CCIE Routing and Switching Labtorial

LTRCCIE-3001

Follow us on Twitter for real time updates of the event:
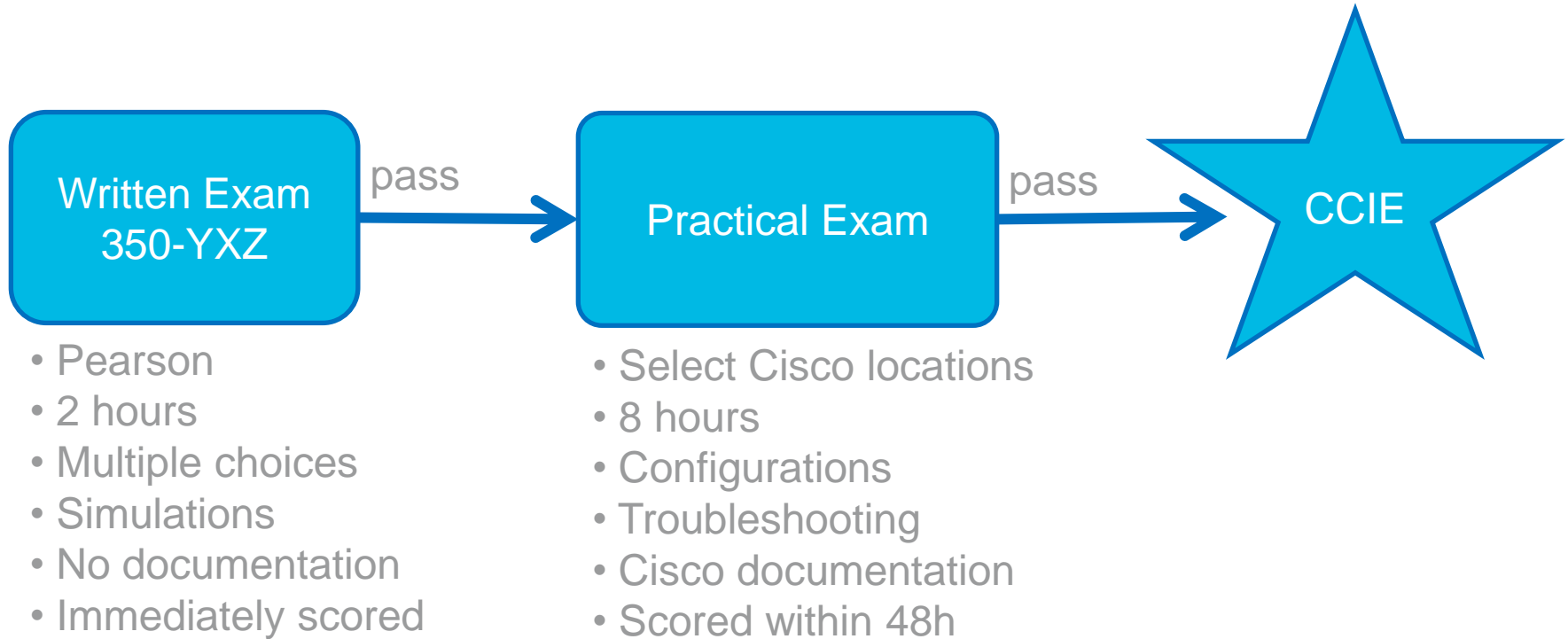
@ciscoliveeurope, #CLEUR

Housekeeping

- We value your feedback- don't forget to complete your online session evaluations after each session & the Overall Conference Evaluation which will be available online from Thursday

- Visit the World of Solutions and Meet the Engineer

- Visit the Cisco Store to purchase your recommended readings

- Please switch off your mobile phones

- After the event don't forget to visit Cisco Live Virtual: www.ciscolivevirtual.com

- Follow us on Twitter for real time updates of the event: @ciscoliveeurope, #CLEUR

Agenda

Section	1	**CCIE Program Update**
Section	2	**CCIE Routing and Switching LAB exam**
Section	3	**Hands-On Lab**
Section	4	**Debriefing**

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Certification Process

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┌─────────────────┐              ┌─────────────────┐              ⭐
