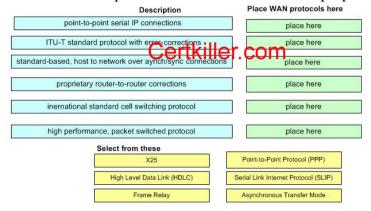
Part 6

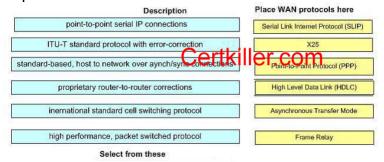
QUESTION 513

Match the WAN protocols on the bottom to their proper descriptions:



Answer:

Explanation:



Reference:

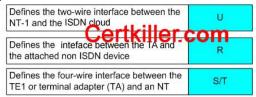
Cisco Press Building Cisco Remote Access Networks Student Guide v1.1 Page 212 & 213



Answer:

Explanation:

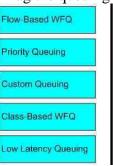




Q

QUESTION 515

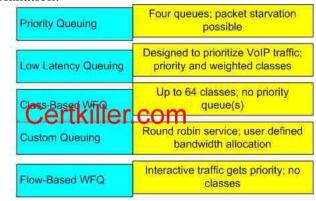
Drag the queuing mechanisms on the left to its matching feature on the right hand side:





Answer:

Explanation:



QUESTION 516

You are tasked with determining the best queuing method to use in the Certkiller network. In regards to traffic control; which queuing method gives preferential service to low-volume traffic streams?

A.FIFO Queuing

B.Priority Queuing

C.Custom Queuing

D. Weighted Fair Queuing

E.Low Latency Queuing

F.None of the above

Answer: D

Explanation:

In WFQ, traffic is sorted by high and low volume conversations. The traffic in a session is kept within one conversation

(session), and the records are handled FIFO within a particular conversation. The lower volume interactive traffic is

given a priority and flows first. The necessary bandwidth is allocated to the interactive traffic, and the high volume

conversations equally share whatever band width is left over.

Reference: CCNP Remote Access Exam Certification Guide, page 298, Brian Morgan & Craig Dennis, Cisco Press

2001, ISBN 1587200031

QUESTION 517

How are routing updates and hellos processed when using custom queuing?

A.They do not need to be queued.

B.They are automatically placed in queue 0.

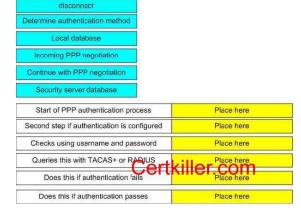
C. They must manually be placed in a high priority queue.

D. They must be part of a policy map to ensure that they have guaranteedbandwidth.

Answer: B

QUESTION 518

Drag the PPP authentication process action to its descriptions.



Answer:

Explanation:

Start of PPP authentication process	Incoming PPP negotiation
Second step if authentication is configured	Determine authentication method
Checks using username and password	Local database
Queries this with TACAS+ or RADIUS	Security server database
Queries this with TACAS+ or RAPIUS Does this if authentication fails	disconnect
Does this if authentication passes	Continue with PPP negotiation

QUESTION 519

IPSec is being used for the Certkiller VPN. In the IPSec protocol; what are the responsibilities of the Internet

Key Exchange (IKE)? (Choose all that apply)

A.Negotiating protocol parameters

B.Integrity checking user hashes

C.Authenticating both sides of a connection

D.Implementing tunnel mode

E.Exchanging public keys

F.Packet encryption

Answer: A, C, E

Explanation:

Internet Key Exchange (IKE) is used to establish all the information needed for a VPN tunnel. Within IKE, you negotiate your security policies, establish your SAs, and create and exchange your keys that will be used by other

algorithms such as DES. IKE is broken down into two phases, described next.

Phase One of IKE

Phase one is used to negotiate policy sets, authenticate peers, and create a secure channel between peers. IKE phase

one can happen in one of two modes, main mode or aggressive mode. The major difference is that in main mode, three

different and distinct exchanges take place to add to the security of the tunnel, whereas in aggressive mode everything is

sent in a single exchange.

