

An aerial night view of a city, likely Las Vegas, featuring the Eiffel Tower replica and a large fountain. The image is overlaid with a semi-transparent red filter and a diagonal split line. The text is centered in white.

**RED HAT NORTH AMERICA TRAINING PARTNER
& INSTRUCTOR CONFERENCE**

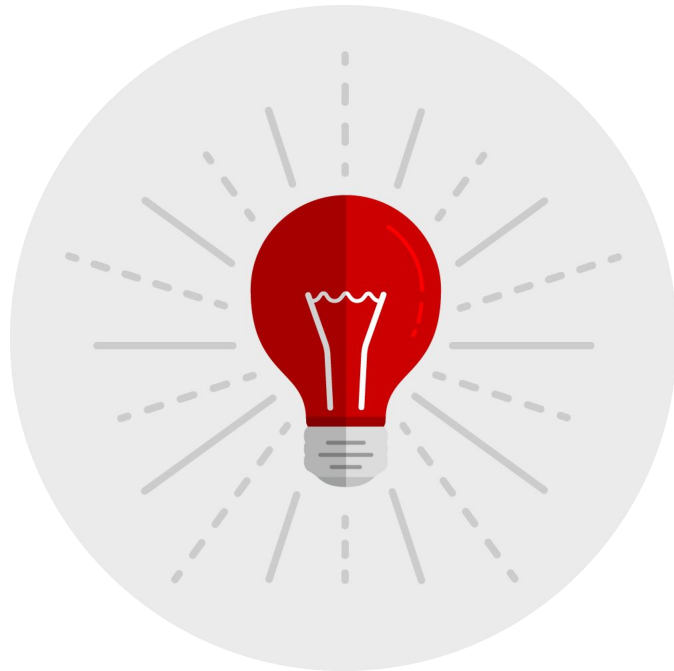


Top 5 Tips and Tricks for Instructors

Travis Michette
Senior Technical Instructor



Topics



Instructor MOJO Page / RHLC / Knowledge Management

Resources for instructors and collaboration tools

Resetting Passwords and Tokens

Resetting of credentials (Self-Service)

Filing and Accessing JIRAs

Using JIRA bug filing effectively and contributing back

Classroom Setup/Delivery Hacks

Providing additional materials, Ansible to manage, RHT-Each

Accessing Student VMs Remotely

Accessing systems in CLEv2/CLEv3 and Differences



Instructor Resources

Instructor Toolkit

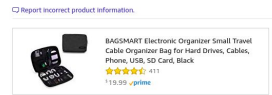


Roll over image to zoom in

Electronic Organizer, Jelly Comb Travel Organizer Bag Electronic Accessory Cases Cable Organizer Bag Double Layer for USB Cables, Charger, Power Bank, Phone, E-book Kindle, iPad or Tablet(up to 9.7")
by Jelly Comb

4.5 out of 5 stars (153 customer reviews) | 3 answered questions

- Currently unavailable.**
We don't know when or if this item will be back in stock.
- VARIOUS STORAGE SPACES:** Keep all your things organized. Versatile electronic organizer has double layers. In the first layer, one big foam padded pocket to hold your E-book Kindle, iPad or Tablet(up to 9.7"), 17 elastic loops, 5 mesh pouches with elastic loops and 5 small elastic compartments to hold cables, earphones, SD card, USB flash disk, pen etc. In the second layer, 1 zipper mesh pocket, 4 mesh bag and 4 extra elastic loops to store cellphone, laptop charger, chargers and more gadgets.
 - CONVENIENT OUTSIDE POCKETS AND TOP HANDLE:** Two flipped pockets in the front to store your cellphone, business card, tissue conveniently and one big zipped pocket backside to store your purse and other important items. A great carrying bag comes with a portable top handle that you can simply catch it to your hand anywhere. A compact bag for travel, business trips, daily life, work life and home use.
 - GREAT TRAVEL ORGANIZER:** The travel electronic organizer bag can help you to keep all in one place without tangle or damaged, easy access to what you need. It can also be used as cosmetic carrying bag with convenient size of 10.7x 8.4 inches, fit perfectly in your briefcase, luggage and backpack. Perfect for travelling and business trip.
 - DURABLE AND WATERPROOF:** Made of durable and waterproof nylon fabric, the electronic organizer bag protects your electronics accessories from rain and crash. Wear-resistant, easy to clean for long term usage. It's a great gift for birthday, Christmas Day etc.
 - BUY WITH CONFIDENCE:** We offer 100% satisfaction warranty, 30-day Money Back Guarantee, 100% replacement for defective items. If you don't like the new convenient electronic organizer for any reason, simply contact us to request a refund or exchange.



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Sabrent 2.5-Inch SATA to USB 3.0 Tool-Free External Hard Drive Enclosure (Optimized for SSD, Support UASP-SATA III) Black (EC-UASP)
by Sabrent

4.5 out of 5 stars (4,017 customer reviews) | 391 answered questions



- Tool free design, easy to install:** Transfer Rates Up to 480 MBps when connected to a USB 3.0 port. Transfer Rates up to 3.5 Gbps when connected to a USB 3.0 port.
- Suitable for 2.5" SATA:** Supports Standard Notebook, 2.5" SATA and SATA II Hard Drive.
- Optimized for SSD:** Supports UASP SATA III Backwards-Compatible with USB 2.0 or 1.1
- Hot-swappable:** Plug and Play, no drivers needed.
- Operating System Supported:** Operating Systems: Mac, Windows. Supported Windows Versions: Windows 7, Windows 8, Windows Vista, Windows XP. Supported Mac OS X Versions: OS X 10.7 or later.
- System requirements:** Available USB 3.0 port on the computer to achieve full 5 Gbps transfer speeds; Available USB 2.0 port on the computer to achieve full 480 Mbps transfer speeds; Windows: XP/Vista/7/8 (64-bit 32-bit & 64-bit versions) MAC: OS X.

Compare with similar items
Used & new (3) from \$8.99 - \$Prime
Report incorrect product information.

