String) [Set-Location] ",
      "+ ItemNotFoundException",
      "+ FullyQualifiedErrorId : PathNotFound,Microsoft.PowerShell.Commands.SetLo",
      "+ cationCommand"
    ],
    "stdout": "",
    "stdout_lines": []
  }
}
```

Cause Analysis

The Windows host has an error correction mechanism when deploying the action **Run PowerShell Commands**. Therefore, the deployment will not fail. However, the log shows that the file is not found.

Solution

Modify the path or file name in the PowerShell command.

4.16.4 How Does a PowerShell Command Reference Parameters?

The specific procedure is as follows:

- Step 1** Add required parameters on the **Parameters** tab page.
- Step 2** In the **Run PowerShell Commands** window, use **\${}** to reference these parameters.
- Step 3** View the deployment result.

Figure 4-98 Deployment result

```
TASK [Execution parameter] *****
ok: [***, ***, ***, ***] = {
  "msg": "cd C:/tomcat/"
}
```

----End

4.16.5 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the `\b` characters.

Figure 4-99 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ba' specified."]
```

- The deployment fails due to the `\f` characters.

Figure 4-100 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\fa' specified."]
```

- The deployment fails due to the `\r` characters.

Figure 4-101 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ra' specified."]
```

- The deployment fails due to the `\t` characters.

Figure 4-102 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ta' specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-103 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\na' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.16.6 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click `***`, and click **Edit**. The **Deployment Actions** page is displayed. 11

- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.16.7 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
- Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.

----End

4.16.8 Failed to Deploy an Application on a Windows Host

Symptoms

The following log information is displayed.

Figure 4-104 Log information

```
37 [2019-02-19 14:35:35.650] TASK [Install 7zip] *****
38 [2019-02-19 14:35:35.650] fatal: [***.***.***.***]: FAILED! => [changed]: true, "cmd": "cmd.exe /c start /wait C:\\Users\\Administrator\\Downloads\\7z1805-x64.exe /S", "delta": "0:00:01.531201", "end": "2019-02-19 06:35:35.675437", "msg": "non-zero return code", "rc": 3702504530, "start": "2019-02-19 06:35:34.144230", "stderr": "\nUnhandled Exception: System.IO.FileLoadException: Could not load file or assembly 'System.Data, Version=***.***.***.***, Culture=neutral, PublicKeyToken=877595949489627f' or one of its dependencies. The paging file is too small for this operation to complete. (Exception from HRESULT: 0x80070049) \n\n at System.Management.Automation.PSObject.get_InternalAdapterSet(Object obj) \n\n at System.Management.Automation.PSObject.get_InternalTypeNames() \n\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParametersPrivate(PSObject inputToOperateOn) \n\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameters(PSObject inputToOperateOn) \n\n at System.Management.Automation.CommandProcessor.Read() \n\n at
```

Cause Analysis

The corresponding patch is missing when the Windows host is verified for its connectivity.

Solution

[Verify the connectivity again according to the Windows configuration document.](#)

4.16.9 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.16.10 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.17 Running PowerShell Scripts

4.17.1 Running PowerShell Scripts Failed

Symptoms

The error message **"module_stderr": "Test-Path : Cannot bind argument to parameter 'Path' because it is an empty str\r\ning.** is displayed.

Cause Analysis

Ansible is used to deploy the action **Run PowerShell Script**. The Windows path incorrectly uses a backslash (\) instead of a forward slash (/).

Solution

Check the entered path and ensure that the path uses forward slashes (/).

4.17.2 Deployment Is Successful But Does Not Achieve the Expected Result

Symptoms

The action deployment is successful, but it does not achieve the expected result.

Cause Analysis

The PowerShell script may be incorrectly compiled.

Solution

Manually test the PowerShell script on the local host. If the PowerShell script is correctly compiled, perform the deployment again.

4.17.3 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the **\b** characters.

Figure 4-105 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ba' specified."]
```

- The deployment fails due to the **\f** characters.

Figure 4-106 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\fa' specified."]
```

- The deployment fails due to the **\r** characters.

Figure 4-107 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ra' specified."]
```

- The deployment fails due to the **\t** characters.

Figure 4-108 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D[\\ta] specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-109 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D[\\na] specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.17.4 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click `***`, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.17.5 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
 - Step 2** Click the **Environment Management** tab.
 - Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
 - Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.
- End

4.17.6 Failed to Deploy an Application on a Windows Host

Symptoms

The following log information is displayed.

Figure 4-110 Log information

```
37 [2019-02-19 14:35:35.656] TASK [Install Tsip] *****
38 [2019-02-19 14:35:35.656] fatal: [***.***.***.***]: FAILED! => [changed: true, "cmd": "cmd.exe /c start /wait C:\Users\Administrator\Downloads\Tzi1805-64.exe /S", "delta": "0:00:01.551201", "end": "2019-02-19 08:35:35.676437", "msg": "non-zero return code", "rc": 378204630, "start": "2019-02-19 08:35:34.144239", "stderr": "Unhandled Exception: System.IO.FileNotFoundException: Could not load file or assembly 'System.Data.Version***.***.***, Culture=neutral, PublicKeyToken=77a55c6119344089' or one of its dependencies. The parsing file is too small for this operation to complete. (Exception from HRESULT: 0x8007054F)\r\n at System.Management.Automation.PSObject.MappedInternalAdaptersSet(Object obj)\r\n at System.Management.Automation.PSObject.GetMappedAdapter(Object obj, TypeTable typeTable)\r\n at System.Management.Automation.PSObject.get_InternalAdaptersSet()\r\n at System.Management.Automation.PSObject.get_InternalTypeNames()\r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParametersPrivate(PSObject inputToOperateOn)\r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameters(PSObject inputToOperateOn)\r\n at System.Management.Automation.CommandProcessor.Read()\r\n at
```

Cause Analysis

The corresponding patch is missing when the Windows host is verified for its connectivity.

Solution

[Verify the connectivity again according to the Windows configuration document.](#)

4.17.7 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.17.8 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.18 Running Docker Commands

4.18.1 Docker Not Installed

Symptoms

- The error message **docker: not found** is displayed.
- The error message **docker: unrecognized service** is displayed.

Cause Analysis

The Docker service is not installed.

Solution

Install the Docker service through the action **Install Docker**.

4.18.2 Docker Command Parameter Error

Symptoms

- The error message **requires exactly 1 argument** is displayed.
- The error message **unknown shorthand flag** is displayed.

Cause Analysis

During the deployment of the action **Run Docker Command**, some parameters in the commands are not set or incorrectly set.

Solution

Set parameters based on the format prompted in logs and perform the deployment again.

4.18.3 No Deployment Permissions

Symptoms

Case 1: The error message **connect: permission denied** is displayed.

Case 2: An error message is displayed, indicating that the user does not have permissions to access **/etc/docker/daemon.json**:

Cause Analysis

Only the **root** user and users in the Docker user group are allowed to perform operations on Docker.

Solution

Step 1 Add the user to the Docker user group.

1. Log in to the server using a user account with the sudo permissions, for example, **testuser**.

2. Check whether the Docker user group exists.

```
sudo cat /etc/group | grep docker
```

a. If so, add the user to the Docker user group.

```
sudo usermod -aG docker testuser
```

b. If not, create a Docker user group and add the user to the group.

```
sudo groupadd docker
```

```
sudo usermod -aG docker testuser
```

Step 2 Exit the server. Then, log in to the server again and check whether the user can run the Docker command.

```
docker info
```

Step 3 If another error message, indicating that the user does not have permissions to access **/var/run/docker.sock**, is displayed, modify the permissions for **/var/run/docker.sock**.

```
sudo chmod a+rw /var/run/docker.sock
```

----End

4.18.4 Image Does Not Exist

Symptoms

The error message **No such image** is displayed.

Cause Analysis

The specified image does not exist on the local host.

Solution

Check whether the specified image is correct. If the image is incorrect, specify a correct one.

4.18.5 login Command Execution Failed

Symptom 1

After you add the deployment action **Run Docker Command** and set **Command** to **login**, the error message **unauthorized: authentication required** is displayed.

Cause Analysis

Authentication fails due to incorrect username or password.

Solution

Enter the correct username and password.

Symptom 2

During the deployment of the **login** command in the action **Run Docker Command**, an error message indicating no permissions is displayed.

Cause Analysis

Only the **root** user and users in the Docker user group are allowed to perform operations on Docker.

Solution

Add the user to the Docker user group.

NOTE

For details about how to join a Docker group, see [No Deployment Permissions](#).

Symptom 3

During the deployment of the **login** command in the action **Run Docker Command**, the error message **request canceled while waiting for connection(Client.Timeout exceeded while awaiting headers)** is displayed.

Cause Analysis

1. The image repository address is incorrect. As a result, the connection fails and Docker fails to verify the v2 interface.
2. The host does not have the permission to access external networks or is not configured with a proxy. As a result, the connection to the remote image repository times out.

Solution

1. Check the image repository address to ensure that the image repository address is correct and reachable.
2. Configure a proxy for the host to connect to the image repository.

Symptom 4

During the deployment of the **login** command in the action **Run Docker Command**, two error messages are displayed: **certificate signed by unknown authority** and **Task failed may be associated with not configured trust**.

Cause Analysis

No certificates have been configured for the image repository, and the target host has not been authorized to access this repository.

Solution

- Check that the image repository address, username, and password are correct, and that the network connection and user permissions are normal.
- During host authorization, Docker will be restarted and containers will be stopped. To prevent this from happening, configure the required image repository address in advance.

Case 1

No container is running, or the container is interrupted. The interruption does not affect services.

1. In the deployment action details area, set **Command** to **login** and select **Yes** for **Restart Docker**.
2. If you need to restart the containers, add the action **Run Docker Command** and set **Command** to **restart** in the action details.
3. Click **Save & Deploy**.

Case 2

Containers are running, and a service interruption is not allowed.

1. Check whether the `/etc/docker/daemon.json` file exists.
 - a. If the file does not exist, create it and add the following configuration to the file:

```
{
  "live-restore": true
}
```
 - b. If the file already exists, add the following configuration to it:

```
{
  "insecure-registries" : [],
  "live-restore": true
}
```

 NOTE

- For details about how to set the **live-restore** parameter, visit the official website <https://docs.docker.com/config/containers/live-restore/>
 - The **live-restore** parameter can be used to prevent containers from being stopped due to engine upgrades or restarts. Note that **live-restore** cannot be used in swarm mode. Therefore, **live-restore** is unavailable for clusters.
2. Authorize the host to access the image repository.
 - a. In the **/etc/docker/daemon.json** file, configure the repository address as follows:

```
{
  "insecure-registries" : ["10.10.**.*", "10.10.**.*:8080"],
  "live-restore": true
}
```
 3. Make the modification take effect.
 - a. If you use **systemd**, run the following command to load the configuration:

```
systemctl reload docker
```
 - b. If **systemd** cannot be used due to version incompatibility, run the following command to restart Docker. (Note that this operation will stop running containers.) Then, add action **Restart Containers**.

```
service docker restart
```

4.18.6 build Command Execution Failed

Symptom 1

After you add the deployment action **Run Docker Command** and set **Command** to **build**, the error message **Dockerfile: no such file or directory** is displayed.

Cause Analysis

The Dockerfile path is incorrect, or the Dockerfile does not exist in the path.

Solution

Check whether the Dockerfile path is correct and whether the package and file on which the image build depends are in the same path as the Dockerfile.

Symptom 2

- During the deployment of the **build** command in the action **Run Docker Command**, the error message **request canceled while waiting for connection** and a FROM statement are displayed.
- During the deployment of the **build** command in the action **Run Docker Command**, an error message (**not found**) indicating that the base image is not found and a FROM statement are displayed.

Cause Analysis

The base image following the FROM statement in the Dockerfile does not exist in the local host or the remote repository. Another possible cause is that you have not logged in to the remote repository and cannot pull the base image from the remote repository.

Solution

When deploying the **build** command, ensure that you have logged in to the remote repository or have pulled the base image from the repository to the local host.

Symptom 3

During the deployment of the **build** command in the action **Run Docker Command**, an error message indicating that the command in the Dockerfile fails is displayed in the stderr log and the build command execution logs are also printed.

Cause Analysis

The information such as user information in the Dockerfile is incorrect, or the command is incorrectly run during the build process.

Solution

Modify the Dockerfile based on the log information to ensure that all information in the file is correct and the command can be deployed properly.

4.18.7 tag Command Execution Failed

Symptom 1

After you add the deployment action **Run Docker Command** and set **Command** to **tag**, the error message **...requires exactly 2 arguments...** is displayed.

Cause Analysis

The possible causes are as follows:

- Multiple groups of images are not separated by line breaks.
- The format of the image tag is incorrect.

Solution

Perform the following operations based on the failure causes:

- Separate multiple groups of images with line breaks.
- Modify the image tag format as prompted.

Symptom 2

After you add the deployment action **Run Docker Command** and set **Command** to **tag**, the output indicates that the **tag** command is in the format of **docker tag SOURCE_IMAGE[:TAG] TARGET_IMAGE[:TAG]...** and that the execution parameters end with a line break.

Cause Analysis

One or more line breaks (**\n**) are mistakenly added to the end of the images to be tagged.

Solution

Delete the last line break in the text box for **tagging multiple groups of images**.

4.18.8 push Command Execution Failed

Symptom 1

After you add the deployment action **Run Docker Command** and set **Command** to **push**, the error message **...An image does not exist locally with the tag...** is displayed.

Cause Analysis

The image to be pushed does not exist on the local host.

Solution

Check that the entered image information is correct, and push the image again.

Symptom 2

After you add the deployment action **Run Docker Command** and set **Command** to **push**, an error message is displayed, indicating that the authentication failed.

Cause Analysis

You have logged out of the remote image repository and cannot push images.

Solution

Run the **login** command to log in to the remote image repository and push the image again.

4.18.9 run Command Execution Failed

Symptom 1

When you add the deployment action **Run Docker Command** and set **Command** to **run**, the operation does not stop until it fails.

Cause Analysis

The parameters set on the page are not specified to run in the background.

Solution

Add **-d** in the parameters to run the **run** command in the background.

Symptom 2

During the deployment of the **run** command in the action **Run Docker Command**, the error message **Unable to find image * locally** is displayed.

Cause Analysis

The local image does not exist.

Solution

Check that the image name and tag are correct, and run the image again.

4.18.10 start, restart, stop, or rm Command Execution Failed

Symptom 1

After you add the deployment action **Run Docker Command** and set **Command** to **start**, **restart**, **stop**, or **rm**, the error message **...No such container...** is displayed.

Cause Analysis

The container does not exist.

Solution

Check whether the entered container name or ID is correct. If not, enter the correct container name or ID and perform the deployment again.

Symptom 2

The result shows that the deployment is successful, but the start, stop, or restart operation fails.

Cause Analysis

The container configuration is incorrect, or the configuration file is damaged.

Solution

Check and modify the internal configuration file of the container based on the logs.

4.18.11 rmi Command Execution Failed

Symptom 1

After you add the deployment action **Run Docker Command** and set **Command** to **rmi**, the error message **image is referenced in multiple repositories** is displayed.

Cause Analysis

The images indicated by image IDs belong to different repositories, or the image tags are different.



REPOSITORY	TAG	IMAGE_ID
12.12.12.12/test/aaaa	v1	afcc09c45fba
12.12.12.12/test/aaaa	v2	afcc09c45fba
13.13.13.13/test/aaaa	v2	afcc09c45fba

Solution

- Identify the image to be deleted using its name and tag, for example, **12.12.12.12/test/aaaa:v1**.
- To delete all images related to an image ID, enter multiple groups of images in the execution parameters and separate them with spaces.

Symptom 2

After you add the deployment action **Run Docker Command** and set **Command** to **rmi**, the error message **image is being used by running container** is displayed.

Cause Analysis

The image to be deleted has been running and a container has been created using this image. The image cannot be deleted before the container is deleted.

Solution

Stop and delete the container, and then delete the image.

4.18.12 pull Command Execution Failed

Symptom 1

After you add the deployment action **Run Docker Command** and set **Command** to **pull**, the error message **manifest for * not found** is displayed.

Cause Analysis

The image to be pulled does not exist in the image repository.

Solution

Check that the entered image information is correct, and pull the image again.

Symptom 2

After you add the deployment action **Run Docker Command** and set **Command** to **pull**, the error message **Auth is empty, only accept X-Auth-Token or Authorization or authentication failure** is displayed.

Cause Analysis

You have logged out of the remote image repository and cannot pull images.

Solution

Run the **login** command to log in to the remote image repository and pull the image again.

4.18.13 rm Command Execution Failed

Symptoms

After you add the deployment action **Run Docker Command** and set **Command** to **rm**, the error message **You cannot remove a running container** is displayed.

Cause Analysis

The container to be deleted is running.

Solution

- Run the **stop** command to stop the container and then delete the container.
- Add the **-f** parameter to forcibly delete a running container using SIGKILL.

4.18.14 Connection Timed Out

Symptom 1

After you add the deployment action **Run Docker Command** and set **Command** to **pull**, the error message **request canceled while waiting for connection** is displayed.

Cause Analysis

The image to be pulled is not tagged with the repository address, repository branch, or username, or the tag information is incorrect.

Solution

Enter a correct and complete image name, and try to pull the image again.

Symptom 2

After you add the deployment action **Run Docker Command** and set **Command** to **push**, the error message **request canceled while waiting for connection** is displayed.

Cause Analysis

The image to be pushed is not tagged with the repository address, repository branch, or username, or the tag information is incorrect.

Solution

Run the **tag** command to tag the correct repository branch information for the image to be pushed, and try to push the image again.

Symptom 3

After you add the deployment action **Run Docker Command** and set **Command** to **login**, the error message **request canceled while waiting for connection(Client.Timeout exceeded while awaiting headers)** is displayed.

Cause Analysis

1. The image repository address is incorrect. As a result, the connection fails and Docker fails to verify the v2 interface.
2. The host does not have the permission to access external networks or is not configured with a proxy. As a result, the connection to the remote image repository times out.

Solution

1. Check the image repository address to ensure that it is correct and reachable.
2. Configure a proxy for the host to connect to the image repository.

4.18.15 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in **ClientAliveInterval** for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of **ClientAliveInterval** in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.18.16 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add **'user ALL=(ALL) ALL'** to the `/etc/sudoers` file. **user** indicates the user to grant higher permissions to.

4.18.17 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the `\b` characters.

Figure 4-111 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ba' specified."]
```

- The deployment fails due to the `\f` characters.

Figure 4-112 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\fa' specified."]
```

- The deployment fails due to the `\r` characters.

Figure 4-113 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ra' specified."]
```

- The deployment fails due to the `\t` characters.

Figure 4-114 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ta' specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-115 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\na' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.18.18 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click `***`, and click **Edit**. The **Deployment Actions** page is displayed. 11

- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.18.19 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
- Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.

----End

4.18.20 Failed to Deploy an Application on a Windows Host

Symptoms

The following log information is displayed.