│  Written Exam   │    pass      │                 │    pass      CCIE
│   350-YXZ       │ ──────────→  │  Practical Exam │ ──────────→
└─────────────────┘              └─────────────────┘
```

- Pearson
- 2 hours
- Multiple choices
- Simulations
- No documentation
- Immediately scored

- Select Cisco locations
- 8 hours
- Configurations
- Troubleshooting
- Cisco documentation
- Scored within 48h

CCIE Information World Wide

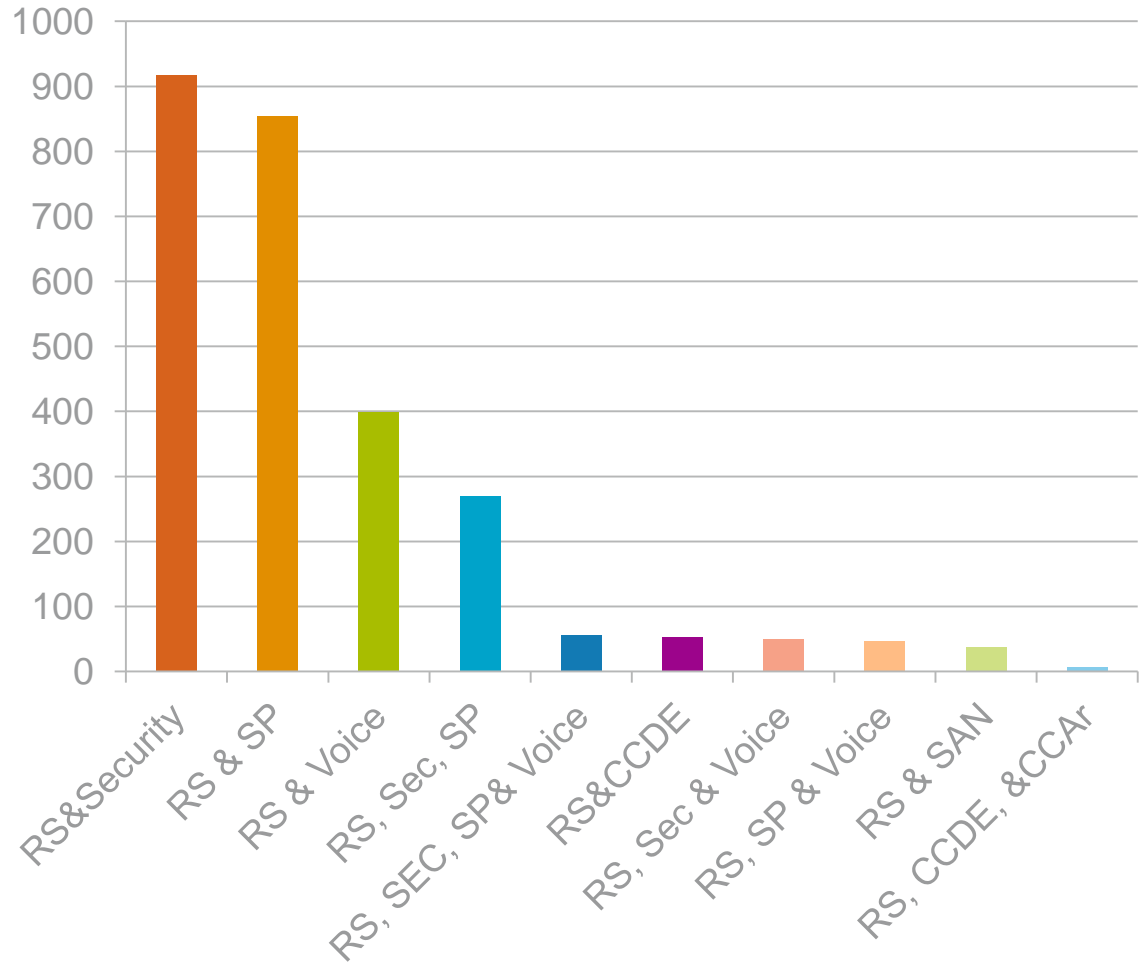| Total	26634*
RS	17,320
Security	3,794
SP	2,885
Voice	2,291
SAN	170
Wireless	93
CCDE	63
SP Ops	11
CCAr	7

Certified or Re-certified
* Updated on 01/09/2012
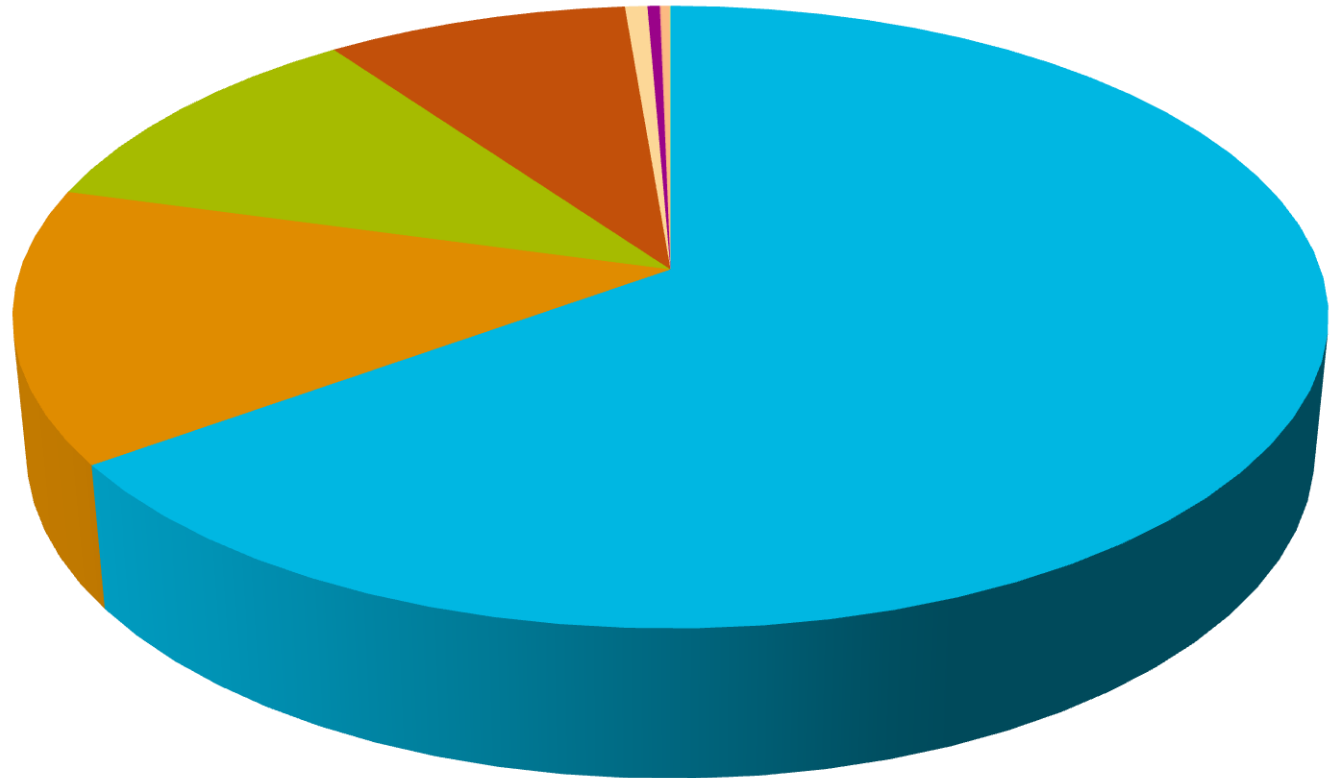
Legend: ■ RS ■ Securty ■ SP ■ Voice ■ SAN ■ Wireless ■ SP OPS ■ CCDE ■ CCAr

CCIE Information World Wide
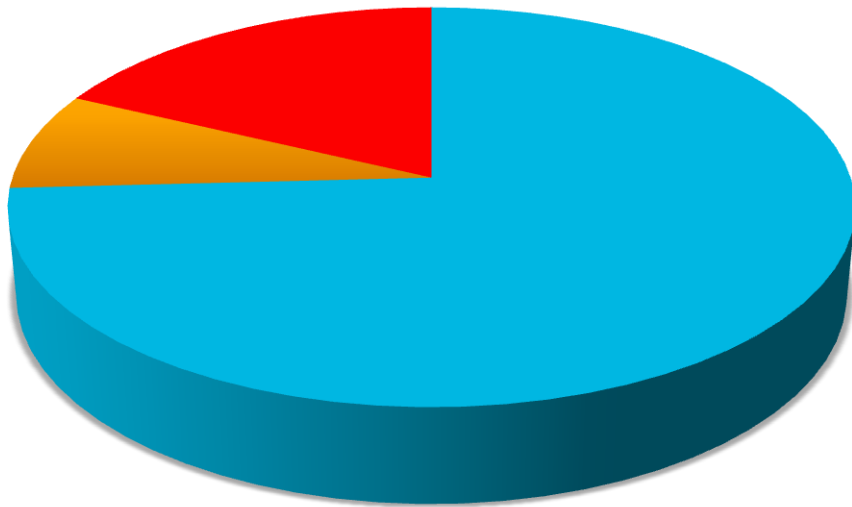

CCIE R&S vs all other tracks

Pie chart legend: ■ RS ■ All Others

Bar chart categories (left to right): RS&Security, RS & SP, RS & Voice, RS, Sec, SP, RS, SEC, SP& Voice, RS&CCDE, RS, Sec & Voice, RS, SP & Voice, RS & SAN, RS, CCDE, &CCAr

