# OneTaos Lab

# What is TaosLab?

TaosLab (or Taos Lab) is an all-encompassing term for the training hardware and setup that we have here in Boise. We have 9 Servers with 72GB of RAM (3 dedicated to VMware hosts), we have a NetApp storage array, CCNA gear, a Palo Alto Firewall and some Juniper gear.

# What’s it good for?

You can use the equipment we have to study for the CCNA, learn about firewalls and networking, build your own Exchange cluster or Hyper-V cluster, install VMware ESXi, almost anything!

# Who can use it?

Almost anybody! We may add more restrictions later, but right now you just have to be a Taoser.

# What are the limitations?

Same as Montana’s old speed limit: reasonable and prudent. We will use thin provisioning to maximize storage utilization. For normal POCs and testing, the minimum recommended memory is usually sufficient.

# What if I break something?

Don’t panic. It’s a lab. Obviously we want you to play nicely with the other VMs, but if something goes wrong use this as a learning opportunity. Ask others with more experience to fix it or notify [Taoslab@taos.com](mailto:Taoslab@taos.com) and we’ll find someone to help.

# Why should I use this when I can build my own VMs?

The lab is meant to help you learn and test processes and technologies. For VMs for client VPN purposes we generally expect those to stay on your primary system due to Microsoft licensing constraints. Also this keeps test VMs off of the Taos production network with makes our security people happy.

# When can we use it?

You can use it anytime that we’re not doing maintenance.

# Where can we use it?

You can use it from your system on site or remotely by accessing <https://taoslab.taos.com>. You must be put in a certain Taos Training VPN group in order for that to work though.

# How do I use it?

You can connect to TaosLab.local or any systems in Taos Lab from our production network. Traffic passes through a Cisco ASA Firewall, so only certain traffic can pass back (DNS for example). You’ll find that you can RDP or SSH without any issues. You only need a “TaosLab.local” domain account if you wish to use the taoslab domain. Linux systems with stand-alone accounts don’t need a taoslab account as you will access those directly.

# How do I get a Taos Lab account?

If you want to use the existing Taoslab.local domain and services (DNS, AD, etc.) then submit a ticket to [taoslabticket@taos.com](mailto:taoslabticket@taos.com) with a request to create a “TaosLab” account as well as any other needs, such as a VM to install an application you want to test. As an OCA you may need to create the VM yourself (instructions below)

# What if I will never touch Windows?

Well, you still might want a taoslab account so you can configure likewise AD auth, but if not then just send a VM creation request to [taoslabticket@taos.com](mailto:taoslabticket@taos.com). We can provide CentOS 6 and 7 VMs as well as 2008 r2 and 2012 r2 systems. If you want something custom like Ubuntu, we can let you install the OS.

# Who’s in Charge of Taos Lab?

Mr. Eric Geyer is the ultimate authority. Various other engineers have helped create what we have currently.

# Who do I ask for Help?

You can contact Eric Geyer or Grant Ballard for general lab questions. Joel Huffman or Anthony Fuller for the networking portion. Roscoe Howard or Greg Bergeson for Storage (NetApp) specific questions. Or, just e-mail [taoslab@taos.com](mailto:taoslab@taos.com) and we’ll all see your question and have a chance to respond.

# How can I help?

Thank you for asking. Volunteers are always welcome. We are going to start small with someone from each shift (hopefully). These people are free to share the information. If you are interested in volunteering, please send an e-mail to [taoslab@taos.com](mailto:taoslab@taos.com) and we’ll see how you can help.

# Is there anything else I should know?

Yes! San Jose uses these resources to run classes occasionally. When these classes take place, we try to be extra careful to not break anything but this shouldn’t affect general lab users.

# General Usage Instructions

It is expected that once you build some test systems you will RDP (or SSH) directly to those systems, but you will have to create those systems first.

# Creating new VMs:

1. You can export VMs from Virtual Box as an OVF/OVA and import them into the lab vCenter  
   Note: use the 1.0 spec
2. You can clone one of the template VMs built (work still being done building these)
3. You can build your own (ISOs are on the NA02\_ISO\_VMWARE\_NFS datastore)

**Remember! We have one way access to the lab with a firewall in between Taos.local and Taoslab.local.** This means that you can’t connect to systems (like your laptop/desktop) from any machines in the lab.

