



Packet Tracer: Overview Session



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Packet Tracer Overview Agenda

- What is Packet Tracer?
- Why is PT beneficial?
- PT features
- How to acquire PT
- Packet Tracer Forum
- Tools for Teaching PT
- Distribution of PT
- Reporting Bugs

Packet Tracer

Packet Tracer simulation software enables instructors to easily teach complex technical concepts and supplements classroom equipment.

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Packet Tracer 4.1 by Cisco Systems, Inc. (Alpha 4) - C:/Program Files/Packet Tracer 4.1/xxxx/Reference_Topologies/3st.pkt

File Edit Options Help

Logical [Root]

OSI Model Inbound PDU Details

PDU Formats

Ethernet II

0	4	8	16	20	Bytes
PREAMBLE:		DEST. MAC:		SRC. MAC:	
01010...1011		0001.4303.39A0		888A.43E4.877E	
TYPE:		DATA (VARIABLE LENGTH)		FCS:	
0x000				0x0	

IP

4	8	16	20	32	Bits
IHL:		DSCP:		TO:	
ID: 0x0		BIC:		FRAG. OFFSET:	
TTL: 32		PRO: 0x1		CHKSUM:	
SRC IP: 172.16.1.2		DST IP: 172.16.1.1			
OPT: 0x0		0x0			
DATA (VARIABLE LENGTH)					

ICMP

4	8	16	20	32	Bits
TYPE:		CODE:		CHECKSUM:	
0x0		0x0		0x0	

MAC Table for Switch0

VLAN	Mac Address	Port
1	0001.4303.39A0	FastEthernet
1	888A.43E4.877E	FastEthernet

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Key Benefits of PT

- Based on three learning principles: learning is **active**, learning is **social**, and learning is **contextual**.
- Integrated in **CCNA Discovery**, **CCNA Exploration**, and **CCNA Security** courses.
- Includes a variety of **new features**
 - Improvement in visualization both in simulation (QoS Packet Queueing) and Physical view
 - New Client/Server protocol implementation
 - Additional protocols modeled
 - Improved modeling of existing protocols
 - Improved GUI
 - Activity Wizard improvements
 - Multiuser
- **Supplements** hands-on lab equipment
 - Each student can build, configure and troubleshoot networks using virtual equipment

Features of PT

* New in PT 5.0
 * New in PT 5.2 or higher

- Logical and Physical Workspaces
- Real-time and Simulation Modes
- Global event list (packet sniffer); Adjustable Windows
- LAN: Ethernet (including CSMA/CD), 802.11 wireless
- Switching: VLANs, 802.1q, trunking, VTP, DTP, STP, **RSTP***
- TCP/IP: HTTP, DHCP, Telnet (with SSH), TFTP, DNS, TCP, UDP, IP, ICMP, and ARP including **IPv6***
- Routing: static, default, RIPv1, RIPv2, EIGRP, OSPF (single and **multiple area***), inter-VLAN routing and **Route Redistribution***
- WAN: Frame Relay, PPP, HDLC
- **Multiuser Connection*** to allow peer to peer collaboration
- VPN, IDS, IPS, IPsec, CBAC, Outside NAT, AAA, GRE, SNMPv1 and 2, parser views, NTP (with a PT based server), Firewall and Zone based firewall, Syslog, Diffserv QOS
- **Activity wizard enhancements**

What is New to PT5.x?

- More Protocols: IPv6, Multi-area OSPF, Route Redistribution, Multilayer Switching (3560 Catalyst switch), SSH (Secure Shell), RSTP (Rapid Spanning Tree Protocol), More ICDN, Discovery and Exploration Commands
- Multi-user Collaboration
- VPN, IDS, IPS, IPSec, CBAC, Outside NAT, AAA, GRE, SNMPv1 and 2, parser views, NTP (with a PT based server), Firewall and Zone based firewall, Syslog, Diffserv QOS, ISAKMP, TACACS+, Radius, SNMP, HTTPS, SYSLOG
- Support for CCNA and CCNA Security
- Improved Wireless Security modelling with WPA, WPA2, WPA-PSK, WPA2-PSK
- Activity wizard enhancements

How to Acquire PT

PT is now available for download on the Academy Connection Website homepage of the user.

Just click on the icon shown here which will appear in the left panel on the Academy Connection.