Bar chart Y-axis: 0 to 1000
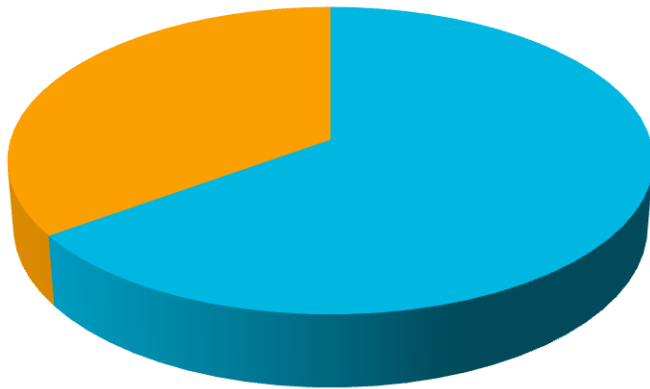
Updated on 01/09/2012

CCIE Information World Wide

Worldwide CCIE per status

Total CCIE per region

- Active
- Suspended
- Inactive
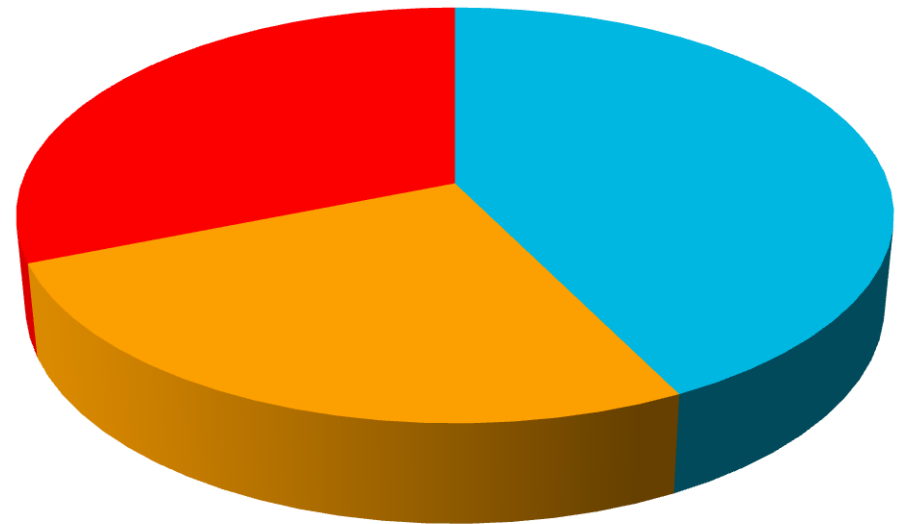
- Pacific Rim
- EMEA
- Americas

Updated on 01/09/2012

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CCIE Information World Wide

Total EMEA CCIEs by Region
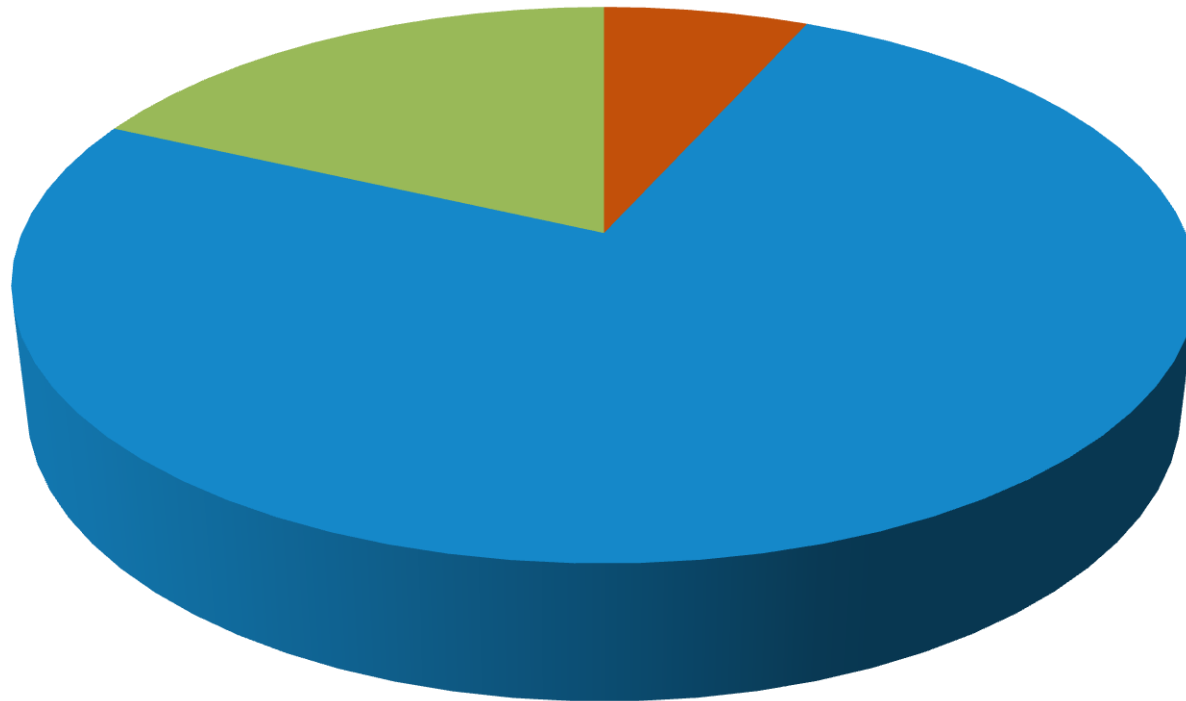
■ Africa ■ Europe ■ Middle East

Updated on 01/09/2012

Agenda

Section	1	CCIE Program Overview
Section	2	**CCIE Routing and Switching Version 4**
Section	3	**Hands-On Lab**
Section	4	**Debriefing**

CCIE Routing and Switching Version 4

- Expert-level knowledge of LAN and WAN interfaces, Routing Protocols, and variety of routers and switches

- Expert-level in troubleshooting to solve complex connectivity problems and apply solutions to increase bandwidth, improve response times, maximize performance, improve security, and support global applications

PPDIOO

CCIE Routing and Switching Version 4

