NETLAB Academy Edition®

Rich Weeks
NDG

NETLAB Academy Edition is a registered trademark of the Network Development Group Inc.
NETLAB Academy Edition® provides remote access to Cisco Networking Academy Program lab equipment and curriculum. To access, you need a user ID and password, assigned to you by your instructor or local system administrator.

**Personal Firewall** software can interfere with NETLAB. If you are having login problems or other issues, please disable your personal firewall to see if that fixes the problem. If so, adjust your firewall software accordingly.

**Required Browser Plugins and Options**
- Java*: Enabled (IE users see below)
- JavaScript: Enabled
- Cookies: Enabled (for this site)
- Popup Windows: Enabled (disable popup blockers for this site)
Agenda – NETLAB Academy Edition®

• Overview of NETLAB Academy Edition®

• Review remote PC enabled Pods
  Over the last 6 months several new pods have been released

• New website to advertise systems around the world
  Academies with NETLAB AE can advertise available equipment resources
  Remote Academies can contact hosting Academies

• Discuss the next software release (4.0)
  Addition of features to assist with resource sharing
  The ability to restrict pod access by groups called communities
  Many more new upgrades

• Glimpse at future software upgrades
Overview - NETLAB Academy Edition®

• NETLAB is a server appliance shipped to the Academy
  Includes all the software required to host real gear on the Internet
  Easy to setup, use, and maintain
  Instructions, documentation and support provided by NDG
  Scheduler and automation manage equipment access

• Academy equipment can be accessed via the Internet
  Increase the number of real gear lab sessions
  Share equipment resources with other Academies
  Centrally host equipment at one Academy for many Academies
What does NETLAB AE provide Academies?

- Remote access to lab equipment
  - Turnkey solution for hosting lab equipment
  - All the software tools you need integrated onto one server
  - Worldwide Scheduler
- Classroom lecture tool
  - Telnet sharing and other software tools enhance Instructor Led Training
- History of student work
- Lab management
  - Automates routine tasks: lab setup, password recovery, erased flash recovery, etc.
  - Clean-up after students and prepares equipment for the next reservation
- Curriculum server
How NETLAB AE Works

Reseller ships NETLAB AE to the Cisco Networking Academy

Academy installs NETLAB at the school
After Setup Equipment is Remotely Accessible
Remotely Accessing Equipment

No NEW Firewall Holes

NETLAB+ Remote PC Java Viewer

NETLAB+ Remote PC Software

VNC (keyboard + video + mouse)

API (status + reboot now)

CONTROL PLANE

POD

TCP 23

UDP 5900

TCP 5900

E0

E1

NETLAB+ Remote PC Software
NETLAB System Administration

• GUI administration
  Easy to manage and operate
• Lowers skills required to admin
• NDG updates every system
  Worldwide distribution of upgrades
  Addition of tools as needed
  New topologies as needed
NETLAB System Administration

- Plug and play setup
- Includes all required software
- “Cook book” instructions
- NDG supports each admin
NETLAB AE Topology – Basic Router
NETLAB AE Topology - Basic Switch Pod
NETLAB AE Topology – Advanced Router
NETLAB AE – Advanced Switch Pod
Version 3.7 Security Router Pod
Why NETLAB AE?

• Increased lab time for students
  Lab equipment becomes accessible from any Internet enabled PC
  Access from home, library, remote campus, etc.

• Significant equipment sharing with other Academies
  Equipment without NETLAB is typically used a few hours a day
  With NETLAB the equipment can be used around the clock
  License allows sharing with any Cisco Networking Academy

• Maximize investment in lab equipment (ROI)
  Increase the use of available equipment
  Helping Academies that cannot afford equipment or upgrades
  Cost recovery (following the Academy guidelines)
How has NETLAB AE Been Used

- As a tool to provide students around the clock lab access
  - CATCs often purchase to share with Regional and Local Academies
  - Regionals or School Districts purchase to share among several Academies
  - To support Academies within a specific area: country, province, state, etc.

- For training instructors
  - Bridge training to upgrade Instructor skills
  - Equipment in one country, but trainers are traveling to students around the world

- Blended Distance Learning
  - At US Academy conferences presenters highlighted NETLAB as key to success
NETLAB AE Product Summary

• Solves equipment scaling challenges
  A small investment can be stretched to thousands
  Can stretch equipment dollars among many Academies
    One new lab pod can be shared by many instead of one Academy
    High end equipment can be shared by many Academies
    Each NETLAB AE system can support 10 pods for 87,600 lab hours

• Sustainability
  Customers receive upgrades to keep pace with program changes
    New curriculum, new topologies, new features, documentation, and support
  Secondary values: serves curriculum, archives of lab work, etc.
  Creates an environment that is easier to manage for the instructors
NETLAB Academy Edition
Product Enhancements
Update Admin Profile to Receive Emails

Please keep your technical and business contact information up to date so that NDG can contact you if necessary.

<table>
<thead>
<tr>
<th>CONTACT INFORMATION</th>
<th>Technical Contact</th>
<th>Business Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Name</td>
<td>Kaan Uzun</td>
<td>Rich Weeks</td>
</tr>
<tr>
<td>E-mail Address</td>
<td><a href="mailto:kuzun@netdevgroup.org">kuzun@netdevgroup.org</a></td>
<td><a href="mailto:richweeks@netdevgroup.org">richweeks@netdevgroup.org</a></td>
</tr>
<tr>
<td>Phone Number</td>
<td>919-990-9070</td>
<td>919-990-9070</td>
</tr>
<tr>
<td>AOL Instant Messenger ID</td>
<td>kaan8ndg</td>
<td>rweeksatndg</td>
</tr>
<tr>
<td>Receive Alerts by E-mail</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Receive NETLAB+ News</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Back to Admin  Update Contact Info  Change Admin Password
Release Notes

http://www.netdevgroup.com/release-notes.htm

Release Notes

3.7.5a

New features:

Catalyst 3560 lab device support.

