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# **MI 2C - Versera ICE Technician Level II**

## **Course Information**

This course is designed for the technician who requires knowledge on the system technical operations. The student will learn configuration, maintenance, troubleshooting and basic administration of the system. Students who will be maintaining the system can expect to have considerable hands on exercises

### **Course Length**

5 Days

### **Prerequisites:**

MI 1C - Versera ICE Technician level I

### **Course Outline:**

#### **Module 1 – Versera ICE System Overview**

This module is designed to provide an introduction to the technical attributes of the ICE system architecture, including the protocols and equipment that ICE will interface with. To become familiar with the hardware layout of the ICE system components. To become familiar with how a call flows through the system.

#### **Module 2 – Signaling Gateway Function (SGF)**

This module is designed to provide the student with the knowledge and skills required to operate and maintain the Signaling Gateway Function (SGF) unit.

#### **Module 3 – Managing Trunks**

This module will help the student identify trunk configuration components and how to modify the trunk configuration of the Versera ICE system. It will include additional troubleshooting information on trunks.

#### **Module 4 – Short Message Service (SMS)**

This module will show the student how to configure, monitor and test Short Message Server (SMS) links used for MWI and Missed Call Server.

#### **Module 5 – Database Change Utility**

This module introduces the student to the database change utility command, dbchng. This utility can be used to examine and modify the subscriber database.

#### **Module 6 – System Broadcast Messages**

The purpose of this module is to show the student how to create a broadcast message prompt, then use commands to send a system-wide broadcast message.

#### **Module 7 – MessageMe/MyServices**

This module will show the student how to operate and maintain the MyServices/MessageMe server.

#### **Module 8 – Missed Call Server**

This module will show the student how to operate and maintain the Missed Call server.

## Module 9 – SMS Alert

This module is designed to provide the student with the knowledge and skills required to operate and maintain the SMS Alert server.

### Course Objectives

After completing this course, the student should be able to:

- Troubleshoot, locate and replace system hardware.
- Configure and troubleshoot SS7 links.
- Complete trunking configuration according to system/switch requirements.
- Properly manage trunks and isolate failures.
- Configure and troubleshoot SMS links.
- Perform database changes and create reports.
- Send system-wide broadcast messages.

### Course Agenda

- Module 1 – Versera ICE System Overview
- Module 2 – Signaling Gateway Function (SGF)
- Module 3 – Managing Trunks
- Module 4 – Short Message Service (SMS)
- Module 5 – Database Change Utility
- Module 6 – System Broadcast Messages
- Module 7 – MessageMe/MyServices
- Module 8 – Missed Call Server
- Module 9 – SMS Alert
- Final Exam
- Certificates
- Course Evaluations

## ***Module 1 – Versera ICE System Overview***

To provide an introduction to the technical attributes of the Versera ICE system architecture, including the protocols and equipment that Versera ICE will interface with.

To become familiar with the hardware layout of the Versera ICE system components and how a signal flows through the system.

### **Module Objectives**

- After completing this module, the student will be able to do the following:
  - Describe the technical attributes of the Versera ICE system
  - Locate each of the Versera ICE components.
  - Describe the function of each component.
  - Describe the system architecture and trace a call through the system.

### **Required Materials**

- Student Study Guide
- ICE Hardware Reference Manual

### **Student Activities**

- Written exercise

## ***Module 2 – Signaling Gateway Function***

This module is designed to provide the student with the knowledge and skills required to operate and maintain the Signaling Gateway Function (SGF) unit.

### **Module Objectives**

- After completing this module, the student will be able to do the following:
  - Describe the basic functionality of an SS7 link and its components
  - Edit system configuration tables to support SS7.
  - Use system utilities to configure ICE for SS7.
  - Connect to the SGF GUI and administer SS7 links.
  - Identify potential problems on the system.

