

# Cisco Packet Tracer 5.3



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# Packet Tracer 5.3 Overview

- Minor Release

- Enhanced functionality to support assessment and gaming and their integration with content

- Enhanced protocols and features to support entrepreneurship, broadband and health information network environments

- Enhanced Activity Wizard functionality to support Packet Tracer SBAs and Cisco Aspire

- Required maintenance and adjustments

- Replaces Packet Tracer 5.2

- Release date April 29th – external announcement



## What's New in Packet Tracer 5.3

- Improved Linksys models, wireless security
- Cable and DSL enhancements
- Call Manager Express (VOIP support)
- FTP server and routers/switches - Server and Client
- Email system (SMTP – POP3) - Server and Client
- BGP – limited implementation that allows for a more realistic representation of the Internet for scenarios
- Generic IP end devices – to create more versatility in device creation
- Activity Wizard Initial Tree enhancements – more scenario variations



# PT 5.3 and CCNA and CCNP Curricula

Version 5.3 enhancements provide new or enhanced functionality to help illustrate the following topics:

- CCNA Discovery

- D1: improved Linksys and wireless– Generic IP end devices

- D2: better DNS, improved DHCP, wireless security, new FTP, SMTP, POP3,

- D3: Improved multiarea OSPF, EIGRP, BGP

- D4: New ISR VOIP, Call Manager Express

- CCNA Exploration

- E1: improved HTTP, DNS, DHCP, new FTP, SMTP, POP3

- E2: Improved multiarea OSPF, EIGRP, new BGP

- E3: Improved Linksys models, wireless security, 802.11

- E4: New PPPoE, enhanced IPSec, Cable and DSL enhancements

- CCNP

- Improved multiarea OSPF, EIGRP, new BGP



# Packet Tracer 5.3 Protocol Support

- Application

FTP, SMTP, POP3, HTTP, TFTP, Telnet, SSH, DNS, DHCP, NTP, SNMP, AAA, ISR VOIP, SCCP config and calls ISR command support, Call Manager Express

- Transport

TCP and UDP, TCP Nagle Algorithm & IP Fragmentation, RTP

- Network

BGP, IPv4, ICMP, ARP, IPv6, ICMPv6, IPsec, RIPv1/v2/ng, Multi-Area OSPF, EIGRP, Static Routing, Route Redistribution, Multilayer Switching, L3 QoS, NAT, CBAL, Zone-based policy firewall and Intrusion Protection System on the ISR, GRE VPN, IPsec VPN

- Network Access/Interface

Ethernet (802.3), 802.11, HDLC, Frame Relay, PPP, PPPoE, STP, RSTP, VTP, DTP, CDP, 802.1q, PAgP, L2 QoS, SLARP, Simple WEP, WPA, EAP

\*New in PT 5.3

\*Enhanced in PT 5.3

# Packet Tracer 5.3 Demo





# Packet Tracer 5.3 Documents

All collateral available on Livelink and PT Course Catalog page

- Packet Tracer At A Glance
- Packet Tracer Datasheet
- Packet Tracer Overview PPT
- Packet Tracer FAQs
- Packet Tracer Support for

Curricula **new!**

- Course Catalog web pages
- Pre- and Post-login

**Cisco Packet Tracer Data Sheet**

Cisco | Networking Academy  
Most Worth Open™

**Cisco Packet Tracer**

**Opportunity**  
As networking systems continue to evolve in complexity, new curricula and educational tools are emerging to facilitate teaching and learning about networking technology. The Cisco Networking Academy™ program is designed to lead pace with the evolution of networking careers by providing innovative curricula and educational tools that help students understand the complexities of information and communication technologies (ICT). Within this framework, the Cisco Packet Tracer™ learning software was developed to help Networking Academy students gain practical networking technology skills in a rapidly changing environment. Students seeking ICT skills can now benefit from the accessibility of online curricula and the opportunities for social learning, collaboration, and competition.

Packet Tracer supplements physical equipment in the classroom by allowing students to create a network with an almost unlimited number of devices, encouraging practical discovery and trouble shooting. The simulation based learning environment helps students develop 21st century skills such as decision making, creative and critical thinking, and problem solving.

Packet Tracer complements the Networking Academy curricula, allowing instructors to easily teach and demonstrate complex technical concepts and networking systems design. Instructors can customize individual or multiple activities, providing hands-on lessons for students that offer value and relevance in their classrooms. Students can build, configure, and troubleshoot networks using virtual equipment and simulated connections, alone or in collaboration with other students. Packet Tracer offers an engaging, interactive environment for learning networking concepts and protocols. Most importantly, Packet Tracer helps students and instructors create their own virtual "network world" for experimentation, exploration, and exploration of networking concepts and technologies.