Figure 4-116 Log information

```
37 [2019-02-19 14:35:35.650] TASK [Install 7zip] *****
38 [2019-02-19 14:35:35.656] fatal: [***.***.***]: FAILED! => [changed]: true, "cmd": "cmd.exe /c start /wait C:\\Users\\Administrator\\Downloads\\7z1805-x64.exe /S", "delta": "0:00:01.531201", "end": "2019-02-19 06:35:35.675437", "msg": "non-zero return code", "rc": 3702504530, "start": "2019-02-19 06:35:34.144230", "stderr": "\nUnhandled Exception: System.IO.FileLoadException: Could not load file or assembly 'System.Data, Version=***.***.***, Culture=neutral, PublicKeyToken=87855501304688' or one of its dependencies. The paging file is too small for this operation to complete. (Exception from HRESULT: 0x80070049) \n\n   at System.Management.Automation.PSObject.get_InternalAdapterSet(Object obj)\n   at System.Management.Automation.PSObject.get_InternalTypeNames()\n   at System.Management.Automation.CmdletParameterBinderController.BindPipelineParametersPrivate(PSObject inputToOperateOn)\n   at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameters(PSObject inputToOperateOn)\n   at System.Management.Automation.CommandProcessor.Read()\n   at
```

Cause Analysis

The corresponding patch is missing when the Windows host is verified for its connectivity.

Solution

Verify the connectivity again according to the [Windows configuration document](#).

4.18.21 Error Occurs During Application Deployment with the sudo Privileges

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
## user MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root    ALL=(ALL)    ALL
allen   ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys  ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.18.22 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.

4. After the configuration is complete, deploy the application.

4.18.23 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.18.24 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.18.25 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.18.26 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"/usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"/usr/bin/unzip\" could not handle archive. Command \"/usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.19 Pending Execution

4.19.1 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in `ClientAliveInterval` for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of `ClientAliveInterval` in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.19.2 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add **'user ALL=(ALL) ALL'** to the `/etc/sudoers` file. **user** indicates the user to grant higher permissions to.

4.19.3 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the `\b` characters.

Figure 4-117 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ba' specified."]
```

- The deployment fails due to the `\f` characters.

Figure 4-118 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\fa' specified."]
```

- The deployment fails due to the `\r` characters.

Figure 4-119 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ra' specified."]
```

- The deployment fails due to the `\t` characters.

Figure 4-120 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ta' specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-121 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\na' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.19.4 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.19.5 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
- Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.

----End

4.19.6 Failed to Deploy an Application on a Windows Host

Symptoms

The following log information is displayed.

Figure 4-122 Log information

```
37 [2019-02-19 14:35:35.650] TASK [Install Teip] *****
38 [2019-02-19 14:35:35.650] fatal: [***.***.***]: FAILED! => [changed]: true, "cmd": "cmd.exe /c start /wait C:\\Users\\Administrator\\Downloads\\Te1805-ed4.exe /S, "delta": "0:00:01.531201", "end": "2019-02-19 06:35:35.675437", "msg": "non-zero return code", "rc": 3762504530, "start": "2019-02-19 06:35:34.144230", "stderr": "Unhandled Exception: System.IO.FileLoadException: Could not load file or assembly 'System.Data, Version=***.***.***, Culture=neutral, PublicKeyToken=b77a5c561934e089' or one of its dependencies. The paging file is too small for this operation to complete. (Exception from HRESULT: 0x800705af)\r\n at System.Management.Automation.PSObject.MappedInternalAdapterSet(Object obj)\r\n at System.Management.Automation.PSObject.GetMappedAdapter(Object obj, TypeTable typeTable)\r\n at System.Management.Automation.PSObject.get_InternalAdapterSet() \r\n at System.Management.Automation.PSObject.get_InternalTypeNames() \r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParametersPrivate(PSObject inputToOperateOn)\r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameters(PSObject inputToOperateOn)\r\n at System.Management.Automation.CommandProcessor.Read() \r\n at
```

Cause Analysis

The corresponding patch is missing when the Windows host is verified for its connectivity.

Solution

[Verify the connectivity again according to the Windows configuration document.](#)

4.19.7 Error Occurs During Application Deployment with the sudo Privileges

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
## user MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root    ALL=(ALL)    ALL
allen   ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.19.8 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.

2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.19.9 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.19.10 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.

- Contact the network administrator to modify the outbound rules of the security group.

4.19.11 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.19.12 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"usr/bin/unzip\" could not handle archive. Command \"usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.20 FAQs About ServiceStage

4.20.1 ServiceStage Fails to Be Deployed

Symptoms

The deployment fails and the error message "download: response is nil" is displayed.

Cause Analysis

Failed to download the software package from CodeArts.

Solution

Configure the ECS host to access the public network by using one of the following solutions:

- Applying for a NAT gateway
- Assigning an EIP and binding it to an ECS
- Having an ECS without a public IP address access the Internet

4.20.2 How Do I Handle Error "The token must be updated"?

Symptoms

During the deployment of actions related to ServiceStage, the error message **The token must be updated** is displayed.

Cause Analysis

The IAM permission has been modified. The permission in the browser cache is inconsistent with that on the backend server.

Solution

Log in to the console and deploy the application again.

4.21 FAQs About Kubernetes Deployment Tasks

4.21.1 Parameter Referenced by `{{}}` in the Manifest File Is Not Defined in the Application

Symptoms

An error message similar to "**msg**": "**AnsibleUndefinedVariable: 'xxxxx' is undefined**" is displayed.

Cause Analysis

In the selected Manifest file, the parameter referenced by `{{}}` is not defined in the application.

Solution

Add the parameter on the **Parameters** tab page of the application.

Log keyword: AnsibleUndefinedVariable

4.21.2 Target File Does Not Exist in CodeArts Artifact

Symptoms

An error message similar to **ReleaseManFileUrl is null,Please check the deploy task!** is displayed.

Cause Analysis

The Manifest file selected in an application does not exist in CodeArts Artifact.

Solution

Edit the application and select the required Manifest file again.

Log keyword: ReleaseManFileUrl is null

4.21.3 Path of the Manifest File in CodeArts Artifact Is Incorrect

Symptoms

An error message similar to **Failed to download k8s files from ReleaseService, please check your file path!** is displayed.

Cause Analysis

The Manifest file selected in an application does not exist in CodeArts Artifact.

Solution

When editing the application, check whether the YML file path is correct. If the application parameters are referenced, ensure that the final path is correct after the parameters are replaced.

Log keyword: Failed to download k8s files from ReleaseService

4.21.4 kubeconfig File Is Incorrectly Configured

Symptoms

An error log such as **Unable to connect to the server** is displayed.

Cause Analysis

The kubeconfig file is incorrectly configured. As a result, the cluster fails to be connected to.

Solution

- Any error in the configuration of the kubeconfig file may cause a cluster connection failure.
- Ensure that the used kubeconfig file is correct. For details about how to generate the kubeconfig file, see [Kubernetes Deployment Guide](#).

Log keyword: Unable to connect to the server

4.21.5 kubectl Command Fails to Be Deployed

Symptoms

An error is reported in the **TASK [Execute kubectl command]** step. The **stderr_lines** field starts with **error** and is followed by the error information.

Cause Analysis

The kubectl command that is used to perform operations on clusters fails to be deployed.

Solution

1. Check whether the value of the **cmd** field in the log is the same as expected.
2. If not, modify the application.
3. If the command is correct, check the information in the **stderr_lines** field and rectify the fault according to the error information.

NOTICE

The selected Manifest file and path are encrypted. Therefore, they are different from the original values.

4.21.6 Failed to Deploy Applications on Kubernetes

Symptoms

The error message **Failed to download k8s files from CodeArts Repo, please check your file path!** is displayed.

Cause Analysis

The size of the selected code repository file exceeds 200 MB, or the number of files in the code repository exceeds 1,024.

Solution

Split the code repository to ensure that the Manifest code repository contains only the Manifest configuration of Kubernetes.

4.21.7 Log Contains "Too many files to unzip" When CodeArts Repo Is Selected as the Manifest File Source During Kubernetes Deployment

Symptoms

During the deployment of the action **Deploy on Kubernetes**, when **Use Manifest files** is selected and **CodeArts Repo** is selected for **File Source**, the error message **Too many files to unzip.** is displayed.

Cause Analysis

In the current application, there are more than 1024 files in the selected branch of the code repository.

Solution

Method 1:

Create a branch for the Manifest file. Then edit the application, select this branch, save the settings, and perform the deployment again.

Method 2:

Use a build task to package the Manifest file in the code repository to CodeArts Artifact. Then, select **CodeArts Artifact** for **File Source**, select the Manifest file in the release repository, save the settings, and perform the deployment again.

4.21.8 Error Message "File is too large" Displayed During Manifest File Source Selection for Kubernetes Deployment

Symptoms

During the deployment of the action **Deploy on Kubernetes**, when **Use Manifest files** is selected and **CodeArts Repo** is selected for **File Source**, the error message **File is too large** is displayed.

Cause Analysis

The size of the file in the selected code repository or CodeArts Artifact exceeds the upper limit (100 MB).

Solution

Ensure that the size of the file in the selected code repository or CodeArts Artifact does not exceed 100 MB.

4.22 Ansible

4.22.1 Invalid Entry File Path

Symptoms

An error message is displayed, indicating that the file path is incorrect.

Cause Analysis

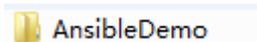
The entered file path is invalid.

Solution

Enter the relative path of the directory generated after the playbook package is decompressed.

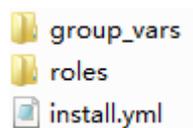
- If the directory after decompression is similar to that shown in the following figure, the entry file path is **AnsibleDemo/install.yml**.

Figure 4-123 Directory generated after the playbook package is decompressed



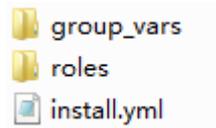
The following figure shows the structure of the **AnsibleDemo** directory:

Figure 4-124 AnsibleDemo directory structure



- If the directory after decompression is similar to that shown in the following figure, the entry file path is **install.yml**.

Figure 4-125 Directory structure after the playbook package is decompressed



4.22.2 Entry File Not Found

Background

The fault usually occurs during Ansible deployment because the playbook package selected from CodeArts Artifact does not contain the **install.yml** file or the entered **entry file path** does not exist.

Symptoms

An error message is displayed, indicating that the entry file is incorrect and cannot be found.

Cause Analysis

The entered entry file path is incorrect, or the entry file does not exist.

Solution

Check whether the entry file path is correct or whether the file exists in the path.

4.22.3 Copy Module Error

Symptoms

During the deployment of the action **Ansible**, if a custom playbook file is selected, an error message is displayed.

```
fatal: [1_***.***.***.245]: FAILED! => {  
  "changed": false,  
  "msg": "src must be a relative path"  
}
```

Cause Analysis

The src path is an absolute path when the copy or template module is used.

Solution

When the copy or template module is used, change the src path to a relative path that does not start with special characters (\backslash \$~) or contain consecutive periods (..).

Usage of Copy and Template Modules

You are not allowed to copy folders if the copy and template modules are used in playbooks. Instead, you must copy the files to the directory where the .yml script is located, set the source directory (**src**) to the name of the files to be copied, and set the destination directory (**dest**) to the file path on the target host.

```
- name: Copy a version of named.conf that is dependent on the OS. setype obtained by doing ls -Z /etc/named.conf on original file
  template:
    src: named.conf_{{ ansible_os_family }}.j2
    dest: /etc/named.conf
```

NOTICE

If the file name contains only digits (for example, **123654**), enclose the file name with single quotation marks (') or double quotation marks ("), for example, '123654'.

4.22.4 JSON Parameter Parsing Error

Symptoms

JSON parameters are not replaced or parsed as expected during the Ansible application deployment.

During the Ansible application deployment, the template module can be used to replace a text file. If the parameter values in the file are in JSON or JSON array format, the character **u** will be added in front of the keys and values after parsing. For example:

- Input parameters: {"key":"jsonkey","value":"jsonvalue"}
- Parameters after replacement: {u'value': u'jsonvalue', u'key': u'jsonkey'}

Solution

Enclose JSON parameters with single quotation marks. The template module will forcibly parse the parameters in character string mode to ensure correct replacement. The following is an example:

- Input parameters: {"key":"jsonkey","value":"jsonvalue"}
- Parameters after replacement: {"key":"jsonkey","value":"jsonvalue"}

4.22.5 Service Module in Playbook Scripts Fails to Start or Stop Services

Symptoms

The service module in playbook scripts cannot start or stop services.

Cause Analysis

The service module uses the **started** and **stopped** parameters to control services. Deployment is supported only when specific conditions are met. For details, see service description in the Ansible official document.

Solution

Use the shell or command module to deploy the **service xxx start/stop** command to start or stop a service. **xxx** indicates a service name.

4.22.6 Ansible Application Deployment Fails

Symptoms

The deployment action **Ansible** fails and the error message **Download file error** is displayed.

Cause Analysis

The downloaded playbook package is too large, or there are more than 1024 files in the package.

Solution

1. Re-create the playbook package and ensure that the playbook package contains the playbook script but not the service code.
2. Split the code repository to separate the playbook code from the service code.
3. Use the build function to separately package the playbook code in the code repository and select CodeArts Artifact for deployment.

4.22.7 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The **/etc/ssh/sshd_config** configuration file has defined the heartbeat time (unit: s) in **ClientAliveInterval** for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of **ClientAliveInterval** in the **/etc/ssh/sshd_config** file to **1800**.
2. Restart the SSHD service.

4.22.8 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add '**user ALL=(ALL) ALL**' to the **/etc/sudoers** file. **user** indicates the user to grant higher permissions to.

4.22.9 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the **\b** characters.

Figure 4-126 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! ={"changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ba' specified."}]
```

- The deployment fails due to the **\f** characters.

Figure 4-127 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! ={"changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\fa' specified."}]
```

- The deployment fails due to the **\r** characters.

Figure 4-128 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! ={"changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ra' specified."}]
```

- The deployment fails due to the **\t** characters.

Figure 4-129 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! ={"changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ta' specified."}]
```

- The deployment fails due to the **\n** characters.

Figure 4-130 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! -["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D\\ud' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.22.10 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
 - Step 2** Click the **Environment Management** tab.
 - Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
 - Step 4** After the host is added and verified, deploy the application again.
- End

4.22.11 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11

- Step 2** Click the **Environment Management** tab.
- Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
- Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.
- End

4.22.12 Failed to Deploy an Application on a Windows Host

Symptoms

The following log information is displayed.

Figure 4-131 Log information