Phase Two of IKE

IKE phase two is used to negotiate the IPSec security parameters (such as the IPSec transform sets), establish SAs,

and optionally perform additional DiffieHellman

exchanges. IKE phase two has only one mode, called quick mode,

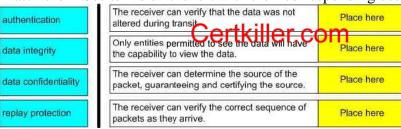
which happens only after IKE phase one has completed.

Reference:

Cisco Press BCRAN 642821 Exam Certification Guide 2004 (ISBN 1587200848) Page 438 to 439

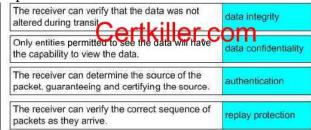
QUESTION 520

Match the IPSec terms on the left with their corresponding descriptions on the right.



Answer:

Explanation:



OUESTION 521

The Certkiller ISDN configuration of Router A is displayed below:



Assuming that there are only two BRI interfaces on Router Certkiller; how many B channels will end up

forming the multilink PPP bundle between routers A & B when the total load threshold continuously remains greater then 50%?

A.1

B.2

C.3

D.4

E.5

F.6

131

Answer: D

Explanation:

When the cumulative load of all UP links (a numbern) exceeds the load threshold the dialer adds an extra link and when

the cumulative load of all UP links minus one (n 1) is at or below load threshold then the dialer can bring down that one

link. The dialer will make additional calls or drop links as necessary but will never interrupt an existing call to another

destination.

Theloadargument is the calculated weighted average load value f

The load is calculated by the system dynamically, based on bandwidth. You can set the bandwidth for an interface in

kilobits per second, using thebandwidthcommand.

The load calculation determines how much of the total bandwidth you are using. Aloadvalue of 255 means that you are

using one hundred percent of the bandwidth. The load number is required.

In this example, since the load is set to only 1 (either incoming or outgoing) the maximum number of BRI links will be

bonded in the bundle. Since there are 2 data channels per BRI interface, all 4 of them will be utilized.

QUESTION 522

Exhibit:



Refer to the exhibit. What is required to make this a valid "dialer watch" configuration?

A. The CK1 backup interface must be configured with the dialer watch disable 30 command.

B.The CK1 dialer watchmust be configured for group 1, not group 8.

C.The CK1 OSPF configuration must have anetworkstatement for 172.22.53.0.

D.The BRI of CK1 must be configured with an additional dialer mapstatement referencing the "watched" network.

Answer: D

QUESTION 523

You are a senior network administrator and your junior administrator didn't arrive to work because he claimed he was sick. So you give him an assignment to do from home via Telnet. So from his home; he

logged onto the companies router and entered the following command:

Router(config)#aaa newmodel

Before entering anything else, the lazy junior administrator (with the intention of being cautious) thought it would be safe to save the configuration to NVRAM, log off from telnet and take a break for a few hours. Assuming that no local username or password exists on the router database, what will happen when the administrator tries to immediately establish another telnet session? (Choose two)

A.The session asks for a username that may not exist.

B. The router requires a reboot to so the administrator can login.

C.The administrator must access the router through the console port to login.

D.The administrator can log in without using a password.

Answer: A, C

Explanation:

Once AAA has been enabled on the router, the administrator must declare the methods by which authentication can

take place. The key issue is to ensure that the administrator has a way to gain access to the router if the AAA server is

down. Failure to provide a backdoor interface can result in lost communications to the router and the necessity to break

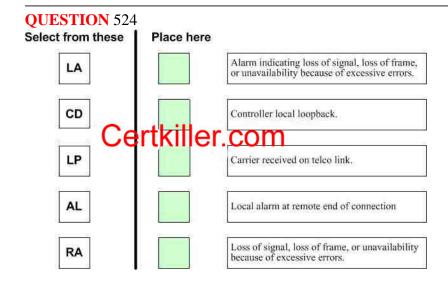
in through the console port. Care should be taken to always configure a local access method during any implementation

of AAA.

