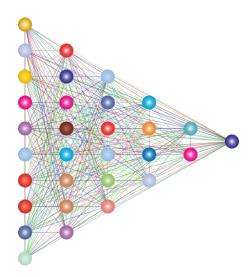
Network Connection Failures Lesson Name:

Content Screen:

Slide: Navigation Menu Title: Welcome

> Welcome to The Jenkins Journey 2.2 Network Connection Failures.



Directions to the Graphic Artist:

Graphic needs to be centered.

Directions to the Developer

If you are working with a development team, place notes to the multimedia team member here.

Final Graphic Name(s):

Computer Network

Source Graphic(s):

https://openclipart.org/image/800px/svg_to_png/309344/1541102451.png

Questions or Comments:

Alt tag

Triangular image with colorful dots and lines representing a computer network.

Lesson Name: Network Connection Failures

Navigation Menu Title: Introduction

Content Screen: ____1

Slide: 2

Previous Learning

- Style Checking Errors
 - Different ways the errors can occur.
 - How the errors impede the continuous integration (CI) process.



Questions or Comments:

Description of navigation, etc

Failure Mode 2

- Network Connection Errors
 - Four types of errors.
 - How to respond to each error type.



Directions to the Graphic Artist:

Graphics to use as the background, other requests to a graphic artist, such as image of kids using a laptop

Directions to the Developer

If you are working with a development team, place notes to the multimedia team member here.

Final Graphic Name(s):

- 1. Backward arrow
- 2. Forward arrow

Source Graphic(s):

- 1. https://openclipart.org/image/800px/166965
- 2. https://openclipart.org/image/800px/166862

Alt tag

- 1. Arrow pointing backward.
- 2. Arrow pointing forward.

Navigation Menu Title: Objectives

Lesson Name: Network Connection Failures

Lesson Name: Network Connection Failures

Content Screen: 1

Slide:____3

Terminal Objective: With the aid of supplied documentation, helpdesk employee can verbally summarize the conditions that are most likely to cause each of the top five failure modes in the JourneyQube CICD pipeline.

Enabling Objective: Identify and respond to the most common network connection errors.

Questions or Comments:

Description of navigation, etc

Directions to the Graphic Artist:

Graphic needs to be centered.

Directions to the Developer

If you are working with a development team, place notes to the multimedia team member here.

Final Graphic Name(s):

Bullseye

Source Graphic(s):

https://openclipart.org/detail/20596/arrow-in-the-gold

Alt tag

Bullseye with arrow in the center-most circle.

Lesson Name:

Content Screen: Network Connection Failures

Navigation Menu Title: Failure Mode 2 Definition

Network Connection Errors

- Communication error between the CI process and one of the external services to which it connects.
- Four categories
 - Resolution error
 - Connection error
 - 4xx http error (request error)
 - 5xx http error (server error)



Questions or Comments:

Slide: 4

Description of navigation, etc

Directions to the Graphic Artist:

Graphics to use as the background, other requests to a graphic artist, such as image of kids using a laptop

Directions to the Developer

If you are working with a development team, place notes to the multimedia team member here.

Final Graphic Name(s):

Computer Error

Source Graphic(s):

https://openclipart.org/image/800px/215740

Alt tag

Black and white computer with error message on screen.

Lesson Name: Network Connection Failures

Navigation Menu Title: DNS Resolution Error Example

Content Screen:___

Slide:____⁵

• Occurs when a server name cannot be found.

```
Connecting to server unknown-dns.home
[Pipeline] readYaml
[Pipeline] sh
+ curl -f <a href="http://unknown-dns.home/api">http://unknown-dns.home/api</a>
 % Total % Received % Xferd Average Speed Time Time Current
                              Dload Upload Total Spent Left Speed
                                           0 --:--: Ocurl: (6) Could not resolve host: unknown-dns.home
[Pipeline] }
[Pipeline] // script
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
ERROR: script returned exit code 6
Finished: FAILURE
```

Questions or Comments:

Description of navigation, etc

Directions to the Graphic Artist:

Screenshot needs to be centered.

Directions to the Developer

If you are working with a development team, place notes to the multimedia team member here.

Final Graphic Name(s):

Screen Shot 2020-09-23 at 11.20.56 AM.png

Source Graphic(s):

SME original

Alt tag

Screen shot containing error output from Curl: "Could not resolve host".

Lesson Name: Network Connection Failures

Content Screen:____1

Slide: 6

Navigation Menu Title: Resolving Resolution Errors, Part 1

Example: nslookup not finding a server

Questions or Comments:

Description of navigation, etc

```
[dv@linuxdev:~$ nslookup unknown-dns.home
```

Server: 192.168.1.240

Address: 192.168.1.240#53

** server can't find unknown-dns.home: NXDOMAIN

dv@linuxdev:~\$

Directions to the Graphic Artist: Final Graphic Name(s):

Center graphic

Directions to the Developer

If you are working with a development team, place notes to the multimedia team member here.

