

*Exam Question Formats*  
*Tips for Taking Exam*  
**CERT DAY PREPARATION**

*Adapted APAC/Japan Technical Advocacy Team Documents*



# Agenda

- Exam Overview & Options
- Study Resources
- Exam Question Formats
- Tips for Taking the Exams
- Legends/Truths
- Time Budgeting

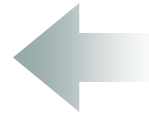
# Exam Overview and Options



# Certification: 1-Step or 2-Step



ICND2 (640-816) Exam



CCNA (640-802) Exam

ICND1 (640-822) Exam

# CCNA Exam (640-802)

**CCNA (640-802) Exam  
Topics**

**ICND2 (640-816) Exam  
Topics**

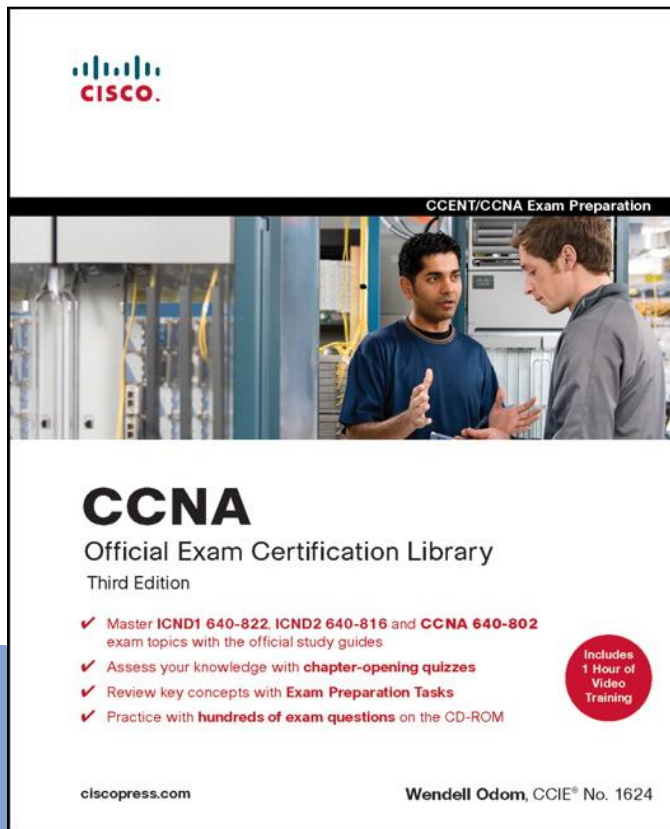
**ICND1 (640-822) Exam  
Topics**

- From an exam day perspective ...
  - You may see more ICND2 than ICND1, because some ICND2 skills require ICND1 skills plus more
  - e.g., An ICND2-level question using VLSM may also prove ICND1-level subnetting knowledge and ICND2-level subnetting knowledge

# Study Resources



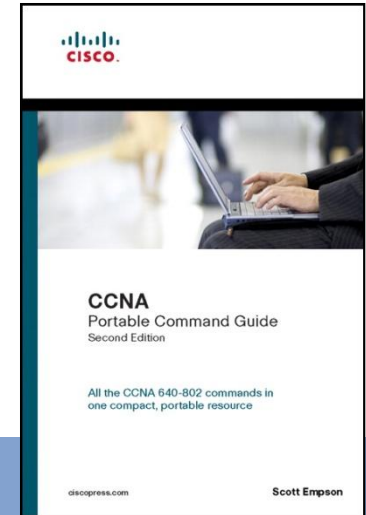
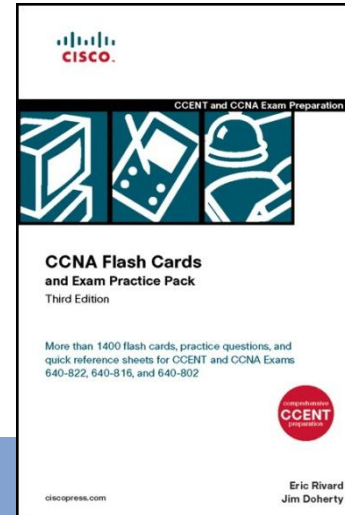
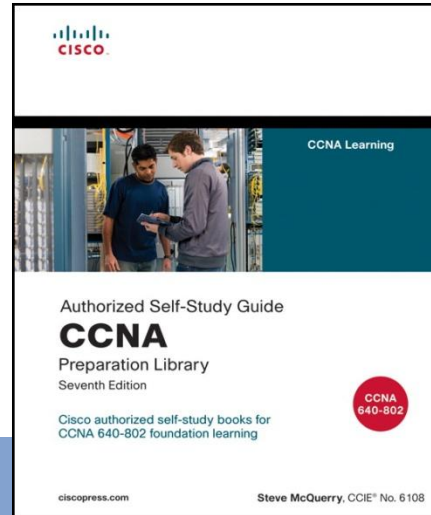
# CCNA Exam Recommended Reading



