



ITU Centres of Excellence Network for Arab Region

Sudatel Telecommunications Academy (SUDACAD)

**Online Training Course on
"Software Defined Networking (SDN)"
09-16 August 2020**

COURSE OUTLINE

COURSE DESCRIPTION

Title	Software Defined Networking (SDN)
Method of delivery	Online
Objectives	This training aims to provide participants with extensive insights and practices about "Software Defined Networking (SDN)" which is an emerging networking paradigm that greatly simplifies network management tasks. In addition, it opens the door for network innovation through a programmable flexible interface controlling the behavior of the entire network as well as explain different visions of what Software Defined Networking (SDN) actually is, shows real implementations of SDN in very large networks as well as high security networks.
Dates	09-16 August 2020
Duration	7 Days
Registration deadline	06 August 2020
Training fees	75 \$
Course code	200I24940ARB-A

LEARNING OUTCOMES

By the end of this course, participants will be able to:

- Explain the core concepts and architecture of SDN
- Implement and configure SDN environment
- Work with various open source and commercial controller
- Build different SDN topologies by using SDN Simulation(Mininet)
- Understanding and Implementing different network application in various SDN Controller
- Opportunity to take the ONF SDN Associates Certification (OCSA) at the end of your course program
- Compare and contrast conventional networking approaches and SDN.
- Understand the basics of building an SDN application, inclusion issues relate to devises, Controller and application types.

TARGET POPULATION

The course is targeted at Strategic planners, network architects, network managers, systems engineers, network administrator, service planners and carrier operation staff who are responsible for planning, implementing and deploying networks which may require SDN and OpenFlow techniques in the future.

TUTORS/INSTRUCTORS

NAME OF TUTOR(S)/INSTRUCTOR(S)	CONTACT DETAILS
Dr. Ahmed Abdelaziz Abdelatif Osman	ahmedmazar1977@gmail.com

EVALUATION

Participants will be evaluated according to:

- Active interaction in the group exercises and discussions;
- Planned Quizzes;
- Dedication in attending the sessions.

TRAINING SCHEDULE AND CONTENTS / AGENDA

Date for days	Time; Start time	Topics/Activities
09/08/2020	13:00-15:00	The challenges of the traditional network Comparing between traditional network and SDN networks
10/08/2020	13:00-15:00	The advantages of the SDN networks Understanding the SDN architecture
11/08/2020	13:00-15:00	Setup the SDN environment
12/08/2020	13:00-15:00	Working Reactive and Proactive flows
13/08/2020	13:00-15:00	Implementing SDN network with ONOS Controller
15/08/2020	13:00-15:00	Working with ODL Controller
16/08/2020	13:00-15:00	Using the Restful APIs in SDN controller Overview of the ONF projects

METHODOLOGY

- Instructor-Led Class Lectures and presentations– Slides.
- Reviews and Revisions.
- Case Studies.

TRAINING COORDINATION

Training Coordinator: Eng. Mohaned Abdalla Suleiman Senior Sales Engineer Planning & Development Dept., SUDACAD Mobile: +249 120 120 983 Tel: +249 183 490 999 E-mail: mohanedas@sudatel.sd	ITU Coordinator: Eng. Mustafa Al Mahdi Programme Administrator ITU Arab Regional Office Tel: +202 3537 1777 Mobile: +20114 1177573 Fax: +202 3537 1888 Email: mustafa-ahmed.al-mahdi@itu.int
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REGISTRATION AND PAYMENT

ITU Academy portal account

Registration and payment should be made online at the ITU Academy portal.

To be able to register for the course you MUST first create an account in the ITU Academy portal at the following address:

<https://academy.itu.int/index.php/user/register>

Training registration

When you have an existing account or created a new account, you can register for the course online at the following link: <https://academy.itu.int/index.php/training-courses/full-catalogue/software-defined-networking-sdn> You can also register by finding your desired course in our training catalogue <https://academy.itu.int/index.php/training-courses/full-catalogue>

Payment

1. On-line payment

A training fee of USD 75 per participant is applied for this training. Payments should be made via the online system using the link mentioned above for training registration at <https://academy.itu.int/index.php/training-courses/full-catalogue/software-defined-networking-sdn>

2. Payment by bank transfer

Where it is not possible to make payment via the online system, select the option for offline payment to generate an invoice using the same link as above. Download the invoice to make a bank transfer to the ITU bank account shown below. Then send the proof of payment/copy of bank transfer slip and the invoice copy to Hcbmail@itu.int and copy the course coordinator. All bank transaction fees must be borne by the payer.

Failure to submit the above documents may result in the applicant not being registered for the training.

3. Group payment

Institutional Contacts are users that represent an organization. Any student can request to be an institutional contact or to belong to any existing organization.

To do this, head to your profile page by clicking on the **“My account”** button in the user menu. At the bottom of this page you should see two buttons:

- a. If you want to **become an institutional contact**, click on the **“Apply to be an Institutional Contact”** button. This will redirect you to a small form that will ask for the organization name. After you fill the name of the organization you want to represent, click on **“continue”** and a request will be created. An ITU Academy manager will manually review this request and accept or deny it accordingly.
- b. If you want to **belong to an existing organization**, click on the **“Request to belong to an Institutional Contact”** button. This will redirect you to a small form that will ask you to select the organization you want to join from an organization list. After you select the correct organization, click on **“continue”**, a request will then be created. The Institutional Contact that represents that organization will manually accept or deny your request to join the organization.

ITU BANK ACCOUNT DETAILS:

Name and Address of Bank:	UBS Switzerland AG Case postale 2600 CH 1211 Geneva 2 Switzerland
Beneficiary:	Union International des Telecommunications
Account number:	240-C8108252.2 (USD)
Swift:	UBSWCHZH80A
IBAN	CH54 0024 0240 C810 8252 2
Amount:	75 USD
Payment Reference:	CoE-ARB 24940 – WBS No. P.40592.1.06

4. Other method of payment

If due to national regulations, there are restrictions that do not allow for payment to be made using options 1 & 2 above, please contact the ITU coordinator for further assistance.