Practice Labs for Cisco

Practice Labs gives you the ability to configure a wide range of technologies in a safe environment using just your browser.

With our Practice Labs for Cisco we cover topics for ICND (1 & 2), CCNA Routing and Switching, CCNA Security and the more advanced topics of the CCNP exams (Routing, Switching and Troubleshooting) all using real Cisco equipment. The associated lab guides cover exam and real world scenarios for each of these technologies which are carried out on real equipment.

1 Cisco Lab Hardware

Our hosted Cisco hardware is based on widely deployed Cisco products including Cisco 2900 series routers and 3750 series layer 3 switches and ASA5512x firewalls (see hardware list for complete listing of the products in the lab). From the browser you gain access to the console port of each of the devices giving you complete control to carry out either your own configurations, or follow the lab guides to configure specific technologies that are required for the relevant Cisco exams.

Lab Diagram

Example Lab: **100-101 (ICND1)** **Interconnecting Cisco Networking Devices Part 1**
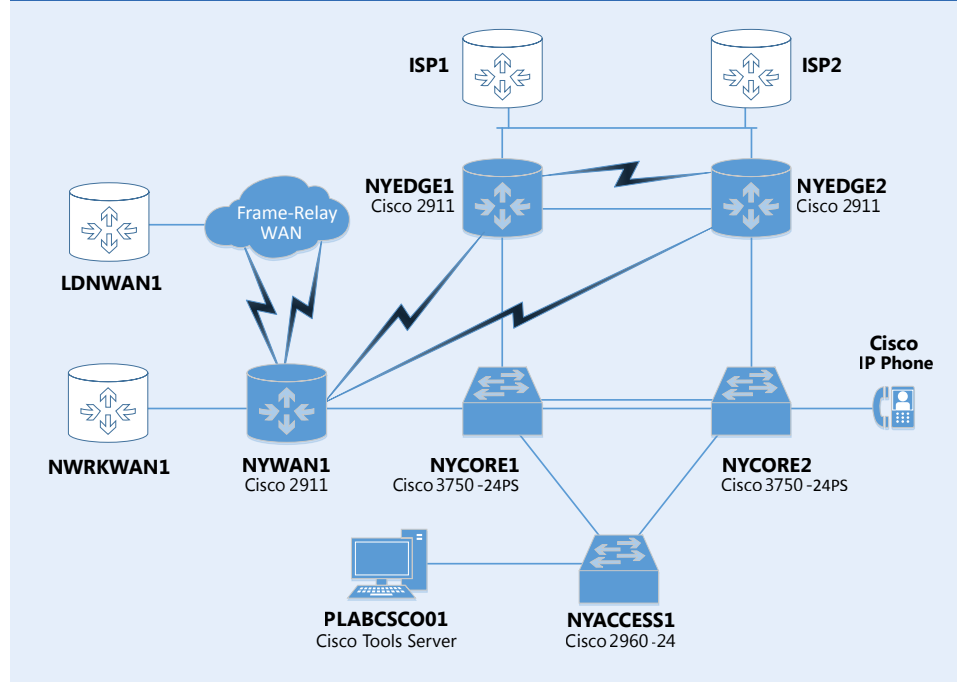
Core Lab Hardware

1 * **Cisco 2911 ISR router**
   with VOICE and SEC license
   2 * **HWIC-2T**
   1 * **HWIC-1T**
   1 * **PVDM-3-16**
2 * **Cisco 2911 ISR routers**
   with SEC and DATA licenses
   2 * **HWIC-2T**
2 * **Cisco 3750-POE switches**
   with layer 3 capabilities
1 * **Cisco 2960-24 switch**
1 * **Microsoft Windows Server**

Security Lab Hardware

1 * **Cisco ASA5512X firewall**
1 * **Cisco 2911 ISR router**
   with SEC license
1 * **Cisco 2960-24 switch**
3 * **Microsoft Windows Server 2008 servers**

2 Lab Courseware

Our lab guides cover a wide variety of topics, from basic configuration and troubleshooting to advanced topics like routing protocols, NAT, VRF and route-redistribution. Each topic configures the equipment creating a specific network topology that lends itself to that particular task. For example configuring EIGRP may apply a complex configuration creating a local and a wide area network topology enabling you to get a deeper understand of how the protocol works.

Practice Labs for Cisco continued.

Task based course outline

Each course contains the steps and pre-built topology enabling you to jump right in to the configuration without the fuss of trying to work out which base topology may work best for any particular topic.

Exercise 1 - Configure and verify DH Cisco IOS

In this exercise you will configure a Cisco router to act as a DHCP server within t you will have learnt in your course, DHCP is a service that enables hosts to get a without you having to manually configure each it. This is particularly useful when PCs and laptops and other devices that don't require static addresses in your net

Use your study material or your favourite search engine to find the following topi

- Cisco configuring the Cisco IOS DHCP Server

Diagram

DHCP scope properties on NYEDGE1
labpool
Network: 192.168.16.0/24
Gateway: 192.168.16.1
DNS: 192.168.16.10
Domain: practicelabs.com
Lease: 7 days
Excluded: 192.168.16.1 - 15
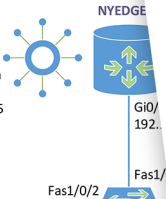
Configuring a DHCP Scope

In this first example you will enable DHCP and configure an address scope on NYEDGE1 such that NYWAN1 will be able to retrieve an IP address automatically.

We will use the subnet that is commonly used within the lab which is 192.168.16.0/24.

The following tasks will need to be completed to configure DHCP:

- Create an address pool
- Specify the IP configuration for the pool
- Specify any domain related settings for the pool (domain name, dns etc) (optional)
- Specify any additional DHCP options required (optional)
- Specify any IP address exclusion required (optional)

Step 1

DHCP is configured in global configuration mode. Click on NYEDGE1 in the lab and configure a ne address pool called labpool:

```
NYEDGE1#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
NYEDGE1(config)#ip dhcp pool labpool
NYEDGE1(dhcp-config)#
```

Example Course: **100-101 (ICND1) Interconnecting Cisco Networking Devices Part 1**

❸ 2015 Course List:

200-120 - Cisco Certified Network Associate

100-101 - Interconnecting Cisco Networking Devices Part 1

200-101 - Interconnecting Cisco Networking Devices Part 2

300-101 - Implementing Cisco IP Routing (ROUTE v2.0)

300-115 - Implementing Cisco IP Switched Networks (SWITCH v2.0)

300-135 - Troubleshooting and Maintaining Cisco IP Networks (TSHOOT v2.0)

640-554 - Implementing Cisco IOS Network Security

❹ Practice Labs Usability

- Wide range of Cisco and other industry standard technologies at your disposal.
- Choose to follow an exam path or create your own configuration.
- Unlimited access removes any time pressure and the ability to reset and start over with the click of a button removes any fear of making mistakes.
- Practice Labs for Cisco enables you to focus on gaining a deep understanding of Cisco technologies.