

Riverbed Certified Solutions Professional – Application Performance Management

Riverbed 499-01

Version Demo

Total Demo Questions: 22

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Topic Break Down

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QUESTION NO: 1

When analyzing a TCP-based transaction, you should suspect TCP as the root cause of an issue when AppTransaction Xpert's AppDoctor Statistics tab shows what?

- A. Large network transfer effects and large protocol delays
- B. A high number of application turns and application messages
- C. A high percentage of tier processing effects delay
- D. Large parallel effects delay

ANSWER: A

Explanation:

Large network transfer effects and large protocol delays indicate that the transaction's elapsed time is being materially affected by transport and network behavior rather than by time spent executing application logic. In AppTransaction Xpert's AppDoctor analysis, network transfer effects represent delay associated with moving data across the network, which can become substantial when TCP throughput is constrained by such conditions as packet loss, retransmissions, congestion, limited window growth, or an unfavorable bandwidth-delay relationship. Protocol delays identify time attributable to protocol-level exchanges and waiting behavior. For a TCP-based transaction, elevated values in both areas are a strong signal to inspect the TCP connection and packet trace for loss recovery, duplicate acknowledgments, round-trip time, receive-window constraints, connection setup behavior, and data-transfer efficiency. This is especially important because TCP adapts its sending rate in response to network conditions; even modest loss or latency can have a disproportionate impact on application response time. Riverbed describes AppTransaction Xpert as a tool for analyzing application and network performance from captured transaction data: [Riverbed AppTransaction Xpert](#). Riverbed's support resources and product documentation are available through the [Riverbed Support portal](#).

QUESTION NO: 2

Which characteristics make a network location appropriate for passive AppResponse Xpert monitoring? (Select 3)

- A. Visibility into both directions of important application conversations
- B. Coverage of the client-to-server traffic path
- C. Sufficient mirror-port capacity for the copied traffic
- D. Access only to the switch management VLAN
- E. A location that receives only server broadcast traffic

ANSWER: A B C

Explanation:

Visibility into both directions of important application conversations, coverage of the client-to-server traffic path, and sufficient mirror-port capacity for the copied traffic are appropriate characteristics. Passive analysis depends on a complete and reliable representation of the traffic relevant to the applications being investigated. Monitoring at a point that sees client and server exchanges supports transaction correlation, while adequate mirror capacity reduces the risk that oversubscription will discard packets and distort results. A location that sees only management traffic does not provide useful application-transaction visibility. See [Riverbed AppResponse](#) and the [Riverbed Support portal](#) for deployment guidance.

QUESTION NO: 3

Which data can AppResponse Xpert derive from observed TCP traffic without an agent on the application server? (Select 3)

- A. TCP retransmission behavior

- B. TCP connection failures
- C. Round trip time (RTT)
- D. Business-method execution time inside a Java class
- E. JVM garbage-collection pause duration

ANSWER: A B C

Explanation:

TCP retransmission behavior, TCP connection failures, and round trip time (RTT) can be derived from observed TCP packet exchanges. AppResponse Xpert uses passive packet analysis to identify connection establishment, retransmission, acknowledgements, and timing behavior on monitored traffic. This provides valuable network and transport-layer performance visibility without installing an agent on the endpoints. Business-method execution time, in contrast, requires application-level instrumentation or application-provided telemetry rather than packet observation alone. See [Riverbed AppResponse](#) and the [Riverbed Support portal](#) for product documentation.

QUESTION NO: 4

Command-line options in AppResponse Xpert allow administrators to customize how Web Transaction Analysis constructs page families from monitored objects. Which of the following options are supported? (Select 3)

- A. Enable SOAP processing
- B. Remove session IDs embedded in URLs
- C. Specify which HTTP header fields and POST parameters to append to the end of the URL
- D. Specify the HTTP header field that contains the user name
- E. Stitch individual page requests into multi-step transactions

ANSWER: A B C

Explanation:

Web Transaction Analysis (WTA) builds page families by normalizing and, when needed, enriching the request identity derived from monitored HTTP objects. **Enable SOAP processing** is supported because SOAP traffic requires WTA to interpret SOAP request content so that SOAP operations can be represented meaningfully in web-transaction analysis rather than treated only as generic HTTP posts. **Remove session IDs embedded in URLs** is also supported because session-specific URL components would otherwise cause requests for the same logical application page to be divided into many separate page families. Removing those identifiers produces stable grouping across user sessions. **Specify which HTTP header fields and POST parameters to append to the end of the URL** is supported for cases where the URL alone does not sufficiently distinguish application requests. Including selected request attributes lets administrators deliberately make those values part of the page-family identity while retaining control over which fields affect the grouping. Together, these controls allow WTA to normalize volatile identifiers, recognize SOAP semantics, and differentiate requests whose meaningful identity is carried outside the base URL. Riverbed's documentation portal provides product documentation and release-specific administration references at [Riverbed Documentation](#); support resources, including legacy AppResponse documentation access, are available through [Riverbed Support](#).