- *CCENT/CCNA ICND1  
Official Exam Certification Guide,  
Second Edition*
- *CCNA ICND2  
Official Exam Certification Guide,  
Second Edition*
- **1 Hour of Video Training**

# CCNA Exam Recommended Reading

**31 Days Before Your CCNA Exam** second edition  
By Allan Johnson (640-802)



**Video Learning and  
Lab Assistance**

**Foundation  
Learning**

**Test Review and  
Practice**

**Hands on  
Application**



# Exam Question Formats



# Multiple Choice, Single Answer

- May test simple recall of pertinent facts
- May require analysis and understanding of complex scenarios
- If you click a 2<sup>nd</sup> answer, it automatically unchecks the previous answer

Which OSI model layer is concerned with routing?

- A. Layer 1
- B. Layer 3
- C. Layer 5
- D. Layer 7

# Multiple Choice, Multiple Answer

- Question states the number of right answers
- Exam engine reminds about too few, too many answers

Which cable in the campus LAN should be a crossover cable  
(Choose 2)?

- A. SW1 – SW2
- B. PC1 – SW2
- C. AP1 – SW1
- D. R1 – SW2
- E. PC2 – PC3

# Drag-and-Drop

- List of items to be dragged on the left
- Drag to the boxes on the right

Click and drag the unit of information on the left to the OSI Layer to which it best corresponds on the right. Not all apply.

Packet

Frame

Bit

Segment

Record

Layer 1

Layer 2

Layer 3

Layer 4

# Testlet

- One general scenario
- Multiple different multiple choice questions
- Can move around between the questions

The screenshot shows a software interface for a 'Testlet'. At the top, a blue header bar contains the text: 'This is a "Testlet" - it contains 4 questions that relate to the scenario below.' Below this, the 'Scenario' section is highlighted in yellow and contains the text: 'An employee who uses a laptop as a workstation at the office is having trouble establishing a connection to the company network. The employee calls the technical support help desk. After a series of questions, the technical support person has the employee ping the gateway address 192.168.0.1. The support person then has the employee ping the loopback address 127.0.0.1. What the employee reports to the technician is shown below:'. Below the scenario, a question is displayed: 'Given the evidence in the scenario, what are the two possible reasons why the laptop can't connect to the network? (Choose two.)'. The question is labeled 'Question #4' on the left. It has four multiple-choice options, each with a checkbox: 'The gateway is down.', 'The network cable of the laptop is not plugged into the RJ-45 wall jack.', 'The laptop is missing its NIC.', and 'The subnet mask on the gateway is incorrect.'. On the right side of the question area, there is a vertical list of numbers 1, 2, 3, and 4. The number 4 is highlighted in green, indicating it is the selected question. A vertical scrollbar is visible on the right side of the scenario and question text.