01.png

Source Graphic(s):

SME original

Alt tag

nslookup, server not found error

Lesson Name: Network Connection Failures

content Screen: 1

Slide:

Navigation Menu Title: Resolving Resolution Errors, Part 2

Example: nslookup finding a server

[dv@linuxdev:~\$ nslookup server.home

Server: 192.168.1.240

Address: 192.168.1.240#53

Name: server.home

Address: 192.168.1.30

dv@linuxdev:~\$

Center graphic

Directions to the Developer

Directions to the Graphic Artist:

If you are working with a development team, place notes to the multimedia team member here.

Final Graphic Name(s):

02.png

Source Graphic(s):

SME original

Alt tag

nslookup, server "server.home" found at Address "192.168.1.30"

Questions or Comments:

Description of navigation, etc

Lesson Name: Network Connection Failures

Content Screen: 1

Navigation Menu Title: Connection Error Example

Occurs when unable to connect to server.

Questions or Comments:

Slide: 8

Description of navigation, etc

```
Connecting to server 192.168.1.10
[Pipeline] sh
+ curl -u dave:password <a href="http://192.168.1.10/permissionError">http://192.168.1.10/permissionError</a>
% Total % Received % Xferd Average Speed Time Time Time Current
Dload Upload Total Spent Left Speed

0 0 0 0 0 0 0 0 --:--:-- --:--- Ocurl: (7) Failed to connect to 192.168.1.10 port
80: Connection refused
```

Directions to the Graphic Artist:

Center screenshot.

Directions to the Developer

If you are working with a development team, place notes to the multimedia team member here.

Final Graphic Name(s):

Screen Shot 2020-09-23 at 11.32.28 AM.png

Source Graphic(s):

SME original

Alt tag

Screenshot of curl command is "curl –u dave:password http://192.168.1.10/permissionError. Result is connection failure error. "Failed to connect to 192.168.1.10 port 80: Connection refused.

Course Name: The Jenkins Journey **Content Screen: Network Connection Failures Lesson Name:** Slide: 9 Navigation Menu Title: Resolving Connection Errors, Part 1 Questions or Comments: Example: telnet failing to connect Telnet command Description of navigation, etc dv@linuxdev:~\$ telnet 192.168.1.10 80 Trying 192.168.1.10... telnet: Unable to connect to remote host: Connection refused dv@linuxdev:~\$ Final Graphic Name(s): **Directions to the Graphic Artist:** Center screenshot. 03.png Source Graphic(s): SME original **Directions to the Developer** Alt tag If you are working with a development team, place notes to the multimedia team member here. Telnet command "telnet 192.168.1.10 80"

telnet error displayed with text "unable to connect to

remote host: Connection refused".

Course Name: The Jenkins Journey
Lesson Name: Network Connection Failures

Navigation Menu Title: Resolving Connection Errors, Part 2

Content Screen:

Slide: 10

Questions or Comments:

Example: Successful telnet connection.

Telnet command

Description of navigation, etc

[dv@linuxdev:~\$ telnet 192.168.1.10 8081 Trying 192.168.1.10... Connected to 192.168.1.10. Escape character is '^]'.

Directions to the Graphic Artist:

Center screenshot.

Directions to the Developer

If you are working with a development team, place notes to the multimedia team member here.

Final Graphic Name(s):

04.png

Source Graphic(s):

SME original

Alt tag

Telnet command "telnet 192.168.1.10 8081"

Telnet success displayed with text "Connected to 192.168.1.10."

Network Connection Failures Lesson Name:

Navigation Menu Title: Knowledge Check

Content Screen:

Slide: 11

Questions or **Comments:**

> Description of navigation, etc

If curl output states that it cannot "resolve" a server address, that means that you have experienced a connection failure.

a. True

b. False

Directions to the Graphic Artist:

Graphics to use as the background, other requests to a graphic artist, such as image of kids using a laptop

Directions to the Developer

The answer is "b". If "a" is selected, display the following message: "Incorrect. The word 'resolve' indicates an error with the DNS lookup process. Any curl output that uses the word 'resolve' is probably a DNS error." If "b" is selected, display the following message: "Correct. The word 'resolve' indicates an

error with the DNS lookup process. Any curl output that uses the word 'resolve' is probably a DNS error."

Final Graphic Name(s):

File name of pre-selected graphics

Source Graphic(s):

Where to find graphic

Alt tag

No image on this page.

Lesson Name: Network Connection Failures

Navigation Menu Title: Knowledge Check

Content Screen:____1

Slide:____12

Curl output has identified that there is a connection error. One step to resolve this issue is to use the telnet command line tool to attempt to replicate the connection failure.

Questions or Comments:

Description of navigation, etc

a. True

b. False

Directions to the Graphic Artist:

Graphics to use as the background, other requests to a graphic artist, such as image of kids using a laptop

Directions to the Developer

The answer is "a".

If "a" is selected, display the following message: "Correct! The telnet tool allows you to open a connection to any server on any port."

If "b" is selected, display the following message: "Incorrect. The telnet tool allows you to open a connection to any server on any port. This step allows you to determine if the

open a connection to any server on any port. This step allows you to determine if the server is refusing connections or if Jenkins cannot connect for other reasons."