Bug fixes:

#508: Cycling individual pods offline and online many times can cause incorrect temporary IP addresses to be used during pod boot and flash recovery. Pod test may fail on Ethernet test.

#509: E0 and E1 are reversed on R1 in Basic Switch Pod Version 2.

3.7.5

Beta release (sharing portal).

3.7.4

Released: December 2, 2005
NETLAB Academy Edition
Remote PC Enabled Pods
Remote PC’s

- Integrates with VMware GSX
- Virtual Remote Computers
  - Students can reconfigure PC’s
  - Allow administrative access
  - To meet lab requirements
  - Can return to original configuration
- Scheduler resets machines at the end of lab

- “How to” documentation
  - Visit www.netdevgroup.com
  - List of Benefits and Requirements
  - Technical Specifications are covered
  - Remote PC Guide explains setup
Benefits and Requirements

Benefits

- The keyboard, video and mouse of each VM can be accessed without a backdoor network on the virtual machine.
- All access to a virtual machine is proxied through NETLAB+ and the VMware GSX host operating system, similar to KVM-over-IP hardware solutions.
- You may run any guest operating system supported by VMware GSX on a virtual machine.
- NETLAB+ supports revert to snapshot. Changes to a virtual machine can be discarded at the end of a lab reservation, returning the PC to a clean state.
- Users can have administrative privileges on a virtual machine without risk.
- NETLAB+ integrates with the VMware API. Users may power on, power off, and revert to clean state (scrub) from the NETLAB+ web interface.
- Users can shutdown and reboot a virtual machine during the lab, without losing changes.
- Virtual network interfaces on a virtual machine can be tied to real networks in the lab (requires 802.1q NIC on the VMware host).
- Administrators of the GSX server and virtual machines can access, update, and maintain the systems remotely.

VMware GSX Server Requirements

Remote PCs are implemented on one or more VMware GSX servers (separate from the NETLAB+ server). VMware GSX systems meeting the following are supported by NDG.

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Processor</th>
<th>Memory</th>
<th>Network Interfaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentium 4 - 3.0GHz (or faster)</td>
<td>1.9GB minimum (see guidelines below)</td>
<td>Dual Intel® 802.1q Adapters (recommended)</td>
<td></td>
</tr>
</tbody>
</table>
Technical Specifications

How Many VMware GSX Servers Do I Need?

The number of VMware GSX servers and memory requirements vary based on the lab topologies and number of pods you want to implement.

Step 1. Carefully study the lab topologies and determine the number of virtual switches and virtual machines required by each pod. The requirements for each pod shown below assume that you are implementing all PCs supported by the pod.

Please note only these Academy Edition lab topologies support virtual machines.

<table>
<thead>
<tr>
<th>Topology</th>
<th>Maximum Virtual Switches (VMMet)</th>
<th>Maximum Virtual Machines</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIC ROUTER POD v2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3 Routers PC Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASIC SWITCH POD v2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>1 Router 2 Switches PC Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NETWORK SECURITY POD (2.0)</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>SECURITY ROUTER POD</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>2 Firewall PCs 6 Servers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SECURITY PIX POD</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>2 PIX Firewalls PCs 8 Servers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Step 2. Add up the number of virtual switches and virtual machines used by each pod you are implementing. For example:
Basic Router Pod

In the past pods only had routers and switches.
Basic Router Pod Version 2
Basic Switch Pod
Basic Switch Pod Version 2
Security Router Pod
Security Pix Pod
New – Security Pod Combines Both Pods
Coming Soon - New DSL Pod
For a list of Topologies

- [http://www.netdevgroup.com/ae/topologies.htm](http://www.netdevgroup.com/ae/topologies.htm)
<table>
<thead>
<tr>
<th>Course</th>
<th>Lab</th>
<th>Description</th>
<th>BRPv1</th>
<th>BRPv2</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCNA2</td>
<td>2.2.1</td>
<td>Router Configuration Using Setup</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs not required</td>
</tr>
<tr>
<td>CCNA2</td>
<td>2.2.9</td>
<td>Command Line Fundamentals</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs not required</td>
</tr>
<tr>
<td>CCNA2</td>
<td>3.1.2</td>
<td>Command Modes and Router Identification</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs not required</td>
</tr>
<tr>
<td>CCNA2</td>
<td>3.1.3</td>
<td>Configuring Router Passwords</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs not required</td>
</tr>
<tr>
<td>CCNA2</td>
<td>3.1.4</td>
<td>Using Router show Commands</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs not required</td>
</tr>
<tr>
<td>CCNA2</td>
<td>3.1.5</td>
<td>Configuring a Serial Interface</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs not required</td>
</tr>
<tr>
<td>CCNA2</td>
<td>3.1.6</td>
<td>Making Configuration Changes</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs not required</td>
</tr>
<tr>
<td>CCNA2</td>
<td>3.1.7</td>
<td>Configuring an Ethernet Interface</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs not required</td>
</tr>
<tr>
<td>CCNA2</td>
<td>3.2.3</td>
<td>Configuring Interface Descriptions</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs not required</td>
</tr>
<tr>
<td>CCNA2</td>
<td>3.2.5</td>
<td>Configuring Message-of-the-Day (MOTD)</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs not required</td>
</tr>
<tr>
<td>CCNA2</td>
<td>3.2.7</td>
<td>Configuring Host Tables</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs not required</td>
</tr>
<tr>
<td>CCNA2</td>
<td>4.1.6</td>
<td>Using CDP Commands</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs not required</td>
</tr>
<tr>
<td>CCNA2</td>
<td>4.2.2</td>
<td>Establishing and Verifying a Telnet Connection</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs not required</td>
</tr>
<tr>
<td>CCNA2</td>
<td>4.2.3</td>
<td>Suspending and Disconnecting Telnet Sessions</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs not required</td>
</tr>
<tr>
<td>CCNA2</td>
<td>4.2.4</td>
<td>Advanced Telnet Operations</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs recommended</td>
</tr>
<tr>
<td>CCNA2</td>
<td>4.2.5a</td>
<td>Connectivity Tests - Ping</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs supported using BRP V2</td>
</tr>
<tr>
<td>CCNA2</td>
<td>4.2.5b</td>
<td>Connectivity Tests - Traceroute</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs supported using BRP V2</td>
</tr>
<tr>
<td>CCNA2</td>
<td>4.2.6</td>
<td>Troubleshooting IP Address Issues</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs supported using BRP V2</td>
</tr>
<tr>
<td>CCNA2</td>
<td>5.1.3</td>
<td>Using the Boot System Command</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs not required</td>
</tr>
<tr>
<td>CCNA2</td>
<td>5.1.5</td>
<td>Troubleshooting Configuration Register Boot Problems</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs not required</td>
</tr>
<tr>
<td>CCNA2</td>
<td>5.2.3</td>
<td>Managing Configuration Files with TFTP</td>
<td>No</td>
<td>Yes</td>
<td>PCs and TFTP server software required</td>
</tr>
<tr>
<td>CCNA2</td>
<td>5.2.5</td>
<td>Managing IOS Images with TFTP</td>
<td>No</td>
<td>No</td>
<td>lab not recommended and not listed</td>
</tr>
<tr>
<td>CCNA2</td>
<td>5.2.6a</td>
<td>Password Recovery Procedures</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs recommended</td>
</tr>
<tr>
<td>CCNA2</td>
<td>6.1.6</td>
<td>Configuring Static Routes</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs not required</td>
</tr>
<tr>
<td>CCNA2</td>
<td>7.2.2</td>
<td>Configuring RIP</td>
<td>Yes</td>
<td>Yes</td>
<td>PCs recommended</td>
</tr>
</tbody>
</table>
NETLAB Academy Edition
Sharing Portal
## NETLAB AE Web Portal