Text of overall scenario

Text of each question here...

based on which question is clicked here

# Simulations (Sims)

- Problem Statement, with Goal
- Objective: Complete or Fix the Configuration
- Must Access and Use the CLI
- Click a PC icon to (virtually) Use an Emulator to Connect to Router/Switch
- support:
  - Help (?)
  - Abbreviated commands
  - Tab key to complete commands/keywords

# Sim Topology View

Problem Statement



The network shown in the diagram is setup to use link-state dynamic routing between R1, R2, R3 and R4. The routing between R2, R3 and R4 is working fine, but routing to and from R1 is not working. You have access to the console of all the routers (R1, R2, R3 and R4) for issuing selected commands supported by this simulation to troubleshoot the problem.

Once you identify the problem you will need to access the R1 router console to correct the configuration on R1 to resolve the problem. When the routes to 10.3.3.0/30, 10.2.2.0/30, and 10.4.4.16/28 appear in R1's routing table, you will know that the problem has been resolved.

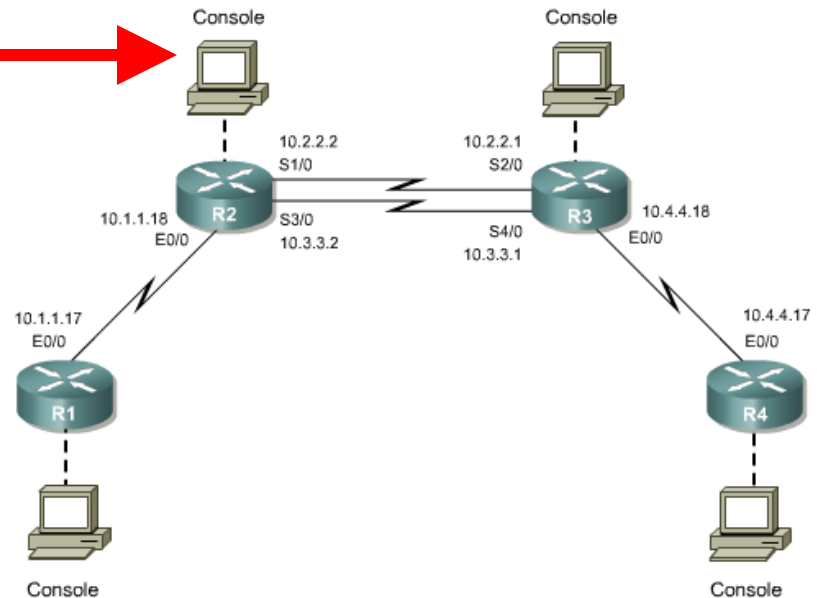
Dashed Line Implies to Click this PC to reach R2's CLI



eSIM™ Professional 01:36  
Scenario 1 Version 1.0

- You will have to scroll this window and the problem statement window to view the entire problem.
- Click on picture of host connected to a router by a serial console cable shown in the diagram as a dotted line and select the CiscoTerminal

Hide Topology



# Sim With CLI Visible

The network shown in the diagram is setup to use link-state dynamic routing between R1, R2, R3 and R4. The routing between R2, R3 and R4 is working fine, but routing to and from R1 is not working. You have access to the console of all the routers (R1, R2, R3 and R4) for issuing selected commands supported by this simulation to troubleshoot the problem.

Once you identify the problem you will need to access the R1 router console to correct the configuration on R1 to resolve the problem. When the routes to 10.3.3.0/30, 10.2.2.0/30, and 10.4.4.16/28 appear in R1's routing table, you will know that the problem has been resolved.

