Course : production and infrastructure administration tools

Seminar - 2d - 14h00 - Ref. OPG
Price : 1850 € E.T.

NEW

The aim of this course is to provide participants with an overview of tools for the production and administration of information systems infrastructures. You will discover practical concepts for optimizing the management and maintenance of IS infrastructures, while guaranteeing their performance and security.

Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Identify backup and restore tools on the market
- ✓ Identify market scheduling tools
- ✓ Identify security tools on the market
- ✓ Identify the virtualization tools on the market

Intended audience
IT production management and control.

Prerequisites
Knowledge of the IT production environment.

Course schedule

1 Information systems and challenges

- Information system, Computer system: Definitions.
- What's at stake?
- New technologies.

PARTICIPANTS
IT production management and control.

PREREQUISITES
Knowledge of the IT production environment.

TRAINER QUALIFICATIONS
The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS
The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

TEACHING AIDS AND TECHNICAL RESOURCES
• The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
• At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
• A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

2 The concepts

- Lines of analysis.
- Fields of application.
- Types of treatment.
- Computer system components.
- Technical architectures.

3 The components

- Hardware components.
- Means of communication.
- Software: Reminders and definitions.
- Mainframe and server operating systems: proprietary systems, Unix systems, Windows.
- Client operating systems.
- Data servers: RDBMS architecture, Relational DBMS offer.
- Transaction support: properties of a transaction system, two-phase validation.
- Administration and control software: network and system administration and control.
- Development software.
- Software packages: definitions, examples.

4 Major players and technical systems

- Manufacturers and their role in the ecosystem.
- Software publishers and their contributions.
- Service companies: support and expertise.
- Cross-sector banking services: an example of cross-sector collaboration.
- The nature of the main technical systems: their typology and uses.

5 IT architecture concepts and models

- Function distribution model.
- Two/three-level architecture.
- Multi-level architecture with Web interface.
- Multi-level architectures, market.
- Distributed architecture and virtualization.
- Towards a service orientation?
- Portal concept.

6 Technologies, middleware and services

- The main software components.
- Basic, service, data access, transactional and message-oriented middleware.
- Internet/Intranet/Extranet technologies: definitions, fields of application,
- Web technologies : Basic technologies (http, HTML, CSS, XML).
- From browser to intelligent client (plug-in, ActiveX, java, script, etc.).
- From static to dynamic servers (CGI, ASP, JSP, PHP).
- Towards a service-oriented architecture: Notion of service-oriented architecture, techniques and challenges.

7   Integrated offerings and application servers

- Overview and features.
- Typology of application servers.
- Offers.
- Specific offers: Examples of the Microsoft offer.
- J2EE: Main features - Examples of offerings.

8   System security, backup and protection

- System security.
- Message authentication and encryption.
- Public key encryption.
- Key distribution.
- Key management - PKI.
- Internet encryption: HTTPS/SSL.
- Protection against intrusion.
- Proxies and firewalls.
- Backup and restore software.
- The challenges.

Dates and locations

REMOTE CLASS
2026 : 11 June, 17 Sep., 3 Dec.

PARIS LA DÉFENSE
2026 : 4 June, 10 Sep., 26 Nov.