```
37 [2019-02-19 14:35:35.056] TASK [Install Tsp] *****
38 [2019-02-19 14:35:35.056] fatal: [***.***.***.***]: FAILED! => [changed]: true, cmd: cmd.exe /c Start /wait C:\Users\Administrator\Downloads\Tz1805-04.exe /S, "data": "0:00:01.531201", "msg": "2019-02-19 06:35:35.075437", "msg": "non-zero return code", "rc": 3762504530, "start": "2019-02-19 06:35:34.144236", "stderr": "Unhandled Exception: System.IO.FileNotFoundException: Could not load file or assembly 'System.Data, Version=***.***.***.***, Culture=neutral, PublicKeyToken=877a5c5619944983' or one of its dependencies. The paging file is too small for this operation to complete. (Exception from HRESULT: 0x800705AF)\r\n at System.Management.Automation.PSObject.MappedInternalAdapterSet(Object obj)\r\n at System.Management.Automation.PSObject.GetMappedAdapter(Object obj, TypeTable typeTable)\r\n at System.Management.Automation.PSObject.get_InternalAdapterSet()\r\n at System.Management.Automation.PSObject.get_InternalTypeName()\r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameterPrivate(PSObject inputToOperateOn)\r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameter(PSObject inputToOperateOn)\r\n at System.Management.Automation.CommandProcessor.Read()\r\n at
```

Cause Analysis

The corresponding patch is missing when the Windows host is verified for its connectivity.

Solution

[Verify the connectivity again according to the Windows configuration document.](#)

4.22.13 Error Occurs During Application Deployment with the sudo Privileges

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
## user MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root ALL=(ALL) ALL
allen ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.22.14 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.22.15 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.22.16 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.22.17 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.

- c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.22.18 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"usr/bin/unzip\" could not handle archive. Command \"usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.23 Creating an IIS Site

4.23.1 Incorrect Port Number

Symptoms

An error message is displayed, indicating that the port number is too long.

Cause Analysis

The port number contains more than 5 characters.

Solution

Reduce the port number length (5 characters at most).

4.23.2 Physical Path of an Application Does Not Exist

Symptoms

An error message is displayed, indicating that the physical path does not exist.

Cause Analysis

When creating an IIS site, ensure that the physical path bound to the IIS site exists.

Solution

Check whether the entered physical path is correct, which should be that of the application on the host.

4.23.3 IIS Not Installed on the Host

Symptoms

An error message is displayed, indicating that WebAdministration fails to be loaded.

Cause Analysis

Before creating an IIS site, ensure that the IIS module has been installed on the host.

Solution

Follow the instructions provided in [How Do I Check the IIS Function on the Local Computer](#).

4.23.4 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.

4.23.7 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.23.8 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

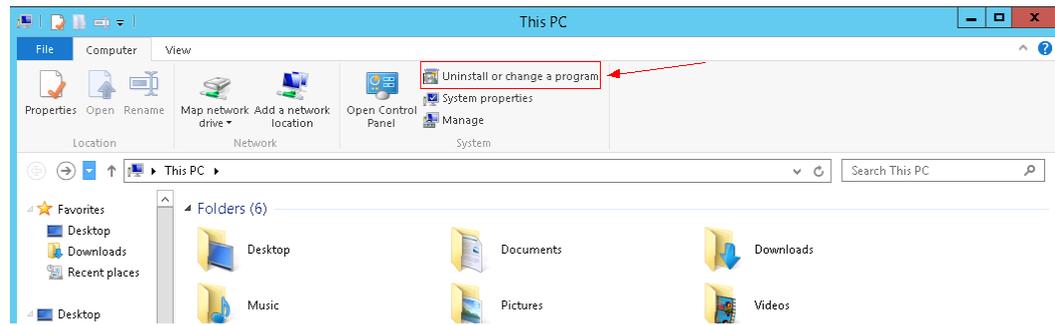
4.23.9 How Do I Check the IIS Function on the Local Host?

To check whether the IIS function exists on the local computer, perform the following steps:

The following steps use **Windows Server 2012 R2** as an example:

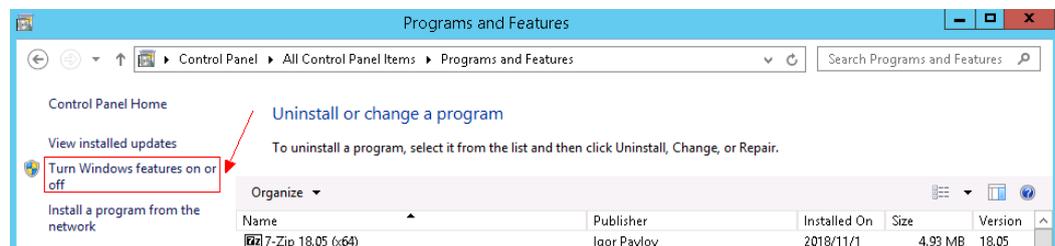
- Step 1** Start the computer and click **Uninstall or change a program**.

Figure 4-133 Uninstalling or changing a program



Step 2 Click **Turn Windows features on or off**.

Figure 4-134 Turning Windows features on or off



Step 3 On the page displayed, click **Next**.

Figure 4-135 Selecting installation type

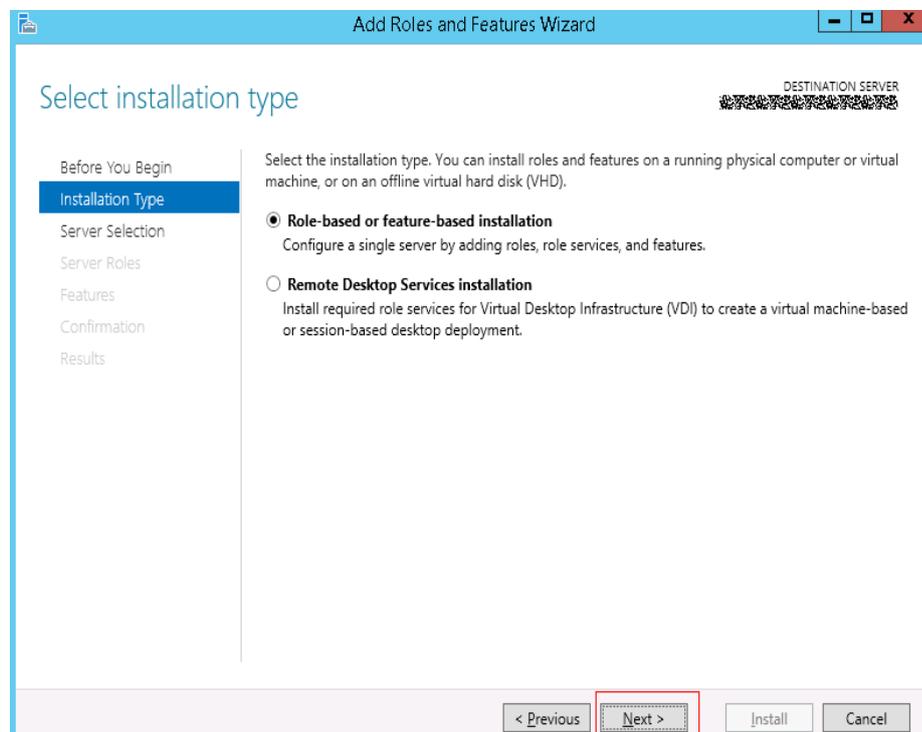
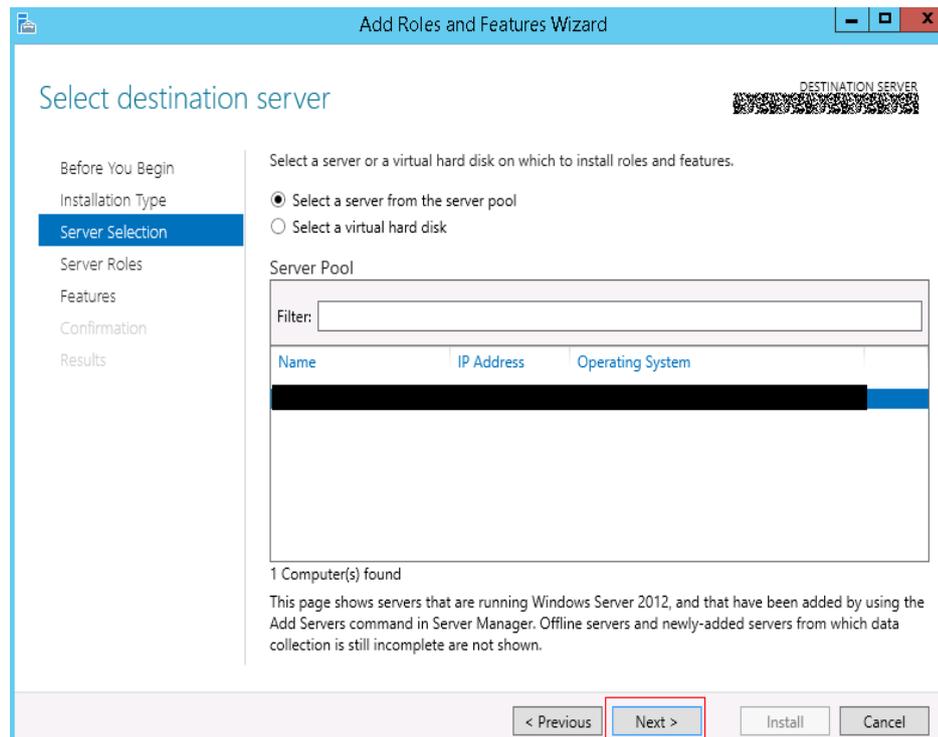
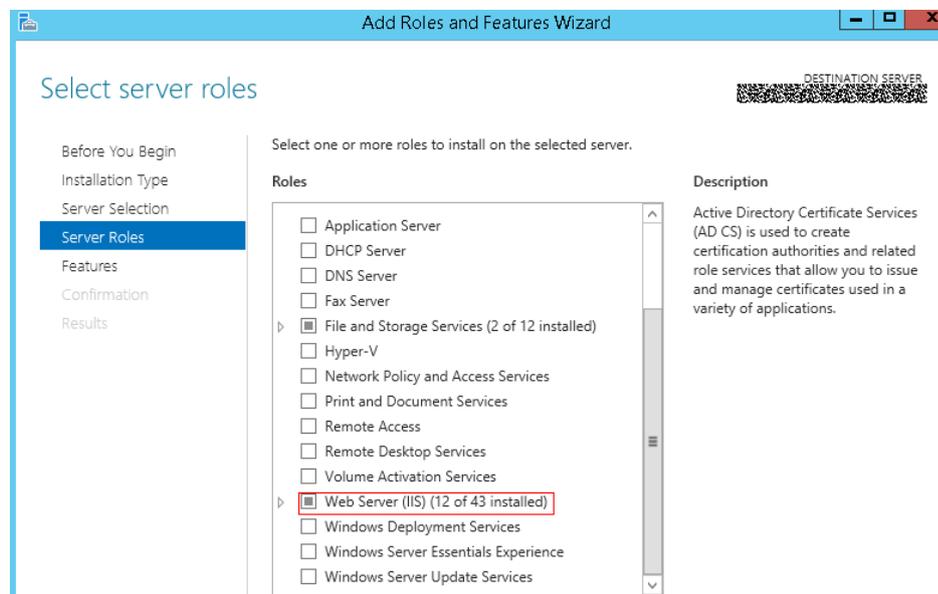


Figure 4-136 Selecting destination server



Step 4 On the page displayed, find **Web Server (IIS)**. If Web Server(IIS) does not exist, the IIS function is not supported.

Figure 4-137 Finding Web Server(IIS)



----End

4.24 Installing IIS

4.24.1 Host Not Restarted

Please restart the computer before trying to install more

Symptoms

The deployment fails and the error message **Please restart the computer before trying to install more** is displayed.

Cause Analysis

The host is not restarted after some Windows functions are enabled or disabled.

Solution

Restart the host.

must log in to complete the current configuration or the configuration\r\nn in progress must be canceled

Symptoms

The deployment fails and the error message **must log in to complete the current configuration or the configuration\r\nn in progress must be canceled** is displayed.

Cause Analysis

The host is not restarted after some Windows functions are enabled or disabled.

Solution

Restart the host.

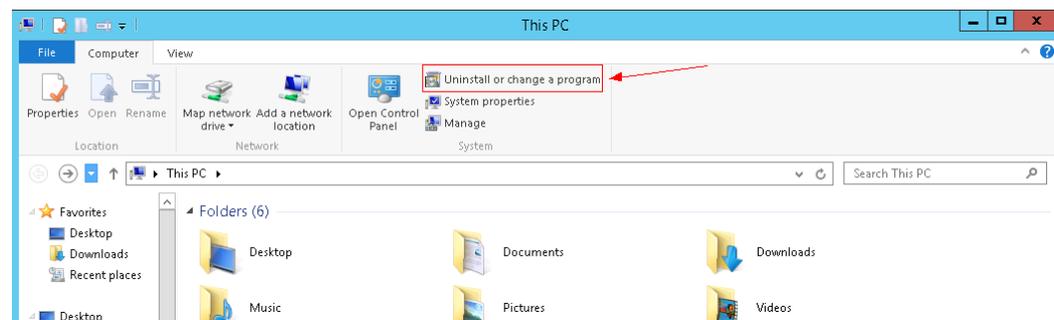
4.24.2 How Do I Check the IIS Function on the Local Host?

To check whether the IIS function exists on the local computer, perform the following steps:

The following steps use **Windows Server 2012 R2** as an example:

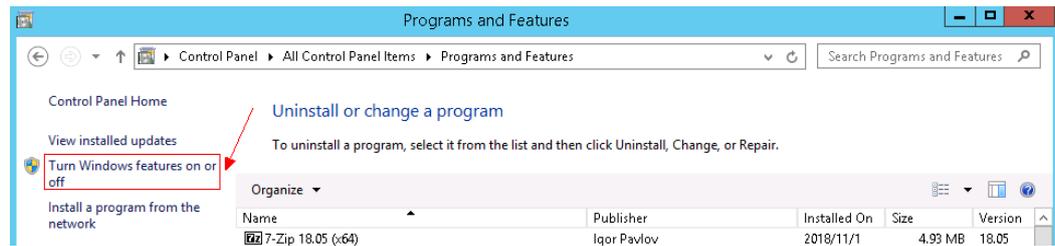
- Step 1** Start the computer and click **Uninstall or change a program**.

Figure 4-138 Uninstalling or changing a program



- Step 2** Click **Turn Windows features on or off**.

Figure 4-139 Turning Windows features on or off



Step 3 On the page displayed, click **Next**.

Figure 4-140 Selecting installation type

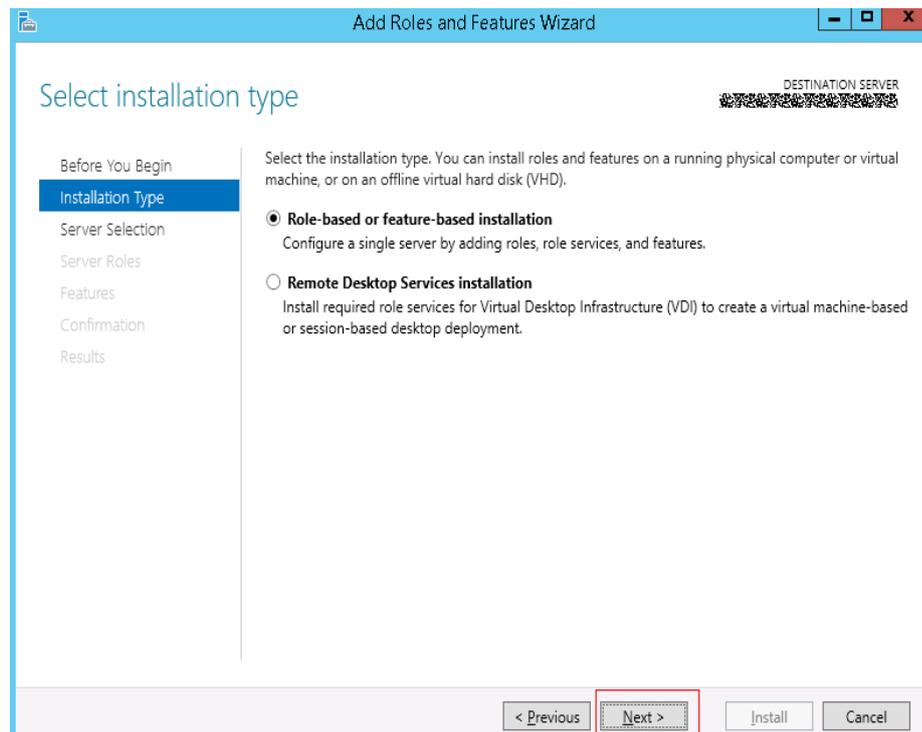
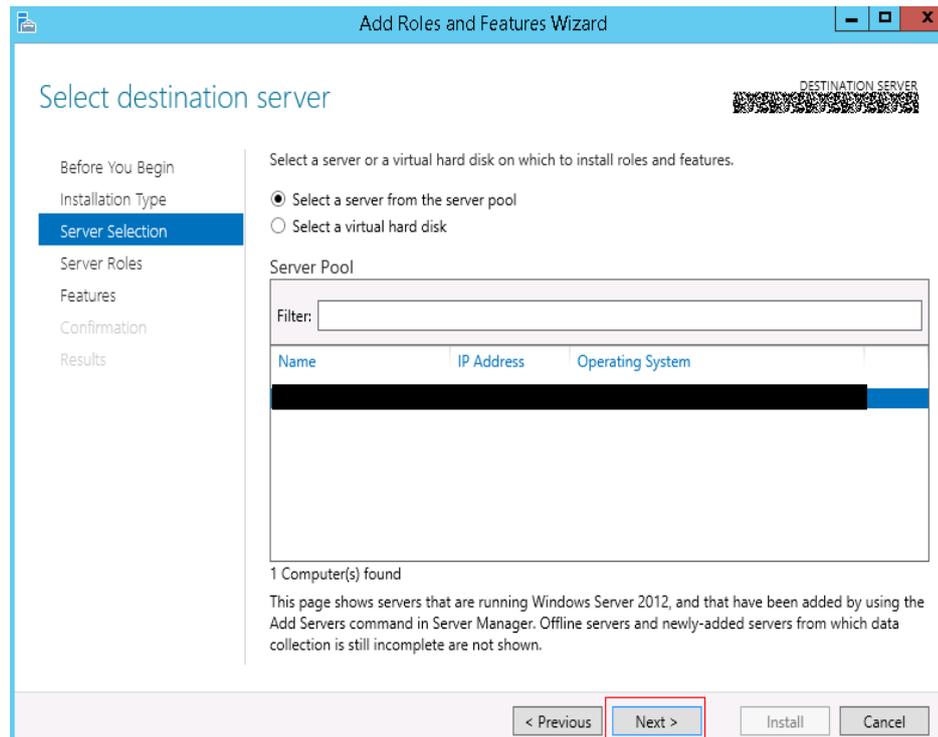
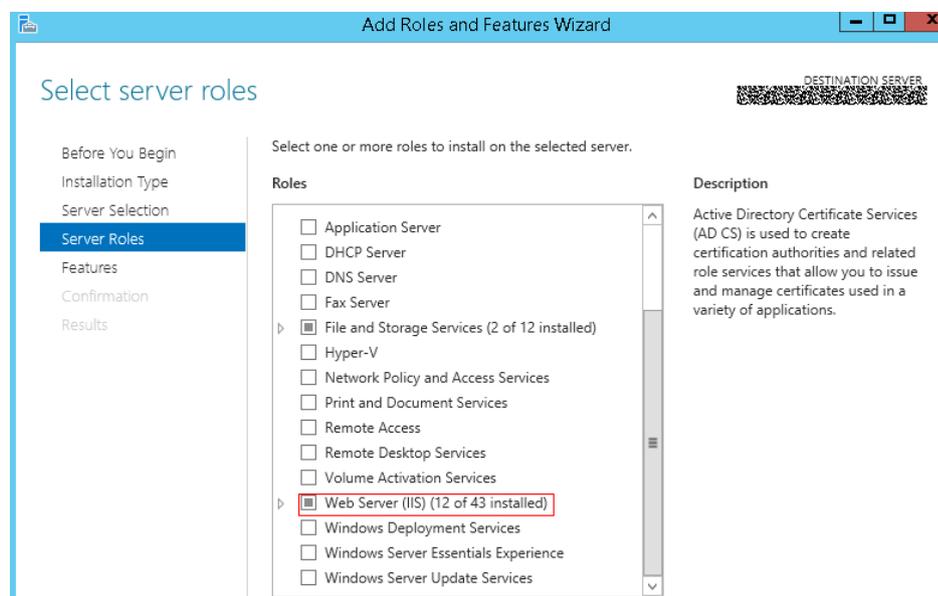


Figure 4-141 Selecting destination server



Step 4 On the page displayed, find **Web Server (IIS)**. If Web Server(IIS) does not exist, the IIS function is not supported.

Figure 4-142 Finding Web Server(IIS)



----End

4.24.3 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the `\b` characters.

Figure 4-143 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ba' specified."]
```

- The deployment fails due to the `\f` characters.

Figure 4-144 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\fa' specified."]
```

- The deployment fails due to the `\r` characters.

Figure 4-145 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ra' specified."]
```

- The deployment fails due to the `\t` characters.

Figure 4-146 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ta' specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-147 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\na' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.24.4 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.24.5 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
- Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.

----End

4.24.6 Failed to Deploy an Application on a Windows Host

Symptoms

The following log information is displayed.

Figure 4-148 Log information

```
37 [2019-02-19 14:35:35.650] TASK [Install Teip] *****
38 [2019-02-19 14:35:35.650] fatal: [***.***.***]: FAILED! => [changed]: true, "cmd": "cmd.exe /c start /wait C:\\Users\\Administrator\\Downloads\\Te1805-ed4.exe /S", "delta": "0:00:01.531201", "end": "2019-02-19 06:35:35.675437", "msg": "non-zero return code", "rc": 3762504530, "start": "2019-02-19 06:35:34.144230", "stderr": "\r\n\r\nUnhandled Exception: System.IO.FileLoadException: Could not load file or assembly 'System.Data, Version=***.***.***, Culture=neutral, PublicKeyToken=b77a5c561934e089' or one of its dependencies. The paging file is too small for this operation to complete. (Exception from HRESULT: 0x800705af)\r\n\r\n at System.Management.Automation.PSObject.MappedInternalAdapterSet(Object obj)\r\n at System.Management.Automation.PSObject.GetMappedAdapter(Object obj, TypeTable typeTable)\r\n at System.Management.Automation.PSObject.get_InternalAdapterSet() \r\n at System.Management.Automation.PSObject.get_InternalTypeNames() \r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParametersPrivate(PSObject inputToOperateOn)\r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameters(PSObject inputToOperateOn)\r\n at System.Management.Automation.CommandProcessor.Read() \r\n at
```

Cause Analysis

The corresponding patch is missing when the Windows host is verified for its connectivity.

Solution

[Verify the connectivity again according to the Windows configuration document.](#)

4.24.7 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.24.8 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.25 Installing JDK

4.25.1 A JDK of the Same Version Already Exists on the Target Host

Symptoms

A JDK of the same version already exists on the target host.

Cause Analysis

If JDK 1.8.0 has already been installed on the target host, another JDK of the same version can no longer be installed.

4.25.2 Java Not Installed on the Target Host

Symptoms

The following log information is displayed.