The screenshot displays the eSIM Professional interface. On the left, a sidebar contains a 'Show Topology' button with a red arrow pointing to it. The main area is split into two panes. The top pane shows a list of CLI commands and their descriptions: terminal (Set terminal line parameters), traceroute (Trace route to destination), tunnel (Open a tunnel connection), undebug (Disable debugging functions), verify (Verify a file), where (List active connections), write (Write running configuration to memory, network, or terminal), x28 (Become an X.28 PAD), and x3 (Set X.3 parameters on PAD). The bottom pane shows the output of the 'show ip route' command on router R1, displaying codes for various routing protocols and a list of connected networks: 10.0.0.0/8 (subnetted) and 10.1.1.0/27 (directly connected).

eSIM™ Professional 04:25  
Scenario 1 Version 1.0

- You will have to scroll this window and the problem statement window to view the entire problem.
- Click on picture of host connected to a router by a serial console cable shown in the diagram as a dotted line and select the CiscoTerminal

Show Topology

```
CiscoTerminal

terminal      Set terminal line parameters
traceroute    Trace route to destination
tunnel        Open a tunnel connection
undebug       Disable debugging functions (see also 'debug')
verify        Verify a file
where         List active connections
write         Write running configuration to memory, network, or terminal
x28           Become an X.28 PAD
x3            Set X.3 parameters on PAD

R1#en
R1#sho ip rou
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, * - candidate default
       U - per-user static route, o - ODR

Gateway of last resort is not set

      10.0.0.0/8 is subnetted, 1 subnets
C       10.1.1.0/27 is directly connected, Ethernet0/0
R1#
```

Toggle  
Between CLI  
View and  
Topology  
View Here



# Simlet

- Like testlet, with multiple different Multiple Choice questions
- Like sim, uses simulator
- Objective is to answer Multiple Choice questions
- Typically, no configuration required

# Simlet

Select Question Here

Question #2

What is the access-list number assigned to Ethernet0 interface?

1  102

2  99

3  110

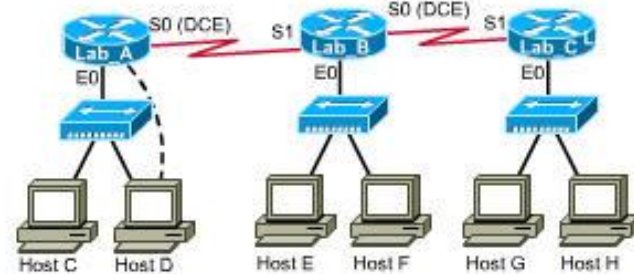
4  35

Toggle Between CLI View and Topology View Here

• You will need to scroll this window to view all the directions.

• To gain access to a router prompt, you must be in the main window, the

Hide Topology



Dashed Line between Host D and router Lab A implies to Click Host D icon to reach Lab A's CLI

# Exam Taking Tips



# Tips:

## Multiple Choice Questions

- Look for the “best” answer; some answers may be good, but not “best”, so read all the answers
- Look for subtleties, for example:
  - “Packet” implies layer 3, typically IP packet, routing, etc
  - “RIP Version 2” implies classless routing protocol and implies both VLSM support and  $2^s$  formula (instead of  $2^s - 2$  formula) for the number of subnets
- If you need to guess:
  - Rule out as many answers as possible
  - Your first impression is usually the better answer to guess
  - There is no penalty for guessing

# Tips: Testlets

- Answer all questions—exam software will remind you before letting you move on
- You can move between questions in a single testlet
  - If confused by testlet question 1, look at question 2
  - When reading question X, go ahead and click answer(s), even if you are unsure, so you'll remember your first impressions
- Same general suggestions as Multiple Choice questions

# Tips: Sims

- Sim questions are always answered by configuring something!
- The Exam Engine grades the **running config**, not the startup config
- Before exam day ...
  - Practice as much as you can (real gear, simulators, sample tests, read every configuration in books, repeat labs while in class, etc.)
  - Use multiple sources for practice/review of configurations
- Exam day ...
  - Do what you can—**partial credit!!!**
  - Start with “show running-config”
  - There are no style points!