References:

Cisco Press BCRAN 642821 Exam Certification Guide 2004 (ISBN 1587200848) Page 408 CCNP Remote Access Exam Certification Guide, page 374, Brian Morgan & Craig Dennis, Cisco Press 2001, ISBN

1587200031



Answer:

Explanation:

Select from these



QUESTION 525

If you wanted to cache the routes learned by distance vector dynamic routing protocols so you can use them over a DDR connection and keep line usage costs down; what strategy would you use?

A.Route redistribution

B.DDR route maps

C.Snapshot routing

D.Passive interfaces

E.Dynamic static routes

Answer: C

Explanation:

In ISDN dialondemand routing (DDR) environments, distance vector routing protocol periodic updates can unnecessarily keep an idle DDR link up, resulting in high usage bills. Snapshot Routing can be implemented to overcome

this limitation. Distance vector protocols such as IP Routing Information Protocol (RIP), Internetwork Packet Exchange

(IPX) RIP, and Interior Gateway Routing Protocol (IGRP) send a full routing table at a fixed interval of time as described below:

- 1. The IP RIP routing protocol sends an update, by default, every 30 seconds.
- 2. The IPX RIP routing protocol sends an update every 60 seconds, per its default interval.
- 3. The IGRP routing protocol sends a routing table update, by default, every 90 seconds.

If you dialed the central site for each of these updates, this periodic traffic would keep an ISDN line up indefinitely and

result in a high usage bill. If you do not dial the central site for these updates, dynamic routes (learned from the routing

protocol) would be removed from the routing table. Snapshot routing forces the router to keep the routing table intact

when the DDR link is down and controls when to dial for periodic routing protocol updates.

Snapshot routing provides the remedy for the constant periodic updates generated by the distance vector routing protocols. Snapshot routing operates by defining a routing protocol updateactive periodandquiet period. The

router may

exchange a snapshot of the routing table during the active period. After the active period expires, a quiet period is

maintained where routing updates are suppressed and the snapshot of the routing table is kept intact. Snapshot routing

can be applied to IPX/RIP and AppleTalk Routing Table Maintenance Protocol (RTMP) as well.

QUESTION 526

According to ISDN standards, the ITUT Q.931 is the protocol that works for:

A. Layer3; D channel B. Layer1, D channel C. Layer5; B channel D. Layer2; B channel

E. Layer4; B channel
F. Layer2; D channel

Answer: A

Explanation:

The ISDN protocol model can be represented in the following diagram:

	Control Plane	User Plane
	Signalling	Bearer Data
Layer 3	D-channel DDR Q.931 TE to Switch	B-channels IP, IPX, AppleTalk
Layer 2	LAPD Q.921 TE to Switch	HDLC FPP (LCP, NCP) Authentication Compression
	PHY	SICAL

Everything that is important occurs in the Control Plane on the D-Channel.

Additional Info:

Layer 3 ISDN signalling is specified in Q.930 (ITUT

I.450)andQ.931 (ITUT

I.451) and operate locally between the

router and the switch. Different switch vendors have different bit interpretations hence why the switch type is important.

Like Q.921, Q.931 is only concerned with the terminal to local switch, and it deals with making and tearing down the

call via the D channel. Within the ISDN network itself SS7Internal Signalling Utility Protocol (ISUP) is used. The

fields for Q.931 are shown below:

 Bits
 8
 4
 4
 1
 7
 1
 7
 8

 Protocol Discriminator
 C's
 Call Reference
 Flag
 Call Reference
 O
 Message Reference
 Information Type

 Elements
 Flag
 Reference
 Type
 Elements

Reference:http://www.rhyshaden.com/isdn.htm

QUESTION 527

The Certkiller WAN consists of a hub and spoke frame relay network. In amultipointFrameRelay architecture; what is true about reachability issues? (Choose all that apply.)

A.Splithorizon can cause problems in NBMA environments.

B.Subinterfaces can resolve split horizon issues.

