

# ICMTAM

## Industrial IoT Connected Mass Transit Transportation Solution for Account Managers Workshop

### Course Overview:

Upon completion of the Industrial IoT Connected Mass Transit Transportation Solution for Account Managers Workshop (ICMTAM), the students will have a broad understanding of the drivers, challenges, requirements, market opportunities and business outcomes in the area of modern Cisco Connected Mass Transit Transportation Vertical solution. Students will learn about the Cisco Mass Transit Transportation IoT solution architecture, components, technologies, services, applications, and business challenges. This course will also review the Cisco's competition IoT and the advantages of deploying Cisco Mass Transit Vertical solution. Students will learn about Cisco IoT devices and technologies that are building blocks for the Connected Cisco Mass Transit solution and all the associated Use cases.

Students will learn about the most important Cisco Mass Transit Transportation network management applications and other IoT applications such as Davra RuBAN IoT Management application Computer-aided dispatch (CAD) and Automatic Vehicle Location (AVL), and Fair Payment and Collection Application.

Student will also review a few real-world solution deployments. This course includes training on proposing, selling and explaining the Cisco Mass Transit solution based on Cisco Industrial IoT product portfolio and Cisco Validated Design. Student will learn how to deploy a scalable and secure and resilient Cisco Connected Mass Transit Transportation Solution.

### Prerequisites:

The knowledge and skills that the learner should have before attending this course are as follows:

- Familiarity with selling and proposing Cisco Data Center solutions, cloud solutions, Cisco Routing and Switching solutions, as well as familiarity with the industrial ecosystem.



## Course Objectives:

Upon completing this course, the learner will be able to meet these overall objectives:

- Demonstrate the knowledge of Industrial IoT and IoE business opportunities
- Identify the requirements and sell Cisco Industrial IoT Mass Transit Transportation solution
- Identify Cisco Connected Mass Transit Solution use cases across verticals and horizontals
- Identify the increase revenue opportunities of the IoT solutions
- Demonstrate knowledge of Cisco IoT sales approach to selling Cisco Connected Mass Transit Vertical solutions
- Understand the Industrial IoT market share and the main competitor's solution
- Demonstrate knowledge of the Cisco Connected Mass Transit solution use cases and real-world deployments
- Define the Cisco Industrial IoT product portfolio used in the Connected Mass Transit Transportation Solution
- Understand the IoT and Cisco Connected Mass Transit IoT solution technology stack, standards, protocols and architecture
- Explain the role and benefits of using Cisco Industrial Wireless, Cisco Industrial Security products and networks when deploying Connected Mass Transit solutions
- Explain the Cisco IoT distributed applications and fog computing capabilities
- Describe the Service Provider and Cloud IoT applications and infrastructure
- Understand and demonstrate the benefits of using Cisco Industrial IoT Applications, Fog Computing/ IoT distributed computing and IOx Applications available for Cisco IoT vertical solutions
- Demonstrate the benefits Cisco IoT Industrial Analytics applications
- Explain the Cisco Asset and Fleet Management tools
- Understand the Cisco Service Provider IoT architecture components for Industrial IoT solutions
- Explain Cisco IoT management, monitoring applications and other tools available for Connected Mass Transit Transportation solutions
- Understand Cisco IoT security principles, Cisco IoT Security products used to protect Cisco Mass Transit Transportation solution.
- Understand the scalability, reliability, high-availability and security features of Cisco Connected Mass Transit solution.

## Course Outline:

### Module 1: IoT Overview and Market Positioning

- Lesson 1: Cisco IoT Market Positioning
  - IoT and Industrial IoT Definition
  - Partner Opportunity in IoT
  - Requirements to sell IoT Solutions
  - Cisco IoT Market and IoT Partner Business Opportunity
  - IoT Focus Shift from Information Technology (IT) to Operations Technologies (OT)
  - Address IT and OT Decision-makers' roles
  - Cisco IoT Vertical Industrial Market Overview
- Lesson 2: Cisco IoT Business Case
  - Selling Approach to Cisco IoT Customer
  - Cisco IoT Solutions' Benefits and Values for Customer
- Lesson 3: Business Outcomes and Challenges of Cisco Connected Mass Transit IoT Vertical
  - Challenges, Trends and Obstacles Driving Change in Industrial IoT Transportation
  - Cisco's Digital Journey Value for Mass Transit Transportation
  - Cisco's Connected Mass Transit Benefits
  - Connected Mass Transit Transportation Sectors
  - Cisco and Partners Create Value for Transportation Customers
- Lesson 4: Cisco Competition in Industrial IoT Market
  - Industrial Ethernet switch companies and Market Share
  - Industrial IoT BELDEN Competitive Overview and Market Positioning
  - Typical Hirschmann Network

### Module 2: Introduction into Cisco Industrial IoT and Mass Transit Transportation Ecosystem

- Lesson 1: Industrial IoT Protocols and Devices
  - Cisco Industrial Device Types
  - Industrial IoT Protocols, Standards and Networks
  - Cisco Industrial Wireless Network Advantages and Features

- Lesson 2: Overview of Cisco Industrial IoT Products Portfolio and Partner' Products
  - Cisco IoT Industrial Ethernet (IE) Switching Products
  - Cisco IoT Industrial Embedded and Compute Products
  - Cisco IoT Industrial Wireless Products
  - Cisco IoT Industrial Routing/FAN Products
  - IoT Digital Media Products
  - Cisco IoT Security Products
  - Video Surveillance Manager and IP Cameras
  - Cisco IoT IoX Products
  - Cisco Industrial IoT Management Products
  - Cisco Connected Mass Transit Partners' Products
- Lesson 3: Cisco Industrial IoT Architecture and Mass Transit Architecture
  - Industrial IoT Architectural Approach Yields Large Joint Industrial Networking Opportunity
  - Components of Cisco IoT System Architectural
  - Standardized Industrial IoT Architectures
  - Cisco Connected Transportation High-Level Architecture
  - Cisco Connected Mass Transit High-Level Architecture
  - Cisco Connected Mass Transit System Network Infrastructure and Topology
  - Cisco Connected Mass Transit Technologies
  - Cisco Connected Mass Transit Services
- Lesson 4: Cisco Industrial IoT Distributed Computing/Applications and Cisco Service Provider IoT
  - IoT Fog Computing Applications/ Edge (IOx) Applications
  - Big Data for Data Analytics Applications
  - Service Provider IoT Access
  - IoT Management and Industrial IoT Data Analytics Applications

## Course Outline (cont.):

### Module 3: Cisco Mass Transit Transportation Industrial IoT Solutions, Use Cases and Cisco Competition

- Lesson 1: Cisco Connected Mass Transit Solution CVDs and Use Cases
  - Connected Mass Transit Solution CVD
  - Connected Mass Transit Use Cases
- Lesson 2: Cisco Connected Mass Transit Network Management and other Applications
  - Davra RuBAN IoT Service Delivery Platform and Software
  - Computer-aided dispatch (CAD) and automatic vehicle location (AVL) and Geo Fencing Applications
  - Fair Payment and Collection Application
  - ETA Estimate Time of Arrival
- Lesson 3: High-Availability, Scalability, Performance and Security of Connected Mass Transit Solution
  - Security
  - High Availability
  - Resiliency
- Lesson 4: Connected Mass Transit Case Studies and Examples
  - Delivering Free Wi-Fi Services for Foreign Tourists, Tokyo
  - Cisco Connected Mass Transit with RuBAN IoE Portal for assets monitoring using IoE
  - GSI