Figure 4-149 Log information

```
TASK [Check the Java version] *****
Fatal: [***,***,***,***,***,***] FAILED! =["censored": "the output has been hidden due to the fact that 'no_log: true' was specified for this result", "changed": true]
...ignoring
```

Cause Analysis

The **java-version** command cannot be found because the Java environment is not installed on the host. This error does not affect the application.

Solution

For details, see [Installing JDK](#).

4.25.3 JDK Decompression Failed

Symptoms

The following log information is displayed.

Figure 4-150 Log information

```
TASK [Decompression jdk] *****
Fatal: [***,***,***,***,***,***] FAILED! =["changed": false, "msg": "Failed to find handler for \^zhangsan/java_deploy_dir/jdk-8u151-linux-x64.tar.gz\
to retry, use: --limit @/devcloud/slavespace/slave4/workspace/job_0dd2f42db071467ca5d42fde3a97e154_1547005201583/wksp/5dff31b383ff467dafcf2da
```

Cause Analysis

The installation path is a relative path.

Solution

Specify the installation path as an absolute path, for example, **/usr/local/java**.

4.25.4 Cannot Install OpenJDK 8 on Ubuntu 14 or Earlier Versions

Symptoms

Cannot Install OpenJDK 8 on Ubuntu 14 or Earlier Versions

Cause Analysis

The OpenJDK official website does not provide an OpenJDK 8 package for Ubuntu 14 and earlier versions.

Solution

Use OpenJDK of another version in the deployment action **Install JDK**.

4.25.5 OpenJDK Does Not Support Arm

Symptoms

The error message **Openjdk does not support arm** is displayed in the deployment result.

Cause Analysis

The OpenJDK you are installing does not support the Arm architecture.

Solution

CodeArts Deploy only provides OpenJDK for copyright concerns. If you need to install JDK in an Arm environment, download a JDK for Arm from the Oracle official website.

4.25.6 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in **ClientAliveInterval** for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of **ClientAliveInterval** in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.25.7 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add **'user ALL=(ALL) ALL'** to the `/etc/sudoers` file. **user** indicates the user to grant higher permissions to.

4.25.8 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the **\b** characters.

Figure 4-151 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ba' specified."]
```

- The deployment fails due to the **\f** characters.

Figure 4-152 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\fa' specified."]
```

- The deployment fails due to the **\r** characters.

Figure 4-153 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ra' specified."]
```

- The deployment fails due to the **\t** characters.

Figure 4-154 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D[\\ta] specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-155 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D[\\na] specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.25.9 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click `***`, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.25.10 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
##      user    MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root    ALL=(ALL)        ALL
allen   ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys  ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.25.13 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

```
"msg": "Unexpected failure during module execution."
```

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.25.14 Software Version Detected on Windows Host Does Not Match the Installed Version

Symptoms

The following uses PHP as an example. The PHP version to be installed is `php-7.2.12`.

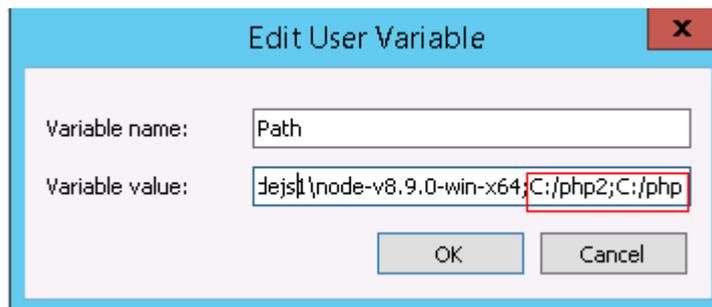
After PHP is installed successfully, log in to the host as the user who verified the host connectivity to view the PHP version.

```
PS C:\Users\Administrator> php -version
PHP 5.6.38 (cli) (built: Sep 13 2018 12:45:08)
Copyright (c) 1997-2016 The PHP Group
Zend Engine v2.6.0, Copyright (c) 1998-2016 Zend Technologies
PS C:\Users\Administrator>
```

The detected PHP version is PHP 5.6.38 or another version, which does not match the installed version.

Cause Analysis

If another version of PHP has been installed on the host, the path of the new PHP will be added to the end of the **Path** variable when you install PHP again. The host searches for a program command based on the paths in the **Path** variable from the beginning to the end. The program command in the original PHP path is found prior to that in the new path. As a result, a version mismatch problem occurs.



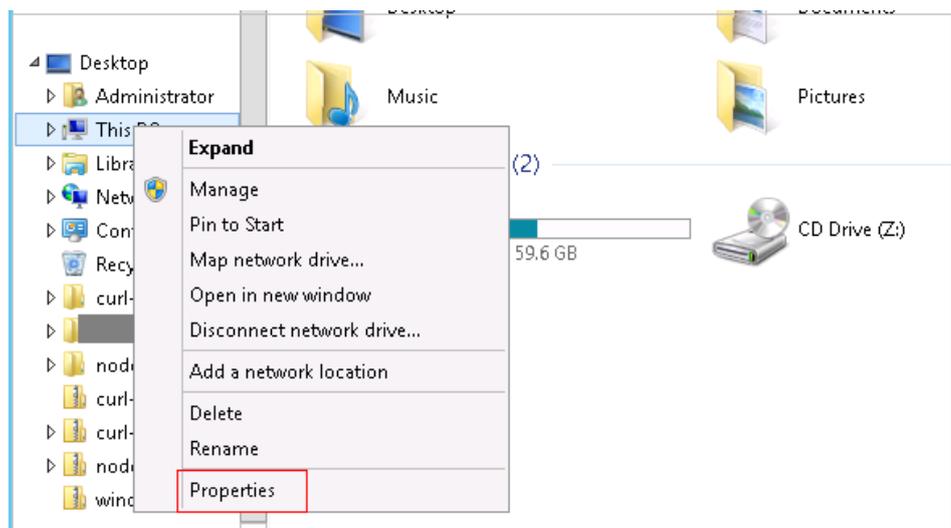
If the program command is found in the **C:/php2** path, the host will not continue to search for the command in the **C:/php** path.

Solution

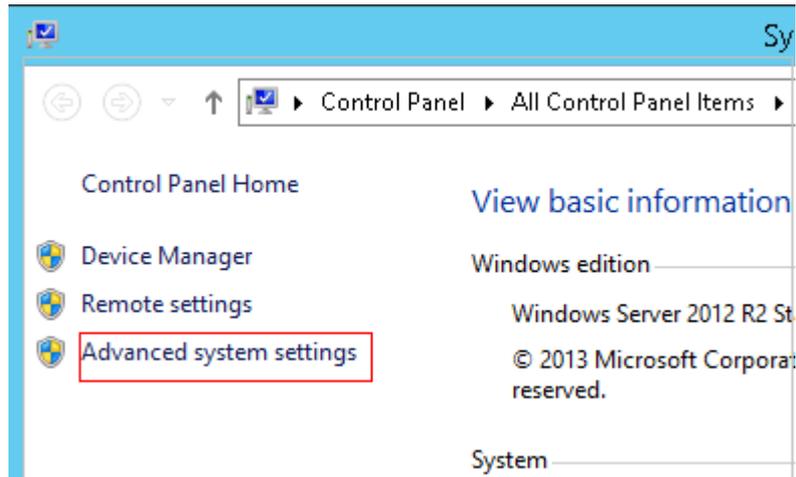
The solutions for user and system environment variables are the same. The following uses user environment variables as an example.

1. View the environment variable Path.

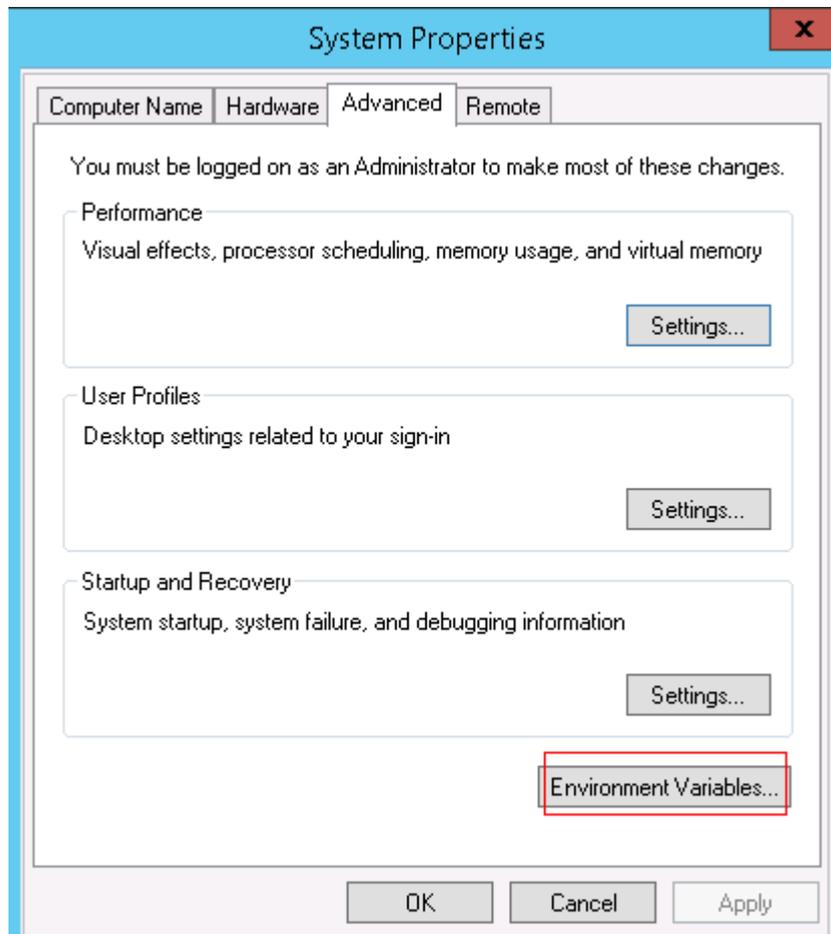
- a. Right-click **My Computer**, and choose **Properties** from the shortcut menu.



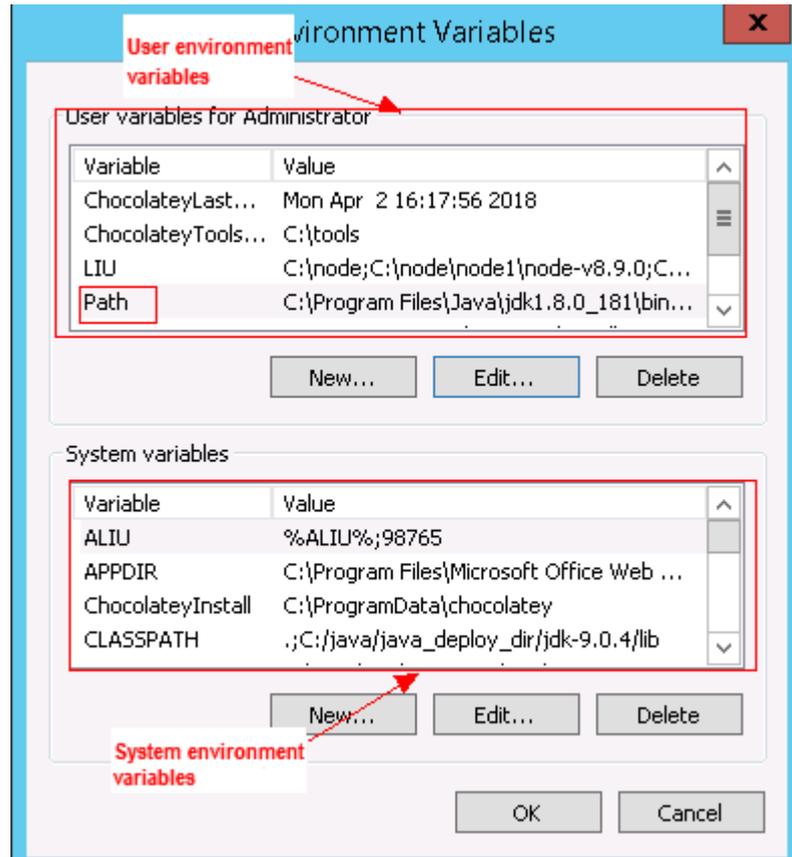
- b. Click **Advanced system settings**.



- c. Click **Environment Variables**.



- d. View the variable **Path**.



2. **Perform either of the following operations:**

- a. If the variable **Path** does not contain any references such as **%PHP_HOME%**, delete all paths related to PHP or place the new PHP path in front of other paths.
- b. If the variable **Path** contains references such as **%PHP_HOME%**, find the environment variable **PHP_HOME** and change its value to the new PHP path. Then the reference variable will be first matched when the host searches for a PHP path.

4.25.15 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.25.16 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.25.17 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.

- c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.25.18 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"usr/bin/unzip\" could not handle archive. Command \"usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.26 Installing Tomcat

4.26.1 Deployment Failed

Symptoms

The deployment of the action **Install Tomcat** fails.

Solution

- Step 1** Run the **java -version** command to check whether the Java environment is ready. If not, configure the Java environment.
- Step 2** Check whether another version of Tomcat already exists on the host. If so, delete the Tomcat environment variable and try again.

- Step 3** Check whether there is any other service that uses the same port as Tomcat.
- Step 4** Check whether multiple Tomcat services have been installed on the same host. If so, change the HTTP, HTTPS, shutdown, and AJP ports in the Tomcat configuration file `server.xml`.

----End

4.26.2 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in `ClientAliveInterval` for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of `ClientAliveInterval` in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.26.3 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add `'user ALL=(ALL) ALL'` to the `/etc/sudoers` file. **user** indicates the user to grant higher permissions to.

4.26.4 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the `\b` characters.

Figure 4-157 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ba' specified."]
```

- The deployment fails due to the `\f` characters.

Figure 4-158 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\fa' specified."]
```

- The deployment fails due to the `\r` characters.

Figure 4-159 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ra' specified."]
```

- The deployment fails due to the `\t` characters.

Figure 4-160 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ta' specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-161 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\na' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.26.5 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.26.6 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
- Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.

----End

4.26.7 Failed to Deploy an Application on a Windows Host

Symptoms

The following log information is displayed.

Figure 4-162 Log information

```
37 [2019-02-19 14:35:35.650] TASK [Install Teip] *****
38 [2019-02-19 14:35:35.650] fatal: [***.***.***]: FAILED! => [changed]: true, "cmd": "cmd.exe /c start /wait C:\\Users\\Administrator\\Downloads\\Te1805-ed4.exe /S", "delta": "0:00:01.531201", "end": "2019-02-19 06:35:35.675437", "msg": "non-zero return code", "rc": 3762504530, "start": "2019-02-19 06:35:34.144230", "stderr": "Unhandled Exception: System.IO.FileLoadException: Could not load file or assembly 'System.Data, Version=***.***.***, Culture=neutral, PublicKeyToken=677a5c5619346089' or one of its dependencies. The paging file is too small for this operation to complete. (Exception from HRESULT: 0x800705af)\\r\\n at System.Management.Automation.PSObject.MappedInternalAdapterSet(Object obj)\\r\\n at System.Management.Automation.PSObject.GetMappedAdapter(Object obj, TypeTable typeTable)\\r\\n at System.Management.Automation.PSObject.get_InternalAdapterSet()\\r\\n at System.Management.Automation.PSObject.get_InternalTypeNames()\\r\\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParametersPrivate(PSObject inputToOperateOn)\\r\\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameters(PSObject inputToOperateOn)\\r\\n at System.Management.Automation.CommandProcessor.Read()\\r\\n at
```

Cause Analysis

The corresponding patch is missing when the Windows host is verified for its connectivity.

Solution

[Verify the connectivity again according to the Windows configuration document.](#)

4.26.8 Error Occurs During Application Deployment with the sudo Privileges

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
## user MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root    ALL=(ALL)    ALL
allen   ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.26.9 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.

2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.26.10 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.26.11 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.

- Contact the network administrator to modify the outbound rules of the security group.

4.26.12 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.26.13 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"usr/bin/unzip\" could not handle archive. Command \"usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.27 Installing Nginx

4.27.1 No sudo Permissions

Symptoms

The following log information is displayed.

```
"stderr": "error: cannot open Packages index using db5 - Permission denied (13)\nerror: cannot open Packages database in /var/lib/rpm\nCRITICAL:yum.main:\nError: rpmdb open failed"
```

Cause Analysis

The user does not have the sudo permission and cannot use yum to download related dependencies.

Solution

Grant higher permissions to the user by adding **'user ALL=(ALL) ALL'** to the **/etc/sudoers** file. **user** indicates the user to grant higher permissions to.

4.27.2 No Permission to Access the Path

Symptoms

The following log information is displayed.

```
"msg": "There was an issue creating /usr/local/python3.6.7 as requested: [Errno 13] Permission denied: '****',  
"path": "****", "state": "absent"
```

Cause Analysis

The user does not have the permission to access the path.

Solution

Use any of the following methods:

- Use the file path that can be accessed by the current user.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user by adding **'user ALL=(ALL) ALL'** to the **/etc/sudoers** file. **user** indicates the user to grant higher permissions to.

4.27.3 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in **ClientAliveInterval** for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of **ClientAliveInterval** in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.27.4 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add `'user ALL=(ALL) ALL'` to the `/etc/sudoers` file. **user** indicates the user to grant higher permissions to.

4.27.5 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the `\b` characters.

Figure 4-163 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***]: FAILED! = [{"changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D\\ba' specified."}]
```

- The deployment fails due to the `\f` characters.

Figure 4-164 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\fa' specified."]
```

- The deployment fails due to the `\r` characters.

Figure 4-165 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ra' specified."]
```

- The deployment fails due to the `\t` characters.

Figure 4-166 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ta' specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-167 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\na' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.27.6 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click `***`, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.

4.27.9 Error Occurs During Application Deployment with the sudo Privileges

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
## user MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root ALL=(ALL) ALL
allen ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.27.10 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.27.11 Software Version Detected on Windows Host Does Not Match the Installed Version

Symptoms

The following uses PHP as an example. The PHP version to be installed is php-7.2.12.

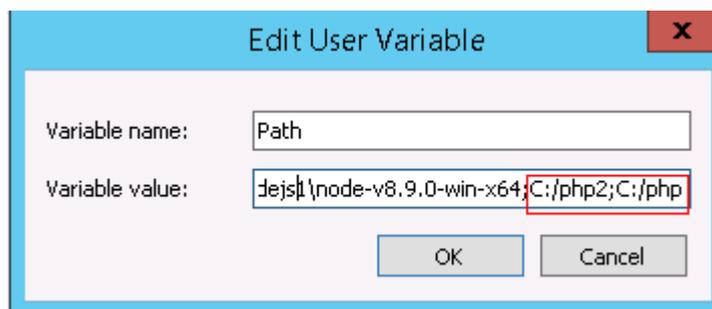
After PHP is installed successfully, log in to the host as the user who verified the host connectivity to view the PHP version.