PNY Turbo 128GB USB 3.0 Flash Drive - (P-FD128GTBOP-GE)
by PNY

4.5 out of 5 stars (9,922 customer reviews) | 523 answered questions



- List Price: \$24.99
With Deal: **\$16.99 - Prime & FREE Returns**
You Save: \$8.00 (32%)
- Free Amazon tech support included -
- | Color: | 128GB | 64GB | 128GB | 256GB |
|--------|---------|---------|---------|---------|
| Grey | \$16.99 | \$19.99 | \$24.99 | \$31.99 |
| Black | Prime | Prime | Prime | Prime |
- Transfer speeds approximately 10 times faster than standard PNY USB 2.0 Flash Drives.
 - Store and transfer large files faster than ever with USB 3.0 technology.
 - Allows for quick and easy transfer of all content.
 - The 128GB Turbo USB 3.0 Flash Drive can hold approximately 23,674 songs.
 - Sliding collar, rugged design with integrated loop makes it easy to attach to key chains, backpacks, etc.
 - Backwards compatible with USB 2.0 ports, so you can utilize any USB 2.0 or USB 3.0 port, compatible with most PC and Mac laptop and desktop computers.
 - Free technical support.



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WD 512GB My Passport SSD Portable Storage - USB 3.1 - Black-Gray - WDBVX5 120PSL-WESN
by Western Digital

4.5 out of 5 stars (359 customer reviews) | 105 answered questions

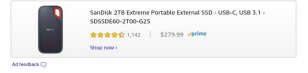
List Price: \$169.99
Price: **\$89.99 - Prime & FREE Returns**
You Save: \$79.99 (47%)

Free Amazon tech support included -

Capacity:	128GB	256GB	512GB
Price	\$89.99	\$119.99	\$169.99
Prime	Prime	Prime	Prime

- Style:** New Generation | Old Generation
- blazing fast file transfers with read speeds up to 540 MB/s
 - Password protection with hardware encryption
 - USB Type-C and USB 3.1 Gen 1 ready; USB 3.0, USB 2.0 and USB-A compatible
 - WD Discovery software for WD Backup, WD Security, Social Media and Cloud Storage import, WD Drive Utilities
 - 3-year manufacturer limited warranty

Compare with similar items
Used & new (33) from \$81.31 - \$Prime
Report incorrect product information.



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TRENDNET 5-Port Unmanaged Gigabit GREENnet Desktop Metal Switch, TEG-550g, Ethernet Splitter, Ethernet/Network Switch, 5 x Gigabit Ports, Fanless, 10 Gbps Switching Fabric, Lifetime Protection
by TRENDNET

4.5 out of 5 stars (560 customer reviews) | 78 answered questions

Price: **\$15.99 - Prime & FREE Returns**
Free Amazon tech support included -

Capacity: **5-Port Gigabit**

Model:	Unmanaged	5-Port Gigabit PoE	AC1900
Wireless LAN Adapter	EdgeSmart	Unmanaged	EdgeSmart w/ Pass Through
Port	5-Port Gigabit	5-Port Gigabit PoE	Gigabit PoE + EdgeSmart

- ETHERNET PORT CONFIGURATION:** 5 Gigabit RJ-45 ports provide high-speed network connections to devices and a 10Gbps switching capacity allows data traffic to flow smoothly, reducing traffic bottlenecks.
- DESIGN DECISION:** With a compact and lightweight metal housing design, this Ethernet switch is well-suited for desktop installations. Its fanless design is perfect for quiet environments that require silent operation.
- ENERGY SAVING:** The 5-Port Gigabit GREENnet Switch, model TEG-550g, provides high bandwidth performance, ease of use, and reliability, all while reducing power consumption by up to 70%. GREENnet technology works right out of the box with no management requirement.
- INSTALLATION:** Fanless, Mountable
- PLUG-AND-PLAY:** Easy setup, simply power up the switch and plug in connected devices.
- LOW-NOISE OPERATION:** Fanless design lowers energy consumption and eliminates operating noise
- TRENDNET LIFETIME PROTECTION:** Lifetime TRENDNET Manufacturer's



Panda Wireless PAU06 300Mbps Wireless N USB Adapter - w/High Gain Antenna - Win XP/Vista/7/8/8.1/10, Mint, Ubuntu, Fedora, openSUSE, CentOS, Kali Linux and Raspbian
by Panda Wireless

4.5 out of 5 stars (2,859 customer reviews) | 540 answered questions

Price: **\$14.99 - Prime & FREE Returns**
Free Amazon product support included -

- Works with any 2.4GHz wireless g/n/modes
- Max wireless connection speed: 300Mbps
- Supports both infrastructure and ad-hoc modes
- Security: WEP 64/128bit, WPA, WPA2, IEEE 802.1x and IEEE 802.11i, Cisco CCX V1.0, 2.0 and 3.0 compliant
- Multi-OS support: 32-bit and 64-bit Windows Vista/7/8/8.1/10, Mint 14/15/16/17/11/12, Ubuntu 12.10/13.04/13.10/14.04/14.10/15.04/15.10, Fedora 18/19/20/21/22, CentOS 6.4/6.5/7

Compare with similar items
New (2) from \$14.99 - \$Prime
Report incorrect product information.



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Samsung T5 Portable SSD - 500GB - USB 3.1 External SSD (MU-PAS00B/AM), Blue
by Samsung

4.5 out of 5 stars (1,576 customer reviews) | 762 answered questions

List Price: \$129.99
Price: **\$91.99 - Prime & FREE Returns**
You Save: \$38.00 (29%)



Note: Available at a lower price from other sellers, potentially without free Prime shipping.
Free Amazon tech support included -

Color: **Blue**

Capacity:	500 GB	1 TB	2 TB
Price	\$91.99	\$139.99	\$219.99
Prime	Prime	Prime	Prime

- Style:** Simple
- Superfast Read Write speeds of up to 540 MB/s
 - Top to bottom metal design that fits in the palm of your hand
 - Optional password protection and AES 256 bit hardware encryption
 - Includes USB Type-C to C and USB Type-C to A cables
 - 3 year warranty, Compatible with USB 3.1 Gen2 (10 Gbps per second), backwards compatible
 - Compatible with Samsung Portable SSD Software requires Windows 7, Mac OS X 10.9 (Brewerick), Android 4.4 (Park), or higher. Older versions of the Windows, Mac and Android operating systems may not be supported

