CCNA (Cisco Certified Network Associate)

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Cisco Certified Certification

- ❖ Entry
  - ▪ **CCENT**
- ❖ Associate
  - ▪ **Design (CCDA)**
  - ▪ **Routing and Switching (CCNA)**
  - ▪ **Security (CCNA Security)**
  - ▪ **SP Operations (CCNA SP Ops)**
  - ▪ **Voice (CCNA Voice)**
  - ▪ **Wireless (CCNA Wireless)**

Architect

Expert

Professional

Associate

Entry

Cont.

❖ Professional

- **Design (CCDP)**
- **Routing & Switching (CCNP)**
- **Security (CCSP)**
- **Service Provider (CCIP)**
- **Voice (CCVP)**
- **Wireless (CCNP Wireless)**

Cont.

- ❖ **Expert**
  - ▪ **CCDE Design Expert**
  - ▪ **CCIE SP Operations**
  - ▪ **CCIE Routing and Switching**
  - ▪ **CCIE Security**
  - ▪ **CCIE Service Provider**
  - ▪ **CCIE Storage Networking**
  - ▪ **CCIE Voice**
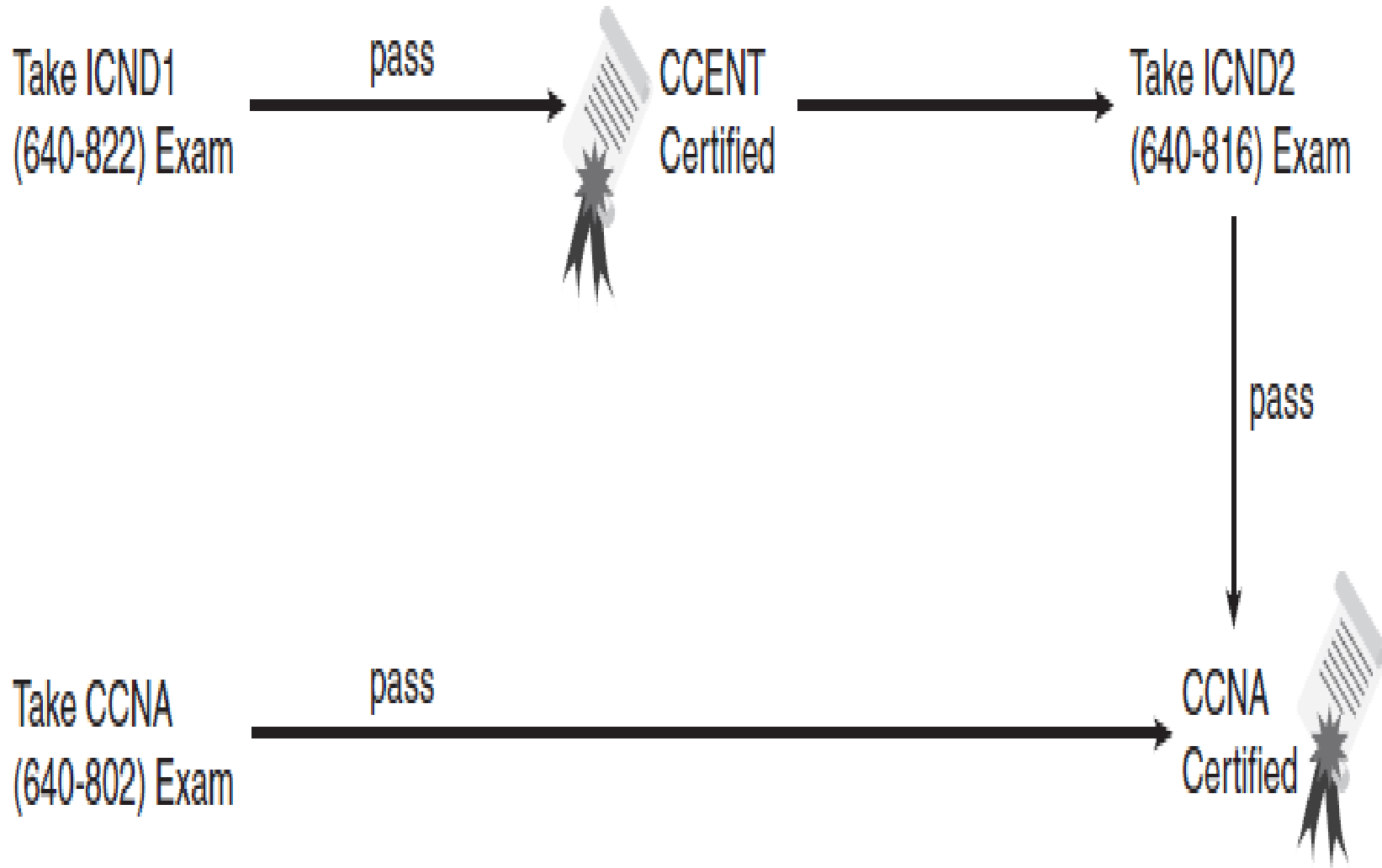 - ▪ **CCIE Wireless**
- ❖ **Architect**
  - ▪ Cisco Certified Architect