### Academy Sharing Portal

The sharing portal allows Academies hosting NETLABAE to advertise system access to potential guest Academies.

The NETLAB Academy Edition license allows Cisco Networking Academies to share system access. You can also charge a cost recovery fee (within the guidelines set by the Academy program).

### Hosting Academies

The Academies below have indicated that they are willing to share time on their NETLABAE system. Please direct inquiries to the contacts listed below.

<table>
<thead>
<tr>
<th>Academy Name</th>
<th>Pod Types Available</th>
<th>Contact Information</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budapest Tech</td>
<td>Basic Router Pod v1 (no PCs)</td>
<td>Gyula Fehér <a href="mailto:feher.gyula@uni-bmf.hu">feher.gyula@uni-bmf.hu</a></td>
<td>We are looking to exchange time with other Academies that own NETLABAE</td>
</tr>
<tr>
<td></td>
<td>Basic Router Pod v2 (with remote PCs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Basic Switch Pod v1 (no PCs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Basic Switch Pod v2 (with remote PCs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advanced Router Pod</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Network Security Pod (2.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Security Router Pod</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Security PIX Pod</td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Florida Community College CACF</td>
<td>Basic Router Pod v2 (with remote PCs)</td>
<td>Tom McGee <a href="mailto:tommcgee@gmail.com">tommcgee@gmail.com</a></td>
<td>Our CACF will share with all Academies based on availability. Upon updating Netlab to have the ability to have remote PCs, there will be a small cost recovery charge</td>
</tr>
<tr>
<td></td>
<td>Basic Switch Pod v2 (with remote PCs)</td>
<td>220-450-5555</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advanced Router Pod</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rostock University</td>
<td>Basic Router Pod v1 (no PCs)</td>
<td>Thomas Vergin <a href="mailto:thomas.vergin@uni-rostock.de">thomas.vergin@uni-rostock.de</a></td>
<td>We will share with all Academies which want to use this service. We charge a small cost recovery fee that is based on the total number of participating Academies. Our goal is to keep the cost below 400 EUR per year.</td>
</tr>
<tr>
<td></td>
<td>Basic Switch Pod v1 (no PCs)</td>
<td>+49 381 499 7020</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advanced Router Pod</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Central England</td>
<td>Basic Router Pod v1 (no PCs)</td>
<td>Richard Smith</td>
<td>At the current time these pods are shared free of</td>
</tr>
</tbody>
</table>
What is the NETLAB AE Web Portal?

• A website listing available NETLAB AE systems
• Optional service, where you can advertise your system
• Your annual support services must be current
• You determine your sharing model
• Cost recovery is allowed
• Examples of how you might share:
  “We share with Academies within our Academy tree”
  “We exchange time with NETLAB AE Academies”
  “We charge a small cost recovery fee to recoup our costs”
Goals of the Web Portal

• Assist Academies that cannot afford NETLAB AE
  Help Academies that cannot acquire equipment
  Help Academies that cannot upgrade equipment
  Support Blended Distance Learning
• Encourage worldwide sharing of equipment resources
  Take advantage around the clock availability
  Many Academies want to exchange NETLAB AE time
• Create a listing of available NETLAB AE systems
  Allow Academies that want to host to advertise their systems
• Help NETLAB AE hosting Academies recoup costs
How to Advertise

- Login as Admin
- Select Sharing Portal
- Complete questionnaire
Web Portal Questionnaire

- Select yes to advertise
- Select pod types you intend to share

The NETLAB Academy Edition license allows your Academy to share access to your system with other Cisco Networking Academies. You can also charge cost recovery (within the guidelines of the Cisco Networking Academy Program).

NDG sponsors a sharing portal that allows hosting Academies to advertise system availability to potential guest Academies. This optional service is provided at no additional cost to NETLAB4 customers with a current maintenance agreement.

To advertise on the portal, please complete the following form and click the Update Settings button.

