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Sign up

# Data communication training : The fundamentals

2 days (14 hours)

## Presentation

With our Data Communication (DAC) training course, you'll get a solid introduction to the subject of [data communication](#), with the OSI reference model used to present and evaluate the various best-known technologies and architectures. During the course, you'll learn about basic DAC concepts, data communication terminology, different transmission media, and the [OSI reference model](#) with its different layers. By the end of the course, you'll know everything there is to know about functionality and architecture. From digital data communication to physical and logical transmission, the different networks and TCP/IP. As with all our training courses, this one will introduce you to the latest resources and new features.

## Objectives

- Evaluating communication solutions
- Identify sources of problems
- Understanding the role of data communication
- Data communication classification

## Target audience

- Network administrator
- Network engineer
- Technical solutions architect
- Deployment Engineer

## Prerequisites

Knowledge of the basic structure of a computer.

# Our training program Data communication : The fundamentals

## Introduction

- What is data communication?
- Basic concepts
- Numbering systems
- The different mechanisms
- Transmission procedures and network types

## DAC Fundamentals

- Introduction to DAC fundamentals
- The objectives and importance of DAC in data management
- Data management risks
- DAC standards and regulations

## Architecture and transmission media

- Transmission media
  - Copper
  - Optical fiber
  - Wireless transmission media
- Physical transmission
- Logical transmission
- Data communication architectures
  - Local area networks LAN
  - IEEE 802 project
    - Ethernet
    - WLAN
- WAN Wide Area Networks
  - xDSL
  - PSTN
  - ISDN
  - PDH
  - SDH

## Reference model

- Layered model principles

- The 7 layers of the OSI reference model
  - Application
  - Presentation
  - Session
  - Transport
  - Network
  - Data link
  - Physics
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## Basics of data communication (TCP/IP)

- VPN
- Cloud
- [PRACTICE] FTP server configuration (IIS)

## Further information

## Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

## Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

## Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

## Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

## Sanction

A certificate will be issued to each trainee who completes the course.