Final Graphic Name(s):

File name of pre-selected graphics

Source Graphic(s):

Where to find graphic

Alt tag

No image on this page

Lesson Name: Network Connection Failures

Content Screen:_____

Slide: 13

Navigation Menu Title: 401 Error Example

 401 error occurs when client does not have permission to access the service. Questions or Comments:

Description of navigation, etc

```
+ curl -u dave:password \underline{\text{http://192.168.1.10:8081/permissionError}}
```

```
% Total % Received % Xferd Average Speed Time Time Current
Dload Upload Total Spent Left Speed
```

```
0 0 0 0 0 0 0 0 0 --:--:- 0
100 19 100 19 0 0 13258 0 --:--:- 19000
```

401 - Access Denied



Directions to the Graphic Artist:

Center screenshot.

Directions to the Developer

If you are working with a development team, place notes to the multimedia team member here.

Final Graphic Name(s):

Screen Shot 2020-09-23 at 11.34.01 AM.png

Source Graphic(s):

SME original

Alt tag

Screenshot with curl command "curl –u dave:password http://192.168.1.10:8081/permissionError" returing a "401 – Access Denied" error.

Lesson Name: Network Connection Failures

Content Screen:____

Slide: 14

Navigation Menu Title: Resolving 401 Error, Part 1

There are several steps required to resolve a 401 error.

Example: Using the "id" command to find a user's group memberships.



Questions or Comments:

Description of navigation, etc

Directions to the Graphic Artist:

Center screenshot.

Directions to the Developer

If you are working with a development team, place notes to the multimedia team member here.

Final Graphic Name(s):

05.png

Source Graphic(s):

SME original

Alt tag

Screenshot using the command "id dave" and the corresponding output "uid=1001(dave) gid=1001(dave) groups=1001(dave),1002(jenkinsusers)"

Lesson Name: Network Connection Failures

Content Screen:____1

Slide: 15

Navigation Menu Title: Resolving 401 Error, Part 2

Example: Check to see if an account is locked using the "passwd" command.

[dv@linuxdev:~\$ sudo passwd -5 dave
dave L 09/23/2020 0 99999 7 -1
dv@linuxdev:~\$

Questions or Comments:

Description of navigation, etc

Directions to the Graphic Artist:

Center screenshot.

Directions to the Developer

If you are working with a development team, place notes to the multimedia team member here.

Final Graphic Name(s):

06.png

Source Graphic(s):

SME original

Alt tag

Screenshot of passwd command "sudo passwd –S dave" and output "dave L 09/23/2020 0 99999 7 -1" – please note that CLI commands are case sensitive.

Lesson Name: Network Connection Failures

Content Screen:_____

Slide: 16

Navigation Menu Title: Resolving 401 Error, Part 3

Example: An unlocked account will show different output.

- The "L" in line 2 indicates a locked account.
- The "P" in line 4 indicates an unlocked account.

[dv@linuxdev:~\$ sudo passwd -S dave dave L 09/23/2020 0 999999 7 -1 [dv@linuxdev:~\$ sudo passwd -S dv dv P 05/13/2019 0 999999 7 -1 dv@linuxdev:~\$

Questions or Comments:

Description of navigation, etc

Directions to the Graphic Artist:

Center graphic.

Directions to the Developer

If you are working with a development team, place notes to the multimedia team member here.

Final Graphic Name(s):

07.png

Source Graphic(s):

SME original

Alt tag

Screenshot of "passwd" output for locked versus unlocked accounts. Not uppercase 'L' for locked accounts and uppercase 'P' for unlocked accounts.

Lesson Name: Network Connection Failures

Content Screen: 1

Slide: 17

Navigation Menu Title: 404 Error Example

Occurs when a path on the server is not found.

Looking up build record for previous build status [Pipeline] readYaml [Pipeline] sh + curl -f http://192.168.1.10:8081/apilookup/1.0 % Total % Received % Xferd Average Speed Time Time Time Current Dload Upload Spent Left Speed Total 0 0 0 0 --:--:-- --:--:-curl: (22) The requested URL returned error: 404 Not Found [Pipeline] }

Questions or Comments:

Description of navigation, etc

Directions to the Graphic Artist:

[Pipeline] // script

Center screenshot.

Directions to the Developer

If you are working with a development team, place notes to the multimedia team member here.

Final Graphic Name(s):

Screen Shot 2020-09-23 at 11.22.52 AM.png

Source Graphic(s):

SME original

Alt tag

Screenshot of a curl command "curl –f http://192.168.1.10:8081/apilookup/1.0" returning "curl: (22) The requested URL returned error: 404 Not Found"

Navigation Menu Title: 503 Error Example

Lesson Name:

Content Screen: Network Connection Failures

Slide: 18

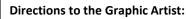
Occurs when there is a network problem between the client and the server.