```
PS C:\Users\Administrator> php -version
PHP 5.6.38 (cli) (built: Sep 13 2018 12:45:08)
Copyright (c) 1997-2016 The PHP Group
Zend Engine v2.6.0, Copyright (c) 1998-2016 Zend Technologies
PS C:\Users\Administrator>
```

The detected PHP version is PHP 5.6.38 or another version, which does not match the installed version.

Cause Analysis

If another version of PHP has been installed on the host, the path of the new PHP will be added to the end of the **Path** variable when you install PHP again. The host searches for a program command based on the paths in the **Path** variable from the beginning to the end. The program command in the original PHP path is found prior to that in the new path. As a result, a version mismatch problem occurs.

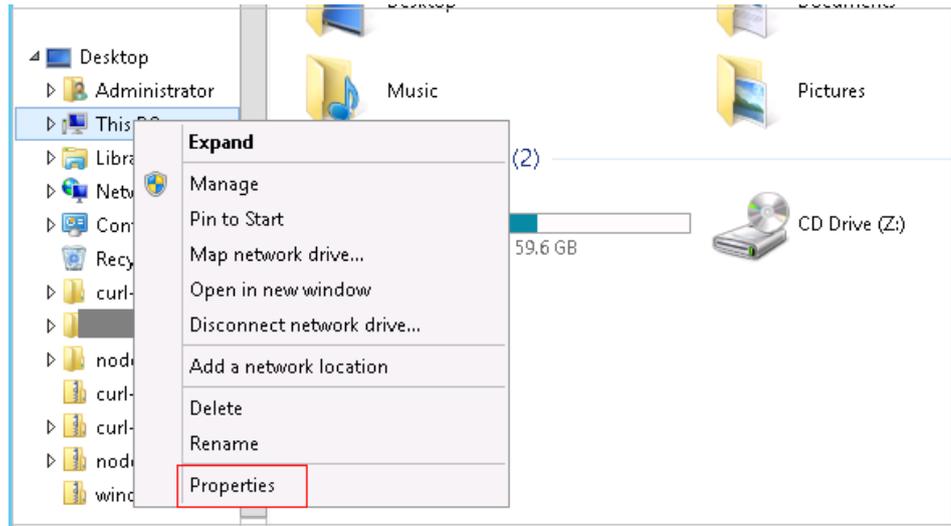


If the program command is found in the **C:/php2** path, the host will not continue to search for the command in the **C:/php** path.

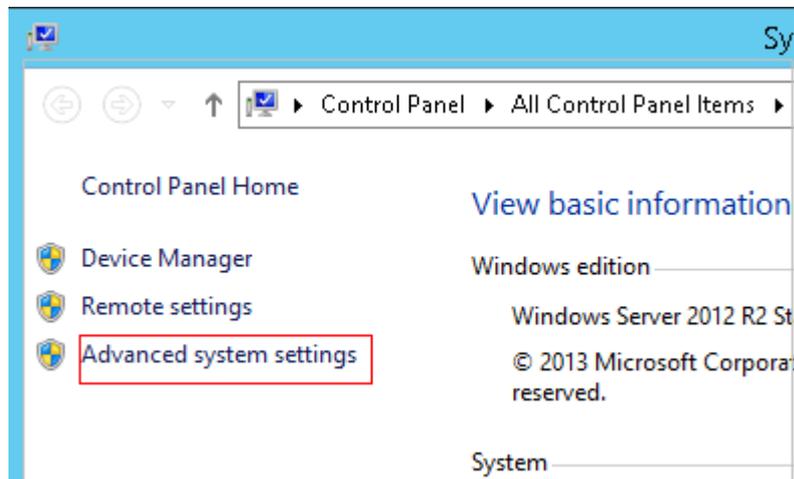
Solution

The solutions for user and system environment variables are the same. The following uses user environment variables as an example.

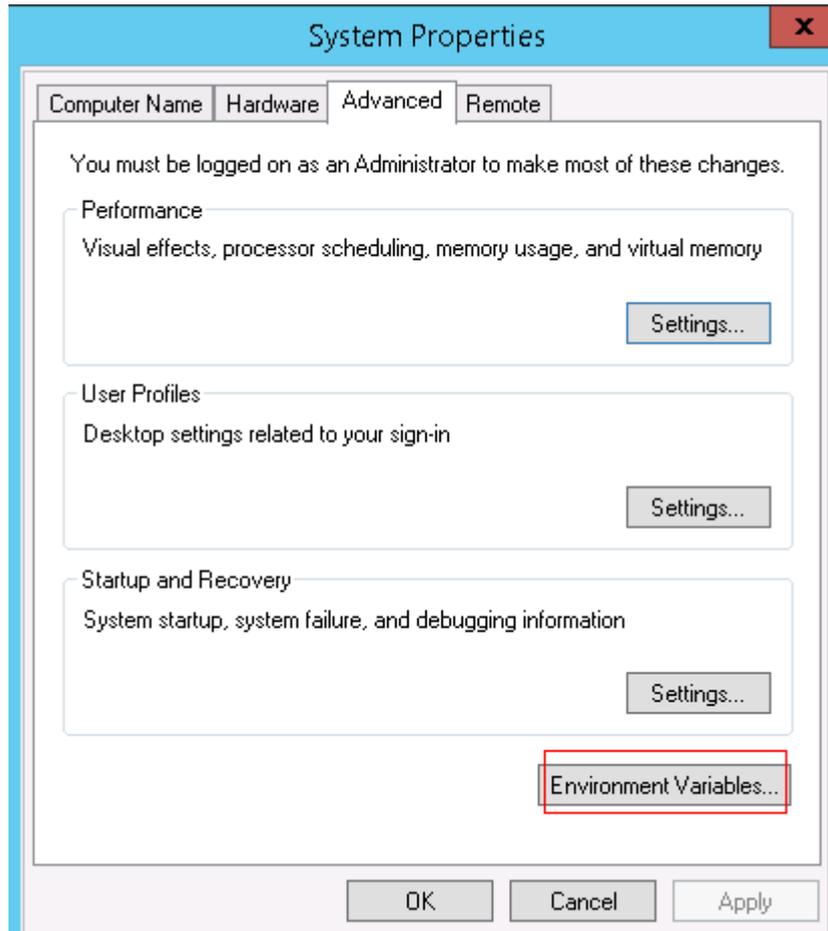
1. **View the environment variable Path.**
 - a. Right-click **My Computer**, and choose **Properties** from the shortcut menu.



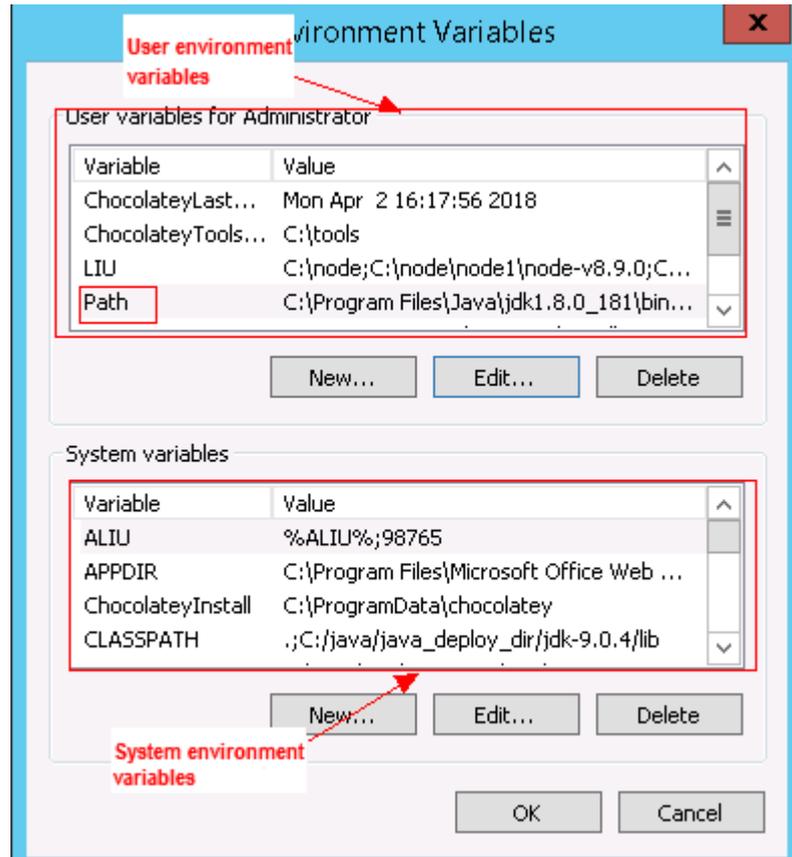
b. Click **Advanced system settings**.



c. Click **Environment Variables**.



- d. View the variable **Path**.



2. **Perform either of the following operations:**

- a. If the variable **Path** does not contain any references such as **%PHP_HOME%**, delete all paths related to PHP or place the new PHP path in front of other paths.
- b. If the variable **Path** contains references such as **%PHP_HOME%**, find the environment variable **PHP_HOME** and change its value to the new PHP path. Then the reference variable will be first matched when the host searches for a PHP path.

4.27.12 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.27.13 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.27.14 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.

- c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.27.15 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"usr/bin/unzip\" could not handle archive. Command \"usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.28 Installing Go

4.28.1 Invalid Installation Path

Symptoms

When the Linux host is selected to deploy the action **Install Go**, an error message is displayed, indicating that the file fails to be decompressed.

Cause Analysis

The Linux host is selected for the deployment, but the installation path is a Windows host path.

Solution

Change the installation path to a Linux path.

4.28.2 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in **ClientAliveInterval** for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of **ClientAliveInterval** in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.28.3 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add **'user ALL=(ALL) ALL'** to the `/etc/sudoers` file. **user** indicates the user to grant higher permissions to.

4.28.4 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the `\b` characters.

Figure 4-169 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ba' specified."]
```

- The deployment fails due to the `\f` characters.

Figure 4-170 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\fa' specified."]
```

- The deployment fails due to the `\r` characters.

Figure 4-171 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ra' specified."]
```

- The deployment fails due to the `\t` characters.

Figure 4-172 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\ta' specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-173 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\Dj\\na' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.28.5 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.28.6 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
- Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.

----End

4.28.7 Failed to Deploy an Application on a Windows Host

Symptoms

The following log information is displayed.

Figure 4-174 Log information

```
37 [2019-02-19 14:35:35.650] TASK [Install Teip] *****
38 [2019-02-19 14:35:35.650] fatal: [***.***.***]: FAILED! => [changed]: true, "cmd": "cmd.exe /c start /wait C:\\Users\\Administrator\\Downloads\\Te1805-ed4.exe /S", "delta": "0:00:01.531201", "end": "2019-02-19 06:35:35.675437", "msg": "non-zero return code", "rc": 3762504530, "start": "2019-02-19 06:35:34.144230", "stderr": "Unhandled Exception: System.IO.FileLoadException: Could not load file or assembly 'System.Data, Version=***.***.***, Culture=neutral, PublicKeyToken=b77a5c5619346089' or one of its dependencies. The paging file is too small for this operation to complete. (Exception from HRESULT: 0x800705af)\\r\\n at System.Management.Automation.PSObject.MappedInternalAdapterSet(Object obj)\\r\\n at System.Management.Automation.PSObject.GetMappedAdapter(Object obj, TypeTable typeTable)\\r\\n at System.Management.Automation.PSObject.get_InternalAdapterSet()\\r\\n at System.Management.Automation.PSObject.get_InternalTypeNames()\\r\\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParametersPrivate(PSObject inputToOperateOn)\\r\\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameters(PSObject inputToOperateOn)\\r\\n at System.Management.Automation.CommandProcessor.Read()\\r\\n at
```

Cause Analysis

The corresponding patch is missing when the Windows host is verified for its connectivity.

Solution

[Verify the connectivity again according to the Windows configuration document.](#)

4.28.8 Error Occurs During Application Deployment with the sudo Privileges

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL) ALL`. `$username` indicates a username.

```
## user MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root    ALL=(ALL)    ALL
allen   ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.28.9 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.

2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.28.10 Software Version Detected on Windows Host Does Not Match the Installed Version

Symptoms

The following uses PHP as an example. The PHP version to be installed is php-7.2.12.

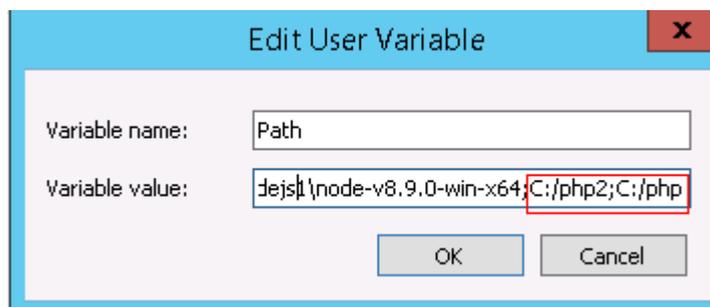
After PHP is installed successfully, log in to the host as the user who verified the host connectivity to view the PHP version.

```
PS C:\Users\Administrator> php -version
PHP 5.6.38 (cli) (built: Sep 13 2018 12:45:08)
Copyright (c) 1997-2016 The PHP Group
Zend Engine v2.6.0, Copyright (c) 1998-2016 Zend Technologies
PS C:\Users\Administrator>
```

The detected PHP version is PHP 5.6.38 or another version, which does not match the installed version.

Cause Analysis

If another version of PHP has been installed on the host, the path of the new PHP will be added to the end of the **Path** variable when you install PHP again. The host searches for a program command based on the paths in the **Path** variable from the beginning to the end. The program command in the original PHP path is found prior to that in the new path. As a result, a version mismatch problem occurs.



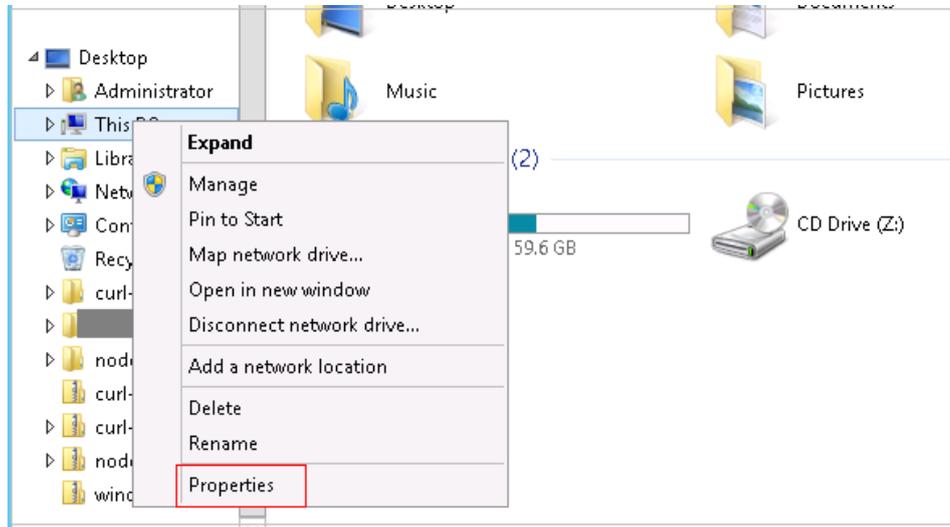
If the program command is found in the **C:\php2** path, the host will not continue to search for the command in the **C:\php** path.

Solution

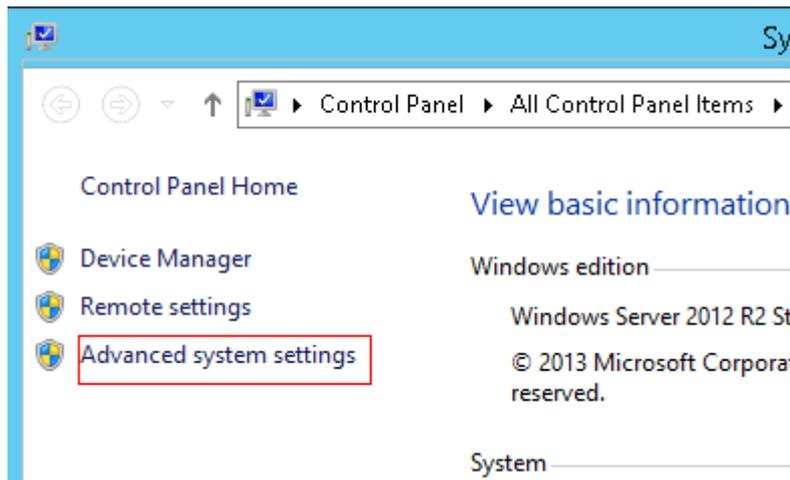
The solutions for user and system environment variables are the same. The following uses user environment variables as an example.

1. **View the environment variable Path.**

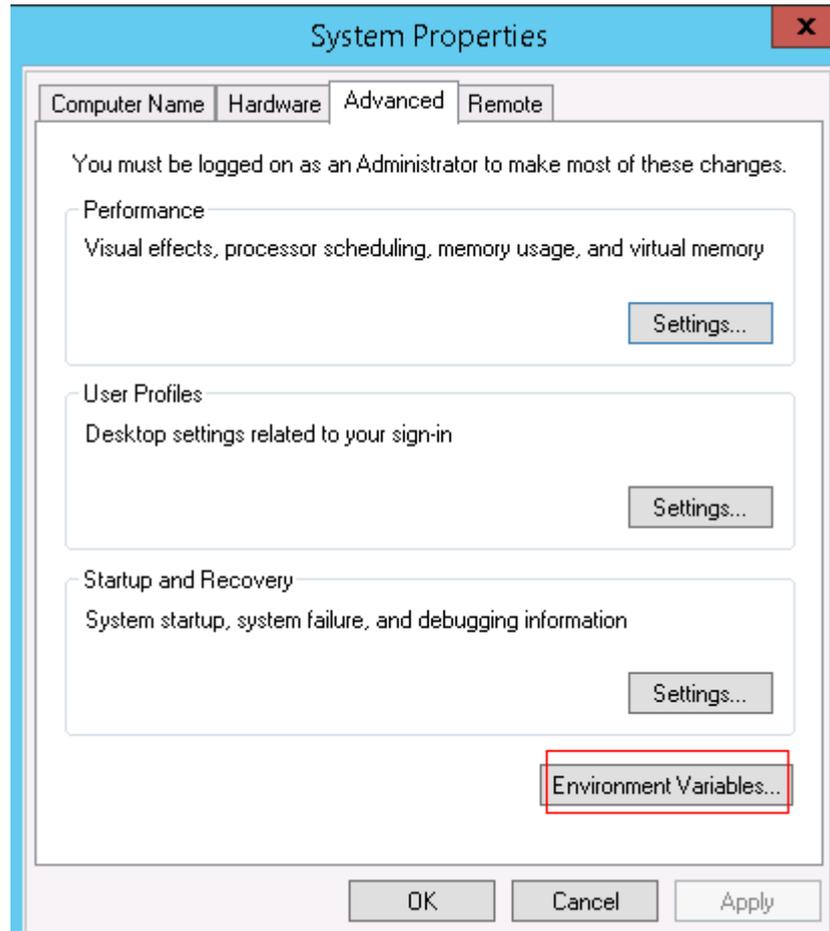
- a. Right-click **My Computer**, and choose **Properties** from the shortcut menu.



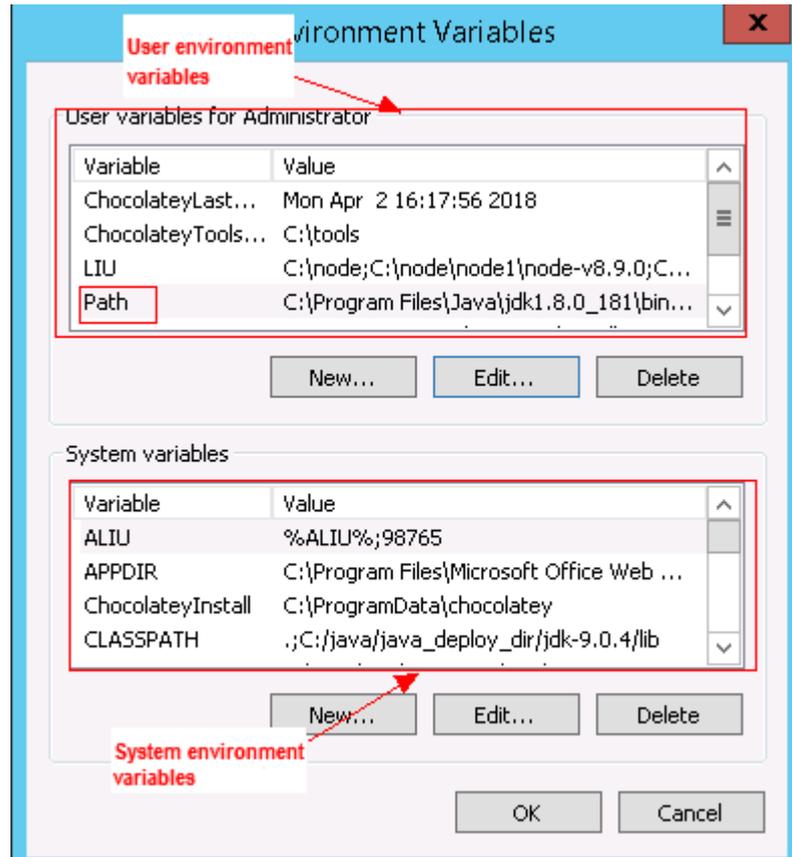
- b. Click **Advanced system settings**.



- c. Click **Environment Variables**.



- d. View the variable **Path**.



2. **Perform either of the following operations:**
 - a. If the variable **Path** does not contain any references such as **%PHP_HOME%**, delete all paths related to PHP or place the new PHP path in front of other paths.
 - b. If the variable **Path** contains references such as **%PHP_HOME%**, find the environment variable **PHP_HOME** and change its value to the new PHP path. Then the reference variable will be first matched when the host searches for a PHP path.

4.28.11 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.28.12 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.28.13 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.

- c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.28.14 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"usr/bin/unzip\" could not handle archive. Command \"usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.29 Installing PHP

4.29.1 Error Returned When Installing PHP as a Common User

Symptoms

The following log information is displayed after you run the deployment action **Install PHP**.

Figure 4-175 Log information