1. Do you want to advertise the availability of your system(s) to other Academies using the NETLAB Academy Edition sharing portal?
   - Yes  [ ]
   - No   [ ]

2. What pod types are you willing to share (check all that apply)?
   - Basic Router Pod v1 (no PCs)
   - Basic Router Pod v2 (with remote PCs)
   - Basic Switch Pod v1 (no PCs)
   - Basic Switch Pod v2 (with remote PCs)
   - Advanced Router Pod
   - Advanced Switch Pod
   - Network Security Pod (2.0)
   - Security Router Pod
   - Security PIX Pod
   - CCNA 2.1 5+Router Pod

2006 AVP template © 2006 Cisco Systems, Inc. All rights reserved.
Web Portal Questionnaire

- Type Academy name
- List system contact
  - Email
  - Phone number
- Provide additional info.
  - Freeform text to describe your sharing model
- Notify Cisco AMs / TMs
  - Willingness to help challenged Academies
  - Info is posted to Cisco
- Select “Submit”
Information is posted on the Portal

Academy Sharing Portal

The sharing portal allows Academies hosting NETLABAE to advertise system access to potential guest Academies.

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<td>220-630-0586</td>
<td></td>
</tr>
<tr>
<td>Rostock University</td>
<td>Basic Router Pod v1 (no PCs)</td>
<td>Thomas Vergin <a href="mailto:thomas.verin@uni-rostock.de">thomas.verin@uni-rostock.de</a></td>
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<tr>
<td></td>
<td>Basic Switch Pod v1 (no PCs)</td>
<td>49 281 486 9333</td>
<td></td>
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</tbody>
</table>
If Your Academy Needs Access to a System Visit: http://www.netdevgroup.com/ae/sharing
NETLAB Academy Edition
Version 4.0
Goals – NETLAB AE Version 4.0

• Addition of features to assist with resource sharing
• Enable sharing while assuring control and security
• Ability to define groups with common access needs
  - New concept called communities
• Tools to setup pod restrictions by communities
• Ability to delegate account management
  - You can assign account creation to a community leader
• News and announcements at the community level
Release Notes for NETLAB Academy Edition

Version 4.0 Beta

Updated: 2006-02-20

NETLAB AE Admin – New Icons

- Administrator Profile
- Manage Communities
- Manage Accounts
- Manage Classes
- System Banners
- Enable / Disable User Logins
- Equipment Pods
- Control Devices
- IOS & PIX Images
- Pod Rules
- Test Outbound Access
- Disk Status
- Add / Remove Curriculum
- Academy Sharing Portal
Communities

A *community* is a distinct group of instructors, students, and classes. Instructors may only manage students and classes within their own community (unless they are granted system-wide privileges by the administrator).

Communities are useful when more than one logical group of users share a system.

**COMMUNITY LIST**

<table>
<thead>
<tr>
<th>Go</th>
<th>ID</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>default</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>NDG</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>XYZ Technical College</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Acme University</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Remote Academy APAC</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Remote Academy EU</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Remote Academy Central America</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>ABC Technical College</td>
<td></td>
</tr>
</tbody>
</table>

- Communities are useful when more than one logical group of users share a system.
- Blocks of time on equipment pods may be allocated by community to ensure that each community receives a predetermined share of lab resources.
**Equipment Access Rules**

Set access rules by community

Pod rules can be established to restrict equipment pod access by community and time of day. Click on the help link for a complete description.

### Pod Rules

<table>
<thead>
<tr>
<th>GO</th>
<th>RULE #</th>
<th>POD</th>
<th>COMMUNITY</th>
<th>DAYS</th>
<th>TIME ZONE</th>
<th>START</th>
<th>END</th>
<th>SCOPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>default</td>
<td>Mon</td>
<td>(GMT-05:00) Eastern Time (US &amp; Canada)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>XYZ College</td>
<td>Thu-Fri</td>
<td>(GMT-05:00) Eastern Time (US &amp; Canada)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(GMT-05:00) Eastern Time (US &amp; Canada)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(GMT-05:00) Eastern Time (US &amp; Canada)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(GMT-05:00) Eastern Time (US &amp; Canada)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(GMT-05:00) Eastern Time (US &amp; Canada)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Add Rule* | *Back to Admin*
Setting Equipment Pod Rules

Please see the help page for information about pod rules.
New Account Management Model
One interface to manage both students and instructors

**Account Search**

<table>
<thead>
<tr>
<th>Community</th>
<th>(all)</th>
<th>Drop-down menu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show</td>
<td></td>
<td>all users, instructors only, students only, users in a specified class roster, users that have never logged in, users that have been inactive for 1 year or more</td>
</tr>
</tbody>
</table>

**Match User ID or Name**

(partial name OK, leave blank to match all)

**Buttons**

- Add Accounts
- Exit
Instructors Can Be Assigned Privilege Level

jdoe2006

Account Type: instructor
User ID: jdoe2006
Name: Jane Doe
E-mail Address: janedoe@fictionalname.org

Privileges:
- [ ] instructor
- [x] instructor with community management privileges
- [ ] instructor with system-wide management privileges

Logins:
- [x] enabled
- [ ] disabled

[Update] [Exit]
Edit Multiple Accounts at Once
Perform actions on multiple accounts

<table>
<thead>
<tr>
<th>User ID</th>
<th>Name</th>
<th>Type</th>
<th>Community</th>
<th>Classes</th>
<th>Last Login</th>
<th>Select</th>
</tr>
</thead>
<tbody>
<tr>
<td>antonio</td>
<td>Antonio Labman</td>
<td>student</td>
<td>NC State</td>
<td>never</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kclark</td>
<td>Kelly Clark</td>
<td>student</td>
<td>NC State</td>
<td>never</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>mnight</td>
<td>Mary Night</td>
<td>instructor</td>
<td>NC State</td>
<td>never</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>rloca5</td>
<td>Rich Lucas Student</td>
<td>student</td>
<td>NC State</td>
<td>never</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>rsmith</td>
<td>Rob Smith</td>
<td>student</td>
<td>NC State</td>
<td>never</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Perform Action on Selected Accounts:
- Add to Class
- Add to Class
- Reset Password
- Delete
Copy and Move Members of the Roster

This page allows you to remove, copy, or move members in this class roster. To perform one of these actions, select the members, the action to perform, then click the GO button.

