New information systems architectures

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SII-298 **3 Days (21 Hours)**

Description

The information system constitutes an essential support for the company. It must be able to adapt to business changes, it must allow users to move around in complete security, it can be hosted in the cloud in order to facilitate its maintenance... This seminar presents the different IS architectures as well as their problems.

Who is this training for ?

For whom

IT management. Functional management. User project manager. Technical Project Manager/Director. Technical architect.

Prerequisites

Basic knowledge of technical architectures.

Training objectives

- Discover the different types of information system architectures
- Understand the challenges of the main developments in IS architectures
- Evaluate the positioning of key market players
- Understanding the foundations of IS urbanization
- Define a strategy to evolve the technical architecture of the IS

Training program

Introduction aux architectures SI et principes d'urbanisation du SI

- Market history, positioning of players.
- Technical architecture today, roles, challenges.
- What is urbanization? Mapping the existing system.
- Define the target IS.
- Who are the stakeholders? What are the deliverables?
- What management structure? What approach? Maturity, integration, costs, risks.
- Feedback from the field.
- Convergence plan: cultural shift for the company and the IT department.

Architectures Web : les fondamentaux

- Web technologies.
- Birth of the network, technical heritage, contributions of architectures and functional constraints.
- TCP/IP, HTTP/HTTPS, HTML5, CSS3, JavaScript.
- The fundamentals.
- Architectures: from centralized server to n-tier architectures.
- The client, the application servers, the connected and disconnected mode.
- The notions of context, transaction, middleware, components, objects.
- Where is the Java EE architecture today And tomorrow?
- Presentation of the architecture.
- NET.
- The Open Source alternative: the philosophy, the benefits, the risks.
- The platform PHP.
- Exchangesv Exchanges on the choice of an Open Source strategy.

Architectures orientées intégration

- Why are integration issues more organizational and functional than technical?
- Principles of an EAI (Enterprise Application Integration).
- The architecture of an EAI (Workflow, BPM, messaging, connectors, etc.
-).
- Asynchronism as an architectural principle.
- ETL, beyond decision-making!
- Market tools, the offerings of major publishers and specialists.
- Exchanges Exchanges on the role of ETL.

Architectures orientées service (SOA)

- What is a service?
- Differences between managers and brokers.
- Service orchestration.
- Transactional aspects.
- Loose coupling and its four dimensions.
- Security, supervision and maintenance.
- Application examples.
- ESBs (Enterprise Service Bus): SOA convergence? EAI, a sustainable architecture model?
- Web Services.
- Concept and associated standards (SOAP, WSDL, WS-*).
- Develop and deploy Web Services.
- The essential Pivot format in an integration project.
- Positioning of the main market players.
- Exchanges Exchanges on the problem of defining services.

Architectures Cloud

- Cloud (SaaS, PaaS, IaaS), virtualization.
- The SaaS (Software as a Service) vision: architectures for customer service.
- The Cloud: the models of the main players: Amazon, Microsoft, Google, OVH, etc.
- What benefits?
- Major advantage: scalability.
- The success of SaaS for CRM and collaboration.
- Impact on deployment.
- Organizational impacts.
- Performance: Backend, Frontend, CDN.
- Exchanges Exchanges on how to choose a Cloud strategy

Terminaux Mobiles

- Players and market.
- How many platforms to favor?
- Operating systems and supports.
- Technologies, native development vs. Framework.
- Uses, equipment, networks, trends.
- Types of applications: native, web and hybrid.
- Exchanges Native application or Web application ?

Conclusion

- How to reduce adoption time?
- Success factors in terms of technical architecture.
- Expected developments.
- Comment organize your technological watch?