```
[2019-02-18 10:22:52.767] TASK [Download dependency] *****
[2019-02-18 10:22:52.767] fatal: [***.***.***.***]: FAILED! => changed: false, module_stderr: "Shared connection to ***.***.***.*** closed.\r\n", module_stdout: "[sudo] password for
[2019-02-18 10:21:26.817909]", stdout: "\n", cmd: "\nsudo yum -y install gcc make gcc-c++ libjpeg libjpeg-devel libpng libpng-devel freetype freetype-devel libpng libpng-devel li
devel glib2 glib2-devel bzip2 bzip2-devel ncurses curl openssl-devel gdm-devel libXpm-devel libX11-devel gd gd-devel gmp-devel readline-devel libxslt-devel expat-devel xmlrpc-c
[0:05:00.425498]", stderr: "\n\nWe trust you have received the usual lecture from the local System Administrator. It usually boils down to these three things:\n\n #1) Respec
you type.\n\n #3) With great power comes great responsibility.\n", rc: 1, invocation: {\n  module_args: {\n    warn: false,\n    executable: null,\n    uses_shell: true,\n    raw_pa
libjpeg libjpeg-devel libpng libpng-devel freetype freetype-devel libpng libpng-devel libxslt-devel zlib zlib-devel glib2 glib2-devel bzip2 bzip2-devel ncurses
devel gd gd-devel gmp-devel readline-devel libxslt-devel expat-devel xmlrpc-c xmlrpc-c-devel", creates: null, argv: null, creates: null, chdir: null, stdin: null),
\non-zero return code"}\r\n", msg: "MODULE FAILURE\nSee stdout/stderr for the exact error", rc: 1}
```

Cause Analysis

To install PHP, download a dependency package from the yum source and install it as user **root**. Non-root users do not have permission to download the dependency package.

Solution

Install PHP as user **root**.

4.29.2 Some Dependency Packages Do Not Exist in the CentOS Yum Repository

Symptoms

The error message **No software package is available** is displayed.

Cause Analysis

The repository corresponding to the yum source configured on the host does not contain some software dependency packages. As a result, the download fails.

Solution

Use the official yum source or the yum source that has the software dependency package.

4.29.3 Download Fails Due to Network Disconnection from the CentOS Yum Source

Symptoms

The error message **Name or service is unknown** is displayed.

Cause Analysis

The host does not have the network permission on the current yum source or the yum source does not exist.

Solution

- Check the host network.
- Check whether the connection to the yum source is available.

4.29.4 Download Fails Because Some Software Dependency Packages Are Missing for apt-get in Ubuntu

Symptoms

The following log information is displayed:

Figure 4-176 Log information

```
[2019-02-25 17:02:33.103] TASK [playrole : Download dependency] *****
[2019-02-25 17:02:33.104] fatal: [***.***.***.198] FAILED! =["changed": true, "cmd": "apt-get --install deploytestno", "delta": "0:00:00.692040", "end": "2019-02-25 17:01:37.46484", "msg": "non-zero return code", "rc": 100, "start":
[2019-02-25 17:01:36.764835], "stderr": "E: Unable to locate package deploytestno", "stderr_lines": ["E: Unable to locate package deploytestno"], "stdout": "Reading package lists...Building dependency tree...Reading state
[2019-02-25 17:02:33.105] to retry, use: --limit @/devcloud/rlavspace/rlavse/workpace/job_54236b78de-697f888fd9295e-d863c_1551085341159/eksp/448d2ceb36fad838b-df049ac-f33d440/config_environment/install_retry
```

Cause Analysis

The dependency package is missing for apt-get. As a result, the download fails.

Solution

Use the official software source or the software source that has the dependency.

4.29.5 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in `ClientAliveInterval` for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of `ClientAliveInterval` in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.29.6 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.

- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add **'user ALL=(ALL) ALL'** to the **/etc/sudoers** file. **user** indicates the user to grant higher permissions to.

4.29.7 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the **\b** characters.

Figure 4-177 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\fa' specified."]
```

- The deployment fails due to the **\f** characters.

Figure 4-178 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\fa' specified."]
```

- The deployment fails due to the **\r** characters.

Figure 4-179 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ra' specified."]
```

- The deployment fails due to the **\t** characters.

Figure 4-180 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ta' specified."]
```

- The deployment fails due to the **\n** characters.

Figure 4-181 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\na' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.29.8 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click ******* , and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.29.9 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click ******* , and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
- Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.

----End

4.29.12 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.29.13 Software Version Detected on Windows Host Does Not Match the Installed Version

Symptoms

The following uses PHP as an example. The PHP version to be installed is php-7.2.12.

After PHP is installed successfully, log in to the host as the user who verified the host connectivity to view the PHP version.

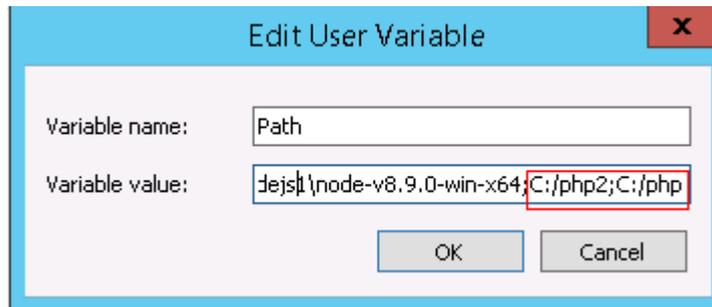
```
PS C:\Users\Administrator> php -version
PHP 5.6.38 (cli) (built: Sep 13 2018 12:45:08)
Copyright (c) 1997-2016 The PHP Group
Zend Engine v2.6.0, Copyright (c) 1998-2016 Zend Technologies
PS C:\Users\Administrator>
```

The detected PHP version is PHP 5.6.38 or another version, which does not match the installed version.

Cause Analysis

If another version of PHP has been installed on the host, the path of the new PHP will be added to the end of the **Path** variable when you install PHP again. The host searches for a program command based on the paths in the **Path** variable from the beginning to the end. The program command in the original PHP path is

found prior to that in the new path. As a result, a version mismatch problem occurs.



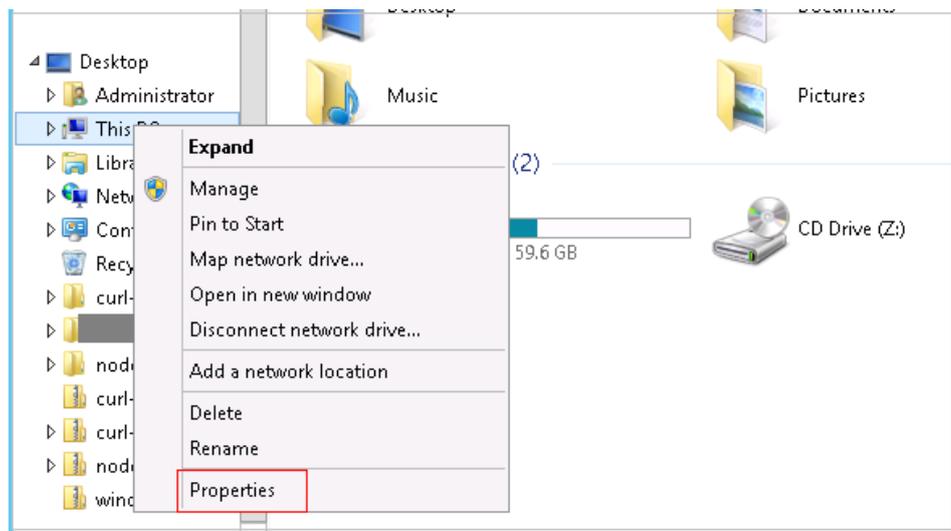
If the program command is found in the **C:/php2** path, the host will not continue to search for the command in the **C:/php** path.

Solution

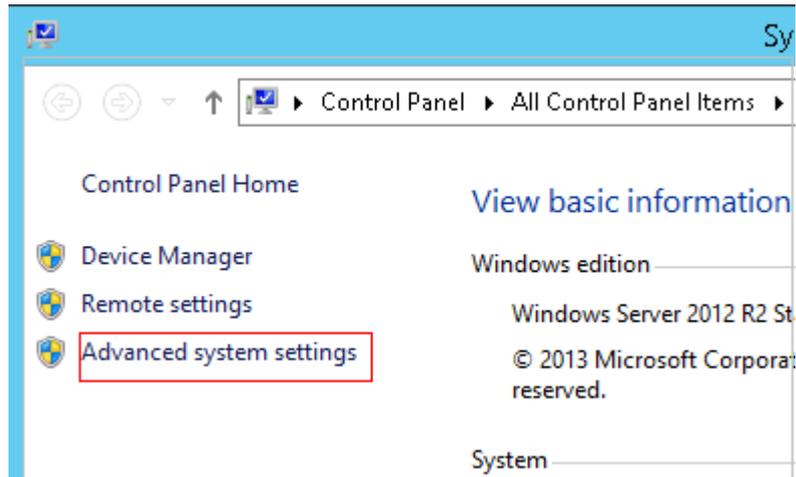
The solutions for user and system environment variables are the same. The following uses user environment variables as an example.

1. View the environment variable Path.

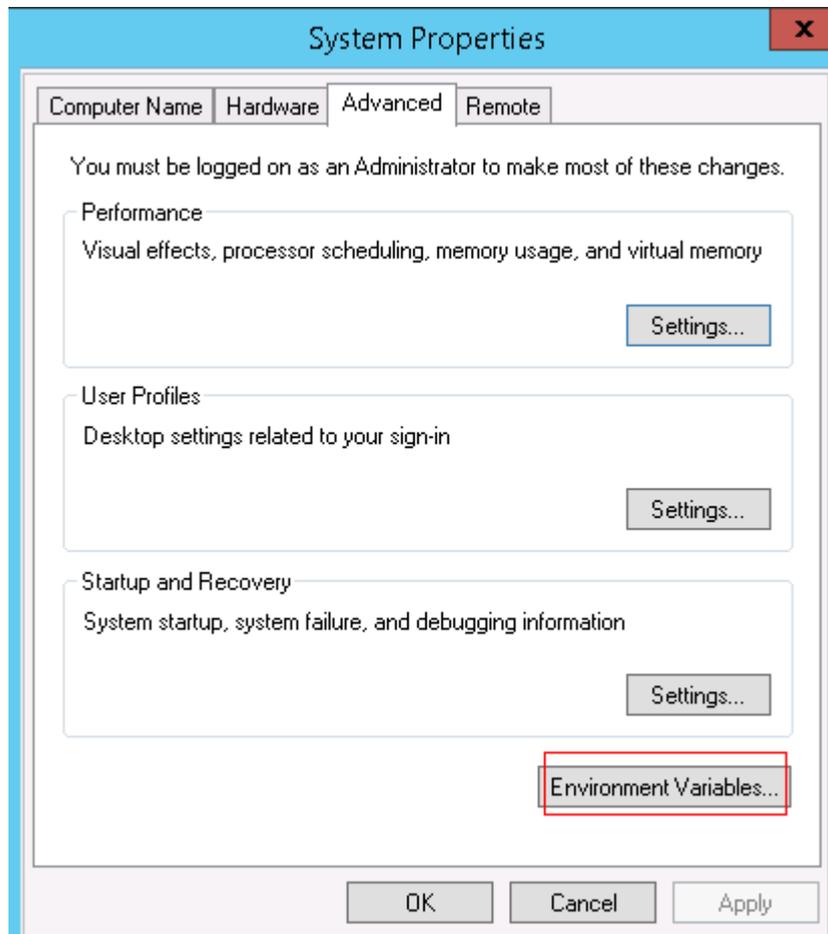
- a. Right-click **My Computer**, and choose **Properties** from the shortcut menu.



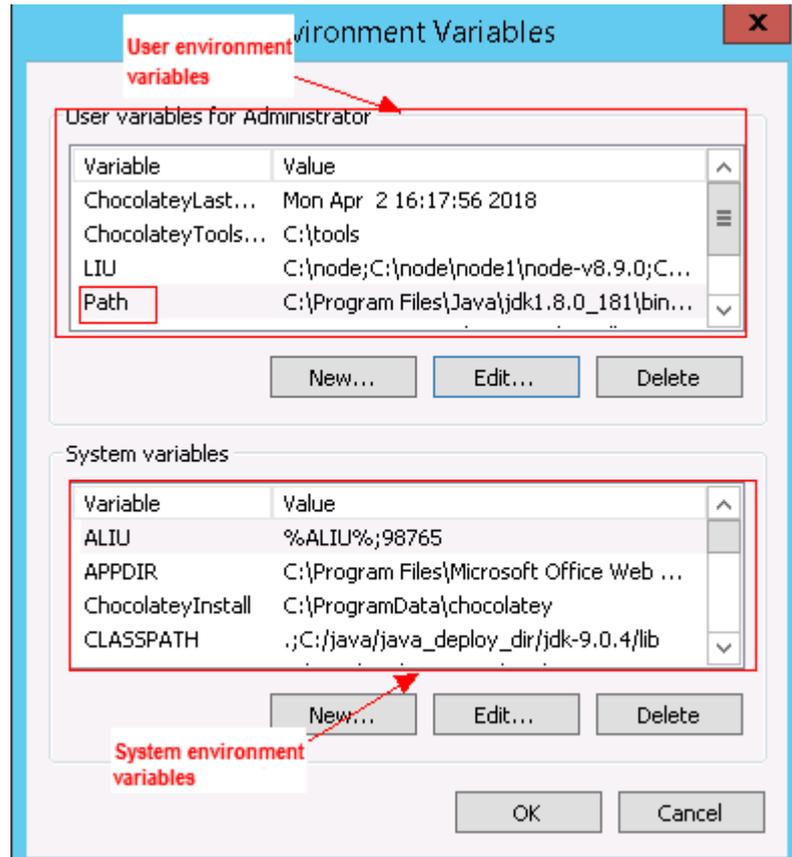
- b. Click **Advanced system settings**.



- c. Click **Environment Variables**.



- d. View the variable **Path**.



2. **Perform either of the following operations:**
 - a. If the variable **Path** does not contain any references such as **%PHP_HOME%**, delete all paths related to PHP or place the new PHP path in front of other paths.
 - b. If the variable **Path** contains references such as **%PHP_HOME%**, find the environment variable **PHP_HOME** and change its value to the new PHP path. Then the reference variable will be first matched when the host searches for a PHP path.

4.29.14 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.29.15 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.29.16 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.

- c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.29.17 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"usr/bin/unzip\" could not handle archive. Command \"usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.30 Installing Node.js

4.30.1 Cannot Decompress Node Packages

Symptoms

The following log information is displayed.

```
TASK [Decompression node package] *****  
fatal: [***, ***, ***, ***] FAILED! ={"changed": false, "msg": "Failed to find handler for \"~/root/deployDownload/node-v6.9.0-linux-x64.tar.gz\".  
to retry, use: --limit @/devcloud/slavespace/slave2/workspace/job_467be5c1113d4813b41353d0dfc4c230_1546427038950/wksp/99a30805f40049c09b36da
```

Cause Analysis

This action is supported by both Windows and Linux hosts. You may incorrectly specify a Windows installation path on a Linux host, resulting in a decompression failure.

Solution

Check that the installation path and host system are correct.

4.30.2 Installation Path Fails to Be Created

Symptoms

The following log information is displayed.

Figure 4-183 Log information

```
TASK [create install dest] *****
fatal: [***.***.***.***]: FAILED! =>{"changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\nodejs' specified."}
to retry, use: --limit @/devcloud/slavespace/slave3/workspace/job_803682a0532348ebb24a27318ee3223c_1546482834786/wksp/9636ffd6a7bf4bebb042a5
```

Cause Analysis

Ansible is used when installing Node.js. When entering a Windows path, use forward slashes (/) instead of backslashes (\).

Solution

Check whether the installation path is correct. If the installation path is a Windows path, ensure that the path contains forward slashes (/).

4.30.3 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in `ClientAliveInterval` for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of `ClientAliveInterval` in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.30.4 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add **'user ALL=(ALL) ALL'** to the **/etc/sudoers** file. **user** indicates the user to grant higher permissions to.

4.30.5 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the **\b** characters.

Figure 4-184 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! ={"changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ba' specified."}]
```

- The deployment fails due to the **\f** characters.

