Intel NUC Configuration
Customized linux installation

Waterford Institute of Technology

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Objectives

Linux install usb keys

Produce 2 installation kits

- Linux-1
    - For student
- Linux-2
    - For system administrator

Purpose is to facilitate:

- Student installation linux on own usb disk
- Broadcast configuration of NUCs by system administrator

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Linux-1 installation

Installation for students

Accessible user accounts

- Administration account **ictskills**

Linux-1 installation

Installation for students

Accessible custom installed software

- ansible
- git

Linux-2 installation

Installation for system administrators

User accounts

- Administration accounts
  - **admin** (reserved account)
  - **nucadmin**
- Standard account
  - **ictskills**

Linux-2 installation

Installation for system administrators

Custom installed software

- ansible
- git
- ssh backdoor
- samba

Software installation

Ansible playbooks

Playbook type P1

- install to localhost

Playbook type P2

- install over ssh

Student software installation

Ansible playbooks reside on Bitbucket or GitHub

Student clones Playbook type P1

- installs linux-1 to usb external disk
- installs required software to localhost using subset P1 playbooks

System administrator software installation

Ansible playbooks reside on Bitbucket or GitHub

Administrator clones Playbook type P2

- installs linux-2 to set of NUCs
- installs required software over ssh
  using subset P2 playbooks

Student linux installation
Targets external usb disk tethered to NUC

To avoid UEFI - GRUB issues

- Internal drive (SSD or spinner) not present in NUC during installations
- install linux from livecd to usb disk
- possible to subsequently boot disk on NUC on which other linux installations present

Linux-1 Student installation

Access and privileges

System Administrator has full access to:

- all three user accounts
- all added applications

Student:

- has administration account **ictskills**
- but no access backdoor (private key required)

Linux-2 System administrator installation

System Administrator has full access,
example:

- all three user accounts
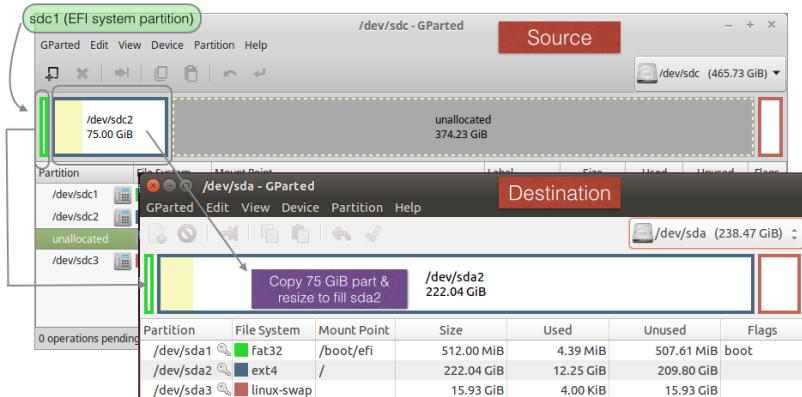- all added applications
- samba
- ssh backdoor
- ansible

Student has:

- restricted (standard) account
  ictskills
- access to ansible and git
- access to specific suite applications
  installed by sys admin

NUC configuration
FTG24 Lab

- Installed on usb device
- Used gparted to copy and paste to minimum size on SSD
- Resized target partition to max

Ansible patterns

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