

Cloud RAN Overview

HOMA1AAE (NWV_111)

HPE course number	HOMA1AAE
Course length	1 hour
Delivery mode	WBT
View schedule, local pricing, and register	View now
View related courses	View now

Mobile Communication Service Providers (CSPs) are on the cusp of a multitude of network and business transformation choices. A good conceptual understanding of the new networking and CSP business paradigms is essential for professionals in the communication industry. This course provides a high-level view of the impact and benefits of Cloud RAN, the vision, and opportunities created by future CSP networks, as well as a number of technology challenges that need to be solved to make Cloud RAN a reality.

Why HPE Education Services?

- IDC MarketScape leader 4 years running for IT education and training*
- Recognized by IDC for leading with global coverage, unmatched technical expertise, and targeted education consulting services*
- Key partnerships with industry leaders OpenStack®, VMware®, Linux®, Microsoft®, ITIL, PMI, CSA, and (ISC)²
- Complete continuum of training delivery options—self-paced eLearning, custom education consulting, traditional classroom, video on-demand instruction, live virtual instructor-led with hands-on lab, dedicated onsite training
- Simplified purchase option with HPE Training Credits

Audience

The course is intended for all that are interested in understanding what Cloud RAN is and how it will transform the CSP network over the next few years.

Course objectives

After completing this course, the student will be able to:

- Describe the concept of Cloud RAN
- Illustrate the Cloud RAN architecture and key protocols
- Describe the operational benefits of Cloud RAN

Detailed course outline

Module 1: Current RAN architecture

- RAN architecture
 - Macro cells
 - Small cells
- RAN connectivity

Module 2: Challenges of today

- RAN equipment requirements
- RAN power requirements
- Why Cloud RAN?
- Problems Cloud RAN solves

Module 3: Cloud RAN architecture

- Remote radio head
- Baseband unit
- Fronthaul

Module 4: Benefits and challenges

- OpEx/CapEx
- Operational
- Radio
- Mobility

Module 5: Baseband unit virtualization

- Virtualization of BBU overview
- Virtualized BBU-Pool
- Advantages of Virtualizing BBU

Module 6: Connectivity topologies

- Fronthaul technologies
- Fronthaul protocols

Module 7: Cloud RAN and virtualization

- C-RAN interworking with NFV
- C-RAN interworking with SDN

Module 8: End of course assessment

Learn more at
hpe.com/ww/learnfv

Follow us:



© Copyright 2016 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Microsoft is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries. The OpenStack Word Mark is either a registered trademark/service mark or trademark/service mark of the OpenStack Foundation, in the United States and other countries and is used with the OpenStack Foundation's permission. We are not affiliated with, endorsed or sponsored by the OpenStack Foundation or the OpenStack community. Pivotal and Cloud Foundry are trademarks and/or registered trademarks of Pivotal Software, Inc. in the United States and/or other countries. Linux is the registered trademark of Linus Torvalds in the U.S. and other countries. VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions. All other third-party trademark(s) is/are property of their respective owner(s).