**Figure 1. Packet Tracer is an engaging interface allows students to configure and simulate system architecture applications.**

**Cisco | Networking Academy™ Cisco Packet Tracer**

Most Worth Open™

**At-A-Glance**

Packet Tracer complements the Networking Academy curricula, allowing instructors to easily teach and demonstrate complex technical concepts and networking systems design. Instructors can customize individual or multiple activities, providing hands-on lessons for students that offer value and relevance in their classrooms. Students can build, configure, and troubleshoot networks using virtual equipment and simulated connections, alone or in collaboration with other students. Most importantly, Packet Tracer helps students and instructors create their own virtual "network world" for experimentation, exploration, and exploration of networking concepts and technologies.

Layer	Cisco Packet Tracer Supported Protocols
Application	HTTP, FTP, POP3, SMTP, DNS, DHCP, Telnet, SSH, RDP, and other protocols
Transport	TCP and UDP
Network	IPv4 and IPv6
Link	802.3 Ethernet, 802.11 Wi-Fi, and other protocols

Packet Tracer is an engaging interface allows students to configure and simulate system architecture applications.

## Supports Networking Academy Curricula

- Supports the majority of protocols and technologies taught in CCNA Discovery, CCNA Exploration, and CCNA Security, and can also be used to teach concepts from IT Essentials and CCNP courses

**7.1.1: Packet Tracing Across An Internetwork**

**7.1.1: Packet Tracing Across An Internetwork**

**Introduction**

This activity shows a network that consists of two routers and two switches. The network is configured with various protocols and services. The goal of this activity is to trace the path of a packet from the source to the destination.

Students Launch Packet Tracer Directly From CCNA Discovery and CCNA Exploration to Access Activities That Reinforce the Curriculum



# PT Support for Curricula Resource *new!*

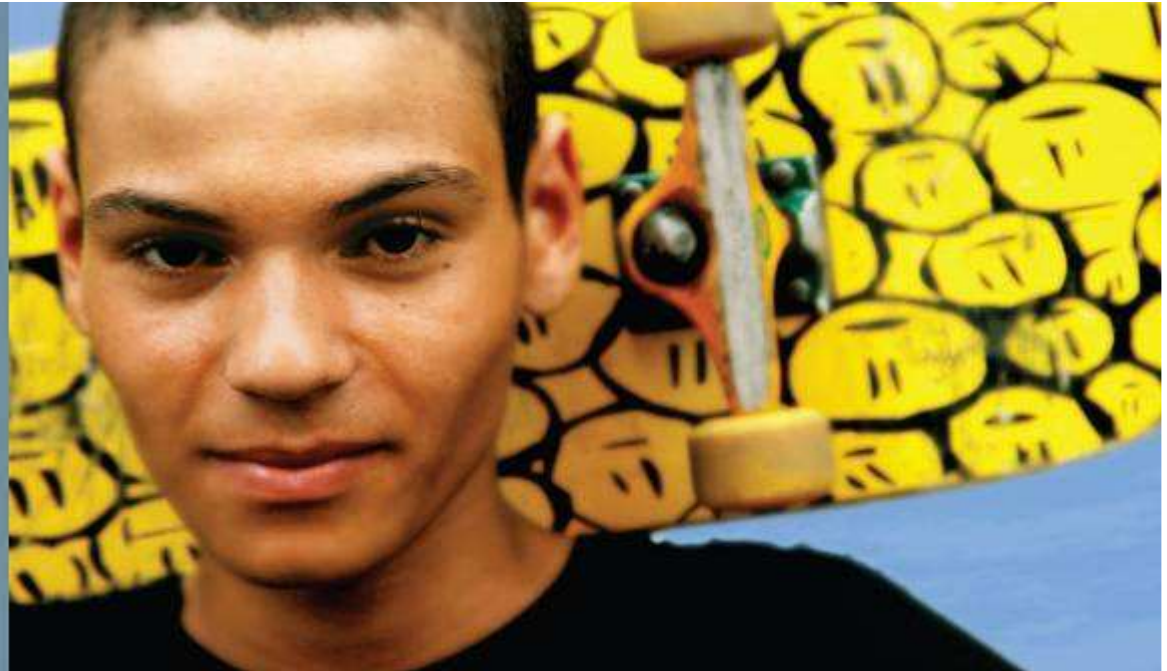
## Cisco Packet Tracer v5.3 Support for Networking Academy Curricula

This document identifies chapters from all Networking Academy courses that include content supported by Packet Tracer 5.3. The purpose of this resource is to help instructors leverage Packet Tracer to create rich learning experiences using Packet Tracer's simulation, visualization, collaboration, and assessment capabilities