<table>
<thead>
<tr>
<th>NAME</th>
<th>USER ID</th>
<th>TEAM</th>
<th>LAST LOGIN</th>
<th>SELECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ed Kress</td>
<td>ekress</td>
<td>A</td>
<td>never</td>
<td>✔</td>
</tr>
<tr>
<td>Hank Unlenbrauck</td>
<td>huhlenbrauck</td>
<td>A</td>
<td>never</td>
<td>✔</td>
</tr>
<tr>
<td>Max Lucas</td>
<td>max</td>
<td>A</td>
<td>Feb 7, 2006</td>
<td></td>
</tr>
<tr>
<td>Robert Porter</td>
<td>robert</td>
<td>A</td>
<td>never</td>
<td>✔</td>
</tr>
<tr>
<td>Robert Smith</td>
<td>rsmith</td>
<td>A</td>
<td>never</td>
<td></td>
</tr>
<tr>
<td>Roland Alexander</td>
<td>ralexander</td>
<td>A</td>
<td>never</td>
<td></td>
</tr>
<tr>
<td>Will Samuels</td>
<td>wsamuels</td>
<td>A</td>
<td>never</td>
<td></td>
</tr>
</tbody>
</table>

Perform Action on Selected Members:
- Remove from Roster (retain accounts)
- Remove from Roster (retain accounts)
- Copy to Another Class
- Move to Another Class
## Operations on Multiple Accounts

| Account   | Student | NDG | Semester 3 CCNA | Semester 4 CCNA | Semester 5 CCNP | Semester 3 CCNA | Semester 5 CCNP | Semester 3 CCNA | Semester 5 CCNP | Semester 3 CCNA | Semester 5 CCNP | Semester 3 CCNA | Semester 5 CCNP | Semester 3 CCNA | Semester 5 CCNP | Semester 3 CCNA | Semester 5 CCNP | Semester 3 CCNA | Semester 5 CCNP | Semester 3 CCNA | Semester 5 CCNP | Semester 3 CCNA | Semester 5 CCNP | Semester 3 CCNA | Semester 5 CCNP | Semester 3 CCNA |
|-----------|---------|-----|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| stud101   | Student 101 | NDG | Semester 4 CCNA | never           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| stud11    | Student 11 | NDG | Semester 3 CCNA | never           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| stud3     | Student 3  | NDG | Semester 5 CCNP | Semester 3 CCNA | Semester 3 CCNA | never           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| stud5     | Student 5  | NDG | Semester 3 CCNA | Semester 4 CCNA | Semester 5 CCNP | Semester 3 CCNA | never           | Feb 15, 2006    |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| stud6     | Student 6  | NDG | Semester 3 CCNA | Semester 4 CCNA | Semester 5 CCNP | Semester 3 CCNA | never           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| stud7     | Student 7  | NDG | Semester 3 CCNA | Semester 4 CCNA | Semester 5 CCNP | Semester 3 CCNA | never           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| vstevens  | Victoria Stevens | XYZ Technical College | CCNP Fall Class spring ccna | Spring CCNA 1 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| wsamuels  | Will Samuels | NDG | Semester 2 CCNA | never           |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |
| xyzinst   | XYZ Instructor | XYZ Technical College |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |                 |

Perform Action on Selected Accounts: **Add to Class Roster** ▼ Go ▲ Select All ▲ Unselect All ▲

[New Search] [Add Accounts] [Exit]
New Account Management Tools
Add multiple accounts at the same time

Enter New Account Information

<table>
<thead>
<tr>
<th>User ID</th>
<th>Name</th>
<th>Type</th>
<th>E-mail Address (optional)</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Robbins</td>
<td>instructor</td>
<td><a href="mailto:Robbins@power.org">Robbins@power.org</a></td>
<td>Enter new user or leave blank</td>
</tr>
<tr>
<td>2</td>
<td>Smith</td>
<td>student</td>
<td><a href="mailto:Smith@school.edu">Smith@school.edu</a></td>
<td>Enter new user or leave blank</td>
</tr>
<tr>
<td>3</td>
<td>Jones</td>
<td>student</td>
<td><a href="mailto:Jones@school.edu">Jones@school.edu</a></td>
<td>Enter new user or leave blank</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>student</td>
<td></td>
<td>Enter new user or leave blank</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>student</td>
<td></td>
<td>Enter new user or leave blank</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>student</td>
<td></td>
<td>Enter new user or leave blank</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>student</td>
<td></td>
<td>Enter new user or leave blank</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>student</td>
<td></td>
<td>Enter new user or leave blank</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>student</td>
<td></td>
<td>Enter new user or leave blank</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>student</td>
<td></td>
<td>Enter new user or leave blank</td>
</tr>
</tbody>
</table>
New Account Management

STEP 1

Welcome Sam Christopher.

This is the first time you have logged into this account. You will now be asked to provide some account settings. These can be changed later.

Please select a new password for this account.

- New Password
- Re-type New Password

STEP 2

In what time zone are you located?

All dates and times are displayed based on this setting. When traveling, you can change this setting to the local time zone.

Time Zone: (GMT-05:00) Eastern Time (US & Canada)
New Account Management

STEP 3

Please enter your e-mail address.

E-mail Address

OK

STEP 4

Thank you.

Your new account is ready to use.

To change your password, time zone, e-mail address, and other advanced settings, select the Profile option from the MyNETLAB page.