Questions or Comments:

> Description of navigation, etc

```
+ curl -u dave:password http://192.168.1.10:8081/timeout
 % Total
          % Received % Xferd Average Speed
                                         Time
                                                Time Time Current
                                                Spent Left Speed
                            Dload Upload
                                         Total
                                     0 --:--:--
 0
           0
                                     0 0:00:05 0:00:05 --:--
     21 100
100
                                     0 0:00:05 0:00:05 --:--
100
      21 100
               21
                                                                 5
```

503 - Gateway Timeout



Center screenshot.

Directions to the Developer

If you are working with a development team, place notes to the multimedia team member here.

Final Graphic Name(s):

Screen Shot 2020-09-23 at 11.35.30 AM.png

Source Graphic(s):

SME original

Alt tag

Screenshot of a curl command "curl –u dave:password http://192.168.1.10:8081/timeout" returning "503 – Gateway Timeout"

Lesson Name:

Content Screen: Network Connection Failures Slide: 19

Navigation Menu Title: 500 Error Example

Occurs when the application on the server encounters an internal error.

Questions or Comments:

> Description of navigation, etc

```
Connecting to server 192.168.1.10
[Pipeline] sh
+ curl -u dave:password <a href="http://192.168.1.10:8081/servererror">http://192.168.1.10:8081/servererror</a>
  % Total % Received % Xferd Average Speed
                                                    Time
                                                             Time
                                                                       Time Current
                                   Dload Upload
                                                             Spent
                                                                      Left Speed
                                                    Total
  0
100
                                0 46087
                                               0 --:--:-- 43000
       43 100
```

Directions to the Graphic Artist:

Center screenshot.

Directions to the Developer

If you are working with a development team, place notes to the multimedia team member here.

500 - Server Error. Stack Trace Suppressed.

Final Graphic Name(s):

Screen Shot 2020-09-23 at 11.39.34 AM.png

Source Graphic(s):

SME original

Alt tag

Screenshot of a curl command "curl –u dave:password http://192.168.1.10:8081/servererror" returning "500 -Server Error. Stack Trace Suppressed."

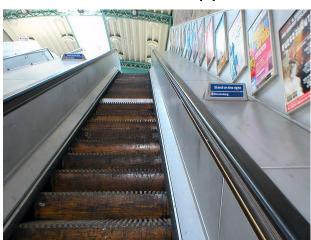
Lesson Name: Network Connection Failures

Navigation Menu Title: Resolving 503 and 500 Errors

Content Screen:_____

Slide: 20

- Both 503 and 500 errors can be serious.
- Always try to duplicate the error be rerunning the build.
- Always escalate
 - 503 errors escalate to network/firewall team.
 - 500 errors escalate to server or application owner.



Questions or Comments:

Description of navigation, etc

Directions to the Graphic Artist:

Center image.

Directions to the Developer

If you are working with a development team, place notes to the multimedia team member here.

Final Graphic Name(s):

800px-Going_up_wooden_escalator_at_Greenford_16-06-06.jpg

Source Graphic(s):

https://commons.wikimedia.org/wiki/File:Going_up_wooden_escalator_at_Greenford_16-06-06.jpg

Alt tag

Picture of wooden escalator.

Content Screen:____

Slide: 21

Navigation Menu Title: Knowledge Check

Curl output has identified a 401 error. Which of the following steps should you take to respond to this problem? Select all answers that apply.

Questions or Comments:

Description of navigation, etc

- a. Verify that the account is unlocked.
- b. Use telnet to connect to the server.
- c. Use SSH to connect to the server.
- d. Verify that the account has permissions to access the server.

Directions to the Graphic Artist:

Graphics to use as the background, other requests to a graphic artist, such as image of kids using a laptop

Directions to the Developer

The answer is "a" and "d".

When "a" and/or "d" are selected display: "Correct! This is part of the permissions troubleshooting process."

When "b" is selected display: "Incorrect. Telnet is used to troubleshoot connection errors."

When "c" is selected display: "Incorrect. SSH is not relevant to 401 errors."

Final Graphic Name(s):

File name of pre-selected graphics

Source Graphic(s):

Where to find graphic

Alt tag

No image on this slide.

Content Screen:

Slide: 22

Navigation Menu Title: Knowledge Check

Curl output has identified a 5xx class error. Upon rerunning the build, you are unable to duplicate the error. Which of the following steps should you take to respond to this problem? Select the best answer.

Questions or Comments:

Description of navigation, etc

- a. Log the error. Since you cannot duplicate it, the issue is resolved.
- b. Open a change request with the application team to have them fix the error.
- c. Log and escalate the error.
- d. Reassign the issue to your manager.

Directions to the Graphic Artist:

Graphics to use as the background, other requests to a graphic artist, such as image of kids using a laptop

Directions to the Developer

The answer is "c".

If "a", "b", or "d" are selected, display: "Incorrect. Regardless of whether or not you can duplicate a 5xx class error, it always should be escalated so the appropriate team is aware of intermittent errors." If "c" is selected, display: "Correct! 5xx class errors should always be escalated so that teams are aware of intermittent problems."

Final Graphic Name(s):

File name of pre-selected graphics

Source Graphic(s):

Where to find graphic

Alt tag

No image on this slide.