### **Required Materials**

- Student Study Guide
- 9110.01659 – Signaling Gateway Function

### **Student Activities**

- None

## ***Module 3 – Managing Trunks***

This module will help the student identify trunk configuration components and how to modify the trunk configuration of the Versera ICE system. It will include additional troubleshooting information on trunks.

### **Module Objectives**

- After completing this module, the student will be able to do the following:
  - Install new trunks on the ICE system.
  - Make modifications to the necessary files for a new trunk set up.
  - Properly start and stop trunk traffic.
  - Verify operations of newly installed trunks.
  - Verify necessary processes are running on the various ICE platforms.
  - Verify deposited messages can be forwarded to the message store.
  - Uses system utilities to test and monitor trunks.
  - Verify the Media Server, through the Application Server, can retrieve and update subscriber information.
  - Read and interpret log files.

### **Required Materials**

- Student Study Guide

### **Student Activities**

- Lab exercise - Adding trunks to the system.

## **Module 4 – Short Message Services (SMS)**

This module will show the student how to configure, monitor and test Short Message Server (SMS) links used for MWI and Missed Call Server.

### **Module Objectives**

After completing this module, the student will be able to do the following:

- Configure SMS links for MWI, MessageMe and Missed Call Server.
- Configure and display SMS flags.
- Interrogate the status of SMS links

### **Required Materials**

- Student Study Guide

### **Student Activities**

- Lab: Testing SMS Links

## ***Module 5 – Database Change Utility (dbchng)***

This module introduces the student to the database change utility command, dbchng. This utility can be used to examine and modify the subscriber database.

### **Module Objectives**

After completing this lesson, the student will be able to do the following:

- Use the dbchng utility to extract records from the database based upon a specified criteria.

### **Required Materials**

- Student Study Guide

### **Student Activities**

- Lab: Using dbchng

## **Module 6 – System Broadcast Message**

The purpose of this module is to show the student how to create a broadcast message prompt, then use commands to send a system-wide broadcast message.

### **Module Objectives**

After completing this lesson, the student will be able to do the following:

- Record a broadcast message as a wav file and then transfer that file to the Media Servers
- Send the broadcast message to:
  - a single subscriber
  - all subscribers on the Messaging system
  - all subscribers with a specific class of service
  - all subscribers with common data by sending a broadcast message.
- Use the dbchng utility to specify subscribers.
- Use the broadcast utility to specify a specific COS
- View the status of the messages.

### **Required Materials**

- Student Study Guide

### **Student Activities**

- N/A

## **Module 7 – My Services/MessageMe**

This module will show the student how to operate and maintain the MyServices/MessageMe server.

### **Module Objectives**

After completing this lesson, the student will be able to do the following:

- Describe the network architecture.
- Identify the hardware components.
- Provision subscribers for the My Services and MessageMe features
- Use a web browser to access the My Services web pages

### **Required Materials**

- Student Study Guide
- 9110.01764 - My Services Administrator's Guide

### **Student Activities**

- None

## ***Module 8 – Missed Call Server***

This module will show the student how to operate and maintain the Missed Call server.

### **Module Objectives**

After completing this lesson, the student will be able to do the following:

- Describe the basic functionality of the MCN and its components.
- Use the OAM and MCN GUI utilities to configure the MCN.
- Provision subscribers
- Use system utilities to isolate and interpret errors on the system.
- Setup and run simulators to test the system.

### **Required Materials**

- Student Study Guide

### **Student Activities**

- None

## **Module 9 – SMS Alert**

This module is designed to provide the student with the knowledge and skills required to operate and maintain the SMS Alert Server.

### **Module Objectives**

After completing this lesson, the student will be able to do the following:

- Describe the basic functionality of an SS7 link and its components
- Edit system configuration tables to support SS7.
- Use system utilities to configure ICE for SS7.
- Connect to the SGF GUI and administer SS7 links.
- Identify potential problems on the system.

### **Required Materials**

- Student Study Guide

### **Student Activities**

- None