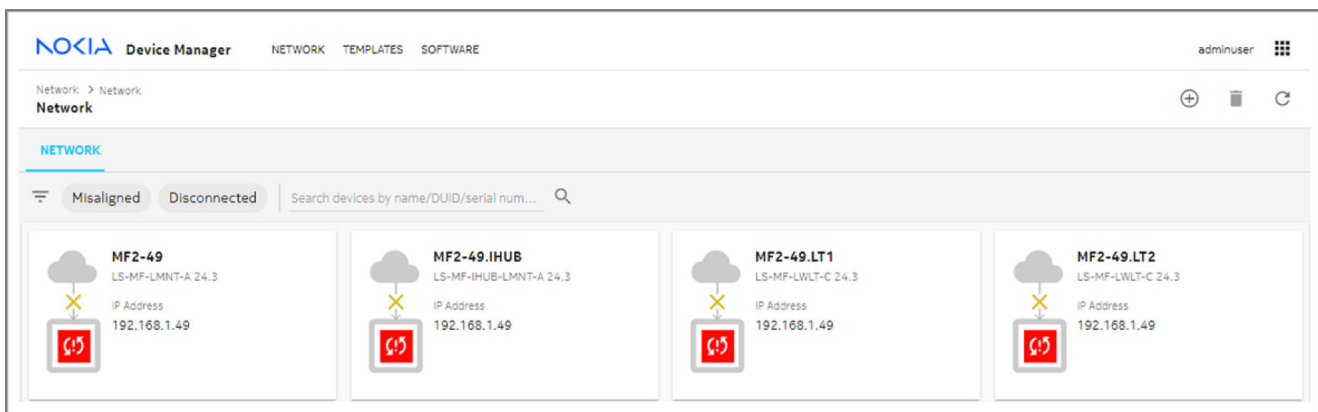


Practice Exam Questions for Nokia Fiber Access Networks Operation Composite Exam (exam number: 4A0-F12)

The following questions will test your knowledge and help prepare you for the Nokia Fiber Access Networks Operation Composite written exam. Compare your responses with the Answer Key at the end of the document.

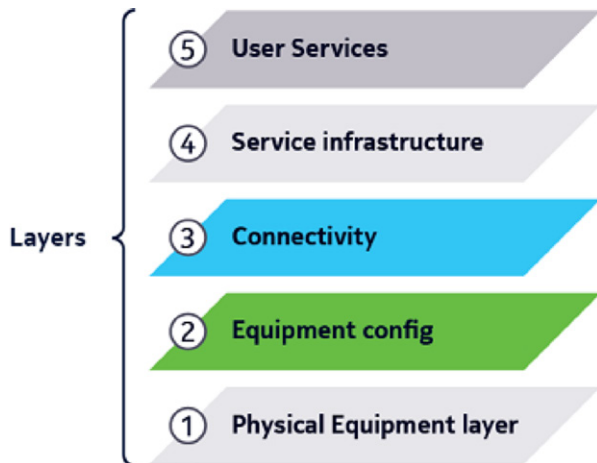
1. Which FTTH component allocates uplink PON bandwidth on demand according to the customer's Service Level Agreement (SLA)?
 - a. Optical Line Termination (OLT)
 - b. Distribution Point Unit (DPU)
 - c. Optical Network Termination (ONT)
 - d. Optical Distribution Network (ODN)
2. In regards to the Nokia Altiplano SDAN solution, which of the following tasks does NOT use NETCONF/YANG?
 - a. Configure a Lightspan device
 - b. Collect state information
 - c. Collect bulk performance metrics
 - d. Receive alarm information
3. Which of the following is NOT a valid management interface on a Lightspan OLT?
 - a. An Ethernet uplink for in-band management
 - b. A PON interface for in-band management
 - c. The LEMI or CRAFT local management port
 - d. The out-of-band management interface
4. Which FTTx scenario uses copper to connect to a customer 6 km away or more?
 - a. FTTE_x
 - b. FTTC_{ab}
 - c. FTT_dp
 - d. FTTH