Lesson Name: Network Connection Failures

Content Screen:____

Slide: 23

Navigation Menu Title: Simulation Exercise

The following several screens are a simulation of a build failure. You are the help desk employee tasked with responding to the issue. In the following set of slides, decide where you need to click (either the buttons on the right or boxed areas of the screenshot) to troubleshoot the issue.



Questions or Comments:

Description of navigation, etc

Directions to the Graphic Artist:

Center image.

Directions to the Developer

Final Graphic Name(s):

https://openclipart.org/image/800px/svg_to_pn g/316358/1551746079.png Source Graphic(s):

Openclipart.org

Alt tag

Picture of woman holding a magnifying glass. A question mark appears to the right of the image.

Lesson Name: Network Connection Failures

Content Screen:____1

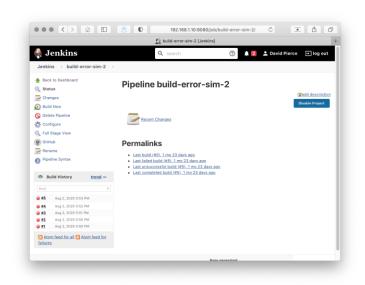
Navigation Menu Title: Simulation Exercise

Slide: 24

You have received an email from a developer citing a build failure. The link brings you to this Jenkins job. Recalling the material from Module 1 on how to access a build log in Jenkins, and using the processes covering in this Module, evaluate the presented screen and decide where you need to click next.

Questions or Comments:

Description of navigation, etc



Enter CLI

Escalate...

Directions to the Graphic Artist:

Graphics to use as the background, other requests to a graphic artist, such as image of kids using a laptop

Directions to the Developer

Put yellow box around "Build Now" and "Build History" panel.

If the user clicks the build history box, bring them to slide 25. If the user clicks the "enter CLI" button at right, bring them to slide 31. If the user clicks the "Build Now" button at left, bring them to slide 27. If they click the "Escalate..." button, bring them to slide 30.

Final Graphic Name(s):

Main_01.png

Source Graphic(s):

SME original

Alt tag

Screenshot of Jenkins job page, with red dots icons indicated the previous build was a failure. Screen has links to "Build Now" and "previous build log."

Lesson Name: Network Connection Failures

Navigation Menu Title: Simulation Exercise

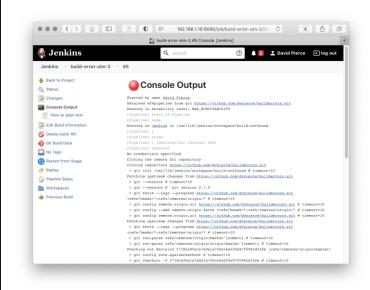
Content Screen:

Slide: 25

Questions or Comments:

Description of navigation, etc

This is the first page of the job log. Use the scroll bar to see the second page, click the back button to return to the previous screen, or click "Enter CLI" to enter the CLI.





Directions to the Graphic Artist:

Graphics to use as the background, other requests to a graphic artist, such as image of kids using a laptop.

Directions to the Developer

Place yellow box around scroll bar and back button on screenshot.

Clicking anywhere on the scroll bar in the screenshot should bring the user to slide 26. Clicking the "<" button or the Back button to the right should bring the user to slide 24. Clicking the "enter CLI" button should bring them to slide 31. Clicking on the "Escalate...." button should bring them to slide 30.

Final Graphic Name(s):

JobLog_01.png

Source Graphic(s):

SME original

Alt tag

Screenshot of Failed Jenkins Build log, build #5. Nothing seems wrong, but you can scroll down to see the rest of the log.

Lesson Name: Network Connection Failures

Navigation Menu Title: Simulation Exercise

Content Screen: 1

Slide: 26

Questions or Comments:

Description of navigation, etc



Back

Enter CLI

Escalate...

This is the second page of the job log. Scroll up to see the beginning, click "Back" to go back to

Directions to the Graphic Artist:

Graphics to use as the background, other requests to a graphic artist, such as image of kids using a laptop

the main screen, or click "Enter CLI" to enter the command line.

Directions to the Developer

Place yellow box around scroll bar and back button on screenshot.

Clicking anywhere on the scroll bar in the screenshot should bring the user to slide 25. Clicking the "<" button or the Back button to the right should bring the user to slide 24. Clicking the "enter CLI" button should bring them to slide 31. Clicking on the "Escalate...." button should bring them to slide 30.

Final Graphic Name(s):

JobLog_02.png

Source Graphic(s):

SME original

Alt tag

Screenshot of failed Jenkins build, second half, build #5. Curl command "curl –f

http://192.168.1.10:8081/apilookup/1.0" has returned "curl: (22) The requested URL returned error: 404 Not Found"

Lesson Name: Network Connection Failures

Navigation Menu Title: Simulation Exercise

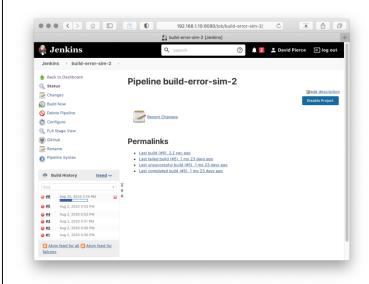
Content Screen:

Slide: 27

Questions or Comments:

Description of navigation, etc

You have started the build again. You can check the job log for the new build, return to the previous screen, or enter the CLI to use tools like telnet or nslookup.





