

ProLUG Automation

Unit 9 Worksheet

Instructions

Fill out this sheet as you progress through the lab and discussions. Hold your worksheets until the end to turn them in as a final submission packet.

Discussion Questions:

Unit 9 Discussion Post 1: Read sections “Container Usage” and “Diskless Booting” on pages 8 and 9 of this doc:

<https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-223.ipd.pdf>

1. What are the main security concerns given about using containers in HPC?
2. What is the PXE or IPXE protocol defined for diskless booting?

Unit 9 Discussion Post 2: Read about chrooted environments here:

<https://en.wikipedia.org/wiki/Chroot> and the Ansible connector here:

https://docs.ansible.com/projects/ansible/latest/collections/community/general/chroot_connection.html

1. What are the uses of a chrooted environment? (there are 5 on Wikipedia)
2. How might using Ansible to build chrooted images help improve your build process?

Definitions/Terminology

Notes During Lecture/Class:

Links:

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Terms:

- Warewulf terminology
 - Image repository
 - System Overlays
 - Runtime Overlays
 - Wwctl language

Useful tools:

Lab and Assignment

Unit 9 Build Modern Linux - https://killercoda.com/het-tanis/course/Automation-Labs/Unit9_Build_Modern_Linux

Digging Deeper

1. Read other parts of this doc for more HPC understanding:
<https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-223.ipd.pdf>
1. What are the components on the drawing on page 3 of doc (pg. 11 in the web viewer)

Reflection Questions

1. What questions do you still have about this week?

2. How are you going to use what you've learned in your current role?