CCNA History

❖ The first three versions of the CCNA certification required that you pass a single exam to become certified.

- 1998, 2000, and 2002

❖ For the current certifications, announced in June 2007

- ICND1 (640-822) exam
- ICND2 (640-816) exam
- CCNA (200-120) exam

CCENT & CCNA Certified

Take ICND1 (640-822) Exam ──pass──▶ CCENT Certified ─────▶ Take ICND2 (640-816) Exam

│ pass
▼

Take CCNA (640-802) Exam ──pass──────────────────▶ CCNA Certified

Cisco Career Certifications

**Chih-hung Chao**

HAS SUCCESSFULLY COMPLETED THE
CISCO CAREER CERTIFICATIONS TEST REQUIREMENTS
AND IS RECOGNIZED AS A

Cisco Certified Network Associate - CCNA

CISCO ID#   **CSCO10031619**

John T. Chambers
John Chambers
President and CEO
Cisco Systems, Inc.

Issued: **August 29, 1999**

CISCO SYSTEMS

CCNP Certification

Cisco Career Certifications

Chih-Hung Chao

HAS SUCCESSFULLY COMPLETED THE
CISCO CAREER CERTIFICATIONS TEST REQUIREMENTS
AND IS RECOGNIZED AS A

Cisco Certified Network Professional – CCNP

DATE: June 23, 2000
CISCO ID#   CSCO10031619

John Chambers
President and CEO
Cisco Systems, Inc.

CISCO SYSTEMS

CCNA™ CCNP™ CCDA™ CCDP™
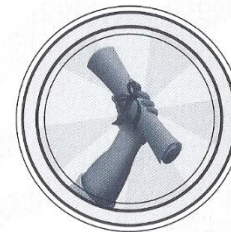
Company ABC, Inc.

Jane Doe
Senior Council

650 555-1212
janed@abcinc.com

100 El Camino Real
Palo Alto, CA
94306-2155

CCNP™

Books

❖教科書
- CCNA 網路規劃與管理實務

❖參考書
- CCENT/CCNA ICND1專業認證手冊 (第三版) (碁峰)
- CCENT/CCNA ICND2專業認證手冊 (第三版) (碁峰)
- CCNA模擬實戰演練 (上奇資訊)

課程內容與進度

❖ **第01**周：課程基本簡介
❖ **第02**周：網路基本運作認識
❖ **第03**周：網路模型運作、ICMP與ARP協定
❖ **第04**周：網際網路協定IPv4規劃
❖ **第05**周：Cisco IOS介紹與常用設定
❖ **第06**周：交換器基礎功能介紹
❖ **第07**周：路由協定原理介紹
❖ **第08**周：基礎路由協定RIP
❖ **第09**周：期中考

Cont.