QUESTION NO: 5

What is required to allow a user to edit dashboard contents and settings?

- A. As long as a user can view the dashboard, they can make their own local edits.
- B. The user has to own the dashboard to be able to do full editing.
- C. The owner can grant specific users full access.

ANSWER: B

Explanation:

The user has to own the dashboard to be able to do full editing. Dashboard ownership is the permission boundary for modifying the dashboard itself, including its contents, layout, configuration, and settings. A user who owns a dashboard has the authority to maintain it and save changes to the shared dashboard definition. This distinguishes dashboard administration from ordinary viewing access: visibility allows a user to open and consume the dashboard, whereas ownership authorizes changes that affect the dashboard's persisted configuration. When dashboard maintenance must be performed by another person, ownership should be assigned or transferred according to the organization's Riverbed access-management process, ensuring that the person making changes has the required ownership context. This model preserves accountability for dashboard design and prevents unintended modifications to dashboards that may be used by multiple operational teams. Riverbed product documentation and related administration guidance are available through the [Riverbed Documentation Portal](#); authenticated product documentation and support resources can also be accessed through the [Riverbed Support Portal](#).

QUESTION NO: 6

Which of these parameters can you work with in the Quick Predict feature? (Select 3)

- A. Bandwidth
- B. Turn reduction
- C. Server processing
- D. Window size
- E. Application turns

ANSWER: A B D

Explanation:

QuickPredict supports what-if modeling of key network and application-efficiency conditions from captured transaction behavior. **Bandwidth** is a supported variable because changing available link capacity allows the analyst to estimate the effect of congestion or a circuit upgrade on transfer time and overall response time. **Turn reduction** is supported because eliminating application turns reduces request/response exchanges; this is particularly significant on higher-latency paths, where each turn can add round-trip delay. **Window size** is also supported because TCP window behavior constrains the amount of unacknowledged data that can be in flight. Modeling a larger effective window can show whether throughput is limited by TCP flow control, especially over paths with a high bandwidth-delay product. Together, these settings help quantify likely performance improvements before network or application changes are deployed. Riverbed's documentation portal provides product documentation and feature references for its application-performance and network-performance analysis tools: [Riverbed Documentation](#). Additional Riverbed support resources, including product documentation access and knowledge content, are available at [Riverbed Support](#).

QUESTION NO: 7

Refer to the exhibit.

Group	Information	Throughput (Inbound and Outbound) [Mbps/sec]	Throughput (Inbound) [Mbps/sec]	Throughput (Outbound) [Mbps/sec]	Connection Requests (TCP Clients) [#]	Connection Requests (TCP Servers) [#]
[-] HQ - Users	Networks reserved fo...	2.672	2.313	0.359	5035	7
[-] Local Traffic	Local Traffic	0.000	0.000	0.000	0	0
[-] Applications	Applications					
[-] IP Protocols	IP Protocols					
[-] Member IPs	Member IPs					
[-] Connected IPs	Connected IPs					
[-] 172.16.1.64	netapp3.opnet.com	1.318	1.286	0.032	0	0
[-] 172.19.0.32	enterprise1.opnet.com	0.356	0.323	0.033	1784	0
[-] 172.19.0.60	techsupport.opnet.com	0.189	0.082	0.106	1578	0
[-] 172.19.0.86	mail.opnet.com	0.152	0.145	0.008	177	0
[-] 172.19.0.10	arx-1s-colo.opnet.com	0.130	0.074	0.056	517	0

In the business group table, the host enterprise1.opnet.com is:

- A. Acting as a client
- B. Acting as a server
- C. Acting as both a client and a server
- D. Acting as neither a client nor a server

ANSWER: B

Explanation:

Acting as a server is correct. In Riverbed's application-performance monitoring views, a business-group table categorizes observed hosts according to their role in the application conversations represented by the selected business group. The role shown for *enterprise1.opnet.com* in the exhibit denotes that the host is providing the application service for the relevant traffic: it receives client requests and returns responses. Therefore, it is classified as a server rather than according to its general ability to initiate network communications. This distinction is important when interpreting application dependency and transaction data, because the client/server role is determined from the direction and service relationship of the monitored application flows. Identifying the host as a server lets an administrator focus analysis on service-side response behavior, server workload, and the dependencies associated with requests handled by that host. Riverbed's application-performance management portfolio is designed to provide this type of application and network visibility, including the relationships between communicating systems and services. See Riverbed's [SteelCentral product information](#) and the [Riverbed Support and documentation portal](#) for product documentation and operational guidance.