This will open a page describing PT with links to FAQ, Datasheet, Training Materials, the Interactive Course Guide, and several download options for the program with or without the Tutorials

<http://cisco.netacad.net/go/pt>

Packet Tracer Forum

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Packet Tracer

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[Community Home](#) > [Instructor Community](#) > Packet Tracer

Packet Tracer 5.0

Packet Tracer version 5 (PT v5.x) is now available. Packet Tracer is a stand-alone, medium-fidelity simulation and visualization environment designed for networking novices to design, configure, and troubleshoot CCNA-level networks.

[>> Download Packet Tracer v5.0](#)
[>> Packet Tracer Video](#)

Tips and Tricks
Share information on Best Practices for teaching and using Packet Tracer in the classroom.

Packet Tracer Training
Access training tutorials and learn more about how to use Packet Tracer.

Activity Wizard
Learn more about the activity wizard; author and share activities within your postings.

Packet Tracer Support
Discuss problems and technical challenges you may be experiencing with Packet Tracer. Submit suggestions for new features and improvements.

Search

- :: Membership Directory
- :: Academy & Class Locator

Search Community

- :: Advanced Search

Resources

- :: Community Help
- :: Community Agreement

Who's Online?

[Send Live Message](#)
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Who's Here?

Help Stop Online Cheating

Reference Topologies

Name	Date modified	Type	Size
1s1	7/29/2008 10:31 PM	Cisco Packet Tracer	3 KB
2c1	7/29/2008 10:35 PM	Cisco Packet Tracer	3 KB
3s1	7/29/2008 10:38 PM	Cisco Packet Tracer	4 KB
3v1	7/29/2008 10:40 PM	Cisco Packet Tracer	4 KB
4s1	7/29/2008 10:46 PM	Cisco Packet Tracer	6 KB
4v1	7/29/2008 10:50 PM	Cisco Packet Tracer	6 KB
5s1	7/30/2008 10:48 AM	Cisco Packet Tracer	5 KB
6c1	7/29/2008 10:58 PM	Cisco Packet Tracer	4 KB
6s1	7/29/2008 11:00 PM	Cisco Packet Tracer	4 KB
6v1	7/29/2008 11:02 PM	Cisco Packet Tracer	4 KB
7c1	7/30/2008 10:50 AM	Cisco Packet Tracer	7 KB
7s1	7/30/2008 10:51 AM	Cisco Packet Tracer	7 KB
7v1	7/30/2008 10:52 AM	Cisco Packet Tracer	7 KB
8v1	7/29/2008 11:28 PM	Cisco Packet Tracer	7 KB
9v1	7/30/2008 10:53 AM	Cisco Packet Tracer	5 KB
11_ccna	7/29/2008 11:40 PM	Cisco Packet Tracer	6 KB
12_ccna	7/29/2008 11:53 PM	Cisco Packet Tracer	6 KB
13_ccna	7/29/2008 11:58 PM	Cisco Packet Tracer	5 KB

18 items (Disk free space: 21.7 GB)

Help and Tutorials

Packet Tracer 5.2

Search

Introduction
What's New
Program Usage

Getting Started
Interface Overview
My First PT Lab

Tutorials

Workspace Basics
Logical Workspace
Physical Workspace
Moving Devices
Wireless Devices
Special Notes


Operating Modes
Realtime Mode
Simulation Mode
PDU Information
Scenarios
Complex PDUs
Special Notes

Connections / Links

Devices & Modules
Routers
Switches
End Devices
Other Devices



Cisco Packet Tracer 5.2



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Using the Help Files

The help files are designed to familiarize users with the Packet Tracer 5.2 interface, functions, and features. Although the help files may be used as a reference guide, the pages are meant to be read in order (especially the sections presented at the beginning). Annotated screenshots are used to aid your understanding. Important notes or tips are presented in tip boxes like the following:

Distribution of PT

- Addressing the “Digital Divide” in Networking
- Improving e-learning from “e-reading and e-watching” to “e-doing”
- Distribute to students using password protected download, CD or memory stick
- Install on classroom computers

Please Communicate

- Share .pkt and .pka files
- Share success stories
- Report bugs using the Packet Tracer Discussion Forum on the Academy Connection website
- Make suggestions for possible future versions
- PTZ files
- Thank You

Q and A



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