Directions to the Graphic Artist:

Graphics to use as the background, other requests to a graphic artist, such as image of kids using a laptop

Directions to the Developer

Place yellow box around "Build History" panel and back button on screenshot.

If the user clicks anywhere in the "Build History" box, bring them to slide 28. If they click the blue "Back" button or the "<" button in the browser screenshot, bring them to slide 24. If they click the "Enter CLI" button, bring them to slide 31. Clicking on the "Escalate...." button should bring them to slide 30.

Final Graphic Name(s):

Build_Again_01.png

Source Graphic(s):

SME original

Alt tag

Screenshot of new build in progress. Can click on Build History to view log of completed new build.

Lesson Name: Network Connection Failures

Navigation Menu Title: Simulation Exercise

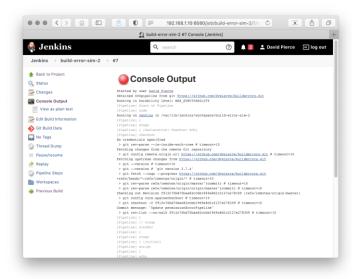
Content Screen: 1

Slide: 28

Questions or Comments:

Description of navigation, etc

This is the first page of the job log. Use the scroll bar to see the second page, click the back button to return to the previous screen, or click "Enter CLI" to enter the CLI.





Directions to the Graphic Artist:

Graphics to use as the background, other requests to a graphic artist, such as image of kids using a laptop

Directions to the Developer

Place yellow box around scroll bar and back button on screenshot.

Clicking anywhere on the scroll bar in the screenshot should bring the user to slide 29. Clicking the "<" button or the Back button to the right should bring the user to slide 27. Clicking the "enter CLI" button should bring them to slide 31. Clicking on the "Escalate...." button should bring them to slide 30.

Final Graphic Name(s):

Build_Again_Log_01.png

Source Graphic(s):

SME original

Alt tag

Screenshot of Failed Jenkins Build log, build #7. Nothing seems wrong, but you can scroll down to see the rest of the log.

Lesson Name: Network Connection Failures

Navigation Menu Title: Simulation Exercise

Content Screen:

Slide: 29

Questions or Comments:

Description of navigation, etc

Back
Enter CLI
Escalate...

This is the second page of the job log. Use the scroll bar to see the first page, click "Back" to go

back to the main screen, or click "Enter CLI" to enter the command line.

Directions to the Graphic Artist:

Graphics to use as the background, other requests to a graphic artist, such as image of kids using a laptop

Page generated: REST API Jenkins 2.235.3 Sep 25, 2020 2:20:54 PM CDT

Directions to the Developer

Place yellow box around scroll bar and back button on screenshot.

Clicking anywhere on the scroll bar in the screenshot should bring the user to slide 28. Clicking the "<" button or the Back button to the right should bring the user to slide 27. Clicking the "enter CLI" button should bring them to slide 31. Clicking on the "Escalate..." button should bring them to slide 30.

This slide is the "solution" slide and should set a global variable so that other slides can know it was visited.

Final Graphic Name(s):

Build_Again_Log_02.png

Source Graphic(s):

SME original

Alt tag

Screenshot of failed Jenkins build, second half, build #7.

Curl command "curl –f

http://192.168.1.10:8081/apilookup/1.0" has returned "curl: (22) The requested URL returned error: 404 Not Found"

Lesson Name: Network Connection Failures

ction Failures

Content Screen:___1

Navigation Menu Title: Simulation Exercise

Slide: 30

Who would you like to escalate this issue to?

Comments:

Questions or

Description of navigation, etc

JourneyQube CI/CD Team

Network Administrator

Server Administrator

Back

Directions to the Graphic Artist:

Graphics to use as the background, other requests to a graphic artist, such as image of kids using a laptop

Directions to the Developer

If the user clicks on "Network Administrator" display feedback "Sorry; they don't know what to do with this ticket" and return the user to slide 24. If the user click on "Server Administrator" display feedback "Sorry but it's not a problem on their end..." and return the user to slide 24. If the user clicks "Back" return them to the previous slide with no feedback. If they click the "JourneyQube CI/CD" button without having previously visited slide 29, go to slide 40. If they click the "JourneyQube CI/CD" button after having visited slide 29, go to slide 39.

Final Graphic Name(s):

File name of pre-selected graphics

Source Graphic(s):

Where to find graphic

Alt tag

No images on this page

Lesson Name: Network Connection Failures

Content Screen:____

Slide: 31

Navigation Menu Title: Simulation Exercise

You have entered a CLI prompt. What would you like to do?

