

Computer Science Department Virtualization Environment

Two VMware based clusters. One managed with NDG Netlabs+, One managed through Vsphere. In Fall 2014, provided virtualized lab capabilities for 1023 student virtual machines in support of 12 Computer Science courses.

Netlab Environment- (CSVVCCONSOLE)

CSCVCCONSOLE Running VCenter 5.1.0 1064983

CSCVMHOST1- Running ESXi 5.1.0 1312873

CSCVMHOST2- Running ESX 5.1.0.1312873

Webclient: <https://cscvconsole:9443>

SAN Storage: 9 Volumes (14Tb of storage)

Non- Netlab Environment (CSCVC01)

VMWARE CLASSES ENVIRONMENT

CSCVC01 - VCenter 5.5 (Virtual)

CSCVCSQL01- Running VCenter 5.5 Database (Virtual)

CSCVMHOST3- Running ESX 5.5.0,1623387

CSCVMHOST4- Running ESX 5.5.0,1623387

CSCVMHOST5- Running ESX 5.5.0,1623387

Webclient: <https://cscvc01:9443>

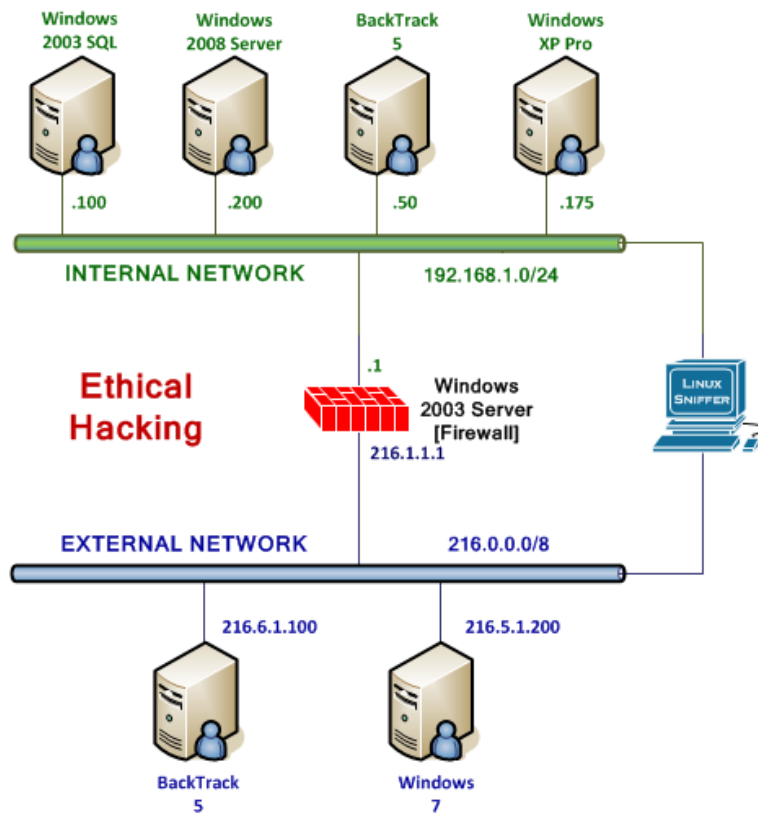
Management VMs-

COMP_UIS_CSCVC01	100 GB	37.14%	37.14 GB	2.29 GB	39.43 GB	49.9 GB
COMP_UIS_CSCVCSQL01	200 GB	19.27%	38.55 GB	2.33 GB	40.87 GB	50.44 GB
COMP_UIS_CSCVM_ISO	300 GB	13.33%	40 GB	2 MB	40 GB	50 GB

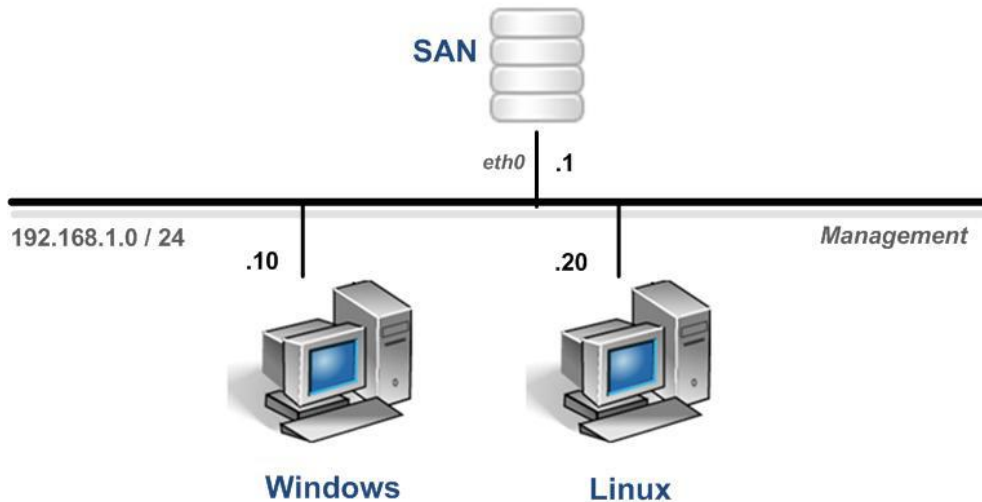
SAN Storage: 24 Volumes (48Tb of storage) 24- 2TB

Virtual Machine Lab Topologies currently implemented and available:

1. Security Testing Pod (CSC570 Security Testing Essentials)



2. Information Storage and Management Pod (CSC570 SAN Essentials)



3. Digital Forensics Pod (CSC470 Intro to Digital Forensics and CSC470 Encase Certification Prep)
Use an Encase Law Enforcement Windows 7 virtual machine.

 **1 CLIENT**
 **1 SERVER**

4. Advanced Digital Forensics Pod (CSC470 Incidence Response and Evidence Collection)



This pod has an Encase Law Enforcement Training Windows 7 machine and a SANS-SIFT 3.0 Forensic Workstation. The software included on the SANS-SIFT machine:

Software Includes:

- log2timeline (Timeline Generation Tool)
- Rekall Framework (Memory Analysis)
- Volatility Framework (Memory Analysis)
- Autopsy (GUI Front-End for Sleuthkit)
- PyFLAG (GUI Log/Disk Examination)afflib
 - afflib-tools
- libbde
- libesedb
- libevt
- libevtX
- libewf
 - libewf-tools

- libewf-python
- libfvde
- libvshadow
- log2timeline
- Plaso
- qemu
- SleuthKit
- complete package listing is found here:
<http://sift.readthedocs.org/en/latest/user/packages.html>

5. Database Administration Pod (CSC570 Advanced DB, CSC570 Database Admin)

 **2 CLIENT**
 **2 SERVER**

6. Software Engineering Pod (CSC478 Software Engineering Capstone)

 **1 CLIENT**
 **2 SERVER**

7. Basic Virtual Machine Pod. Used by CSC570 Big Data Analytics, CSC570 Virtualization Essentials, CSC472 Intro to DB

 **1 CLIENT**

8. Windows Network Administration Pod (CSC465 Windows Network Administration)

 **1 CLIENT**
 **3 SERVER**

9. Network Security Pod (CSC433 Intrusion Detection, CSC430 Foundations of Network Security)
 uses the standard Multi-purpose Security Pod (MSEC)