### Logging in to [vCenter](https://boi-labvcenter.taoslab.local/vsphere-client).

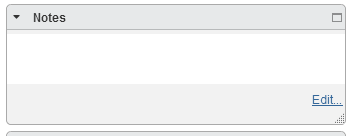
Username: FirstnameLastinitial (GrantB)  
Password: Taos2015 (please change it)  
Domain:Taoslab.local (not required to login to vCenter)

[http**s**://boi-labvcenter.taoslab.local](https://boi-labvcenter.taoslab.local) (click on “Log in to vSphere Client”)

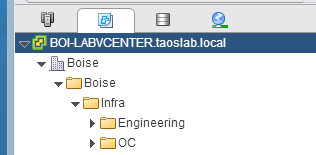
or

[http**s**://boi-labvcenter.taoslab.local/vsphere-client](https://boi-labvcenter.taoslab.local/vsphere-client)

FYI, it is important that you provide a description in the notes field of the VM once you create it. Please provide your name and the basic purpose. If you don’t, you risk it getting powered down without notice (how can we notify you if we don’t know who built it?)



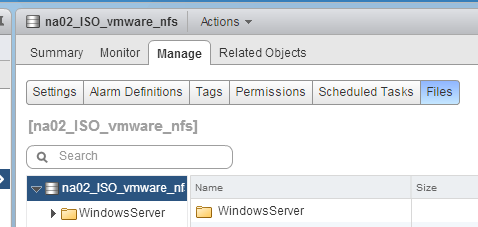
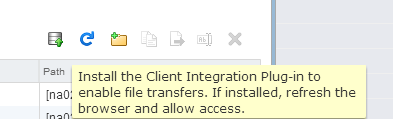
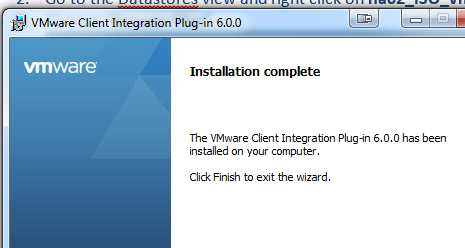
Also, it’d be nice if you created a folder for your VMs in the VMs and Templates view. Don’t forget to move your VMs to the folder once you’ve created it.



You can also RDP to the vCenter server and use the traditional C# (thick) client or install it on your own system if you wish.

Important servers you can RDP to:  
Domain controller: boi-labdc00.**taoslab.local** (physical system)  
vCenter server: boi-labvcenter.**taoslab.local** (VM running on Hyper-V)

### How do I get an ISO into the lab?

1. Get an ISO. Use an app like ImgBurn  
   <http://www.imgburn.com/index.php?act=download&>
2. Go to the Datastores view and right click on **na02\_ISO\_vmware\_nfs**
3. Choose “Browse Files”  
   
4. Install the plugin  
   
5. Install the VMware Client Integration Plug-in. You will most likely have to close your browser.  
   
6. Re-launch the web client, browse to the datastore and click on the upload button  
   cid:image006.png@01D0A2AA.6ED46E20

## Download the Thick Client

<http://kb.vmware.com/selfservice/microsites/search.do?language=en_US&cmd=displayKC&externalId=2089791>

## Other documentation

Start -> Run -> \\sharepoint\practices\managedservices\Managed Services Documents\Clients\Infrastructure\TaosLab

OR

[http://sharepoint/practices/managedservices/Managed%20Services%20Documents/Forms/AllItems.aspx?RootFolder=%2fpractices%2fmanagedservices%2fManaged%20Services%20Documents%2fClients%2fInfrastructure%2fTaosLab&FolderCTID=&View={3BC6FC55-3E1B-4A4D-B00C-8A9482A47707}](http://sharepoint/practices/managedservices/Managed%20Services%20Documents/Forms/AllItems.aspx?RootFolder=%2fpractices%2fmanagedservices%2fManaged%20Services%20Documents%2fClients%2fInfrastructure%2fTaosLab&FolderCTID=&View=%7b3BC6FC55-3E1B-4A4D-B00C-8A9482A47707%7d)