C.Splithorizon is not an issue with multipoint subinterfaces.

D.Subinterfaces do not apply in Frame Relay networks.

E.Splithorizon is an issue with pointtopoint

subinterfaces.

F.A single physical interface can be configured to simulate multiple logical interfaces.

G.All of the above.

Answer: A, B, F

Explanation:

The concept of sub interfaces was originally created inorder better handle issues caused by split-horizon over Non Broadcast Multiple Access (NBMA) networks (e.g. frame relay, X.25) and distancevector based routing protocols (e.g. IPX RIP/SAP, AppleTalk). Split horizon dictates that a routing update received on an interface cannot

be retransmitted out onto the same interface.

Multipoint interfaces/subinterfaces are still subject to the split horizon limitations as discussed above. All nodes attached

to a multipoint subinterface belong to the same network number. Typically, multipoint subinterfaces are used in conjunction with pointtopoint interfaces in cases where an existing multipoint frame relay cloud is migrating to a

subinterfaced pointtopoint network design. A multipoint subinterface is used to keep remote sites on a single network

number while slowly migrating remote sites to their own pointtopoint subinterface network.

Configuring Frame Relay subinterfaces ensures that a single physical interface is treated as multiple virtual interfaces.

This capability allows you to overcome split horizon rules so packets received on one virtual interface can be forwarded

to another virtual interface, even if they are configured on the same physical interface.

References:

 $http://www.alliancedatacom.com/manufacturers/ciscosystems/\ framerelay_design/subinterfaces.asp\ http://www.cisco.com/warp/public/116/fr_faq.html\#21$

OUESTION 528

You are a network design consultant and you've just been contracted by a human resource

company to explain to them the benefits of a remote access server; more specifically, what kind of workers

could benefit the most from them. How would you respond?

A.Mobilesalesforce requiring dialinaccess.

B.Corporate staff requiring access to webbases applications.

C.Mobilesalesforce requiring dedicated connection.

D.Corporate staff requiring access to applications on corporate systems.

E.None of the above

Answer: A

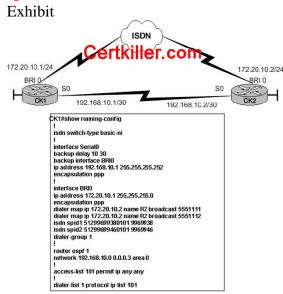
Explanation:

A router acts as an access server, which is a concentration point for dialin and dialout calls. Mobile users, for example, can call into an access server at a central site to access their email messages. The biggest users of remote

access servers are mobile employees that need occasional, temporary connections into the network. Reference:

Cisco Press Building Cisco Remote Access Networks Student Guide v1.1 Page 2-8

QUESTION 529



Refer to the exhibit. Examine the show running configoutput taken on CK1 . The BRI 0 interface on CK1 is connect to the remote site CK2 . However, when CK1 loses the connectivity over the serial link, the backup link does not come up. What could the problem be?

A. The OSPF hello packets are not considered as interesting traffic to dial the backup link.

B. The ISDN backup interface network is not included in the OSPF routing protocol.

C.The PPP authentication is not included in then backup interface configuration.

D.The enabletimer.

specified by thebackup delaycommand, has expired before the backup interface comes up.

Answer: B

QUESTION 530

You are a Cisco Certified Engineer. You are configuring a remote access solution. ITUT Q.931 is the protocol that works for:

A. Layer3; D channel

B. Layer1, D channel

C. Layer5; B channel

D. Layer2; B channel

E. Layer4; B channel

F. Layer2; D channel

642-821

Answer: A

Explanation:

According to Cisco: Cisco platforms support Q.931 user and network side switch types for ISDN call processing.

User side PRI enables the Cisco platform to provide a standard ISDN PRI user side interface to the Public Switched

Telephone Network (PSTN). Network side PRI enables the Cisco platform to provide a standard Digital T1/E1 Packet Voice Trunk Network Modules on Cisco 2600 series and Cisco 3600 series routers. More inform can be found at: this site