ViCtSiNg 3-in-1 Mini Displayport Thunderbolt to HDMI/DVI/VGA Adapter, 4K Mini Displayport 1.2 Converter, Compatible Male to Female Adapter for Macbook, PC, Projector, Surface Pro-Black
by ViCtSiNg

4.5 out of 5 stars (132 customer reviews) | 18 answered questions

Price: **\$16.75 - Prime & FREE Returns**
Free Amazon tech support included -



- Updated Golden Plated Mini DP V1.2 Version | This new model also supports DP V1.1 and provides much faster transfer rate up to 5.4Gbps per line to enable emerging display applications.
- High Resolution 1080p and Full HD 4K (2K support) | Supports video resolutions up to 1920x1200 and 1080p Full HD; Transmits both audio and video from computer or tablet to HD display via HDMI; DP V1.2 enables high color range (Full HD 4K x 2K support over standard displayport connector).
- Wide Compatible Range | Compatible with Apple Macbook, Macbook Pro, Macbook Air, iMac, Mac mini, Mac Pro; Microsoft Surface Pro/Pro 2/Pro 3 (NOT Surface for Windows RT); Lenovo ThinkPad X1 Carbon, X250/X240s, L450/L460/L470/L480; Toshiba Satellite Pro S500; Acer Aspire V3-571-57314G.
- Lightweight and Easy Use | Connect a Mini Displayport (Mini DP or mDP)/Thunderbolt port compatible computer to an mDP monitor or projector with HDMI/DVI/A (a separate HDMI/DVI/A cable sold separately) is required.
- What You Get | Mini DP V1.2 Displayport Adapter, 30-day money back guarantee & 18-month worry-free, our friendly customer service.

New (13) from \$16.75 - \$Prime
Report incorrect product information.



Roll over image to zoom in



Red Hat Instructor Resources



MOJO

Internal repository of knowledge and other information. Access is granted to MOJO upon obtaining a Red Hat e-mail address and setting up a pin and token for access to Red Hat resources.



JIRA

Repository of curriculum bugs and instructor tips for current courses and courses that are under development. Instructors should post bugs against course materials and classroom setup along with the resolutions (if applicable). Access obtained when completing the RHCI course or by requesting from your TQM.



RHLC - Red Hat Learning Community

Knowledge sharing location for discussions around general open source and Red Hat Technologies. Available with a valid RHN ID. Instructors will need to request instructor access to RHLC to access the instructor forums and News from Red Hat Tower.



Instructor Central

Repository for all foundation classroom setup materials, additional materials and information such as classroom hardware requirements, and other resources. Also contains additional exam related content for downloading with the ICRM tool(s).

Instructor Github/Gitlab Repository



Hopefully coming soon will be a **git** repository (either Gitlab or Github) that will be a private repository for instructors to share information, handouts, playbooks and notes



Service Delivery Managers

Rajesh (Raj) Mediratta- NIIT Delivery Manager
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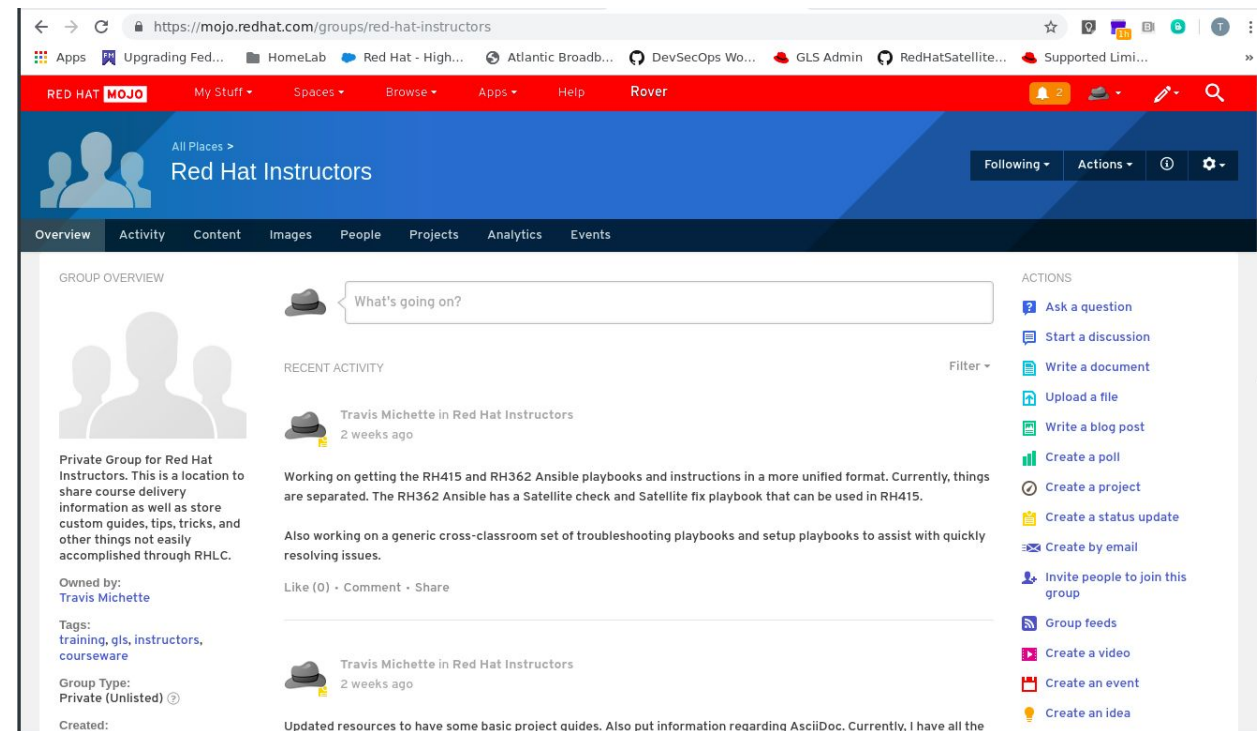
Geoff Gardner - Red Hat Service Delivery Manager
ggardner@redhat.com



NA GLS Instructor MOJO Site (Private Group)

