TELMAR NETWORK TECHNOLOGY AN IQor COMPANY

1648 SM OPERATIONS AND MAINTENANCE COURSE CONTENT

System Description

- Describe the features of the 1648 SONET Multiplexer.
- Describe the basics of normal operation.
- State the basic fundamentals of SONET.

Hardware Configurations

- Recognize the rack configurations used in the 1648 SM Terminal Configuration.
- Describe the hierarchy of the tributary shelves and how they are identified.

Tributary Shelf Configurations and Signal Flow

- State the function of the Tributary shelf types used in the 1648 SM Terminal configuration.
- Recognize and state the functions of the modules that can be used in the Tributary shelves of the 1648 SM Terminal configuration.
- Trace Transmit and Receive signal flow for DS--3/STS--1, OC--3, and OC--12 signals through the tributary shelf.

Optical Line Shelf Configuration and Signal Flow

- State the function of the Optical Line shelf used in the 1648 SM Terminal configuration.
- Name and state the functions of the different modules in the Optical Line shelf.
- Trace the transmit and receive signal flow through the Optical Line shelf.

Protection Switching

- Describe Low--Speed DS3 Protection Switching.
- Describe High--Speed Tributary OC--3 and OC--12 Protection Switching.
- Describe High--Speed Protection Switching.

Communication Shelf Configuration

- State the function of the Communication Shelf
- Name the different modules used in the Communication Shelf and state their functions.
- Describe Power Supply module requirements for system expansion

High Density Repeater Configuration

- Describe the features of a 1648 SM High Density Electrical Repeater Configuration

1301 NMX

- Connect a PC with HP OpenView to a network.
- Access and monitor network elements.
- Perform task in a selected network element.
- View alarms.

Hardware Provisioning

- Identify the menus used for provisioning the 1648 Racks and Shelves.
- Identify the menus used for provisioning the Orderwire configurations.
- Identify the menus used for provisioning the Synchronization.
- Identify the menus used for provisioning the Protection Switching.

OVER PLEASE

Facilities Provisioning

- Access all of the Facility Provisioning menus.
- Set line distances using LBO provisioning.
- Navigate through the various Facilities Provisioning menus

Cross Connect Provisioning

- Describe the types of cross connects and explain their differences.
- Add and delete cross connects.
- Perform path traces.

Alarms and Conditions

- Access alarms to aid in troubleshooting.
- Access the NE Status screen to aid in troubleshooting.

Performance Monitoring

- Access the Performance Monitoring screens.
- Describe the parameters contained in the
- Performance Monitoring screens.
- Change the contents of the parameters in the Performance Monitoring screens.

Loopbacks

- Establish Software Loopbacks to verify circuit performance.

Manual Controls and Administration

- Switch High Speed facilities to Protect using the 1301NMX software.
- Perform a Lamp test using the 1301 NMX software.
- Calibrate the OC48 receive input for performance monitoring using the 1301 NMX software.
- Perform an Enhanced Diagnostics test using the 1301 NMX software.
- Display Hardware and Software Inventory using the 1301 NMX software.

CONTACT INFORMATION

TELMAR NETWORK TECHNOLOGY
Sales Representative: 800-326-4949
Telmar Training: 972-295-7307
training@telmarnt.com