QUESTION NO: 8

For BrowserMetrix, the "time to first byte" and "download and render" time is considered:

- A. Back-end delay
- B. Front-end delay
- C. Network delay
- D. Server delay

ANSWER: B

Explanation:

Front-end delay is correct. In BrowserMetrix, this timing represents the browser-facing portion of a page-load measurement: the elapsed experience associated with receiving the initial response and then downloading page resources and rendering them for the user. It is therefore useful for assessing the responsiveness actually observed in the browser rather than treating page delivery as only a server-processing measurement. Time to first byte provides the initial browser-visible response milestone, while download and render account for the work required before content can be displayed in its usable form. Reviewing this delay helps an operations team identify whether the user experience is being affected across the delivery and browser-rendering stages of a monitored web transaction. This interpretation also aligns with the broader browser timing model, in which response-start and subsequent document loading/rendering milestones are captured from the user-agent perspective. Riverbed's support resources provide product documentation and knowledge-base access for SteelCentral and BrowserMetrix deployments at [Riverbed Support](#). The browser timing concepts underlying response and page-load milestones are specified by the [W3C Navigation Timing Level 2 specification](#).

QUESTION NO: 9

With which of the following RPM products does AppTransaction Xpert integrate? (Select 3)

- A. AppResponse Xpert
- B. IT Guru Network Planner

C. Cascade Pilot

D. AppTransfer Xpert agents

ANSWER: A C D

Explanation:

AppTransaction Xpert was designed as a transaction-analysis component within Riverbed Performance Management, so its value extends beyond an isolated packet trace. It integrates with **AppResponse Xpert** to correlate detailed transaction and packet-level investigation with network and application performance monitoring. This lets an analyst move from an observed performance issue to evidence such as response-time behavior, traffic details, and relevant captures.

Integration with **Cascade Pilot** supports workflow continuity between transaction analysis and the broader performance-analysis environment. Cascade Pilot provides analysis and visualization capabilities that help teams investigate network and application behavior, while AppTransaction Xpert supplies deep transaction-level visibility.

AppTransfer Xpert agents also integrate with AppTransaction Xpert. These agents can be used to collect and transfer packet-capture data from distributed locations, allowing AppTransaction Xpert to analyze traffic captured remotely rather than requiring the analyst to be at the affected site. Together, these integrations support the RPM workflow of detecting an issue, obtaining the relevant traffic, and performing detailed transaction analysis. Riverbed's historical product material describes AppTransaction Xpert as part of the SteelCentral/RPM portfolio and its workflow-oriented analysis role; see the [Riverbed AppTransaction Xpert product page](#) and [Riverbed SteelCentral overview](#).

QUESTION NO: 10

Which parameters are required to enable user session tracking for a specific login page? (Select 3)

A. The IP address of the server(s) where the login page is hosted.

B. User ID

C. Session ID

D. The login page URL

ANSWER: B C D

Explanation:

User session tracking is configured by identifying the login transaction and the application-level values that associate subsequent traffic with an authenticated person and session. **User ID** is required because it identifies the authenticated user extracted from the login exchange. This enables the APM system to present session activity in terms of a meaningful user identity rather than only network endpoints or individual HTTP requests.

Session ID is also required because it is the value used to correlate requests belonging to the same application session after authentication. Login workflows commonly deliver this identifier in an HTTP cookie, URL parameter, or other request/response field; tracking it lets the system retain the session context across the user's later transactions.

The login page URL defines the specific authentication transaction from which the User ID and Session ID are extracted. It scopes the tracking rule to the intended login page and allows the system to recognize when it should begin associating the captured identity and session values with observed traffic. These settings provide the core application-layer definition needed for user-session visibility. Riverbed product documentation and support resources are available through the [Riverbed Documentation portal](#) and the [Riverbed Support portal](#).

QUESTION NO: 11

What is the easiest way to verify dashboard contents without opening the dashboard?