OK
New Icons on the MyNETLAB Pages

- **Scheduler**: Reserve lab time or check the schedule.
- **File Manager**: Manage device configuration files.
- **Account Manager**: Create or manage student and instructor accounts.
- **Class Manager**: Create or manage classes and rosters.
- **Profile**: Change your personal settings.
- **Curriculum**: Access class learning materials.
- **Archive**: Access configurations and logs from completed labs.
- **Logout**: Logoff the system.
Students Can Now Belong to Multiple Classes
Administrator May Manage Classes

The NETLAB administrator account allows you to perform configuration tasks and manage your system. For security, some configuration tasks must be done from the system console.
The Class Manager is used to manage classes and rosters.

Your privileges allow you to manage classes in different communities.

Please select a community from the list by clicking on the name.

<table>
<thead>
<tr>
<th>COMMUNITY</th>
<th>CLASSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC Technical College</td>
<td>0</td>
</tr>
<tr>
<td>Acme University</td>
<td>0</td>
</tr>
<tr>
<td>default</td>
<td>1</td>
</tr>
<tr>
<td>NDG</td>
<td>5</td>
</tr>
<tr>
<td>Remote Academy APAC</td>
<td>0</td>
</tr>
<tr>
<td>Remote Academy Central America</td>
<td>1</td>
</tr>
<tr>
<td>Remote Academy EU</td>
<td>0</td>
</tr>
<tr>
<td>XYZ Technical College</td>
<td>7</td>
</tr>
</tbody>
</table>
Class Management

- Class Name
- Lab Exercises and Content:
  - CCNA 2.1
  - CCNA 3.x Labs and Pods
  - CCNA 3.x Skills Assessment
  - CCNP 3.x Labs and Pods
  - FNS/PIX
  - FNS/Router
  - Network Security 2.0
- Starting Date:
- Ending Date:
- Self Study Lab Access:
  - Allow individuals to schedule lab time
  - Allow teams to schedule lab time
- Maximum Length of Reservation: 4.0 hours (individual or team reservations)
- Minimum Time Between Reservations: No limit (individual or team reservations)
- Console Password (Cisco devices): cisco
- Enable Password (Cisco devices): class
- E-mail Configure/Logs:
  - Yes
- Retain Configure/Logs:
  - Instructor-led reservations
  - Individual or team reservations
- Log Retention Period: 30 days
Start and End Dates are Optional

<table>
<thead>
<tr>
<th>Class Name</th>
<th>Lab Exercises and Content</th>
<th>Starting Date</th>
<th>Ending Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CCNA 2.1</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>CCNA 3.x Labs and Pods</td>
<td>Date</td>
<td>Date</td>
</tr>
<tr>
<td></td>
<td>CCNA 3.x Skills Assessment</td>
<td>Date</td>
<td>Date</td>
</tr>
<tr>
<td></td>
<td>CCNP 3.x Labs and Pods</td>
<td>Date</td>
<td>Date</td>
</tr>
<tr>
<td></td>
<td>FNS/PIX</td>
<td>Date</td>
<td>Date</td>
</tr>
<tr>
<td></td>
<td>FNS/Router</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Network Security 2.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Self Study Lab Access:
  - Allow individuals to schedule lab time
  - Allow teams to schedule lab time

- Maximum Length of Reservation: 2.0 hours
- Minimum Time Between Reservations: No limit

- Console Password (Cisco devices): cisco
- Enable Password (Cisco devices): class

- E-mail Config/Logs:
  - No
  - To lead instructors upon completion

- Retain Config/Logs:
  - Instructor-led reservations
  - Individual or team reservations

- Log Retention Period: 30 days
Class Now Supports Individual and Team Study

<table>
<thead>
<tr>
<th>Class Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Exercises and Content:</td>
</tr>
<tr>
<td>- CCNA 2.1</td>
</tr>
<tr>
<td>- CCNA 3.x Labs and Pods</td>
</tr>
<tr>
<td>- CCNA 3.x Skills Assessment</td>
</tr>
<tr>
<td>- CCNP 3.x Labs and Pods</td>
</tr>
<tr>
<td>- FNS/PIX</td>
</tr>
<tr>
<td>- FNS/Router</td>
</tr>
<tr>
<td>- Network Security 2.0</td>
</tr>
<tr>
<td>Starting Date: None</td>
</tr>
<tr>
<td>Ending Date: None</td>
</tr>
<tr>
<td>Self Study Lab Access:</td>
</tr>
<tr>
<td>- Allow individuals to schedule lab time</td>
</tr>
<tr>
<td>- Allow teams to schedule lab time</td>
</tr>
<tr>
<td>Maximum Length of Reservation: 4.0 hours (individual or team reservations)</td>
</tr>
<tr>
<td>Minimum Time Between Reservations: No limit (individual or team reservations)</td>
</tr>
<tr>
<td>Console Password (Cisco devices): cisco</td>
</tr>
<tr>
<td>Enable Password (Cisco devices): class</td>
</tr>
<tr>
<td>E-mail Config/Logs: No</td>
</tr>
<tr>
<td>Retain Config/Logs: Instructor-led reservations, Individual or team reservations</td>
</tr>
<tr>
<td>Log Retention Period: 30 days</td>
</tr>
</tbody>
</table>
Multiple Lead Instructors

Use this page to appoint lead instructors for this class. Only instructors in the same community can be selected.

<table>
<thead>
<tr>
<th>LEAD INSTRUCTORS</th>
<th>CLASS: Semester 4 CCNA</th>
<th>COMMUNITY: NDG</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME</td>
<td>USER ID</td>
<td>SELECT</td>
</tr>
<tr>
<td>Bruce Almich</td>
<td>balmich</td>
<td></td>
</tr>
<tr>
<td>Kaan Uzun</td>
<td>kuzun</td>
<td>✓</td>
</tr>
<tr>
<td>NDG Instructor 1</td>
<td>ndginst1</td>
<td></td>
</tr>
<tr>
<td>Rich Lucas</td>
<td>rluucas</td>
<td>✓</td>
</tr>
<tr>
<td>Rich Weeks</td>
<td>rweeks</td>
<td></td>
</tr>
</tbody>
</table>

[OK] [Cancel]
A roster is a list of learners in a class.