- V4.0 blueprint released May 5, 2009

- V4.0 exams released October 18, 2009

- Written and lab exams refreshed with new questions

- Added coverage of MPLS and VPN

- Written exam added simulations (flash based items)

- Lab exam added hands-on troubleshooting

- Exam durations and pricing remained same

CCIE R&S: Permanent Lab Locations

Beijing

Tokyo

RTP

Brussels

Hong Kong

San Jose

Bangalore

Sydney

Dubai

Sao Paulo

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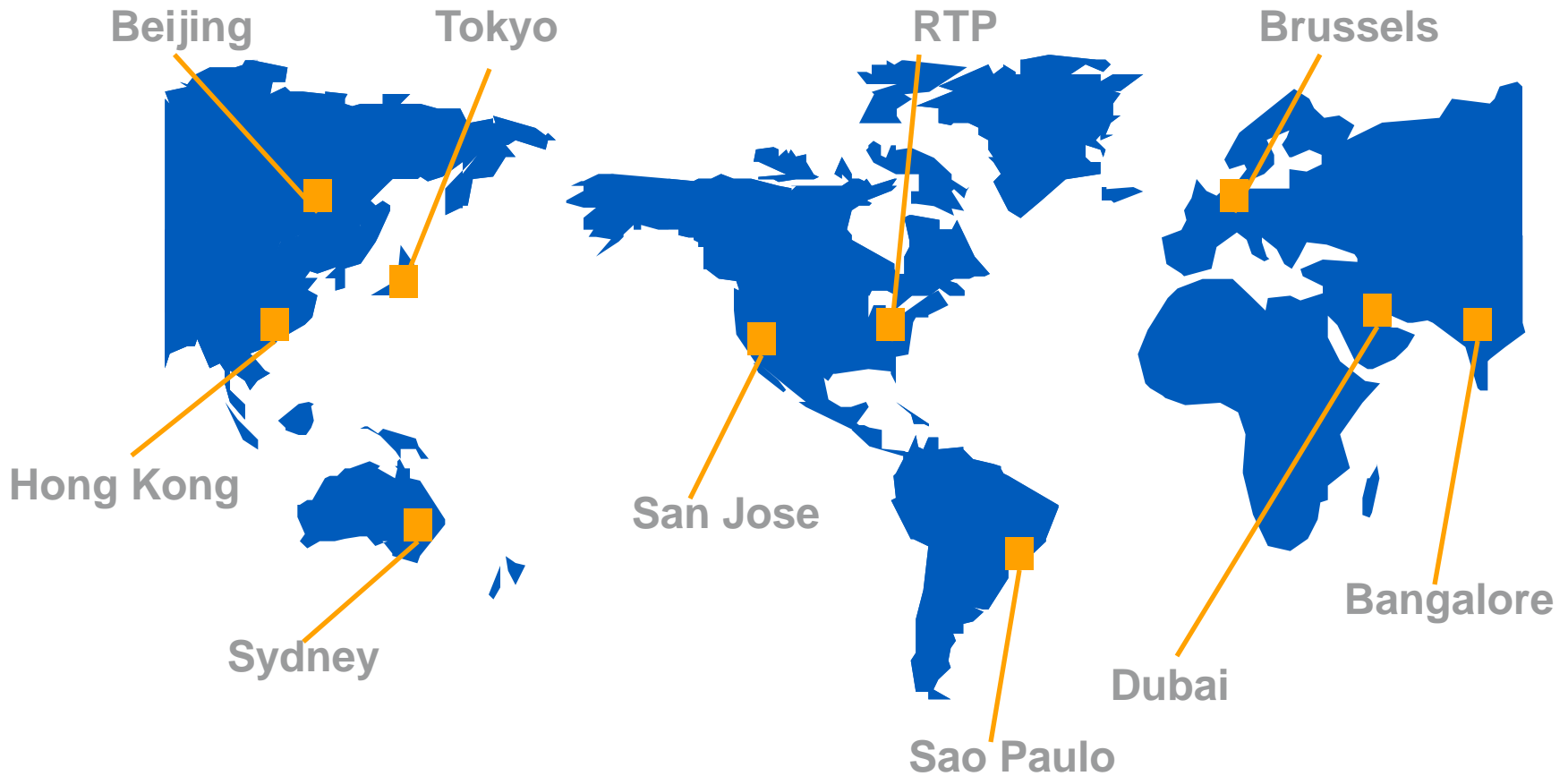
CCIE R&S: Mobile Labs 2012

Note: Dates with an "R" Status are *confirmed events with location information. These events are available for open registration.*

Lab Locations	2012 Dates	Status	Lab
Bangkok, Thailand	Jan 30 - Feb 3	R	Routing & Switching, Security
Riyadh, Saudi Arabia	Feb 4 - 8	R	Routing & Switching, Security
Sao Paulo, Brazil	Feb 13 - 17	R	Routing & Switching, Security
Cairo, Egypt	Feb 19 - 23	R	Routing & Switching, Security
Buenos Aires, Argentina	Mar 5 - 9	R	Routing & Switching, Security and Voice
Moscow, Russia	Mar 19 - 23	R	Routing & Switching, Security
Seoul, South Korea	Mar 19 - 23	R	Routing & Switching, Security and Voice
Mexico City, Mexico	Apr 2 - 6	R	Routing & Switching, Security and Voice
Istanbul, Turkey	Apr 16 - 20	R	Routing & Switching, Security
Lagos, Nigeria	Apr 30 - May 4	R	Routing & Switching, Security
Moscow, Russia	May 14 - 18	R	Routing & Switching, Security
Johannesburg, South Africa	May 28 - Jun 1	R	Routing & Switching, Security
Singapore, Singapore	Jun 4 - 8	R	Routing & Switching, Security and Voice
Rio de Janeiro, Brazil	Jun 11 - 15	R	Routing & Switching, Security
Toronto, Canada	Jun 18-22	R	Routing & Switching, Security and Voice
Warsaw, Poland	Jun 25 - 29	R	Routing & Switching, Security
Shanghai, PR China	Jul 23 - 27	R	Routing & Switching, Security

Status Legend:

N = New date and location, event is not confirmed

R = Confirmed events and are available for open registration, it does not indicate availability. You must Login to the CCIE Database to view availability and register for lab exams.