❖ **第10**周：OSPF路由協定
❖ **第11**周：網際網路協定**IPv6**介紹與設定
❖ **第12**周：IPv6 NDP、Auto-Config and ICMPv6
❖ **第13**周：交換器進階功能介紹
❖ **第14**周：廣域網路介紹
❖ **第15**周：期末分組報告
❖ **第16**周：期末分組報告
❖ **第17**周：**期末考**
❖ **第18**周：**期末總檢討**

其它課程資源

❖ **Packet Tracer 6.0.1**
- ▪ http://mrtg.nuk.edu.tw/~wilson/pt6.exe

❖ **Wireshark**
- ▪ http://www.wireshark.org/

❖ 上課資料
- ▪ 新版高大教學平台
  - • http://elearning2.nuk.edu.tw/

❖ **Exam Engine and Questions on the CD**

評量方法

❖ 平時成績： **30%**
  ▪ 包括課堂表現、實作練習、作業及分組報告。
❖ 出席率：
  ▪ 1.全勤者，本項成績10分。
  ▪ 2.缺席1次不扣分；缺席2次本項成績8分；缺席3次本項成績6分；缺席4次本項成績4分；缺席5次本項成績2分；缺席6次(含)以上則本項成績以0分計。
❖ 期中考：**30%**
❖ 期末考：**30%**

分組報告

高雄大學資訊管理學系 102 學年度第 2 學期

CCNA 網路認證課專題報告日程表(Ref. ICND2_v2)

組別	報告日期	章節	頁次
第一組	05.20	5.2	202 ~ 211
第二組	05.20	5.3 ~ 5.4	211 ~ 223
第九組	05.20	15.2 ~ 15.4	528 ~ 539
第三組	05.27	7.2 ~ 7.3	270 ~ 288
第四組	05.27	7.4	288 ~ 300
第五組	05.27	10.2	380 ~ 389
第六組	06.03	10.3	389 ~ 402
第七組	06.03	11.2 ~ 11.3	408 ~ 417
第八組	06.03	11.4	418 ~ 427

Exam Engine

Pearson IT Certification Practice Test

Cont.

CCENT/CCNA ICND1 640-822 Official Cert Guide, Third Edition

Install the Practice Test

To install the exam engine, click **Install Pearson IT Certification Practice Test**.

Previous Users: If you have already installed the Pearson IT Certification Practice Test from another book, you **DO NOT** need to install the software again. Simply launch the product from the Start menu or your Desktop. Click the **Activate Exam** button in the **My Products** or **Tools** tab, and enter the activation key to activate and download the free practice questions for this book.

New Users: You will need to create a Pearson account before downloading and activating the free practice questions. If you already have an account on **PearsonITCertification.com**, **CiscoPress.com**, or **InformIT.com**, you can use those account credentials to log on instead of creating a new account. When you launch the Pearson IT Certification Practice Test you will be guided through creating a Pearson account.

Install Pearson IT Certification Practice Test

Windows System Requirements:
- Microsoft Windows XP (SP3), Windows Vista (SP2), or Windows 7
- Microsoft .NET Framework 4.0 Client
- Microsoft SQL Server Compact 4.0
- Pentium class 1GHz processor (or equivalent)
- 512 MB RAM
- 650 MB hard disk space plus 50MB for each exam download

Cont.

Setup - Pearson IT Certification Practice Test

Welcome to the Pearson IT Certification Practice Test Setup Wizard

This will install PCPT 1.0.0.7 on your computer.

It is recommended that you close all other applications before continuing.

Click Next to continue, or Cancel to exit Setup.

Next >   Cancel

Exam questions

❖ The exam questions can be in one of the following formats:

- ▪ Multiple-choice (MC)

- ▪ Testlet

- ▪ Drag-and-drop (DND)

- ▪ Simulated lab (Sim)

- ▪ Simlet

Multiple-choice (MC)