Figure 4-185 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! ={"changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\fa' specified."}]
```

- The deployment fails due to the **\r** characters.

Figure 4-186 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! ={"changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ra' specified."}]
```

- The deployment fails due to the **\t** characters.

Figure 4-187 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! ={"changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ta' specified."}]
```

- The deployment fails due to the **\n** characters.

Figure 4-188 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! -["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D\\ud' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.30.6 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
 - Step 2** Click the **Environment Management** tab.
 - Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
 - Step 4** After the host is added and verified, deploy the application again.
- End

4.30.7 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11

- Step 2** Click the **Environment Management** tab.
- Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
- Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.
- End

4.30.8 Failed to Deploy an Application on a Windows Host

Symptoms

The following log information is displayed.

Figure 4-189 Log information

```
37 [2019-02-19 14:35:35.056] TASK [Install Tzip] *****
38 [2019-02-19 14:35:35.056] fatal: [***.***.***.***]: FAILED! => [changed: true, cmd: cmd.exe /c Start /wait C:\Users\Administrator\Downloads\Tz12005-04.exe /S, "data": "0:00:01.531201", "msg": "2019-02-19 06:35:35.075437", "msg": "non-zero return code", "rc": 3762504530, "start": "2019-02-19 06:35:34.144236", "stderr": "Unhandled Exception: System.IO.FileNotFoundException: Could not load file or assembly 'System.Data, Version=***.***.***.***, Culture=neutral, PublicKeyToken=877a5c5619944089' or one of its dependencies. The paging file is too small for this operation to complete. (Exception from HRESULT: 0x800705AF)\r\n at System.Management.Automation.PSObject.MappedInternalAdapterSet(Object obj)\r\n at System.Management.Automation.PSObject.GetMappedAdapter(Object obj, TypeTable typeTable)\r\n at System.Management.Automation.PSObject.get_InternalAdapterSet()\r\n at System.Management.Automation.PSObject.get_InternalTypeName()\r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameterPrivate(PSObject inputToOperateOn)\r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameter(PSObject inputToOperateOn)\r\n at System.Management.Automation.CommandProcessor.Read()\r\n at
```

Cause Analysis

The corresponding patch is missing when the Windows host is verified for its connectivity.

Solution

[Verify the connectivity again according to the Windows configuration document.](#)

4.30.9 Error Occurs During Application Deployment with the sudo Privileges

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
## user MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root ALL=(ALL) ALL
allen ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.30.10 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.30.11 Software Version Detected on Windows Host Does Not Match the Installed Version

Symptoms

The following uses PHP as an example. The PHP version to be installed is php-7.2.12.

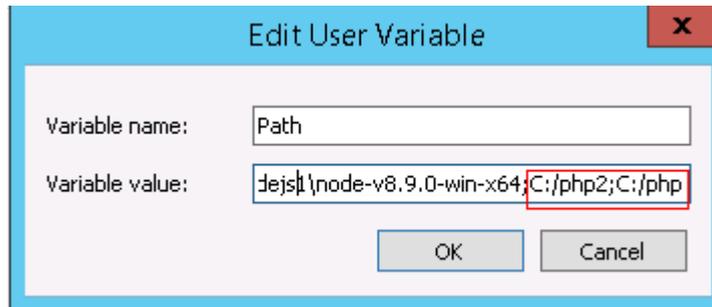
After PHP is installed successfully, log in to the host as the user who verified the host connectivity to view the PHP version.

```
PS C:\Users\Administrator> php -version
PHP 5.6.38 (cli) (built: Sep 13 2018 12:45:08)
Copyright (c) 1997-2016 The PHP Group
Zend Engine v2.6.0, Copyright (c) 1998-2016 Zend Technologies
PS C:\Users\Administrator>
```

The detected PHP version is PHP 5.6.38 or another version, which does not match the installed version.

Cause Analysis

If another version of PHP has been installed on the host, the path of the new PHP will be added to the end of the **Path** variable when you install PHP again. The host searches for a program command based on the paths in the **Path** variable from the beginning to the end. The program command in the original PHP path is found prior to that in the new path. As a result, a version mismatch problem occurs.



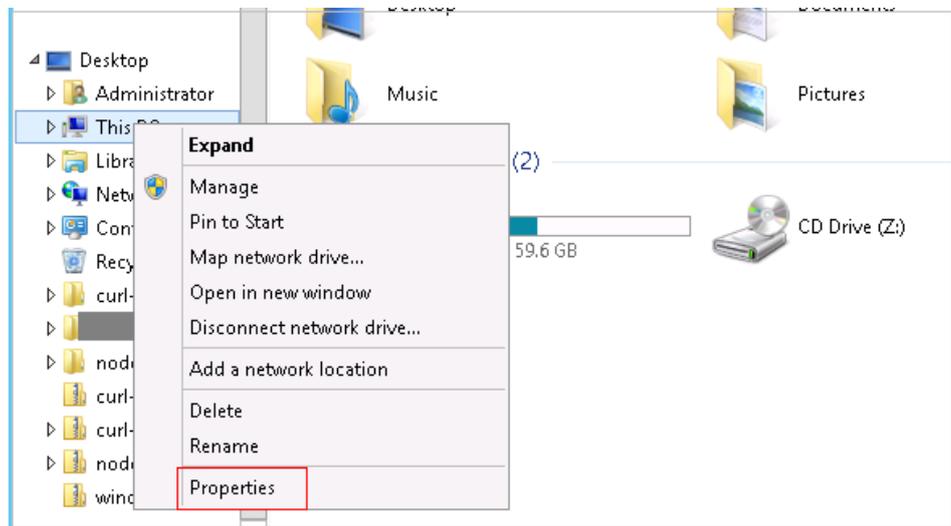
If the program command is found in the **C:/php2** path, the host will not continue to search for the command in the **C:/php** path.

Solution

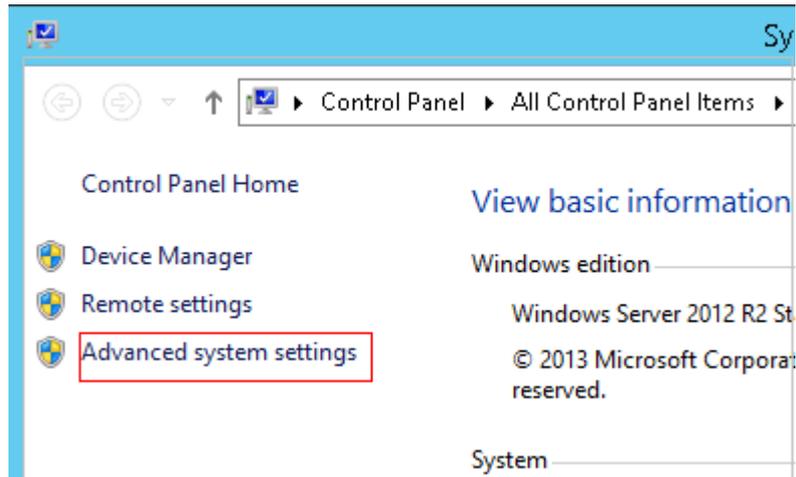
The solutions for user and system environment variables are the same. The following uses user environment variables as an example.

1. View the environment variable Path.

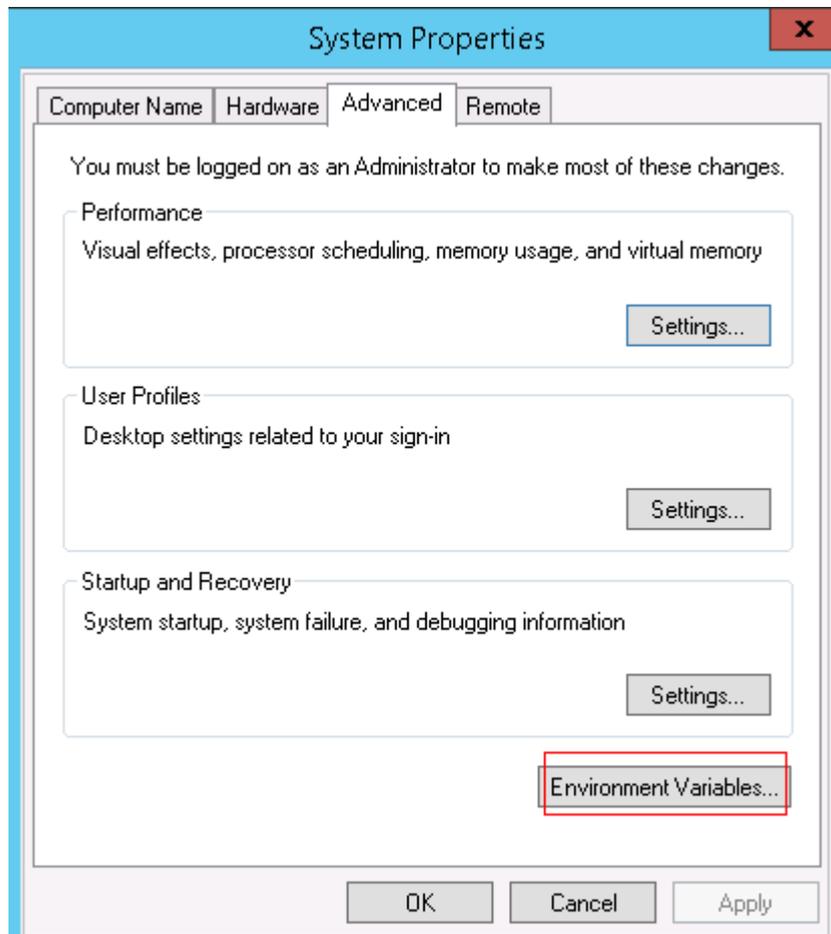
- a. Right-click **My Computer**, and choose **Properties** from the shortcut menu.



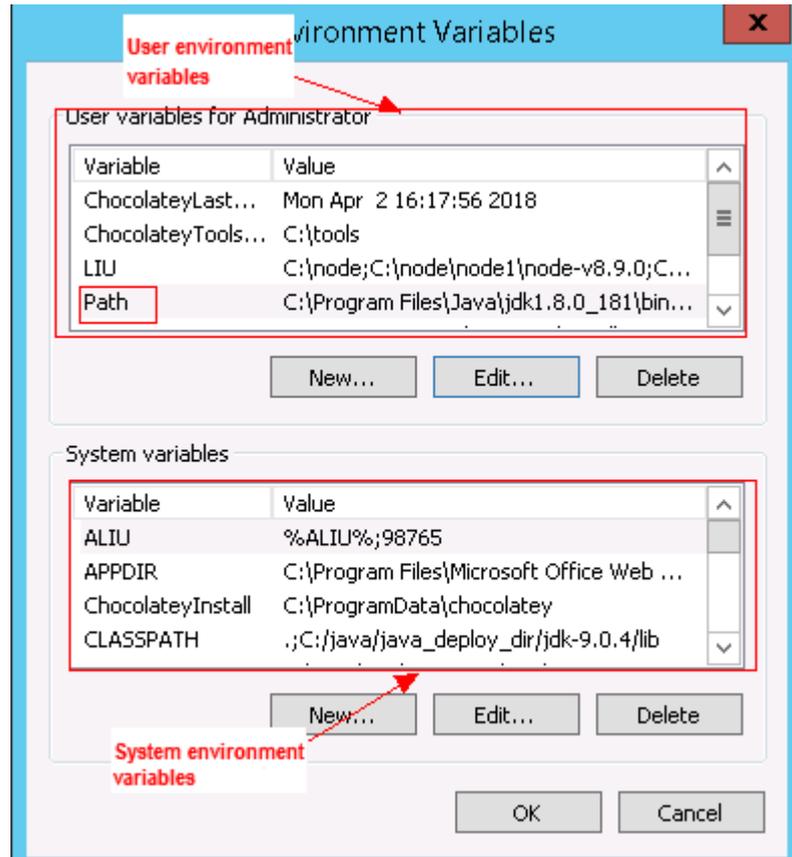
- b. Click **Advanced system settings**.



- c. Click **Environment Variables**.



- d. View the variable **Path**.



2. **Perform either of the following operations:**

- a. If the variable **Path** does not contain any references such as **%PHP_HOME%**, delete all paths related to PHP or place the new PHP path in front of other paths.
- b. If the variable **Path** contains references such as **%PHP_HOME%**, find the environment variable **PHP_HOME** and change its value to the new PHP path. Then the reference variable will be first matched when the host searches for a PHP path.

4.30.12 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.30.13 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.30.14 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.

- c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.30.15 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"usr/bin/unzip\" could not handle archive. Command \"usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.31 Installing Python

4.31.1 No sudo Permissions

Symptoms

The following log information is displayed.

```
"stderr": "error: cannot open Packages index using db5 - Permission denied (13)\nerror: cannot open Packages database in /var/lib/rpm\nCRITICAL:yum.main:\nError: rpmdb open failed"
```

Cause Analysis

The user does not have the sudo permission and cannot use yum to download related dependencies.

Solution

Grant higher permissions to the user by adding 'user ALL=(ALL) ALL' to the `/etc/sudoers` file. `user` indicates the user to grant higher permissions to.

4.31.2 No Permission to Access the Path

Symptoms

The following log information is displayed.

```
"msg": "There was an issue creating /usr/local/python3.6.7 as requested: [Errno 13] Permission denied: ****",  
"path": "****", "state": "absent"
```

Cause Analysis

The user does not have the permission to access the path.

Solution

Use any of the following methods:

- Use the file path that can be accessed by the current user.
- Use a user account with higher permissions, for example, `root`.
- Grant higher permissions to the user by adding 'user ALL=(ALL) ALL' to the `/etc/sudoers` file. `user` indicates the user to grant higher permissions to.

4.31.3 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {  
  "changed": false,  
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",  
  "unreachable": true  
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in `ClientAliveInterval` for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of `ClientAliveInterval` in the `/etc/ssh/sshd_config` file to **1800**.
2. Restart the SSHD service.

4.31.4 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add '**user ALL=(ALL) ALL**' to the **/etc/sudoers** file. **user** indicates the user to grant higher permissions to.

4.31.5 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the **\b** characters.

Figure 4-190 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! ={"changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ba' specified."}]
```

- The deployment fails due to the **\f** characters.

Figure 4-191 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! ={"changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\fa' specified."}]
```

- The deployment fails due to the **\r** characters.

Figure 4-192 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! ={"changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ra' specified."}]
```

- The deployment fails due to the **\t** characters.

Figure 4-193 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! ={"changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\DJ\\ta' specified."}]
```

- The deployment fails due to the **\n** characters.

Figure 4-194 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***: FAILED! -["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D\\ud' specified."]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.31.6 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
 - Step 2** Click the **Environment Management** tab.
 - Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
 - Step 4** After the host is added and verified, deploy the application again.
- End

4.31.7 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11

- Step 2** Click the **Environment Management** tab.
- Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
- Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.
- End

4.31.8 Failed to Deploy an Application on a Windows Host

Symptoms

The following log information is displayed.

Figure 4-195 Log information

```
37 [2019-02-19 14:35:35.056] TASK [Install Tzip] *****
38 [2019-02-19 14:35:35.056] fatal: [***.***.***.***] FAILED: true, cmd: cmd.exe /c Start /wait C:\Users\Administrator\Downloads\Tz12005-04.exe /S, "data": "0:00:01.531201", "msg": "2019-02-19 06:35:35.075437", "msg": "non-zero return code", "rc": 3762504530, "rstat": "2019-02-19 06:35:34.144236", "stderr": "Unhandled Exception: System.IO.FileNotFoundException: Could not load file or assembly 'System.Data, Version=***.***.***.***, Culture=neutral, PublicKeyToken=877a5c5619944089' or one of its dependencies. The paging file is too small for this operation to complete. (Exception from HRESULT: 0x800705AF)\r\n at System.Management.Automation.PSObject.MappedInternalAdapterSet(Object obj)\r\n at System.Management.Automation.PSObject.GetMappedAdapter(Object obj, TypeTable typeTable)\r\n at System.Management.Automation.PSObject.get_InternalAdapterSet()\r\n at System.Management.Automation.PSObject.get_InternalTypeName()\r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameterPrivate(PSObject inputToOperateOn)\r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameter(PSObject inputToOperateOn)\r\n at System.Management.Automation.CommandProcessor.Read()\r\n at
```

Cause Analysis

The corresponding patch is missing when the Windows host is verified for its connectivity.

Solution

[Verify the connectivity again according to the Windows configuration document.](#)

4.31.9 Error Occurs During Application Deployment with the sudo Privileges

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
## user MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root ALL=(ALL) ALL
allen ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.31.10 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

"msg": "Unexpected failure during module execution."

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.31.11 Software Version Detected on Windows Host Does Not Match the Installed Version

Symptoms

The following uses PHP as an example. The PHP version to be installed is php-7.2.12.

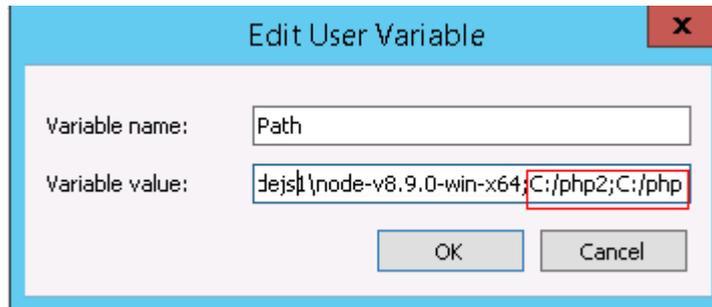
After PHP is installed successfully, log in to the host as the user who verified the host connectivity to view the PHP version.