P = Postponed

C = Canceled, due to low enrollment

Dates for 2012 available at: https://learningnetwork.cisco.com/docs/DOC-3224

CCIE R&Sv4: Exam Philosophy

- **The routing and switching exam tests your ability to apply configuration knowledge, troubleshoot and resolve issues, and react to new and unusual situations;**

- **It is not a design test!**

- **Nor is it always a test of "best practices" for use in the field!**

CCIE R&Sv4: Minimally Qualified Candidate

"The minimally qualified Routing and Switching CCIE can
abstract functional elements of a complex network environment,
understand how infrastructure components interoperate,
grasp subtle issues,
perceive problem areas,
and quickly resolve problems.

The expert's fluency makes them ideally suited for
configuring and validating implementations,
troubleshooting critical network issues,
and participating in network design teams. "

CCIE R&Sv4: Exam Topics

- **Implement Layer 2 Technologies**

- **Implement IPv4 – includes BGP**

- **Implement IPv6**

- **Implement MPLS Layer 3 VPNs**

- **Implement IP Multicast**

- **Implement Network Services**

- **Implement Quality of Service**

- **Implement Network Security**

- **Troubleshoot a Network**

- **Optimize the Network**

- **Evaluate proposed changes to a Network** (only in written exam)

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R&S Lab Exam Overview

- Candidates build a network to a series of supplied specifications

- The point values for each question are shown on the exam

- Some questions depend upon completion of previous parts of the network