# Tips: Simlets

- Simlet questions—no need to change the config!
- You may not have visibility to the running config!
- Before exam day ...
  - Stop and do “show” commands after each step—this emulates the status in Simlet questions
  - Use resources that emphasize and explain show command output
  - Use multiple sources for guidance in your hands-on practice
- Exam day ...
  - Guess if you don't know! (no penalty)
  - If unsure, click your best guess now, to remember your first impressions
  - Read all questions, then use sim (personal preference)

# Router Simulation

## Legends vs. Truth

1. **Legend:** You lose points if you use help “?”
  - **Truth:** No penalty!
2. **Legend:** You have to save your configs even if the simulation does not specifically request saving
  - **Truth:** Grading based on running-config
3. **Legend:** You lose points if you enter too many commands
  - **Truth:** No penalty!



# Router Simulation

## Legends vs. Truth (Cont.)

4. **Legend:** If you miss one little thing, you get 0 points on that Sim question
  - **Truth:** Partial credit is given, so do as much as you can
5. **Legend:** You will fail the exam if you miss even one simulation question
  - **Truth:** You can miss all available points on a sim question and still pass the exam
6. **Legend:** You should spend most of your time working on the simulations
  - **Truth:** Sims do have greater weighting than one MC question, but do not spend most of your time—maybe 5 to 8 minutes

# Other Legends and Truths

- 1. Legend:** The test is adaptive, e.g., if you miss a RIP question, you'll get more RIP questions
  - **Truth:** The tests are not adaptive
- 2. Legend:** My exam covered something not listed in the exam topics
  - **Truth 1:** Exam Topics are “guidelines”; the exams may go beyond the exam topics, so you could see such a question
  - **Truth 2:** More likely: the question was a sample item for possible future tests, and did not affect your score

# Cisco Avoids These Questions ...

- Those that require the memorization of command syntax or interface/menus
- “Trick questions”
- Version-dependent questions, e.g., configure Cisco IOS vs. Cisco Cat IOS
- Subnetting questions that are ambiguous regarding whether to use the  $2^s$  or  $2^s - 2$  formula for the number of subnets

# Time Budget



# Time and Question Counts on the Exams

- The three exams state the following:
  - ICND1: 90 minutes 50–60 questions
  - ICND2: 75 minutes 45–55 questions
  - CCNA: 90 minutes 50–60 questions
- You learn your exam's question count as you begin the exam
- Look at the clock as you begin Sim and Simlet questions

# Time Budget: Short Version

- You need a way to answer the question:
  - Am I using too much time per question so far?
- Time consumers—Sim, Simlet, and Testlet questions—make the obvious math (actual-time/answered-questions vs. time-per-question) much less useful
- Just a suggestion:
  - For each simlet/testlet/sim, add 5 to current question count
  - Multiple by 1.2
  - That's the number of minutes, or less, you should have taken so far
  - It's an estimate—don't be slaved to it

# Time Budget Example

- CCNA Exam
- After question 10, you want to check time
- You've had one Sim question, no Simlets/Testlets
- Multiply  $15 * 1.2 = 18$  minutes
- If actual time  $\leq 18$  minutes, you're doing fine on time

# Register and Check Out

The Cisco Learning Network  
A Wealth of Resources:

- Self Register
- Documents
- Videos
- Discussions
- VIP Blogs
- Self Assessment

[https://learningnetwork.cisco.com/community/learning\\_center?view=overview](https://learningnetwork.cisco.com/community/learning_center?view=overview)



# You Tube Video—'How to Pass the CCNA'

[http://www.youtube.com/watch?v=3UwvOsfJMY8&feature=player\\_embedded#at=72](http://www.youtube.com/watch?v=3UwvOsfJMY8&feature=player_embedded#at=72)

# Summary

**Prepare**

**Use the Many Resources**

**Practice on Routers and Switches, PT, Simulators**

**Time Budget on Questions—Answer All of Them**

**Don't Be Intimidated by the Simulations**

**Give Yourself a Time Budget When You Hit a Simulation**

**Shows and Question Marks work**

**Answer as Much as You Can**

# CERTIFICATION DAY TIPS

- Be calm
- Don't give up
- Don't panic
- Schedule at your best timing
- Don't attempt exam without preparation
- Watch your time
- Focus
- All the best!



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