



# VCX-IP Maintainer Course

(Level 0,1&2)

Target group	Location
Maintainers and system administrators	Customer site or Frequentis TEC (Vienna)
Language	Max. number of participants
English (unless otherwise agreed)	6
Duration	Course ID
5 days	AN0330

Participants will, through extensive practical exercises, learn how to perform scheduled and corrective system maintenance for VCX-IP up to level 2.

## Course goals

Upon successful completion of this course, participants will be able to

- $\rangle\;$  understand the capabilities of the system
- $\rangle\;$  identify and describe the system components and their functions
- $\rangle$  add and modify A/G, G/G and data functions with their corresponding services
- > identify and rectify faults
- > replace line replaceable units (LRUs) and put them back into service
- > configure services for radio and telephone communication
- > configure services for data communication (if applicable)
- > maintain conversion tables and/or routing settings
- > adapt line parameter settings
- > set system parameters
- > perform system administration tasks



### Knowledge

It is assumed that participants

- have a good understanding of written and spoken English
- have extensive ATC domain know-how
- > have extensive knowledge of air traffic control networks and telecommunication basics
- have a good understanding of IP LAN & IP WAN infrastructure (L2, L3 switches, routers & firewalls)
- are able to configure switches, routers and firewalls in command-line mode
- > have extensive understanding of servers, virtualisation of applications and RAID configuration
- > have expert knowledge of line characteristics/protocols of radio, telephone & data line interfaces in use
- have experience with Linux OS
- have basic knowledge of VoIP (SIP, RTP, QoS)
- > have extensive knowledge and skills of umbrella management
- have expert knowledge and skills of system monitoring and how to derive priorities of incidents

#### Qualifications

The following qualifications are necessary:

- > English language level (CEFR): minimum B2
- > Cisco CCNA certification or equivalent experience and/or 5 years' engineering experience in IT and networking environments
- > Certified Telecommunications Analyst (CTA) certification or equivalent experience
- > Linux Foundation Certified Engineer (LFCE) or equivalent experience

## Training agenda

Day 1	Welcome   Health and safety   Course documentation overview   Introduction to the working environment   System architecture and services   System monitoring   Conclusion
Day 2	Review   Maintenance procedures   System administration   Inspection processes   Conclusion
Day 3	Review   System administration (cont.)   Inspection processes and troubleshooting   Conclusion
Day 4	Review   Inspection processes and troubleshooting (cont.)   Conclusion
Day 5	Review   Case studies and best practices (instructor guided)   Summary and review   Student assessment   Assessment feedback   Student feedback   Student certification   Course closure



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