- Closed Group (Access granted by permission - Travis Michette)
- Frequently updated with teaching guides
- Location to post playbooks and resource files for various courses
- Each course is a separate internal project
- Allows more content than what is available from RHLC
- Links to other resources such as business cards and useful collateral

<https://mojo.redhat.com/groups/red-hat-instructors>



The screenshot displays the 'Red Hat Instructors' group page on the Mojo platform. The page features a navigation bar at the top with options like 'My Stuff', 'Spaces', 'Browse', 'Apps', 'Help', and 'Rover'. Below the navigation bar, the group name 'Red Hat Instructors' is prominently displayed. The main content area is divided into sections: 'GROUP OVERVIEW' which includes a description of the group as a private space for sharing course delivery information, tags such as 'training, gls, instructors, courseware', and the group type 'Private (Unlisted)'; 'RECENT ACTIVITY' which shows posts from Travis Michette regarding Ansible playbooks; and an 'ACTIONS' sidebar on the right with options like 'Ask a question', 'Start a discussion', 'Write a document', 'Upload a file', 'Write a blog post', 'Create a poll', 'Create a project', 'Create a status update', 'Create by email', 'Invite people to join this group', 'Group feeds', 'Create a video', 'Create an event', and 'Create an idea'.

LINK

[MOJO - Red Hat Instructors Group](https://mojo.redhat.com/groups/red-hat-instructors)

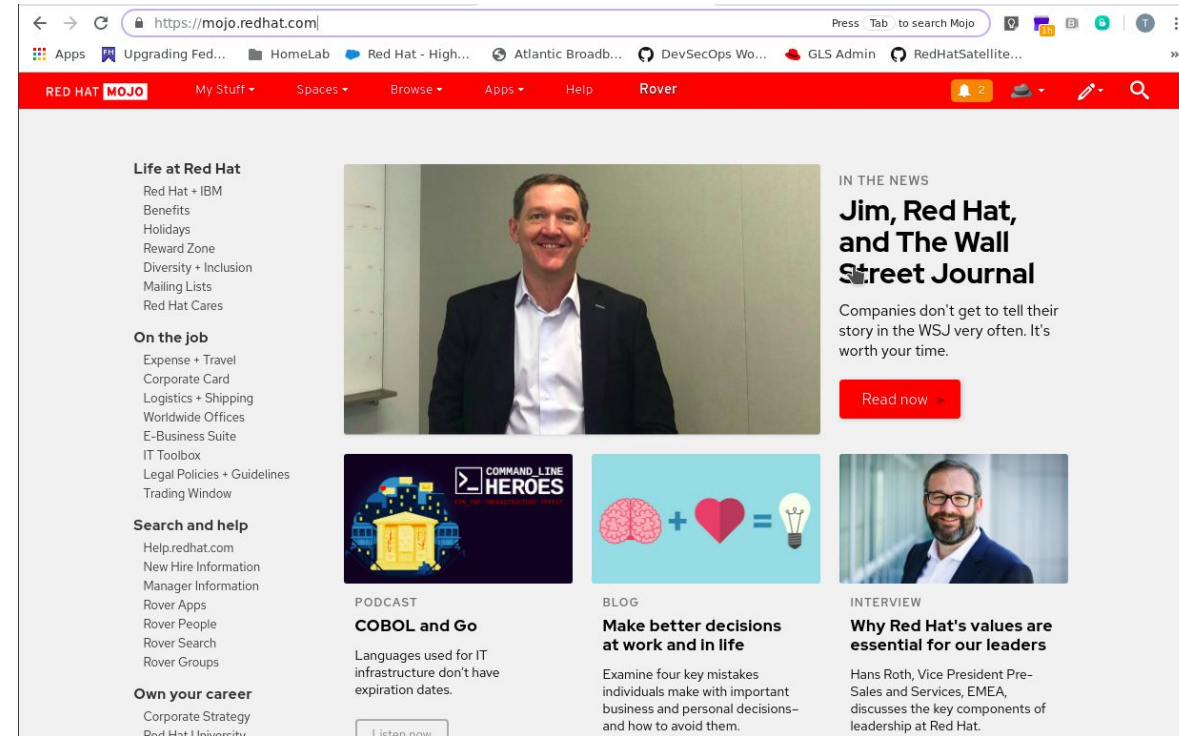
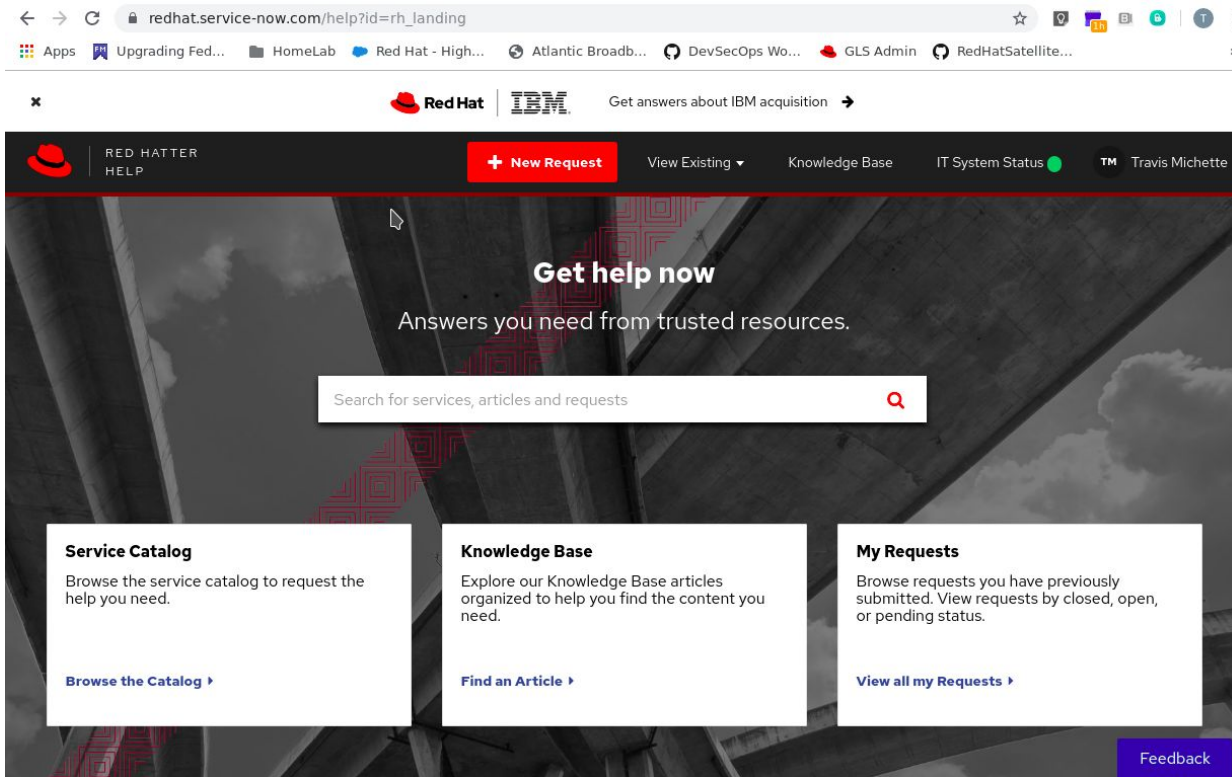