A. Connect to the Postgres configuration database and view the definition for the appropriate dashboard view.

B. In Manage Resources, select the dashboard and click the Details button.

C. In the Open Saved Dashboard dialog panel, right-click on the dashboard name and select Preview.

ANSWER: B

Explanation:

In Manage Resources, select the dashboard and click the Details button. This is the most direct way to inspect a saved dashboard's definition without launching it into the dashboard workspace. The Details view exposes the dashboard's stored metadata and its configured contents, enabling an administrator to confirm what the dashboard contains while remaining in the resource-management interface. This is particularly useful when validating dashboards during administration, reviewing shared resources, or locating a dashboard with particular configured components without altering the current dashboard display. Manage Resources is intended as the central location for working with saved Portal resources, including dashboards, and the Details action provides an inspection-oriented view rather than opening the dashboard for interactive use. Using this built-in interface also avoids relying on direct access to the Portal configuration database, which is not the normal operational workflow for examining dashboard definitions. Riverbed's product documentation resources are available through the [Riverbed Documentation portal](#), while product-specific documentation and downloads can be accessed from the [Riverbed Support portal](#).

QUESTION NO: 12

Refer to the exhibit.



In the diagram, what does the WIN << 7=17408 (in the red rectangle) indicate?

- A. TCP window scaling
- B. Maximum transmission unit (MTU)
- C. TCP maximum segment size
- D. Packet size

ANSWER: A

Explanation:

TCP window scaling is correct. The notation WIN << 7 = 17408 represents application of the TCP Window Scale option. TCP normally carries a 16-bit receive-window value in each segment, which limits the unscaled advertised window to 65,535 bytes. During the TCP three-way handshake, endpoints can negotiate a window-scale shift count so that the advertised window value is interpreted at a larger scale. A shift count of 7 means the captured TCP window value is multiplied by 2^7 , or 128. Thus, the analyzer is showing the calculated/effective receive window as 17,408 bytes after applying the negotiated scale factor. This value tells the sender how much receive-buffer space the peer is currently advertising and helps TCP maintain efficient throughput, especially on links with substantial bandwidth-delay products. The << symbol is the left-shift operation used to express that scaling calculation, rather than a packet-length, MTU, or maximum-segment-size measurement. TCP window scaling is defined in [RFC 7323, TCP Extensions for High Performance](#), which specifies that the shift count expands the effective receive-window range. Riverbed packet-analysis products expose this type of TCP-level detail to help diagnose flow-control and throughput behavior; see the [Riverbed product documentation portal](#).

QUESTION NO: 13

Why should an AppResponse Xpert administrator avoid configuring overlapping SPAN sources that deliver duplicate packets to the monitoring interface?

- A. Duplicate packets can distort packet and retransmission analysis.
- B. Duplicate packets improve the accuracy of every response-time calculation.

- C. Duplicate packets prevent the appliance from recognizing TCP traffic.
- D. Duplicate packets are required to retain 1-day metrics.

ANSWER: A

Explanation:

Duplicate packets can distort packet and retransmission analysis. AppResponse Xpert relies on the copied traffic stream to represent the actual monitored conversations. When the same packets arrive more than once because of overlapping mirror sources, packet counts and TCP behavior can be misinterpreted, which can affect metrics and troubleshooting conclusions. A correct monitoring design provides the required traffic coverage without redundant copies of the same flow. See [Riverbed AppResponse](#) and the [Riverbed Support portal](#) for deployment documentation.

QUESTION NO: 14

What kind of Citrix traffic is AppTransaction Xpert able to decode? (Select 2)

- A. Not encrypted
- B. RC5 (40 bit)
- C. Basic encryption
- D. RC5 (128 bit)
- E. RC5 (128 bit) login only

ANSWER: A C

Explanation:

AppTransaction Xpert can decode Citrix ICA traffic when it is **Not encrypted** and when it uses **Basic encryption**. In an unencrypted ICA session, the analyzer can directly interpret the protocol data needed to reconstruct transactions, identify application activity, and calculate response-time components. Basic encryption is also within the Citrix ICA decoding capability supported by AppTransaction Xpert, allowing the product to decrypt the applicable ICA payload and produce transaction-level analysis rather than treating the session only as opaque network traffic.

This distinction is important for performance troubleshooting: decoding lets an engineer correlate ICA protocol activity with end-user transaction timing and determine where time is being spent. Citrix documents ICA encryption as a configurable session-security feature, including Basic encryption and stronger encryption choices. For the relevant Citrix encryption context, see [Citrix documentation on ICA encryption](#). AppTransaction Xpert is Riverbed's transaction-analysis product for capturing and analyzing application traffic; product background is available from [Riverbed AppTransaction Xpert](#).