5. Which of the following is NOT a responsibility of the installer when turning up a new Lightspan device using the Call-Home method?
 - a. Install it and power it up
 - b. Connect its uplink ports to the network
 - c. Configure the management VPNs in its IHUB
 - d. Report the DUID of its NT cards to the Altiplano team
6. A new Lightspan device needs to be turned up using the Direct Connection method and using the factory-default connection to the management network. Which of the following is NOT a required step in this case?
 - a. The Altiplano team shares with the installer the authentication keys and certificates that the device needs to use.
 - b. The installer installs the device, powers it up and connects it to the network.
 - c. The Altiplano team tells Altiplano the device's IP address.
 - d. The Altiplano team creates a device intent for that specific device.
7. Which of the following do you NOT expect to find in a Blueprint package of a given Altiplano release?
 - a. Intent types
 - b. Initial device configurations
 - c. Profiles
 - d. Network view models
 - e. Performance monitoring models
8. Which of the following is an abstract description of a configuration outcome, created for a particular target device or component, and with specific parameter values?
 - a. Intent
 - b. Intent layer
 - c. Intent type
 - d. Composite intent type
9. Consider the exhibit. Which of the following conditions best explains the state of the relevant device, as seen by Altiplano in the diagram?



- a. The device does not have any active LT cards.
- b. The configured login credentials are incorrect.
- c. There are no ONTs connected to the device's fibers.
- d. The device's geo location is different from the one expected.

10. Consider the exhibit. What layer of the intent hierarchy does an uplink-connection intent belong to?



- a. 1
 - b. 2
 - c. 3
 - d. 4
11. Which of the following is NOT required when creating a direct connect device intent in Altiplano AC?
- a. DHCP server
 - b. Type of device
 - c. Network Virtualizer that will be managing the device
 - d. Device IP address
12. When does it make sense to add more than one port to the same fiber intent?
- a. When the port speed is low
 - b. When the installed LT card houses multiple ports
 - c. When multiple ONTs are expected to be connected to the Lightspan device
 - d. When the ports are connected to the same optical distribution network (ODN)
13. Which of the following is NOT a technology offered by Residential Gateway ONTs on the UNI side to connect to HSI, IPTV or voice services?
- a. POTS
 - b. GPON
 - c. Ethernet
 - d. Wi-Fi
14. When is it said that an ONT acts in Hybrid mode?
- a. When it supports both NETCONF and OMCI protocols
 - b. When it performs the combined functions of an OLT and an ONT
 - c. When some of its LAN ports operate in bridged mode and others in routed mode
 - d. When it is being managed using both TR-069 and TR-369