MOJO Instructor Group Demo



Resetting Passwords & Tokens

Service Desk / MOJO (Requires SSO - Token+Pin)



LINK - Service Desk
[Red Hatter Help](#)

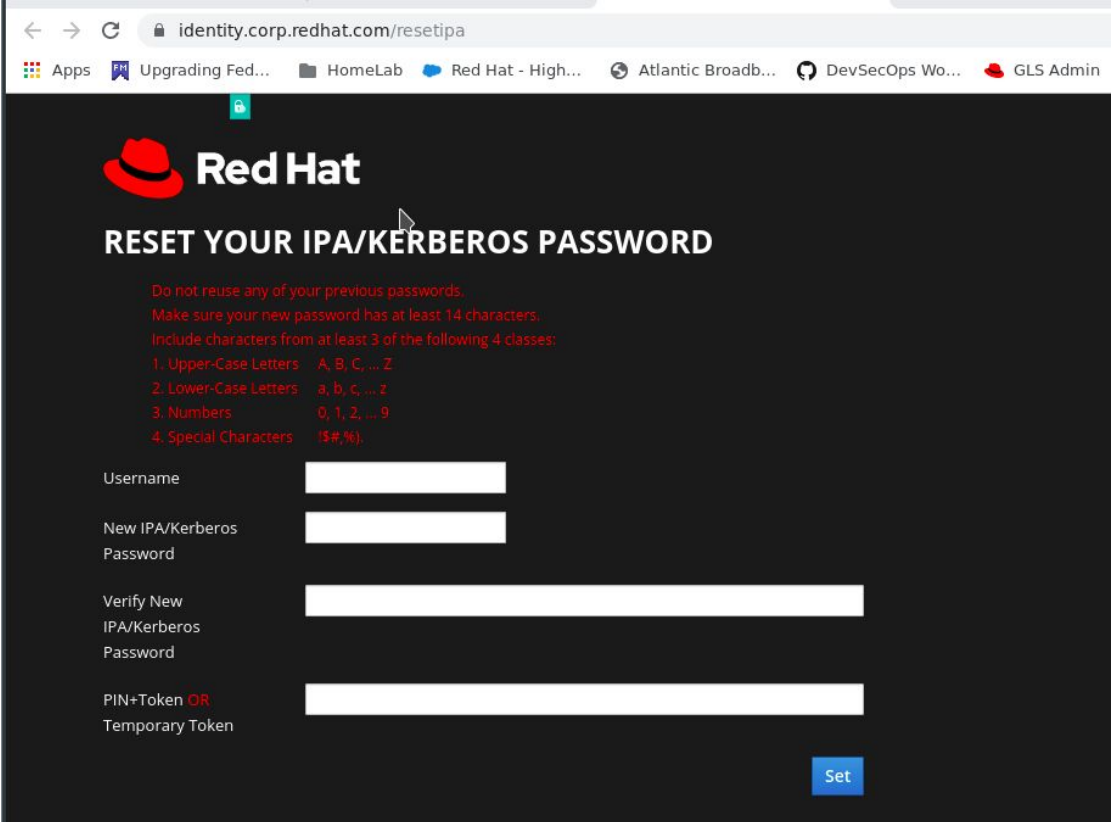
LINK - MOJO
[Red Hat MOJO Page](#)



Resetting Your Kerberos Password (Be on VPN)

SSO PIN+Token Required

- <https://identity.corp.redhat.com/resetipa>



The screenshot shows a web browser window with the URL `identity.corp.redhat.com/resetipa`. The page features the Red Hat logo and the heading "RESET YOUR IPA/KERBEROS PASSWORD". Below the heading, there are instructions: "Do not reuse any of your previous passwords. Make sure your new password has at least 14 characters. Include characters from at least 3 of the following 4 classes: 1. Upper-Case Letters A, B, C, ... Z; 2. Lower-Case Letters a, b, c, ... z; 3. Numbers 0, 1, 2, ... 9; 4. Special Characters !\$#,%". The form includes input fields for "Username", "New IPA/Kerberos Password", "Verify New IPA/Kerberos Password", and "PIN+Token OR Temporary Token". A blue "Set" button is located at the bottom right of the form.

LINK

[Service Desk - Kerberos Password Reset](#)