Questions or Comments:

Description of navigation, etc



Exit CLI

Use telnet

Use passwd

Use nslookup

Directions to the Graphic Artist:

Graphics to use as the background, other requests to a graphic artist, such as image of kids using a laptop

Directions to the Developer

If the user clicks "Back" return them to the previous slide. If the user clicks "use telnet" bring them to slide 32. If they click "use passwd" bring them to slide 35. "Use nslookup" should bring them to slide 37. Any clicking in the console window itself should trigger an old-school ctrl-g bell noise like the PC XT's used to. Just for fun.

Final Graphic Name(s):

main_cli_01.png

Source Graphic(s):

SME original

Alt tag

Screenshot of empty UNIX terminal awaiting command entry.

Lesson Name: Network Connection Failures

Content Screen:_____

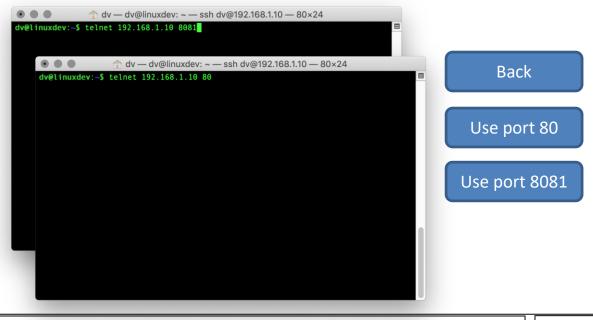
Navigation Menu Title: Simulation Exercise

Questions or Comments:

Slide: 32

Which telnet command would you like to use?

Description of navigation, etc



Directions to the Graphic Artist:

Graphics to use as the background, other requests to a graphic artist, such as image of kids using a laptop

Directions to the Developer

If the user clicks "Back", bring them to slide 31. If they click "Use port 80" bring them to slide 33, and if they click "Use port 8081, bring them to slide 34. If you could have the two images switch places when the 80/8081 buttons are moused over so that the corresponding image is in front, that would be awesome.

Final Graphic Name(s):

telnet_01.png, telnet_03.png

Source Graphic(s):

SME original

Alt tag

telnet_01.png: "Screenshot of UNIX terminal with command entered: "telnet 1982.168.1.10 80" telnet_03.png: "Screenshot of UNIX terminal with command entered: "telnet 1982.168.1.10 8080"

Course Name: The Jenkins Journey **Content Screen: Network Connection Failures Lesson Name: Slide:**__ ³³ Navigation Menu Title: Simulation Exercise **Questions or** Comments: The connection was refused. Description of navigation, etc ↑ dv — dv@linuxdev: ~ — ssh dv@192.168.1.10 — 80×24 dv@linuxdev:~\$ telnet 192.168.1.10 80 Trying 192.168.1.10...
telnet: Unable to connect to remote host: Connection refused dv@linuxdev:~\$ Back Final Graphic Name(s): **Directions to the Graphic Artist:** Graphics to use as the background, other requests to a graphic artist, such as image of telnet_02.png kids using a laptop Source Graphic(s): **SME** original **Directions to the Developer** Alt tag When the user clicks the back button, return them to slide 31. telnet command returned "telnet: Unable to connect to

remote host: Connection refused"

Course Name: The Jenkins Journey **Content Screen: Network Connection Failures Lesson Name:** $\textbf{Slide:}\underline{}^{34}$ Navigation Menu Title: Simulation Exercise **Questions or** Comments: You were able to connect to the server on that port. Description of navigation, etc ↑ dv — dv@linuxdev: ~ — ssh dv@192.168.1.10 — 80×24 dv@linuxdev:~\$ telnet 192.168.1.10 8081 Trying 192.168.1.10...
Connected to 192.168.1.10.
Escape character is '^]'. Back Final Graphic Name(s): **Directions to the Graphic Artist:** Graphics to use as the background, other requests to a graphic artist, such as image of telnet_04.png kids using a laptop Source Graphic(s): **SME** original **Directions to the Developer** Alt tag When the user clicks the back button, return them to slide 31. telnet command returned "Connected to 192.168.1.10"

Lesson Name: Network Connection Failures

Content Screen:____1

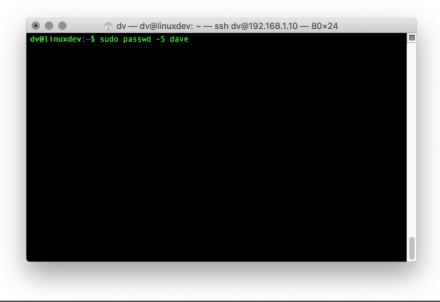
Slide:_ ³⁵

Navigation Menu Title: Simulation Exercise

Remember you may need to use the "sudo" command for privilege escalation when using the 'passwd' command.

Questions or Comments:

Description of navigation, etc



Back

Continue

Directions to the Graphic Artist:

Graphics to use as the background, other requests to a graphic artist, such as image of kids using a laptop

Directions to the Developer

If the user clicks the "Back" button, return them to slide 31. If they click "Continue" bring them to slide 36.