```
PS C:\Users\Administrator> php -version
PHP 5.6.38 (cli) (built: Sep 13 2018 12:45:08)
Copyright (c) 1997-2016 The PHP Group
Zend Engine v2.6.0, Copyright (c) 1998-2016 Zend Technologies
PS C:\Users\Administrator>
```

The detected PHP version is PHP 5.6.38 or another version, which does not match the installed version.

Cause Analysis

If another version of PHP has been installed on the host, the path of the new PHP will be added to the end of the **Path** variable when you install PHP again. The host searches for a program command based on the paths in the **Path** variable from the beginning to the end. The program command in the original PHP path is found prior to that in the new path. As a result, a version mismatch problem occurs.



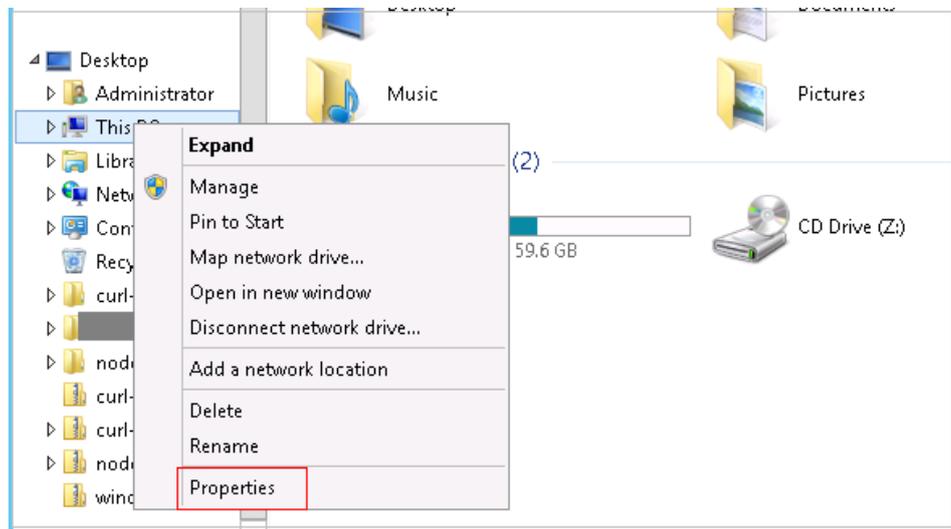
If the program command is found in the **C:/php2** path, the host will not continue to search for the command in the **C:/php** path.

Solution

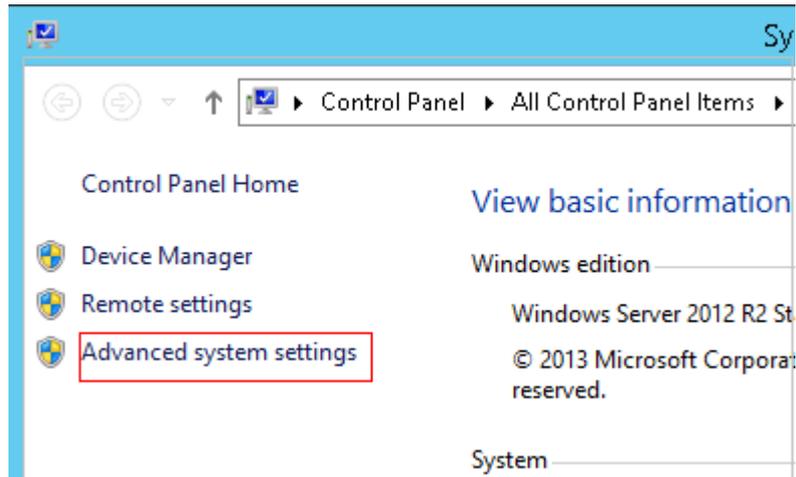
The solutions for user and system environment variables are the same. The following uses user environment variables as an example.

1. View the environment variable Path.

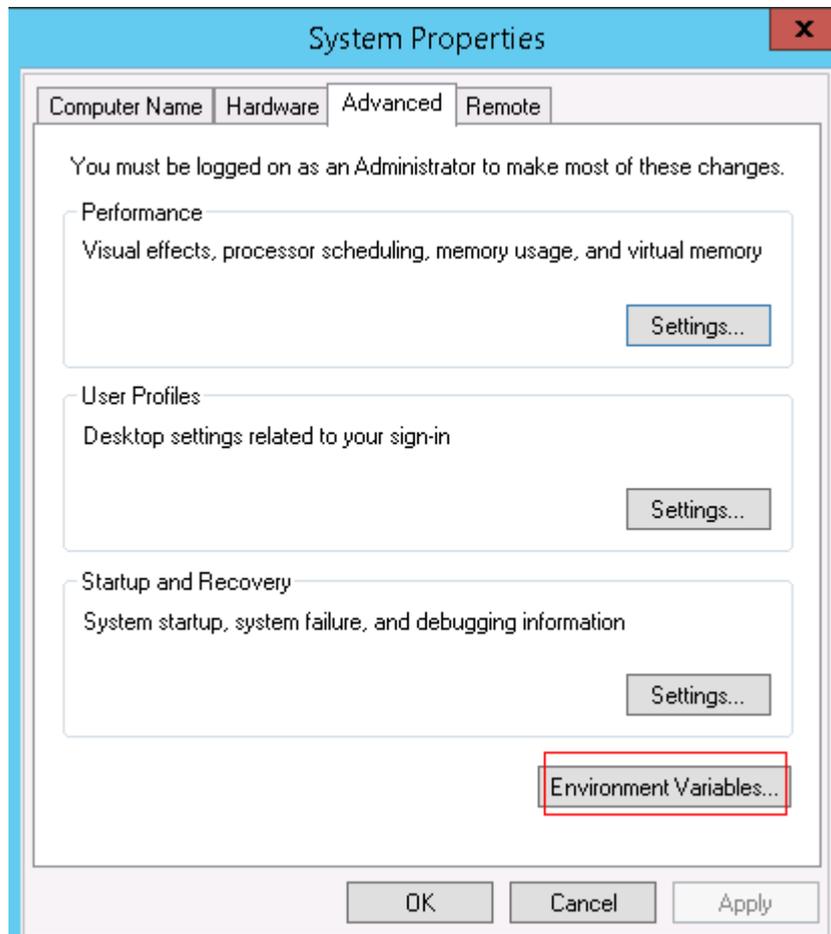
- a. Right-click **My Computer**, and choose **Properties** from the shortcut menu.



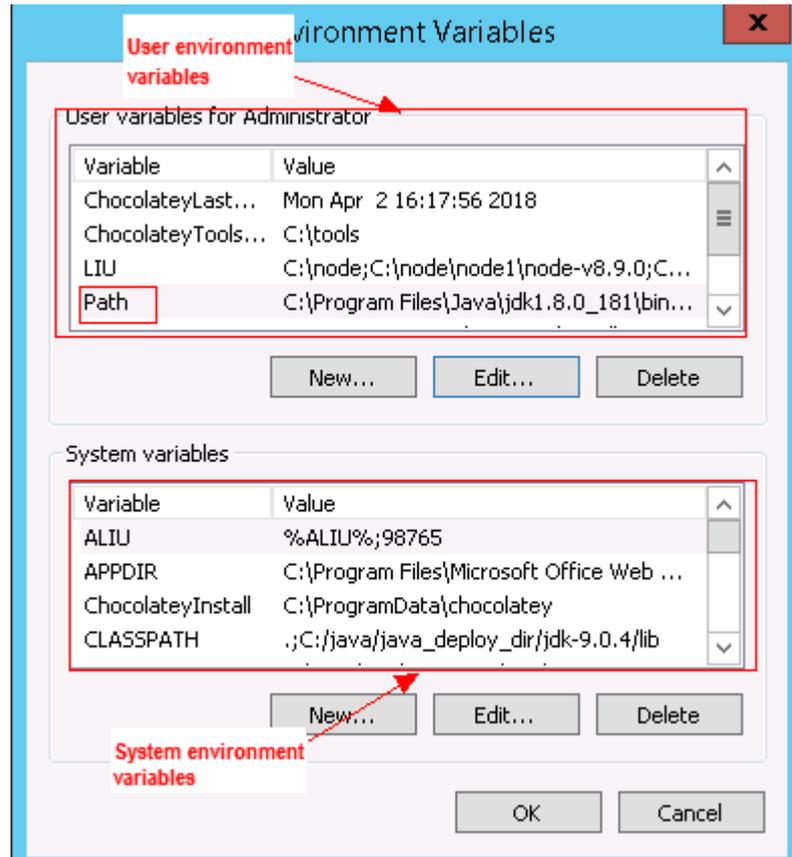
- b. Click **Advanced system settings**.



- c. Click **Environment Variables**.



- d. View the variable **Path**.



2. **Perform either of the following operations:**

- a. If the variable **Path** does not contain any references such as **%PHP_HOME%**, delete all paths related to PHP or place the new PHP path in front of other paths.
- b. If the variable **Path** contains references such as **%PHP_HOME%**, find the environment variable **PHP_HOME** and change its value to the new PHP path. Then the reference variable will be first matched when the host searches for a PHP path.

4.31.12 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (\).

4.31.13 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.31.14 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.

- c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.31.15 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"usr/bin/unzip\" could not handle archive. Command \"usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.32 Installing/Uninstalling Docker

4.32.1 Error Returned During the Deployment of the Action for Installing or Uninstalling Docker as a Common User

Symptoms

During the deployment of the action **Install/Uninstall Docker**, if you set **Operation** to **Install Docker** and select a host that belongs to a common user, an error message is displayed.

```
fatal: [***.***.***.***: FAILED! ={"changed": false, "module_stderr": "Shared connection to ***.***.***.***closed.\r\n", "module_stdout": "sudo: Password required\r\n", "msg": "MODULE FAILURE\nSee stdout/stderr for the exact error", "rc": 1}
```

Cause Analysis

Docker must be installed as the **root** user or a user with the sudo permissions. A password is required when a common user runs commands with the sudo permissions. As a result, the deployment fails.

Solution

Install Docker as the **root** user or grant the password-free sudo permissions to the user.

4.32.2 Error Returned Even Though the Action for Installing or Uninstalling Docker Is Successfully Deployed

Symptoms

During the deployment of the action **Install Docker** under **Install/Uninstall Docker**, an error message is displayed.

Figure 4-196 Log information

```
TASK [Reload service] *****
fatal: [***.***.***.***: FAILED! ={"changed": true, "cmd": ". /etc/profile &systemctl daemon-reload",
...ignoring
```

Cause Analysis

This is because the `systemctl` service is not installed on the host. You can ignore this message.

4.32.3 Application Deployment Interruption

Symptoms

When a host-related application is deployed, an error message is displayed.

```
fatal: [***.***.***.198]: UNREACHABLE! = {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Shared connection to ***.***.***.198 closed.",
  "unreachable": true
}
```

Cause Analysis

The `/etc/ssh/sshd_config` configuration file has defined the heartbeat time (unit: s) in `ClientAliveInterval` for interactions between the server and client. If the host does not respond within the time limit in an Ansible application, the SSH service will be disconnected.

Solution

1. Change the value of `ClientAliveInterval` in the `/etc/ssh/sshd_config` file to **1800**.

- Restart the SSHD service.

4.32.4 Insufficient Permissions

Symptoms

When a host-related application is deployed, and the error message "insufficient permissions" is displayed, indicating that you do not have permissions to access the current file or folder.

Cause Analysis

You do not have permissions to access the current file or folder.

Solution

- Switch to other files that you have permissions to access.
- Use a user account with higher permissions, for example, **root**.
- Grant higher permissions to the user account you are using. For example, to grant all permissions to a user account, add 'user **ALL=(ALL) ALL**' to the `/etc/sudoers` file. **user** indicates the user to grant higher permissions to.

4.32.5 Parameters Contain Backslashes (\)

Symptoms

When a host-related application is deployed, an error message is displayed.

The following takes a path as an example.

- The deployment fails due to the `\b` characters.

Figure 4-197 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D\\ba' specified."]
```

- The deployment fails due to the `\f` characters.

Figure 4-198 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D\\fa' specified."]
```

- The deployment fails due to the `\r` characters.

Figure 4-199 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D\\ra' specified."]
```

- The deployment fails due to the `\t` characters.

Figure 4-200 Log information

```
TASK [Create installation directory] *****
fatal: [***.***.***.***: FAILED! =["changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\D\\ta' specified."]
```

- The deployment fails due to the `\n` characters.

Figure 4-201 Log information

```
TASK [Create installation directory] *****  
fatal: [***.***.***.***] FAILED! = [{"changed": false, "msg": "Get-AnsibleParam: Parameter 'path' has an invalid path 'C:\\\\n\\n' specified."}]
```

Cause Analysis

The deployment failure is caused by the use of escape characters that have special meanings.

Solution

- Method 1: Avoid using special escape characters.
- Method 2: Use forward slashes (/) instead of backslashes (\).

4.32.6 No Host Exists in the Environment

Symptoms

No hosts can be found in the environment.

Cause Analysis

The environment does not contain any hosts.

Solution

- Step 1** Select the target application, click `***`, and click **Edit**. The **Deployment Actions** page is displayed. 11
- Step 2** Click the **Environment Management** tab.
- Step 3** Click the target environment name, switch to the **Resource** page, and click **Import Host**.
- Step 4** After the host is added and verified, deploy the application again.

----End

4.32.7 Environment Does Not Exist

Symptoms

The log failed to obtain environment information. The environment cannot be found.

Cause Analysis

The referenced environment does not exist or has already been deleted.

Solution

- Step 1** Select the target application, click *******, and click **Edit**. The **Deployment Actions** page is displayed. 11
 - Step 2** Click the **Environment Management** tab.
 - Step 3** Click **Create Environment**, configure the information, click **Save** and switch to the **Resource** page.
 - Step 4** Click **Import Host**. After the host is imported and verified, deploy the application again.
- End

4.32.8 Failed to Deploy an Application on a Windows Host

Symptoms

The following log information is displayed.

Figure 4-202 Log information

```
37 [2019-02-19 14:35:35.650] TASK [Install Tsip] *****
38 [2019-02-19 14:35:35.650] fatal: [***.***.***.***]: FAILED! => [changed]: true, "cmd": "cmd.exe /c start /wait C:\\Users\\Administrator\\Downloads\\Ts1805-w64.exe /S", "delta": "0:00:01.531201", "end": "2019-02-19 06:35:35.675437", "msg": "non-zero return code", "rc": 3702504530, "start": "2019-02-19 06:35:34.144230", "stderr": "\nUnhandled Exception: System.IO.FileLoadException: Could not load file or assembly 'System.Data, Version=***.***.***, Culture=neutral, PublicKeyToken=87855c501344889' or one of its dependencies. The paging file is too small for this operation to complete. (Exception from HRESULT: 0x800705d2) \r\n at System.Management.Automation.PSObject.get_MappedInternalAdapterSet(Object obj)\r\n at System.Management.Automation.PSObject.get_MappedAdapter(Object obj, TypeTable typeTable)\r\n at System.Management.Automation.PSObject.get_InternalAdapterSet()\r\n at System.Management.Automation.PSObject.get_InternalTypeNames()\r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParametersPrivate(PSObject inputToOperateOn)\r\n at System.Management.Automation.CmdletParameterBinderController.BindPipelineParameters(PSObject inputToOperateOn)\r\n at System.Management.Automation.CommandProcessor.Read()\r\n at
```

Cause Analysis

The corresponding patch is missing when the Windows host is verified for its connectivity.

Solution

Verify the connectivity again according to the Windows configuration document.

4.32.9 Error Occurs During Application Deployment with the sudo Privileges

Symptoms

A password is required after **Run this task with sudo privileges** is selected during the deployment of a host-related application.

Cause Analysis

You have selected **Run this task with sudo privileges**, but password-free settings have not been configured in the `/etc/sudoers` file on the Linux host.

Solution

In the `/etc/sudoers` file, add `$username ALL=(ALL) NOPASSWD: ALL` after `root ALL=(ALL:ALL) ALL`. `$username` indicates a username.

```
## user MACHINE=COMMANDS
##
## The COMMANDS section may have other options added to it.
##
## Allow root to run any commands anywhere
root    ALL=(ALL)    ALL
allen   ALL=(ALL) NOPASSWD: ALL
## Allows members of the 'sys' group to run networking, software,
## service management apps and more.
# %sys  ALL = NETWORKING, SOFTWARE, SERVICES, STORAGE, DELEGATING, PROCESSES, LOCATE, DRIVERS
```

4.32.10 Deployment Blocked by Third-Party Antivirus Software

Symptoms

The deployment of a host-related application fails and the following error message is displayed:

```
"msg": "Unexpected failure during module execution."
```

Cause Analysis

The deployment program on the target host is blocked by third-party antivirus software.

Solution

1. Log in to the target host.
2. Deploy the application. The third-party antivirus software will block the access from the deployment program.
3. Allow access from the deployment program based on the prompts and confirm not to remind again.
4. After the configuration is complete, deploy the application.

4.32.11 Invalid Path

Symptoms

The log information prompts an invalid path.

Cause Analysis

The entered path is invalid.

Solution

Check the path and ensure that the path does not contain backslashes (`\`).

4.32.12 A Network Error Occurs During Software Installation on CentOS

Symptoms

When software is installed on CentOS, an error message is displayed, indicating that the **network is unreachable**.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the YUM repository is disconnected.
 - b. The firewall restricts outbound access.
 - c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the YUM repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.32.13 A Network Error Occurs During Software Installation on Ubuntu OS

Symptoms

The error message **time out** is displayed when software is installed on Ubuntu OS.

Cause Analysis

- The target host failed to download the software package from the official image repository due to network connection timeout.
- The possible causes of network connection timeout are as follows:
 - a. The network between the target host and the APT repository is disconnected.
 - b. The firewall restricts outbound access.

- c. The security group has an outbound rule to restrict access.

Solution

1. Run the **ping \$domainName** command to check the network connectivity. **\$domainName** indicates the domain name of the APT repository. If the network is normal, perform steps 2 and 3 to check the firewall and security group. If the network is abnormal, contact the network administrator.
2. Check the firewall configurations.
 - Run the **iptables -nL** command to check whether outbound access is restricted on port **80**.
3. Check the outbound rules of the security group to which the target host belongs.
 - Contact the network administrator to modify the outbound rules of the security group.

4.32.14 Windows Path Not Allowed on a Linux Host

Symptoms

The following log information is displayed.

```
"msg": "Failed to find handler for \"/usr/local/python/Python-3.5.4.tgz\". Make sure the required command to extract the file is installed. Command \"/usr/bin/unzip\" could not handle archive. Command \"/usr/bin/gtar\" could not handle archive."}
```

Cause Analysis

The installation path you entered for application deployment on a Linux host is a Windows path.

Solution

Enter a correct installation path.

4.33 Grayscale Release with Istio

4.33.1 Target File Does Not Exist in CodeArts Artifact

Symptoms

An error message similar to **ReleaseManifestUrl is null,Please check the deploy task!** is displayed.

Cause Analysis

The Manifest file selected in an application does not exist in CodeArts Artifact.

Solution

Edit the application and select the required Manifest file again.

Log keyword: ReleaseManFileUrl is null

4.33.2 Parameter Referenced by `{{}}` in the Manifest File Is Not Defined in the Application

Symptoms

An error message similar to "**msg**": "**AnsibleUndefinedVariable: 'xxxxx' is undefined**" is displayed.

Cause Analysis

In the selected Manifest file, the parameter referenced by `{{}}` is not defined in the application.

Solution

Add the parameter on the **Parameters** tab page of the application.

Log keyword: AnsibleUndefinedVariable

4.33.3 Path of the Manifest File in CodeArts Artifact Is Incorrect

Symptoms

An error message similar to **Failed to download k8s files from ReleaseService, please check your file path!** is displayed.

Cause Analysis

The Manifest file selected in an application does not exist in CodeArts Artifact.

Solution

When editing the application, check whether the YML file path is correct. If the application parameters are referenced, ensure that the final path is correct after the parameters are replaced.

Log keyword: Failed to download k8s files from ReleaseService