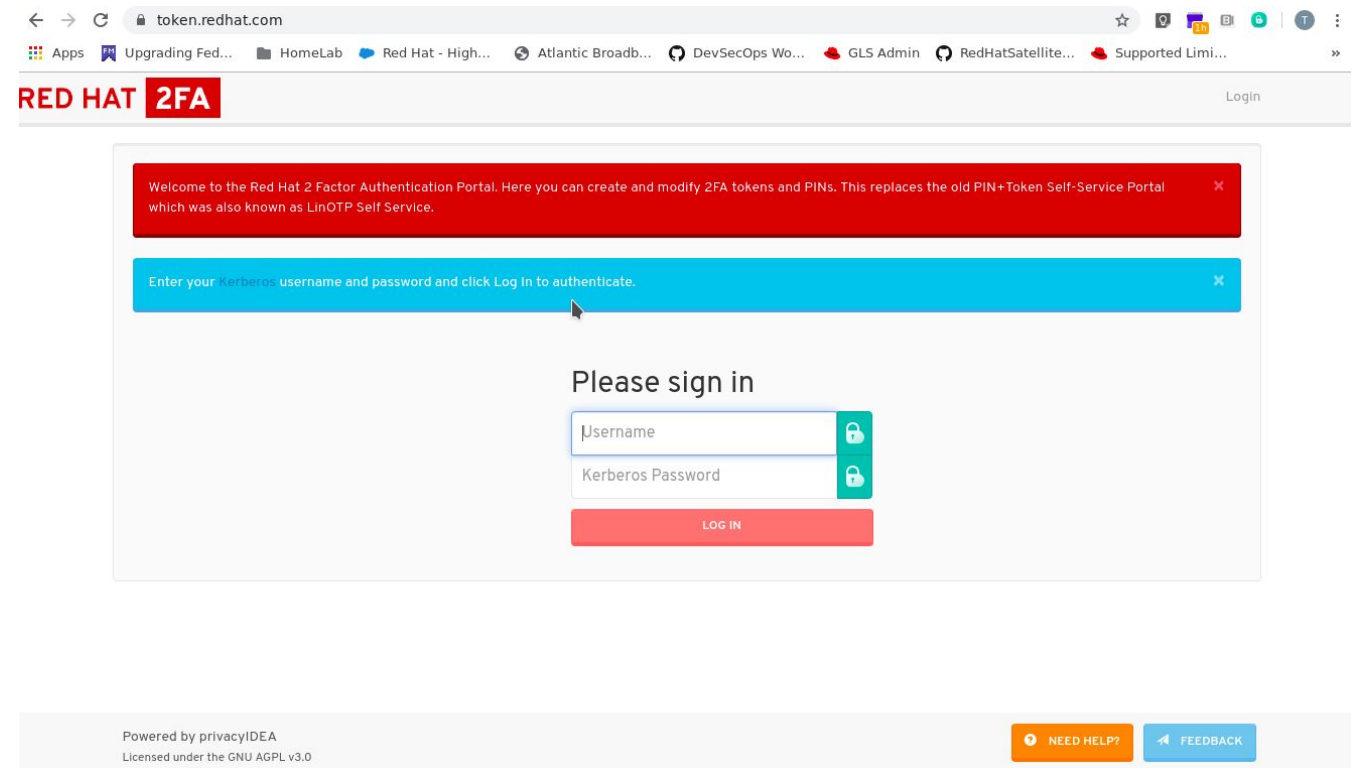


Resetting a Token Code (Username / Password)

- https://redhat.service-now.com/help?id=kb_article&sys_id=9da17fd9f0a88100086dee52c36c9188

Token Reset (Self-Service)

- <https://token.redhat.com/>



LINK: (Requires RH SSO)

<https://redhat.service-now.com>



Using JIRA Effectively

Accessing JIRA

- Report curriculum bugs and provide possible solutions and tips to reproduce issues
 - If a solution has been discovered update the JIRA ticket with the resolution
- Report issues with foundation and classroom setup. Capture logs/screenshots and provide detailed information
- Possibly cross-copy the issue with RHLC to reach out to wider audience and include the link to the JIRA ticket that has been filed
- Create and provide instructor tips for various courses

<https://training-feedback.redhat.com/>

training-feedback.redhat.com/plugins/servlet/samlSso?redirectTo=%2Fplugins%2Fservlet%2FsamlSso%3FredirectTo%3D%2...

redhat Red Hat Training Feedback Tracker Dashboards Create Search

Login to Jira

For authentication to access the Jira Issue Tracker use the link below and provide your RHNID (access.redhat.com login) and supplied password.

[Login to Jira with RHNID and corresponding password.](#)

What should I do if i can not login to Jira?

If you can not login with the SAML authentication, please contact the corresponding administrator.

For adjusting your account login please send an email with the following content:

- Use the E-Mail subject "Jira Account"
- Current Username for Jira login
- Your RHNID (login for <https://access.redhat.com>)

Send the E-Mail to the corresponding person, depending on your role within Red Hat Training:

My Role in Red Hat	Administrator (E-Mail Contact)
Instructor	Florian Brand (fbrand@redhat.com)
Curriculum Team	
Learning Experience Team	Rudolf Kastl (rkastl@redhat.com)
Content Team	

Can I login with my old Jira account?

As a temporary workaround you may login with your old Jira credentials by using the link below, until your login name in Jira has been adjusted to match your RHNID:

[Click here to login with your old username and password](#)

LINK: (Requires JIRA Account)

[JIRA GLS Curriculum Tickets](#)