15. When creating an ONT intent, which parameter determines when threshold crossing alerts (TCAs) will be raised due to poor performance at the UNI interface level?
 - a. ONT type
 - b. UNI speed profile
 - c. POTS service profile
 - d. UNI service profile
16. Which of the following is a role that the OLT does NOT play in the subscriber authentication and authorization process?
 - a. 802.1x authentication server
 - b. PPPoE relay agent
 - c. Layer-2 DHCPv4/v6 relay agent
 - d. Layer-3 DHCPv4/v6 relay agent
17. Which of the following statements about the I2-user intent created for an IPTV service is FALSE?
 - a. It specifies the ONT and the UNI that connects the subscriber to the service.
 - b. A separate I2-user intent needs to be created for each subscriber added to a given service.
 - c. If the Q-VLAN tag is not configured, it uses the same value configured for the I2-infra intent.
 - d. An I2-user intent allows a speed profile to be assigned to the user.
18. Which of the following QoS mechanisms is NOT associated with the QoS policy framework?
 - a. Traffic-class assignment
 - b. Policing
 - c. Buffer admission control
 - d. Marking/re-marking
19. Which of the following statements about the way transmission opportunities are managed in a passive optical network (PON) is FALSE?
 - a. Downstream transmissions to multiple ONTs happen in a Time Division Multiplexing (TDM) fashion controlled by the OLT.
 - b. ONTs are allowed to transmit upstream using a Time Division Multiple Access (TDMA) system controlled by the OLT.
 - c. The OLT estimates the distance to each ONT, to help them align their upstream GTC frames and avoid overlapping transmissions.
 - d. The GEM frames sent by the OLT to each ONT are organized in groups, known as transmission containers (T-CONTs).
20. Which of the following statements about a link aggregation group (LAG) configured on an OLT is FALSE?
 - a. LAGs operate in the data link layer (layer 2) of the OSI model.
 - b. All links in an LAG must be full duplex and must have auto-negotiation enabled.
 - c. It is possible to configure LAGs as static or as dynamic by enabling the LACP protocol for them.
 - d. Some links in the LAG can be active and some in standby by adding them to different link sub-groups.
21. Lightspan SX Distribution Point Units (DPUs) support two management models: PTP Ethernet/TR-167 Backhaul (Model 1) and TR-156 Backhaul (Model 2). Which of the following statements about these management models is FALSE?
 - a. In Model 1, the DPU's key functions are configured directly by Altiplano.
 - b. In Model 1, if the DPU uses a PON link to the OLT, it is configured directly by Altiplano.
 - c. In Model 2, the DPU's key functions are configured by Altiplano indirectly through the OLT.
 - d. In Model 2, the DPU's copper G.FAST links towards the customers are configured directly by Altiplano.



22. Which of the following is NOT a requirement that the management network needs to satisfy for Altiplano to be able to access and properly manage a Lightspan device using the call-home model?
- a. If there is layer-2 path redundancy between Altiplano and the Lightspan devices, an Ethernet forwarding loop prevention strategy must be implemented.
 - b. A DHCP server must be present to assign an IP address and to communicate the gateway and Altiplano IP addresses to the Lightspan device.
 - c. A certificate authority must be IP reachable to dynamically assign authentication keys and certificates to the Lightspan device.
 - d. An NTP server must be IP reachable to provide timing information to the Lightspan device.
23. Which of the following statements about intents is FALSE?
- a. A device-<type> intent identifies the connection method that Altiplano and the Lightspan device will use to discover each other.
 - b. A device-<type> intent includes information for the Lightspan device to contact the Network Time Protocol server.
 - c. A device-config-<type> intent enables the selection of a configuration profile for the Lightspan device.
 - d. A device-config-<type> intent is used to push to the Lightspan device all the profiles it needs.
24. Which of the following intents does NOT need to be configured before a new ONT can be discovered by Altiplano?
- a. device-<type>
 - b. device-config-<type>
 - c. fiber
 - d. ont
25. Which of the following needs to be configured when creating an IPTV service and a user associated with it?
- a. An I2-infra intent, with its VLAN mode set to “multicast-vpn”.
 - b. An mcast-infra intent, with its primary NNI set to the interface that connects the service to the aggregation network.
 - c. An I2-user intent, with its user traffic type set to “multicast”.
 - d. An mcast-user intent, with its UNI set to the port that connects the subscriber to the service.
26. Which of the following statements about the QoS Policy Framework and the Egress Traffic Management on a Lightspan device is FALSE?
- a. Marking/re-marking the P (precedence) bits of a frame can be accomplished either by a Marker or by a CCL QoS policy.
 - b. Frame policing can be accomplished either by a CCL or by a Port-policer QoS policy.
 - c. A buffer admission control (BAC) profile admits or drops frames mapped to a queue based on their assigned BAC color.
 - d. A Scheduler QoS policy determines how queues will compete for bandwidth based on their assigned priorities and weights.
27. Which of the following is a Southbound Interface (SBI) of Altiplano's Network Virtualizer (NV)?
- a. vCLI
 - b. RESTCONF
 - c. Kafka
 - d. IPFIX