Layer	PT 5.3 Feature	IT Essentials: PC Hardware and Software	Networking for Home and Small Businesses	Working at a Small-to-Medium Business or ISP	Introducing Routing and Switching in the Enterprise	Designing and Supporting Computer Networks	Network Fundamentals	Routing Protocols and Concepts	LAN Switching and Wireless	Accessing the WAN	CCNA Security	Implementing IP Routing	Implementing IP Switching	Maintaining and Troubleshooting
		ITE PC	CCNA Discovery				CCNA Exploration				CCNA S	CCNP		
			D1	D2	D3	D4	E1	E2	E3	E4		ROUTE	SWITCH	TSHOOT
L1	Ethernet Straight	8,13,15	1,3,4,7,9	1,2,3,5,9	1- 10	1,3,4,5,6,8	2,7,8,9,10	1	1,2,7	1			2	
	Ethernet Cross													
	Console RS-232													
	Serial DCE/DTE													
	Optical Fiber													
	Telephone													
	Coaxial cable													
	Wireless													
L2	Ethernet	1,3,8,15	3	3,5,9	1,5,8,9	1,3,4	2,7,8,9,10	1	1,2	1	6		2	
	LACP/LAgP												2	
	802.11a/b/g/n	13,15,16	3,7,9			3,5,9	7,8		7	6	6			8
	DTP								3		6		2	4
	VTP				3,9,10	3			4		6		2	4
	802.1q				3,9	7			3,4,6		6		2	4
	STP/RSTP				3,9	1,5,7			5		6		3	4
	CDP			5	2,3	3		2	3	4,8				
	L2 QoS: CoS				5,8	4,5							7	7
	HDLC			5	7,9		7	1		1				
	Frame Relay			5	6,7,9	5,8	7	11		3				
	PPP			5	7,9,10	8	7	1		2				
	PPPoE										7		2	
L3	IPv4, ICMPv4	8,15	3,5	4,5,9	1- 10	6	5,6,9,11	3,4,6		7	1, 4 & 8			6
	IPv6, ICMPv6			4	5	6	5			7				6
	L3 QoS: ToS					1,4				7			7	7, 8
	IPSec			8		8					7 & 8	7	3	
	ISAKMP										7 & 8	7		
	VPN				1,2	4,8				6	8	7	3	9
L4	UDP and TCP	8,15	6	7	1,5,8	4,5	4	5,7,9		5	1 & 4		6	
L7-6-5	HTTP/HTTPS		6	7,8,9	2,8	4	2,3			4	2			



# Passport21 and Gaming





## What We're Hearing

- More emphasis on personal development, business development and soft skills

Communication, negotiation skills

Financial literacy—tracking costs, budgets, investment requirements, ROI

Manage business relationships

- Expand applied practice

Problem solving

Creativity

Decision making





# Passport21 Offerings

- A set of offerings to add to the core ICT and networking curricula
- Designed to prepare students for 21<sup>st</sup> Century careers
- Helps students discover career opportunities and expose them to attitudes, mindset and skills to compete in the 21st century
- Optional learning modules to use in a class

## Passport21 Offerings

Passport21 to  
Broadband



# Entrepreneurship Education

## Technology Skills

- Networking
- Security
- Wireless
- Basic Computing
- Configuration

**What** You  
Learn



## 21st Century Skills

- Collaboration
- Community
- Communication
- Problem-Solving
- Initiative-Taking

**How** You  
Learn



## Entrepreneurial Skills

- Mindset
- Innovative Thinking
- Personal and Social Responsibility
- Business Management

**How** You  
Think





# Passport21





# Case Studies

## Online Case Study Modules with Realistic Scenarios

2 Starting an Internet Cafe
Falcon

2.1 Think like an Entrepreneur
Starting and Internet Cafe

2.1.1 Recognize a Problem
1 2 3

The students on the train are Maria and Alex. They have recognized a problem in their lives. This problem is shared by many people in their town. When they realize there is no readily available solution to their problem, they decide to start a new business to solve the problem. This is entrepreneurial thinking.

**Entrepreneurs**


Entrepreneurs create, operate, and assume the risk for a new business venture. They recognize that what some people see as a problem can be a business opportunity.

Many famous companies have been started because an entrepreneur wanted to solve a problem. Bill Gates was a problem solver. Before he started Microsoft, most software was too complicated and confusing. Gates solved this problem by creating software that was easier to use.

Problem solving is just one way to recognize a new business opportunity. There are six roots of opportunity:

- Problem solving** -obstacles or challenges that the business could solve
- Changes** -laws, situations, and trends that evolve over time
- Inventions** -totally new products that are developed
- Competition** - doing the same thing more effectively than others
- Technological Advances** -adapting new technology to an existing product

**Unique Knowledge** -a special understanding of what the people in your area want



Previous



# Cisco Aspire

An Engaging Game for Experiential Learning Within the Context of Realistic Scenarios

The screenshot displays the Cisco Aspire game interface. The main view is an isometric 3D city simulation with various buildings, streets, and a stadium. On the left, a player profile for 'fred' shows a balance of 3000 and a list of skills: Money Management, Business Sense, Reputation, Configuration, Troubleshooting, Physical Labor. At the top, a calendar shows 'Day 1' with days of the week. The 'ASPIRE' logo is in the top right corner.

- Money management
- Problem injector
- Skills proficiency indicator
- Networking simulation
- Multiple levels, multiple paths
- Multiple contract choices
- Simulated time and economy



## Key Facts

- Passport21 is a set of complementary materials
- Materials are available in English only
- Instructors will be able to select the ones available for a specific class.
- Focus on Entrepreneurship and Broadband knowledge
- Materials will be available in May



## Q and A



File de traducción y demo:  
<http://cisco.webex.com/meet/joesquiv>

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Mind Wide Open™