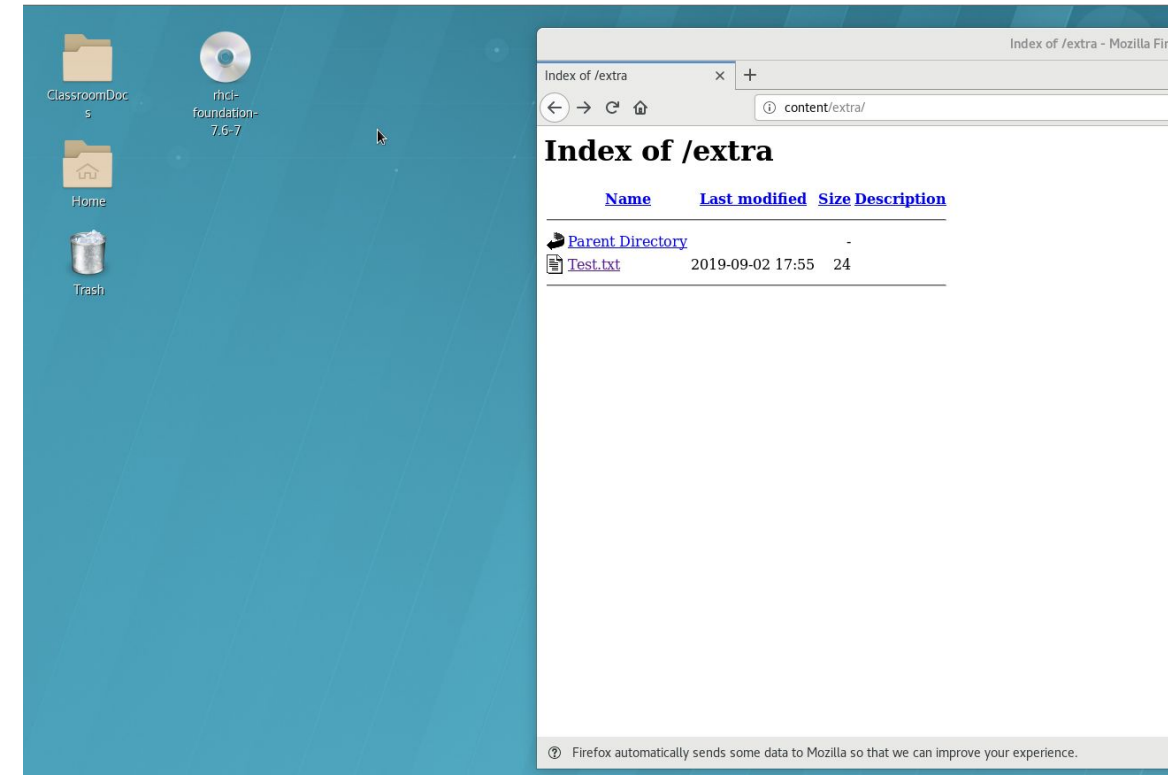
JIRA Demo



Classroom Setup & Delivery Hacks

Providing Additional Information / Handouts / Content

- Create an additional directory and place files in **/content** on the Foundation machine. As an example, the directory could be **/content/extra** and the shortened URL for access would be <http://content/extra>
- Good thing to have would be PDF of registration information (how to setup RHN / Red Hat account.
- PDF describing RHLC process
- Ability to send out the URL for the new course registration / survey process (more on this for Ansible section)



Using Ansible for Deployment and Management (CLEv2)

- Install Ansible (definitely available for RHEL8)
 - Confirmed available for new foundation systems (RHEL 7.6).
- Pull down Ansible playbooks and inventory.
 - Being maintained currently on MOJO or Travis's people page
- Modify inventory and host file information as needed.
- Modify playbooks as needed.
 - DeploySSH (used for Foundation0)
 - WorkstationFW (used for Workstation)

```
kiosk@foundation0:~  
File Edit View Search Terminal Help  
[kiosk@foundation0 ~]$ ls  
Ansible Downloads  
ClassPrep.txt History-7.x.txt  
ClassRHAPrep.txt History.txt  
ClassroomReset.txt Music  
ClassroomSetup-RH415.txt Pictures  
ClassroomSetup.txt Public  
ClassroomTroubleshooting.txt RH415_Ansible.tgz  
Desktop survey  
DHCP-ranges.txt-foundation0 Templates  
Documents Videos  
[kiosk@foundation0 ~]$
```

LINK

[MOJO - Red Hat Instructors Group](#)

LINK: (Red Hat People Page)

[Red Hat People Page - Travis Michette](#)



Testing Classroom / Exam Environments with Nested VMs

- Nested KVM Virtualization
 - `/etc/modprobe.d/kvm.conf`
- Modify the `/etc/dhcp/dhcpd.conf` file to **Allow** “virtual” members
- Use **virtio** but may also need to be using the **Intel e1000e** driver for the network to be detected as a Gigabit NIC (especially for Exam testing)

```
# cat /etc/modprobe.d/kvm.conf
options kvm_intel nested=1
```

```
# Assign IPs 201-220 to PXE clients
pool {
    allow members of "virtual";
    allow members of "pxeclients";
    default-lease-time 120;
    max-lease-time 180;
    range 172.25.254.201 172.25.254.220;
}
```

Virtual Network Interface

Network source: Virtual network 'InstructorNet' : Isolated network, internal and host routing only

Device model: e1000e

MAC address: 52:54:00:1a:fb:8e

IP address: Unknown

Link state: active



RHEL 8 Classroom Hacks

- RHEL8 Foundation uses Wayland
 - **rht-switchgnome** will turn on/off Education Group under “All Applications”
 - Screen sharing in BlueJeans doesn’t work well with Wayland, need to switch back
- PDM (Parallel Download Manager) available for RHEL8
- **usbmkpart** (new) used to create GPT/MSDOS partitions
- **usbmkmenu** (new) available to make GPT/uEFI boot menu
- New **rht-usb** commands
 - RHEL7 uses Python 2
 - RHEL8 uses Python 3
- RHEL8 GNOME Menus and Screen Sizing
 - # yum install gnome-tweaks
 - Open **Tweaks => Extensions** and enable:
 - Desktop icons
 - Applications menu
 - Window list
 - Open **Tweaks => Windowss** and enable:
 - Maximize
 - Minimize
- ICRM updates



Remote Access to Student VMS

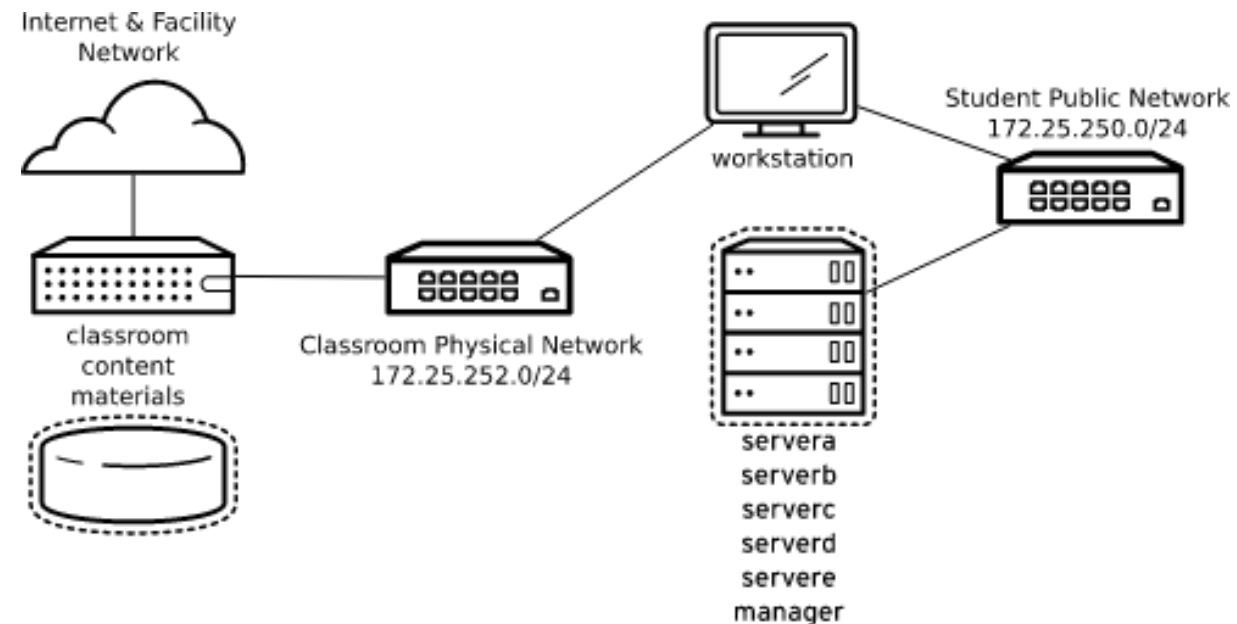
Accessing Student VMs (RHEL7 Foundation Systems CLEv2)

