

BSS/OSS Training

BSS/OSS Training course – BSS and OSS Crash Course

BSS/OSS Training course introduces the fundamentals of Business Support Systems (BSS) and Operation Support Systems (OSS), the information technology infrastructure that gives carriers and service providers the ability to create, deploy, manage, and maintain network-based services and applications. This course covers the details of BSS/OSS for current and next generation applications, services and networks.

Recent developments on fiber optics, OTN, telecom engineering, operations, IPv6, IPTV, cloud computing, LTE, IMS, VoLTE, CAMEL, PCRF, Diameter protocol, are discussed to help the attendees to improve their technology knowledge.

BSS/OSS course is designed to provide a general overview for strategic or technical managers, consultants, communications professionals, software engineers, system engineers, network professionals, marketing and sales professional, IT professionals, and others who plan on using, evaluating or working with OSS (Operations Support Systems) and BSS (Business Support Systems).

This course provides attendees with a comprehensive business and technical foundation in BSS and OSS . Upon completion of this course, the participants will:

- Understand what OSS and BSS are
- Explore OSS/BSS requirements for service providers and products
- Understand what different solutions can be used to enable service providers to maximize their profit, minimizing their costs and creating and managing their services and networks smoothly, and the benefits and limitations of each solution.
- Understand what automated and optimized end-to-end telco processes look like and how they could be implemented

Course Content

INTRODUCTION AND OVERVIEW of BSS/OSS

BSS/OSS Executive Summary

- Operation Support Systems (OSS)
- Business Support Systems (BSS)
- Teleco vs. Enterprise
- Telco vs. Cable/MSO
- Wireless SPs
- Current BSS/OSS Issues
- Legacy BSS/OSS Environment
- Next Generation BSS/OSS Market

- Next Generation BSS/OSS Architecture and Requirements
- Next Generation BSS/OSS Design
- Role of ITU-T/TMN/ETSI/ANSI/TMForum Standards
- BSS/OSS Integration
- Middleware and EAI
- Advanced Client-Server BSS/OSS Design Alternatives
- BSS/OSS and Interconnection Issues
- Overview of TOM, eTOM and NGOSS
- Optimizing End-to-End BSS/OSS Strategies
- Impact of new technologies and services on BSS/OSS

BSS/OSS ARCHITECTURE AND FRAMEWORK

- Business and Enterprise Management
- Service Creation and Delivery
- Customer Care Management
- Network Management
- Processes and Business Logic
- OSS/BSS Framework Components
- Service Orders
- Billing Mediation
- Rating
- Billing
- Network Operations Support
- Engineering and Planning
- Network Planning & Development
- Service and Network Provisioning
- Workflow Management
- Inventory Management
- Trouble/Repair Management
- Network Management
- Network Maintenance & Restoration
- Network Data Management
- Data is Key

BSS/OSS Functional Characteristics

- NGOSS and eTOM
- OSS Functional Characteristics and Components
- OAM&P Requirements

- Configuration Management
- Fault Management
- Performance Management
- Accounting Management
- Security Management
- New BSS/OSS Requirements Supporting Next Generation Networks

Applications and Typical Implementations

- Billing
- Customer care
- Provisioning
- Marketing and Sales Support
- Workforce Management
- Network Management
- Inbound Web-Based Gateways
- Outbound Gateways
- Interconnection
- Fraud Detection and Security
- Churn Management
- Emerging Technologies

Impact of New and Advanced Services

- DSL Services
- IP based Services
- VoIP
- IP VPNs
- MPLS/GMPLS
- Broadband
- Data Services
- Storage on Demand
- Videoconferencing
- MPLS VPN Services
- MPLS-TE and MPLS-TP
- OTN/DWDM
- Service Level Agreement (SLAs)
- Customer Self Provisioning
- Real-Time Access to Customer Data/Accounts
- Flow-Through Provisioning

Software Technology Trends

- BSS/OSS Implementation Alternatives
- Object-Oriented Programming Technologies
- New Management Platforms and Middleware
- Software Development Processes
- Next Generation Expert Systems
- Data Warehousing
- Enterprise Application Integration (EIA)

MAJOR DRIVERS FOR NEXT-GENERATION OSS and BSS

- BSS/OSS Infrastructure of Telcos and Enterprises
- BSS/OSS market trends
- Vital competitive elements for converged services
- Telcos and enterprises need new business systems to support the proliferation of services they will offer
- Convergence of telephony and broadband
- Competitive and converged marketplace
- Open-Billing solutions
- How to evaluate a potential BSS for converged services

BSS/OSS Interconnection and Integration

- Industry Approach
- Service Providers Profile
- Vendors Profile
- Open Interfaces
- Integration of Business and Systems Context
- Business Process Optimization
- Automation
- Workflow Enabled Management Application Integration
- Workflow Standardization
- Building Integrated OSS Infrastructure
- Integrated Platforms
- Business Agreements
- Information Agreements
- Catalyst Projects
- Implementing Workflow
- Interconnection Gateways
- BSS/OSS product solutions and vendors

- Immediate and future needs

BSS/OSS Processes

- Service Fulfillment
- Provisioning and Activation
- Flow-through Provisioning
- OSS Interconnection
- Engineering and Operations
- Requirements for Creating and Managing the Network
- Planning and Engineering
- Inventory
- Network Design and Provisioning
- Network Monitoring and Maintenance
- Network Data Mediation
- Requirements for Managing the Service Offerings
- Service Planning and Development
- Service Provisioning
- QoS Management
- Usage Rating
- Tariffing
- Billing and Formatting
- CRM
- Managing customer relationships
- Self-service shopping, provisioning, account maintenance, trouble reporting and billing applications.
- Increased flexibility in Billing platforms to accommodate credit and debit cards, prepaid services, gaming and others
- Customer's ability to create and maintain customized service offerings
- Fraud
- Churn Management

Creating and Managing the Next Generation Services and the Networks

- Planning and Engineering
- QoS
- Inventory
- Network Design and Provisioning
- Network Monitoring and Maintenance
- Network Data Mediation
- Managing the Service Offerings

- Service Planning and Development
- Service Provisioning
- Service Quality Management
- Usage Rating
- CRM
- Creating and managing the network
- Managing the service offerings
- Managing customer relationships
- Designs on OSS Integration
- Incumbent concerns
- Integrate now, benefit later

Process Modeling Approach

- Operations Processes
- Fulfillment (F) Processes
- Assurance (A) Processes
- Billing (B) Processes
- Operations Support & Readiness (OSR) Processes
- Strategy, Infrastructure and Product Processes
- Enterprise Management Processes
- The eBusiness SP Enterprise
- eBusiness Environment
- eBusiness Strategy and Service Provider Business Models
- eBusiness Processes for Service Providers
- Business Process Frameworks

BSS/OSS Vendors

- Software Development Toolkit Providers
- Solution Providers
- Independent Software Vendors
- Market Position
- Products Offering
- Standards Compliance
- Strategy
- Strengths
- Weaknesses
- Assessments

TMForum (Telemanagement Forum) Overview (optional)

- TeleManagement Forum's Telecom Operations Map
- Service Assurance Program
- Service Fulfillment Program
- Framework Architectural framework
- Business Process Framework (eTOM)
- Information Framework (SID)
- Application Framework (TAM)
- Integration Framework
- Architecture and standard interfaces