Week 2- Sept 8

Starts Sep 5, 2025 10:41 PM

Week 2: Sept 8 to 12th

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1. Read the following Netacad Modules before the Week 2 Theory Class-
    - Module 1: Networking Today
    - Module 5: Number Systems
    - Module 2: Basic Switch and End Device Configuration
2. Before our upcoming lab session, you are required **to hand-write** ✋ week 2 commands/term reference in your **green notebook**.
   This will help you during lab activities and will be checked at the start of your lab class.
3. Pre-lab Assignment: Packet Tracer Activity Due before 11:59pm **the day before** your scheduled lab class.

0 % 0 of 4 topics complete

Week 2 Command Reference

You are required to hand-write the following command reference in your **green notebook.** This will help you during lab activities and will be checked at the start of class.

Note: These commands are to be run on Windows OS only

Commands/Terms	Description
ncpa.cpl	GUI shortcut to enable/disable NICS (network interface card)
ipconfig	Displays basic IP information (IP address, subnet mask, default gateway).
ipconfig /all	Displays detailed IP configuration (MAC address, DNS, DHCP info, all adapters).
ipconfig /release	Releases the current IP address (when using DHCP)
ipconfig /renew	Requests a new IP address from the DHCP server
ping <IP/Hostname>	Tests connectivity to another device or server.
IP Address (Internet Protocol Address)	A unique number assigned to each device on a network.
Subnet Mask	is a number that defines which portion of an IP address identifies **the network** and which portion identifies **the host**.

Default Gateway/Router	The IP address of the **router** that forwards traffic when the destination is **outside the local network**.
DHCP (Dynamic Host Configuration Protocol)	A protocol that automatically assigns IP addresses, subnet masks, gateways, and DNS info to devices on a network.
DNS (Domain Name Server)	A system that translates website names into IP addresses so devices can find and connect to each other on the internet.

Week 2 Command Reference

Checklist

Due September 12 at 11:59 PM Starts Sep 5, 2025 9:00 PM

Week 2: Packet Tracer Pre-Lab

The goal of this pre-lab is to help you:

- Identify and practice basic network settings — IP Address, Subnet Mask, and Default Gateway.
- Learn how to configure IP settings on end devices in Packet Tracer.
- Verify connectivity between devices using the ping command.
- Understand the role of the router as the default gateway

for communication outside the local network.
- Get familiar with Packet Tracer navigation (Desktop tab, IP configuration, Command Prompt).
- By the end of this pre-lab, you should be able to set IP addresses on PCs, test communication, and see your completion score in Packet Tracer.

Save your work > Submit/Upload Your Pre-Lab Packet Tracer File In Brightspace > D**O NOT UPLOAD AS A SCREENSHOT OR PNG FILE.!!!**

Go to Activities > Assignments > Week 2: Packet Tracer Pre-Lab

Week_02-Prelab

PKA File

Week 02: In Person Lab

For Lab 02 In Person:

- You are required **to complete the Pre-Lab Packet Tracer Activity before coming to class > Submit it to Brightspace > Assignment**
- **You must show your Command Reference in your green notebook** to your lab professor **at the beginning of the lab.**
- During the lab, the professor will guide you step-by-step through the following topics:
  - Lab layout and physical connections
  - How to find/change your IP address in the GUI

    - How to find your IP address in the command line
    - Static IP addresses vs. DHCP
    - How to release and renew your IP from the command line
    - Enabling & disabling NICs
    - Testing basic connectivity with Ping
- With the exception of Packet Tracer, all work must be done on the lab PCs (T113).
- 📘The T113 lab layout Power Point is available here T113 - Basic Lab Orientation.pptx
- Please review it before the start of your lab.

Week 02: Theory Class Power Point

M01_Networking Today
PDF document

25F-IP Addressing Intro
PowerPoint Presentation