

# Introduction to Cisco Packet Tracer

Discover and troubleshoot using powerful networking simulation tool.

Introduction to Packet Tracer. This course is designed for beginners with no prior networking knowledge. It teaches basic operations of the tool with multiple hands-on activities helping you to visualize a network using everyday examples, including Internet of Things (IoT). Introductory course is extremely helpful for anyone who plans to take one of the Networking Academy courses which utilizes the powerful simulation tool.Packet Tracer is a simulation, visualization, collaboration, and assessment tool for teaching networking.

It allows students to construct their own model or virtual networks, obtain access to important graphical representations of those networks, animate those networks by adding their own data packets, ask questions about those networks, and finally annotate and save their creations.

## You'll learn these core skills

- Simulate data interactions traveling through a network.
- Visualize the network in both logical and physical modes.
- Apply skills through practice, using labs and Cisco Packet Tracer activities.
- Develop critical thinking and problem-solving skills.

## Four problem types supported by Packet Tracer:

- 1. **Concept-builders:** model-building inquiries leading to student-created explications and animations of networking concepts
- 2. **Skill-builders:** algorithmic problem solving in support of the development of networking procedural knowledge
- 3. Design challenges: constraint-based problems with multiple correct solutions
- 4. **Troubleshooting challenges:** diagnosing, isolating, and fixing the simulated network from a previously bugged network file

## Who Uses Packet Tracer?

- Networking Curious & Aficionados
- CCNA, CCNA Security and CCNP Students
- Engineers, Educators, & Trainers
- Those looking to get into IoT



#### Packet Tracer can be used in a variety of ways:

- Group work
- Class work, Homework, and Distance Learning
- Formative assessment
- Hands-on lab reinforcement
- Lecture demonstrations
- Modeling and visualization of networking device algorithms and networking protocols
- Case studies
- Multi-user cooperative and competitive activities
- Competitions
- Problem-solving activities in concept-building, skill-building, design, and troubleshooting

#### What Will You Learn in Cisco Hands On Course :

- Basic Router/Switch Configurations
- IPv4 Routing Protocol Configurations
- IPv6 Routing Protocol Configurations
- WAN Configurations
- DHCP Configuration
- NAT Configuration
- Port Security Configuration
- Access List Configurations
- SNMP Configuration
- VLAN Configuration
- Inter VLAN Configurations
- Spanning Tree Configurations (STP, RSTP)
- Neighbor Discovery Configurations
- Etherchannel Configurations