- Each candidate has his/her own PC and dedicated rack of equipment, which may or may not be located in lab

R&S Lab Exam Overview

- Equipment should not require hardware configuration or cabling.

- Contact proctor if you discover a problem requiring intervention of this kind

- Report any suspected equipment issues to the proctor as soon as possible; adjustments cannot be made once the exam is over!

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CCIE R&Sv4: Certification Process
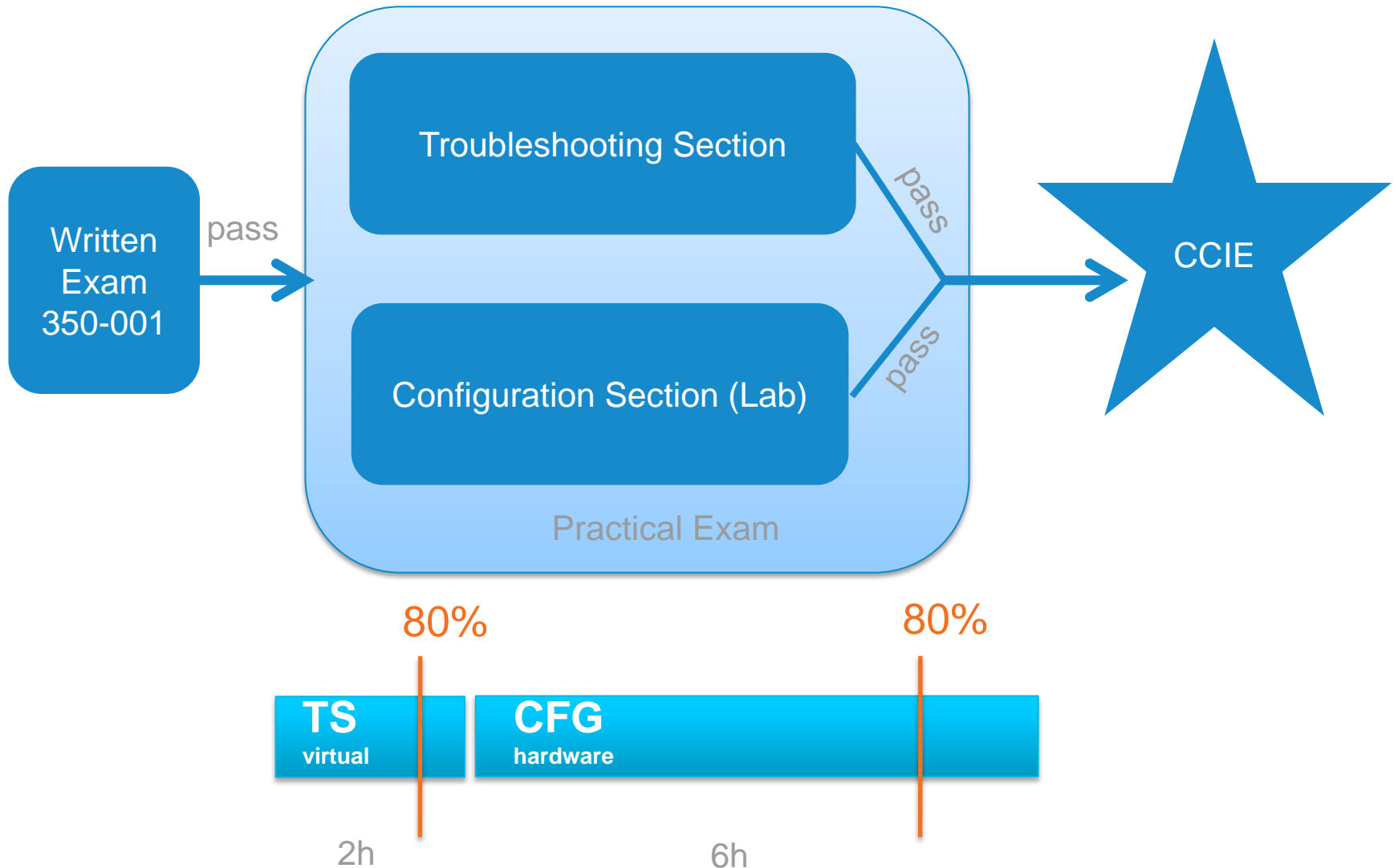
CCIE R&Sv4: Lab Delivery System

- Web GUI delivering all the exam content (questions, diagrams, guidelines, access to devices, documentation)

- Transparent servers backend managing the user sessions and sharing load of running the IOU instances for each users

- Benefits:

  Flexibility in content delivery format

  Content updates effective globally immediately

  Consistent experience for candidates

- No printed exam workbook

CCIE R&Sv4: Lab Delivery System

LDS: Example of TS session

CCIE R&Sv4: Lab Delivery System

LDS: Example of CFG session

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Lab Access

- Lab Access:

    URL: http://lds-prod-fe-1-api.cisco.com/users/login

    User: [Instructor Provided]

- Timing:

Introduction	30min
Troubleshooting section: 1h max (auto-logout)	1h
Configuration section: until 15h30	➔3:30pm
Debriefing	➔5:00pm

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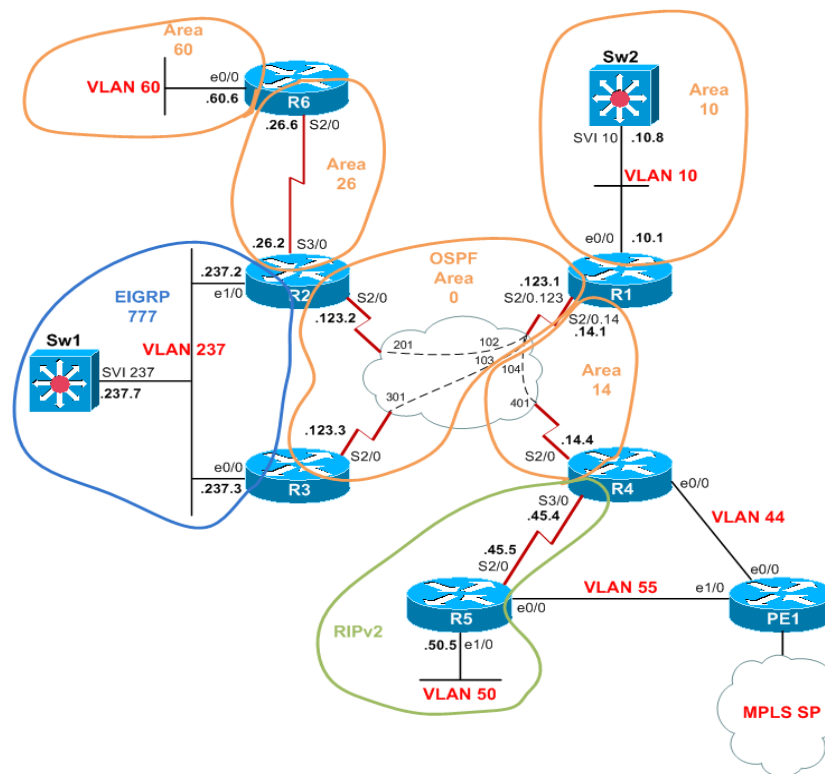# TS Topology

- Virtual devices (IOU + L2IOU)

- Web session will automatically close after **1h!** Be aware!