- **Workstation** VM must be up and running as it provides all networking services to student VMs
- SSH will work from **Foundation0** to **FoundationX** or **WorkstationX** directly
- There is no access to student systems directly from **FoundationX** or the **Classroom** server
- SSH keys are setup along with **/etc/hosts** and **/home/kiosk/.ssh/config** files so that SSH is seamless for the **kiosk** used from **Foundation0** to access systems logging in with the key as the **root** user
- Problem: How to access student VMs from **Foundation0**



Foundation on RHEL8/RHEL7 with a CLEv2 (RHEL7) Classroom Deployment

- **Workstation** VM must be up and running as it provides all networking services to student VMs
- The **workstation** VM allows connectivity to DNS and routing and allows students to access systems by **servera, serverb, etc.** based on short names both from **FoundationX** or **WorkstationX** without requiring the **X** to be specified
- Currently, the Ansible playbooks created on the MOJO site are only for the CLEv2 (RHEL7) classrooms and are setup to be run from **Foundation0** and can access **WorkstationX** and student remote systems like **Servera1**.



Accessing Student VMs (RHEL8 Foundation Systems CLEv3)

- The **bastion** VM allows connectivity through port forwarding to student VMs.
- Overview of CLEv3 and the RHEL8 UCF classroom release provided by Rob Locke during the May Instructor Series Master call.
- [RHLC UCF7 / CLEv3 Discussion](#)
- [RHEL8 ILT Classroom Rollout](#)
- Use `ssh -p <53000 + end_IP> bastion#` to access the machine with the end_IP specified on **Foundation#**.

SSH Backdoor

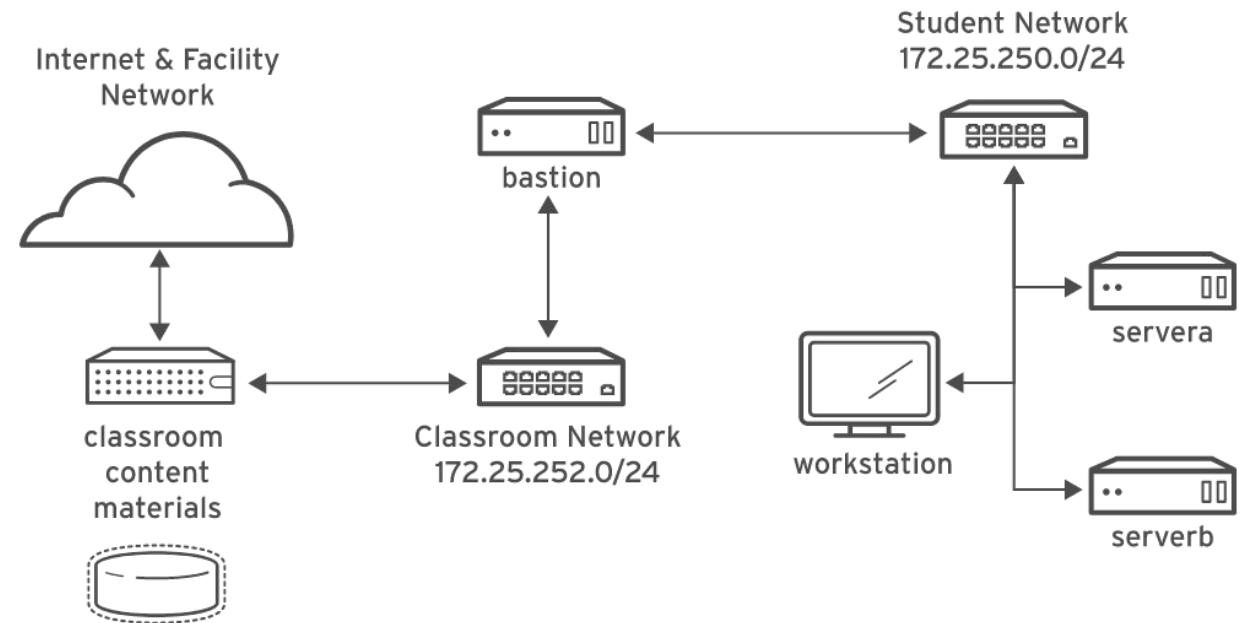
```
# ssh -p 53009 b7
```

Will SSH to port 53009 on **Bastion7** which will in turn allow you to connect to the **172.25.250.9** on the other side of the **Bastion7** host.



Foundation on RHEL8 with a CLEv3 (RHEL8) Classroom Deployment

- **Bastion** VM must be up and running as it provides all networking services to student VMs (including workstation)
- The **bastion** VM allows connectivity through port forwarding to student VMs.
- Currently, the Ansible playbooks created on the MOJO site are only for the CLEv2 (RHEL7) classrooms and do not work on a RHEL8 classroom.



Open Discussion Items



Thank you

Red Hat is the world's leading provider of enterprise open source software solutions. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500.



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<https://www.facebook.com/RedHatServices>



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