<table>
<thead>
<tr>
<th>NAME</th>
<th>USER ID</th>
<th>TEAM</th>
<th>LAST LOGIN</th>
<th>E-MAIL ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ed Kress</td>
<td>ekress</td>
<td>A</td>
<td>never</td>
<td></td>
</tr>
<tr>
<td>Hank Unlenbrauck</td>
<td>huhlenbrauck</td>
<td>A</td>
<td>never</td>
<td></td>
</tr>
<tr>
<td>Max Lucas</td>
<td>max</td>
<td>A</td>
<td>Feb 7, 2006</td>
<td><a href="mailto:maxlucas@mindspring.com">maxlucas@mindspring.com</a></td>
</tr>
<tr>
<td>Robert Porter</td>
<td>robert</td>
<td>A</td>
<td>never</td>
<td><a href="mailto:rporter@netdevgroup.com">rporter@netdevgroup.com</a></td>
</tr>
<tr>
<td>Robert Smith</td>
<td>rsmith</td>
<td>A</td>
<td>never</td>
<td></td>
</tr>
<tr>
<td>Roland Alexander</td>
<td>ralexander</td>
<td>A</td>
<td>never</td>
<td></td>
</tr>
<tr>
<td>Will Samuels</td>
<td>wsamuels</td>
<td>A</td>
<td>never</td>
<td></td>
</tr>
</tbody>
</table>
New Scheduler Option – Attend as Learner

The scheduler allows you to make lab reservations.

Scheduler Options

- View or cancel reservations
- Reserve instructor-led training time for a class
- Reserve self-study time for teams
- Reserve self-study time for individual learners
- Reserve an equipment pod for your own use
- Reserve lab time in a class that you are attending as a learner
Shared Directory from File Manager

Use the file manager to manage configuration files for your lab device. The help page contains a complete description of this feature.

**My Configuration Files**

- 🗂️ Clicking on a folder file changes the current folder
- 🔧 Clicking on a configuration file opens the file for viewing or editing

<table>
<thead>
<tr>
<th>My Class Folders (lsanuzur)</th>
<th>TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>go up one level!</td>
<td>folder</td>
</tr>
<tr>
<td>Default Class Shared Files</td>
<td>folder</td>
</tr>
<tr>
<td>Default Class System Files</td>
<td>folder</td>
</tr>
</tbody>
</table>

⚠️ Due to access restrictions, you cannot create, modify, or delete files and folders here.

➡️ Return to MyNETLAB
Copying Files Using File Manager

File Manager
MyNETLAB  Logout  Help

Use the file manager to manage configuration files for your lab device. The help page contains a complete description of this feature.

My Configuration Files

- clicking on a folder file changes the current folder
- Clicking on a configuration file opens the file for viewing or editing

<table>
<thead>
<tr>
<th>CURRENT FOLDER: Default Class System Files</th>
<th>LAST SAVED</th>
<th>BRPD2</th>
</tr>
</thead>
<tbody>
<tr>
<td>SELECT NAME</td>
<td>TYPE</td>
<td>SIZE</td>
</tr>
<tr>
<td>go up one level</td>
<td>folder</td>
<td></td>
</tr>
<tr>
<td>R1</td>
<td>config</td>
<td>807</td>
</tr>
<tr>
<td>R2</td>
<td>config</td>
<td>807</td>
</tr>
<tr>
<td>R3</td>
<td>config</td>
<td>807</td>
</tr>
</tbody>
</table>

<- perform action on this folder -->
<- perform action on this folder -->
Create new configuration file
Create new ordinary folder
Create new configuration folder
Add selected items to copy list
Delete selected items
Login Announcement

**Eastern Region NETLAB AE #1**

Welcome to the University of North East Technical Community College NETLAB Academy Edition system. This system is servicing Academies in the Eastern Regional tree. If you need assistance with your login ID, please contact your class instructor.

**Personal Firewall** software can interfere with NETLAB. If you are having login problems or other issues, please disable your personal firewall to see if that fixes the problem. If so, adjust your firewall software accordingly.

**Required Browser Plugins and Options**

<table>
<thead>
<tr>
<th>Plugin</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Java®</td>
<td>Enabled (IE users see below)</td>
</tr>
<tr>
<td>JavaScript</td>
<td>Enabled</td>
</tr>
<tr>
<td>Cookies</td>
<td>Enabled (for this site)</td>
</tr>
<tr>
<td>Popup Windows</td>
<td>Enabled (disable popup blockers for this site)</td>
</tr>
</tbody>
</table>
System Announcement

System Name
Appears at the top of the login page, centered in bold type. Identifies the name of this local NETLAB system. You may leave this value blank.

Login Text
Appears at the top of the login page, just below the system name.

Welcome Message
Appears at the top of the MyNETLAB page. Each community may have its own welcome message, which if defined, is displayed instead of the value set here.
Community Announcement

[Image of a software interface showing an editing screen for a community in Networking Academy. The screen displays fields for Community ID, Name, Account Login, Welcome Message, and News and Announcements. There are options to enable or disable account login, and a note that if you set custom welcome or news banners, users in this community will see these banners instead of the system default.]
Banners Support Embedded Markup

NETLAB banners support embedded markup tags that can be used to apply special formatting to your text. Many of the tags are similar to their HTML counterparts, except curly braces are used instead of angle brackets.