Final Graphic Name(s):

Passwd_lockcheck_01.png

Source Graphic(s):

SME original

Alt tag

UNIX terminal with command entered "sudo passwd –S dave"

Course Name: The Jenkins Journey **Content Screen: Network Connection Failures Lesson Name:** Slide:_ ³⁶ Navigation Menu Title: Simulation Exercise **Questions or** Comments: The account appears to be unlocked. Description of navigation, etc ↑ dv — dv@linuxdev: ~ — ssh dv@192.168.1.10 — 80×24 |dv@linuxdev:~\$ sudo passwd -S dave dave P 09/23/2020 0 99999 7 -1 dv@linuxdev:~\$ ■ Back Final Graphic Name(s): **Directions to the Graphic Artist:** Graphics to use as the background, other requests to a graphic artist, such as image of Passwd_lockcheck_02.png kids using a laptop Source Graphic(s): **SME** original **Directions to the Developer** Alt tag

passwd –S command output with uppercase "P" indicating

an unlocked account.

If the user clicks the "Back" button, return them to slide 31.

Course Name: The Jenkins Journey **Content Screen: Network Connection Failures Lesson Name:** Slide:__ ³⁷ Navigation Menu Title: Simulation Exercise **Questions or** Comments: We can try to do an nslookup of the server name from the log? Description of navigation, etc ↑ dv — dv@linuxdev: ~ — ssh dv@192.168.1.10 — 80×24 dv@linuxdev:~\$ nslookup 192.168.1.10 Back Continue Final Graphic Name(s): **Directions to the Graphic Artist:** Graphics to use as the background, other requests to a graphic artist, such as image of Nslookup_01.png kids using a laptop Source Graphic(s): SME original **Directions to the Developer** Alt tag If the user clicks "Back", return them to slide 31. If they click "Continue" proceed to slide 38. UNIX terminal with command entered "nslookup 192.168.1.10"

Lesson Name: Network Connection Failures

Content Screen:_____

Slide: 38

Navigation Menu Title: Simulation Exercise

DNS couldn't find a name for 192.168.1.10, but you don't need DNS working to access a system with its IP address anyway.

Questions or Comments:

Description of navigation, etc

Back

Directions to the Graphic Artist:

Graphics to use as the background, other requests to a graphic artist, such as image of kids using a laptop

Directions to the Developer

When the user clicks "Back" return them to slide 31.

Final Graphic Name(s):

Nslookup_02.png

Source Graphic(s):

SME original

Alt tag

Nslookup command output: "server can't find 10.1.168.192.in-addr.arpa: NXDOMAIN"

Network Connection Failures Lesson Name:

Content Screen:

Slide:__ ³⁹ Navigation Menu Title: Simulation Exercise

Alright! You confirmed that there was a problem and escalated it to the correct party. Nice work.



Directions to the Graphic Artist:

Graphics to use as the background, other requests to a graphic artist, such as image of kids using a laptop

Directions to the Developer

When the user clicks the "Thanks!" button, end the training.

Final Graphic Name(s):

1536673537.png

Thanks!

Questions or Comments:

Description of

navigation, etc

Source Graphic(s):

https://openclipart.org/detail/306471/tick-boz

Alt tag

Picture of green checkmark.

Lesson Name: Network Connection Failures

Navigation Menu Title: Simulation Exercise

Content Screen:____

Slide:____40

You escalated to the correct group, but you did not duplicate the issue first.



Questions or Comments:

Description of navigation, etc

Ok

Directions to the Graphic Artist:

Graphics to use as the background, other requests to a graphic artist, such as image of kids using a laptop

Directions to the Developer

When the user clicks the "Ok" button, go to slide 24.

Final Graphic Name(s):

PeterM-Sad-cat.png

Source Graphic(s):

https://openclipart.org/detail/143/sad-cat

Alt tag

Picture of sad cat

Design Guidelines

Background Color = RGB #E1E0E0h (225, 224, 224)
Title Color = RGB #060951h (6, 9, 81)
Body text = RGB #000000h (0, 0, 0)
Font = Calibri
Font Size (Body Text) = 16pt for slides 1-22.
Font Size (Body Text) = 14pt for slides 23-40.
Font Size (Header) = 20pt bold
Font Size (Title) = 24pt bold

Unless specified otherwise, there is a "previous" and "next" button on the bottom left and right sides of the screen so learners can navigate. As soon as the learner clicks the next slide, the audio starts right away for the subsequent slide.

The audio scripts for each slide are in the "notes" section directly below the slide text.

For slides 24-29, the image will be sized 568px by 450px and positioned to -20px, 120px from the top left corner.

For slides 31-38, the image will be sized to 570px by 390px and positioned to -20px, 124px from the top left corner.

Main body text for slides 1-22 should be positioned at 24px horizontal and 72px vertical from top left corner. Main body text for slides 23-40 should be positioned at 24px horizontal and 45px vertical from top left corner.

For slides 1-22, dimensions of the previous and next buttons will be as follows:

- "Previous" = 110px by 42px with position 28px by 482px from the left corner.
- "Next" = 110px by 42px with position 592px by 482px from left corner.