Boson Exam Environment — v2.0.2 :: Custom Exam

File Exam Feedback Help

Cisco Press CCNA ICND 2 :: CD-I2-2-57-008-1

Question 111 of 150 | 0% correct | ☐ Mark for review

The exhibit shows the output from commands that are issued on SW1 and SW2 in the figure. Assume that all STP parameters not implied by the text in the exhibit are default values, except for priority, where SW3 has a priority of 30,000 and SW4 has a priority of 30,001. Which of the following commands would immediately change the topology of the spanning tree?
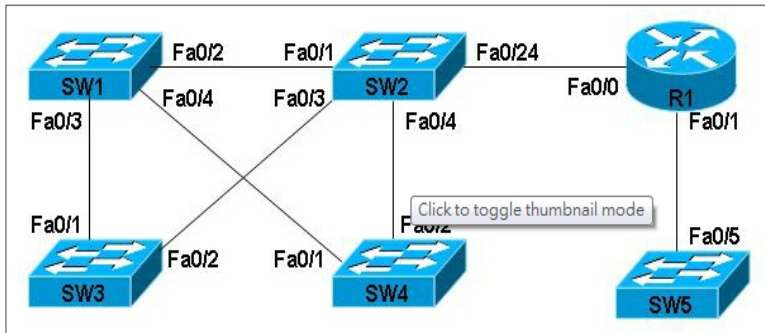
Exhibit 1 (Click to expand)

A. ☐ The **spanning-tree vlan 1 priority 20000** global configuration command on SW1

B. ☐ The **spanning-tree vlan 1 priority 20000** global configuration command on SW2

C. ☑ The **spanning-tree cost 1** command on SW2 under interface fa0/1

D. ☐ The **spanning-tree cost 1** command on SW2 under interface fa0/3

E. ☐ The **spanning-tree vlan 1 root primary** command on SW3

Previous Next Show Answer Notes Print Question Review End and Grade

Testlet

Boson Exam Environment — v2.0.2 :: Custom Exam

File Exam Feedback Help

Cisco Press CCNA ICND 2 :: CD-I2-2-58-007-1 :: CD-I2-2-58-007-1c

The diagram shows a switched LAN. None of the switches has been configured with static MAC addresses or port security. All 6 PCs in the figure can send frames successfully to the switches to which they are connected. Based on the diagram and command output below, answer the following questions.
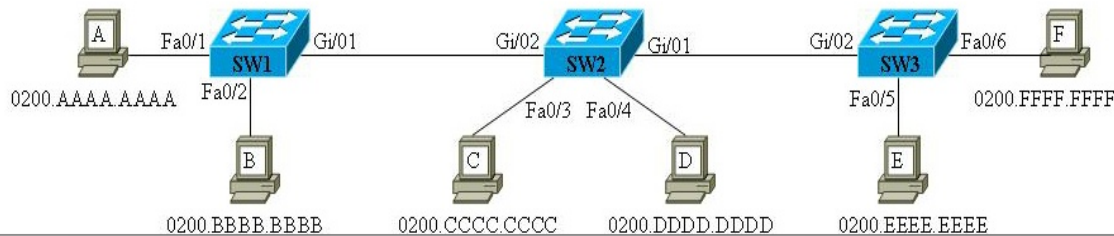
Question 1 of 2 | 0% correct | ☐ Mark for review

All the devices in the diagram have been up and working for a while, except for host A. (Note that as a result, the MAC address tables in the switches at this point in time will be different than the tables shown in the exhibit for this scenario.) PC A is powered on, and then the user issues a **ping 10.1.1.4** command; 10.1.1.4 is host D's IP address. PC A's ARP cache is empty when the **ping** command is issued. Which of the following is true regarding the first frame sent by PC A as a result of the **ping** command?

A. ☐ The frame will not be forwarded to host B

B. ☐ The frame will be forwarded to host C

C. ☐ The frame will be forwarded to SW2, but not SW3

D. ☐ The frame will be forwarded to host D

E. ☐ The frame will be forwarded to host F

Previous   Next   Show Answer   Notes   Print   Question Review   End and Grade

Drag-and-drop (DND)

Simulated lab

Cont.

❖ Sim

- 一般描述一個疑難問題，而你的任務是設定一個或多個路由器及交換器組態來解決它。

❖ Simlet

- 要求你分析工作網路和有問題的網路，將show指令輸出結果與你的網路理論和組態設定知識加以關聯在一起。

Question ?