<table>
<thead>
<tr>
<th>NETLAB EMBEDDED MARKUP TAGS</th>
<th>Begin Tag</th>
<th>End Tag</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>{p}</td>
<td>none</td>
<td></td>
<td>Start a new paragraph.</td>
</tr>
<tr>
<td>{br}</td>
<td>none</td>
<td></td>
<td>Start a new line.</td>
</tr>
<tr>
<td>{b}</td>
<td>/{b}</td>
<td></td>
<td>Text between {b} and /{b} is <strong>bolded</strong>.</td>
</tr>
<tr>
<td>{i}</td>
<td>/{i}</td>
<td></td>
<td>Text between {i} and /{i} is <em>italicized</em>.</td>
</tr>
<tr>
<td>{r}</td>
<td>/{r}</td>
<td></td>
<td>Text between {r} and /{r} appears in red.</td>
</tr>
<tr>
<td>{a <a href="http://URL%7D">http://URL}</a></td>
<td>/{a}</td>
<td></td>
<td>Text between begin and end tag is hyperlinked. If clicked, the specified URL is opened in a new window.</td>
</tr>
<tr>
<td>{reg}</td>
<td>none</td>
<td></td>
<td>Displays the registered trademark symbol ©.</td>
</tr>
<tr>
<td>{tm}</td>
<td>none</td>
<td></td>
<td>Displays the trademark symbol ™.</td>
</tr>
</tbody>
</table>
NETLAB Academy Edition
Product Upgrades Under Development
NETLAB AE Future Software Upgrades

• Account management improvements
  We hope to be able to give you the ability to import accounts

• Pod design tools to allow you to build your own topology
  NETLAB AE customers will be able to build two custom Pods
  We will increase the number of pods (topologies) you can host to 12 pods
  Create graphics and images, create your own hot spots, etc.

• Lab design tool
  Works with standard Academy Edition pods and pod design tool
  Add challenge labs, build and break exercises, and custom lab exercises

• Researching ability to save / restore virtual PC configs
  This is more applicable to NETLAB PE, but may help in the future for AE
  Today Virtual PC’s can be restore to a “start state”
  Customers want the ability to save and restore student work on virtual PC’s
Build Your Own Pod
Why Build Your Own Pod

- Commonly requested by Cisco Academies
- Gives Academies additional flexibility
- To enable you to design pods
- To provide Cisco with a new tool
  Assist with new curriculum
- In the future we hope to allow sharing of your designs
  Plans for a website to share pods
  You would be able to post your design to the website
Modifying General Information

To prevent simultaneous modifications, no other users can modify this file until you close the pod design or log out.

**General Settings**

- **Name**: Kaan Pod 1 (required)
- **Description**: 1 switch
- **Author**: Kaan Uzun
- **Organization**: NDG
- **Copyright**: (C) 2006 NDG
- **Support URL**: http://www.netdevgroup.com
- **Note / Comment**: testing 1
- **Cloning**: This pod design may be cloned
- **Removable**: Administrator may uninstall (NDG option)

**Pod Designer**

- **Name**: Kaan Pod 1
- **Build**: 1
- **Committed**: No
- **Author ID**: KP1
- **Global ID**: 0000_F06E_B5E7_443A_5D2B
- **File Size**: 24001
- **Last Modified**: 2006-04-14 21:05:33 UTC
You Can Password Protect Files

**Pod Designer**

**MyNETLAB  Logout**

<table>
<thead>
<tr>
<th>Name</th>
<th>Build</th>
<th>Committed</th>
<th>Author ID</th>
<th>Global ID</th>
<th>File Size</th>
<th>Last Modified (y-m-d h:m:s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaan Pod 1</td>
<td>1</td>
<td>No</td>
<td>KP1</td>
<td>00C0_F06B_85E7_443A_5D2B</td>
<td>24001</td>
<td>2006-04-14 21:05:33 UTC</td>
</tr>
</tbody>
</table>

To prevent simultaneous modifications, no other users can modify this file until you close the pod design or log out.

**Password Required**

This file is password protected. Before changes are allowed, you must supply the current modification password.

Enter the current modification password: [Enter]

[OK] [Cancel]
Help Screens and Instructions

Default Topology Image

A topology image is a GIF, JPEG, or PNG file that users see during a lab reservation. Each lab exercise can specify a topology image, or use the default image. For best results, the width of a topology image should not exceed 600 pixels. Rectangular "hotspots" can be defined for each lab device. When the user clicks on a hotspot, NETLAB will launch the appropriate viewer and connect the user to the lab device.

The default topology image is used when a lab exercise does not explicitly specify a topology image. To import a default topology image for this pod design, specify the path of a GIF, JPEG, or PNG file on your PC or workstation, or click the browse/choose button.

Path to Default Topology Image: \BRPV2\brpv2_detail.png

[OK] [Cancel]
Build Your Own Topology Image
Defining Control Settings

Control Settings

- Access Server Ports: 3
- Switched Outlets: 3
- Consecutive Control Switch Ports: 6
- VLAN Pool Size: 6
- Default VLAN Map:
  - VLAN A
  - VLAN B
  - VLAN C
  - VLAN D
  - VLAN E
  - VLAN F
  - VLAN A: OFF
  - VLAN B: TRUNK
  - VLAN C: CONTROL
  - VLAN D: VLAN A
  - VLAN E: VLAN B
  - VLAN F: VLAN C

To prevent simultaneous modifications, no other users can modify this file until you close the pod design or log out.
Control Settings

Pod Designer

Control Settings

Access Server Ports: 3
Switched Outlets: 3
Consecutive Control Switch Ports: 6
VLAN Pool: 6

Default VLAN Map:

<table>
<thead>
<tr>
<th>VLAN A</th>
<th>VLAN B</th>
<th>VLAN C</th>
<th>OFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>+4</td>
<td>+5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To prevent simultaneous modifications, no other users can modify this file until you close the pod design or log out.
For Support Services
Email: support@netdevgroup.com

Technical Support
- Frequently Asked Questions
- Documentation
- How To Obtain Technical Support
- Release Notes and Known Issues

Designated Operating Environment
- System Requirements
- Supported Lab Topologies
- Supported Lab Devices
- Supported Control Devices
- CSS, Connectivity and Firewall Considerations
- Licensees and Legal Notices (including Third Party Products)

Technical Tips

NDG’s friendly, professional support staff will be happy to assist you.
Additional Information

Visit www.netdevgroup.com for additional information