28. What is the default TCP port to access the vCLI for the Access Controller in Altiplano?
- a. 6512
 - b. 6513
 - c. 6520
 - d. 6530
29. Which of the following statements about the Altiplano license is FALSE?
- a. The license allows the use of different Access Controller features that are available depending on the product variants specified in the license.
 - b. The Access Controller license key must be added to all Network Virtualizer instances connected to the Access Controller.
 - c. The license supports a specified maximum number of subscribers corresponding to different port types that can be managed by the Altiplano Access Controller.
 - d. Without a valid license, the operator cannot access the Access Controller Web GUI.
30. Which of the following is NOT used to add a device manager to the Altiplano Access Controller?
- a. Altiplano Web UI
 - b. NETCONF API
 - c. RESTCONF API
 - d. SNMP
31. Which of the following statements about NETCONF is FALSE?
- a. It uses Extensible Markup Language (XML).
 - b. It is UDP-based.
 - c. It uses the client-server model.
 - d. It can use YANG as its data modeling language.
32. Which of the following is NOT a function of the NC Browser application in the Altiplano Access Controller?
- a. It navigates the contents of the YANG Model of the AC, NV and NETCONF devices.
 - b. It retrieves configuration and state data.
 - c. It edits the configuration data.
 - d. It provides access to a library of macro requests.
33. Which of the following is a reason that an intent is misaligned?
- a. A config change of the device was detected by an audit.
 - b. The intent was just synchronized.
 - c. The rendered configuration was updated according to the configuration in the Network Virtualizer.
 - d. The intent was put into suspend state.
34. Which of the following profile operations is NOT supported in Altiplano Access Controller?
- a. Create new profile
 - b. Create similar profiles
 - c. Copy to new version
 - d. Copy to new device



35. Which of the following can be caused by restoring a device configuration from the Device Configuration History in Network Views?
- a. Automatic reboot of the device
 - b. Creation of a new device template
 - c. Intent misalignment
 - d. Deletion of the current version of the configuration
36. Which of the following statements about the Inventory Manager is TRUE?
- a. Inventory models are uploaded into Altiplano as part of the device extension.
 - b. It allows the querying of all instances of specific inventory Object Types.
 - c. It provides automation of bulk operations for devices and intents.
 - d. It allows the export of queried inventory data to a JSON file.
37. When choosing “intent” as the object in a policy, which of the following operation is NOT available?
- a. Refresh State Data
 - b. Audit
 - c. Modify and Synchronize
 - d. Clean Unused Objects from Device
38. Which of the following statements about the IPFIX back-end service is TRUE?
- a. The IPFIX back-end service is used to handle all incoming IPFIX messages.
 - b. The IPFIX back-end service is used to post-process data using the collection models from the Network Virtualizer.
 - c. The IPFIX back-end service is used to configure IPFIX exporter configuration onto devices.
 - d. The IPFIX back-end service is used to decode messages from the exporter.
39. Which alarm severity indicates a non-service-affecting condition that requires attention but does not require immediate action?
- a. Critical
 - b. Major
 - c. Minor
 - d. Warning
40. Which of the following applications is used to view Altiplano logs?
- a. Altiplano Access Controller
 - b. Altiplano Network Virtualizer
 - c. IndexSearch (OpenSearch) Dashboards
 - d. Keycloak



Answer Key

1. A	11. 1A	21. B	31. B
2. C	12. 1D	22. C	32. D
3. B	13. 1B	23. B	33. A
4. A	14. C	24. D	34. D
5. C	15. D	25. A	35. C
6. A	16. A	26. D	36. B
7. B	17. C	27. D	37. D
8. A	18. C	28. B	38. B
9. B	19. D	29. D	39. C
10. C	20. B	30. D	40. C

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