



# 1680 OGM OPERATIONS AND MAINTENANCE COURSE CONTENT

## System Overview

- Introduce the student to the 1680 OGM and explain the concepts of the 1680 OGM architecture
- Discuss the possible configurations associated with the 1680 OGM
- Provide a detailed explanation of 4-Fiber Bi-directional Line Switched Ring (4FBLSR) operation
- Make available to the student a list of all associated customer documentation
- Identify all the data rates associated with the 1680 OGM
- State the function of the Multiflex shelves
- Describe the various configurations that can be used in a 1680 OGM network
- Describe the operation of a 4FBLSR system
- Identify the 1680 OGM documentation

## 1680 OGM Features

- Provide a detailed explanation of the Full ADM/4F-BLSR
- Provide a detailed explanation of Half ADM operations
- Discuss in detail the different modules used in the Multiflex shelves of a 1680 OGM rack
- Discuss Customer Interfaces and methods of access
- Discuss Customer Interface Unit modules
- Identify the rack components of a Full ADM/4FBLSR NE
- Identify the rack components of a Half ADM
- State the functions of each module found in a 1680 OGM rack

## Signal Flow

- Provide a detailed explanation of signal flow through the shelves
- Provide a detailed explanation of signal flow through the modules
- Provide a detailed explanation of signal flow through the Network Element (NE)
- Trace electrical signals throughout the modules and shelves
- Describe signal flow throughout a Network Element (NE)

## Switching

- Describe in detail the switching architecture for the 1680 OGM
- Provide a detailed explanation of protection switching
- Identify the types of switching architecture
- Identify the types of protection switching

## Operations

- Identify basic computer requirements to run Alcatel software
- Identify software requirements
- Introduce the student to the 1301 NMX
- Identify the proper Alcatel management software and operational software requirements
- Navigate the 1301 NMX
- Logon to a system
- Logoff a system

- Introduce the student to provisioning the 1680 Optical Gateway Manager (OGM) manually and by using the Turn-Up Wizards.
- Describe the steps to navigate the 1301NE Browser Window
- Identify the menus used for provisioning the 1680 OGM Racks and Shelves
- Identify the menus used to change the service state and delete modules
- Identify menus used to assign OCn types
- Identify the menus used for provisioning Synchronization

## Facilities Provisioning

- Create a new facility using the Facility Wizard
- Provision STS frames
- Provision Section and Line facilities
- Assign STS Paths
- Identify the menus used to provision Optical facilities
- Identify the menus used to assign STS Path facilities
- Identify the menus used to delete optical line and STS path facilities
- Identify the menus used to provision Data Communications Channels

## Provisioning Cross-Connects

- Describes the steps utilizing the Cross-Connect Wizard to provision cross-connects.
- Create a new cross-connects
- View cross-connects
- Delete cross-connects

## Protection Groups

- Provide steps to create and delete Protection Groups
- Provide steps for switches and lockouts
- Provision protections group
- Perform switches and lockouts

## Alarms and Conditions Surveillance

- Describe Procedures for gathering alarm and condition information
- Describe the method of viewing and modifying the alarms and conditions log
- Access alarms and conditions to aid in trouble clearing
- Modify the way alarms and conditions are sorted and displayed
- View Autonomous Messages Log.
- Modify setting for viewing logs
- Modify method of Log query.

## Diagnostics and Administration

- Describe and perform the steps for performing and releasing a loopback
- Describe steps and perform Power level calibrations
- Describe steps to generate hardware and software inventory reports

## CONTACT INFORMATION

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