

# Real World Cisco Voice Passport

Save **£500** from individual prices with a passport price of **£2,490 + VAT**

- Live kit is used throughout all the courses
- Maximum class sizes of 8 delegates
- 8 days training delivered as two 4 day courses
- High practical content with knowledge mirroring real world skills
- Continuing post course support for 12 months
- 11 years experience of Network Training

Our **Real World Cisco VoIP Passport** covers all the essential topics from foundation VoIP and IPT configuration and concepts through to advanced calling, search space and partitions found in converged enterprise deployments.

Certification is not the main course objective, rather practical and engaging training covering all the essential topics. **Real world Cisco voice part 1** and **Real world Cisco voice part 2** can either be taken individually or combined to provide the knowledge to support an enterprise level convergence project from design, installation and configuration through to troubleshooting.

## Real World Cisco VoIP (Part 1)

This task oriented, practical hands-on course assumes nothing about VoIP & IPT and builds in complexity covering all the essential IP Telephony components and concepts providing IT professionals with the knowledge and skills to support and configure Cisco IPT solutions.



Experts in Networking

0870 350 4000  
www.ncat.co.uk  
info@ncat.co.uk

This practical (no theory for theory sake) course provides the foundation that covers the technology, configuration and concepts for Cisco Voice Solutions. It not only covers VoIP but also IPT solutions utilising Call Manager (CCM). Certification is not the main course objective.

- Live equipment used in practicals
- 12 months post course support

### Course Pre-Requisites

- CCENT level of knowledge essential, CCNA level preferred
- Knowledge and understanding of Windows

Course	Course Objectives	Content
<p><b>Real World Cisco Voice (Part 1)</b></p> <p><b>Target audience:</b> CCNA &amp; CCNP level professionals wishing to understand Cisco Solutions</p> <p>The course content forms part of the following Cisco exams with some additional study</p> <p>CVoice QoS CIPT</p> <p>Duration: 4 days</p> <p>Location: Slough Client Site</p>	<p>Upon completion of this course, the delegate will be able to:</p> <ul style="list-style-type: none"> <li>• Understand VoIP terminology</li> <li>• Define the advantages and limitations of VoIP</li> <li>• Understand the Cisco hardware used in different environments</li> <li>• Understand the relationship between CODEC choice, payload size, and transmission bandwidth</li> <li>• Describe the voice quality problems inherent in transmitting voice over a packet network.</li> <li>• Configuring Voice Ports and Dial Peers</li> <li>• Configuring routers for Voice over IP (VoIP)</li> <li>• Configure network wide quality of service (QoS)</li> <li>• Install the Cisco Call Manager components</li> <li>• A basic Configuration of Cisco Call Manager to support IP Phones</li> <li>• Identify and configure Catalyst Switches used in CIPT solutions</li> <li>• Describe how gateways fit into the CIPT design</li> <li>• Configure a basic route &amp; dial plan</li> <li>• Configure Cisco Routers for Call Admission Control</li> </ul>	<ul style="list-style-type: none"> <li>• Basic Call Manager feature definition</li> <li>• Configuring of the Cisco Unified Communications Manager Phone registration process</li> <li>• Analogue and Digital Voice Technologies</li> <li>• Introduction to Voice over IP</li> <li>• Configuring Voice Interfaces</li> <li>• Voice Dial Peers</li> <li>• Voice over IP Signalling and Call Control</li> <li>• Improving and Maintaining Voice Quality</li> <li>• Cisco Call Manager to support IP Phones</li> <li>• Identify and configure Catalyst Switches used in CIPT solutions</li> <li>• Describe how gateways fit into the CIPT design</li> <li>• Configuration of H.323 Gateways and Gatekeepers for Zone CAC</li> <li>• Explanation of the H.323 protocol</li> </ul>

## Real World Cisco VoIP (Part 2)

This practical hands-on course focuses on Communications Manager (Call Manager). This provides delegates with resilient Call Manager design, configuration and troubleshooting in order to broaden and deepen their Call Manager knowledge.



Experts in Networking

0870 350 4000  
www.ncat.co.uk  
info@ncat.co.uk

Focused on understanding and solving common VoIP and IPT problems and issues by building on the knowledge gained from RWCV Part 1.

- Live equipment used in practicals
- 12 months post course support

### Course Pre-Requisites

- CCNA level of knowledge
- Completion of the Real World Cisco Voice Part 1 or the following knowledge
- Cisco IPT Switch and Router configuration including QoS, Gateways/Keepers, toll bypass, etc
- Understand the relationships between Codec choice and Traffic Engineering,
- Understanding basic dial plans, digit analysis, digit manipulation and IP Phone registration
- Configure Call Manager to support IP phones

Course	Course Objectives	Content
<p><b>Real World Cisco Voice (Part 2)</b></p> <p>The course content forms part of the following Cisco exams with some additional study</p> <p>CIPT</p> <p>Duration: 4 days</p> <p>Location: Slough Client Site</p>	<p>Upon completion of this course, the delegate will be able to:</p> <ul style="list-style-type: none"> <li>• Understand the Cisco hardware used in different environments. Including Media Convergence Servers.</li> <li>• To gain a detailed understanding of SCCP call legs and setup</li> <li>• Describe and implement Automated Alternate Routing AAR.</li> <li>• Understand Cisco Call manager resilient deployment design options.</li> <li>• Understand the Cisco Call Manager components.</li> <li>• Understand Cisco Call Manager cluster communication protocol SDL Signal Distribution Layer.</li> <li>• Describe the various IP phone models and list their features</li> <li>• Configure Cisco Call Manager to support a large IP Phones base</li> <li>• Configure Cisco Unity (Voice Mail)</li> <li>• Configure an advanced route plan</li> <li>• Configure a Call Manager Class of Service</li> <li>• Define and Create Extension Mobility feature's.</li> <li>• Add a user to Call Manager and configure user options</li> <li>• Describe how to use the internal server tools to troubleshoot Call Manager problems</li> </ul>	<ul style="list-style-type: none"> <li>• Call Manager 4.x, 5.x, and additional feature definition and explanation for CUCM 6.x</li> <li>• Analogue and Digital Voice Technologies</li> <li>• Signal Distribution Layer</li> <li>• The Skinny Protocol</li> <li>• CCM Time zone/CCM/Device pool and other CCM groups.</li> <li>• Voice over IP Signalling and Call Control</li> <li>• Improving and Maintaining Voice Quality</li> <li>• Call Manager Cluster and Deployment Options</li> <li>• Install the Cisco Call Manager components and upgrade a Call Manager Cluster</li> <li>• Cisco Call Manager to support IP Phones</li> <li>• Deploy Extension Mobility</li> <li>• Deploy Additional Phone Services.</li> <li>• Creation of Hunt Groups.</li> <li>• Add a user to Call Manager and configure user options.</li> <li>• Deploy and configure CCM cluster-to-cluster ICT Trunks.</li> <li>• MGCP &amp; H323 controlled Trunks.</li> <li>• Build on RWCV Pt1 Basic Dial Plan concepts to Advanced Digit Analysis, Translation Patterns and Partitions/Calling Search Space.</li> <li>• Call Manager Cluster and Deployment Options</li> </ul>