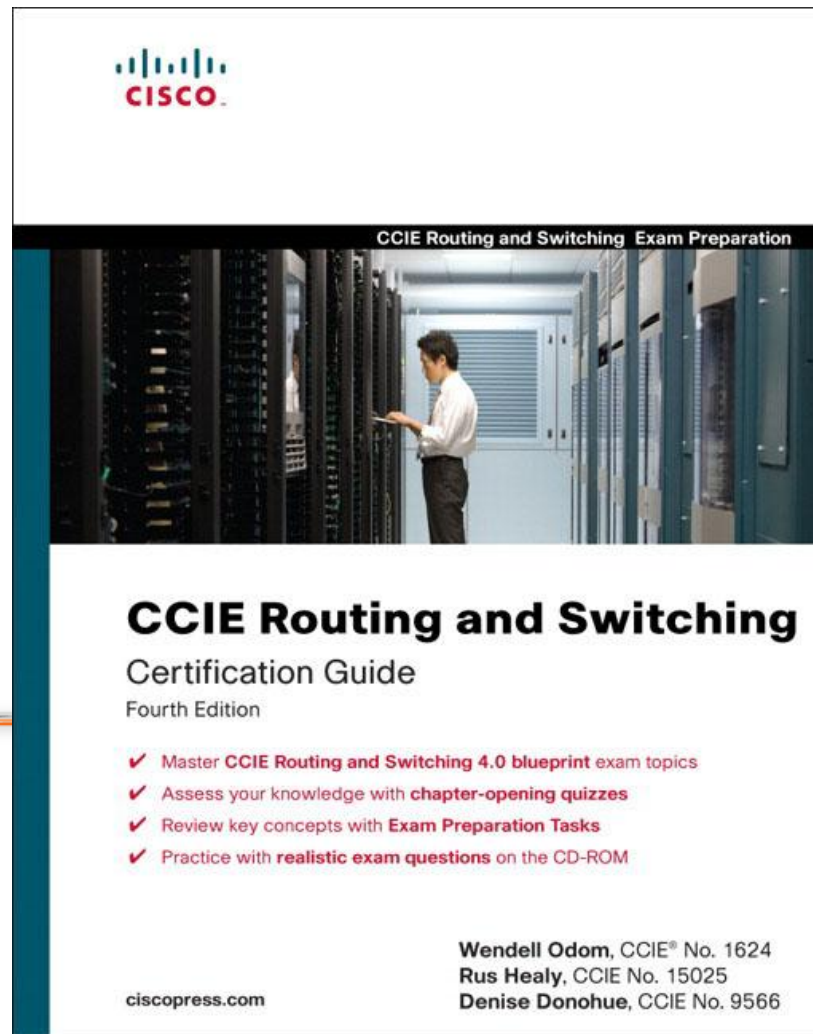- **READ THE GUIDELINES FIRST!**

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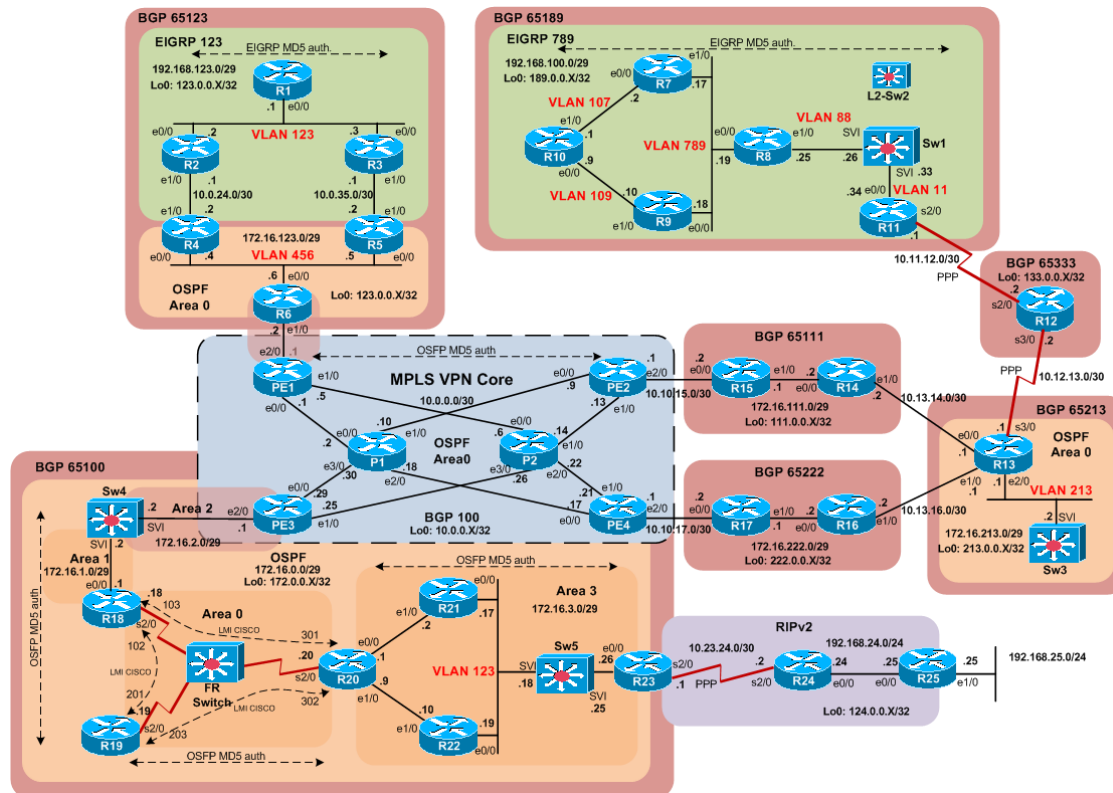
CFG Topology

- Virtual devices (IOU + L2IOU)

- Web session will NOT automatically close… Proctor will stop you.

- **READ THE GUIDELINES FIRST!**

Recommended Reading

Learn. Connect.
Collaborate. together.

Please complete your Session Survey

We value your feedback

- Don't forget to complete your online session evaluations after each session. Complete 4 session evaluations & the Overall Conference Evaluation (available from Thursday) to receive your Cisco Live T-shirt

- Surveys can be found on the Attendee Website at www.ciscolivelondon.com/onsite which can also be accessed through the screens at the Communication Stations

- Or use the Cisco Live Mobile App to complete the surveys from your phone, download the app at www.ciscolivelondon.com/connect/mobile/app.html

1. **Scan the QR code**
   (Go to http://tinyurl.com/qrmelist for QR code reader software, alternatively type in the access URL above)

2. **Download the app or access the mobile site**

3. **Log in to complete and submit the evaluations**

http://m.cisco.com/mat/cleu12/

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Thank you.

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