QUESTION NO: 15

Which of the following are not required to set up pattern-based properties for grouping metrics in a panel? (Select 3)

- A. Create a new property name for each possible value.
- B. Add a description.
- C. Choose the new property name in the panel's grouping configuration.
- D. Enable custom properties either at the server level or dashboard level.

ANSWER: A B D

Explanation:

Pattern-based properties derive property values dynamically by applying a pattern to metric names or other matching data. Consequently, *Create a new property name for each possible value.* is not needed: one configured property can produce many distinct values as matching metrics are evaluated. *Add a description.* is also optional metadata. A description may help another dashboard author understand the purpose of a property, but it does not affect property matching, value extraction, or panel grouping behavior.

Enable custom properties either at the server level or dashboard level. is likewise not a prerequisite for this configuration. Pattern-based property setup is defined through the relevant property configuration and then used by the panel; it is not dependent on a separate server-level or dashboard-level enablement step. The operational step that makes the grouping work is selecting the configured property in the panel's grouping configuration, so that panel configuration is required rather than one of the listed nonrequired actions. Riverbed product documentation and knowledge resources are available through the [Riverbed Documentation portal](#) and the [Riverbed Support portal](#).

QUESTION NO: 16

What three functionalities are included in the AppTransaction Xpert Advanced version but not in the Standard version? (Select 3)

- A. Continuous capture on AppTransaction Xpert agents
- B. Scheduled captures
- C. WAN acceleration capture and import
- D. Trace explorer

ANSWER: A B C

Explanation:

AppTransaction Xpert Advanced extends the Standard edition's interactive, packet-trace-based troubleshooting workflow with capabilities intended for ongoing and distributed data collection. **Continuous capture on AppTransaction Xpert agents** is an Advanced capability because it allows an agent to retain capture data over time, helping an analyst retrieve evidence for intermittent or previously occurring performance events. **Scheduled captures** are also included with Advanced, enabling capture operations to be configured for defined times or recurring windows rather than requiring manual initiation. This supports repeatable monitoring and collection around known business processes, peak periods, or maintenance events. **WAN acceleration capture and import** is an Advanced function that enables AppTransaction Xpert to bring relevant capture data from WAN-acceleration environments into the analysis workflow. Together, these features provide persistent collection, automated capture timing, and broader visibility across optimized WAN paths—capabilities associated with the Advanced license tier. Riverbed product and documentation resources are available through the [Riverbed application acceleration product information](#) and the [Riverbed Support and Documentation portal](#).

QUESTION NO: 17

Highlighting a business group in the business group table and then clicking on the tool bar menu to launch the Response Time Composition Chart will show:

- A. The response time for the clients in the business group.
- B. The response time broken into categories for the clients in the business group.
- C. The response time broken into categories for servers in the business group.
- D. The response time for the top ten IP addresses in the business group.

ANSWER: C

Explanation:

The response time broken into categories for servers in the business group is correct. In the Business Group table, a business group represents a defined collection of server-side entities used to organize and analyze application delivery performance. Launching the Response Time Composition Chart from a selected business group opens a server-oriented breakdown of the response-time experience associated with that group. Rather than presenting only one aggregate response-time value, the chart decomposes response time into contributing categories so an analyst can see where time is being spent and focus investigation on the relevant portion of the application-delivery path. This composition view is particularly useful for distinguishing delay associated with the server or application processing from delay attributable to network transport and related components, while retaining the selected business group as the reporting scope. That workflow aligns with Riverbed's application-performance monitoring approach: group the monitored services, select the target group in the table, and use response-time analysis to identify the source area of performance impact. Riverbed product documentation and support resources are available through the [Riverbed Documentation portal](#) and the [Riverbed Support portal](#).

QUESTION NO: 18

To integrate the Riverbed product suite into your existing trouble ticketing system, which of the following could be done? (Select 3)

- A. Use the built-in email and SNMP mechanism or a custom forensic script in AppInternals Xpert to send alerts to the existing system.
- B. Configure alerts in AppResponse Xpert to send SNMP traps to the existing system.
- C. Set up BrowserMetrix to send email alerts to an email gateway.
- D. Add email alerts to the RPM Dashboard settings.
- E. Configure Transaction Trace Warehouse to send email alerts to an email gateway when certain thresholds are met.

ANSWER: A B C

Explanation:

Use the built-in email and SNMP mechanism or a custom forensic script in AppInternals Xpert to send alerts to the existing system. AppInternals Xpert can use alert actions and automation-oriented mechanisms to communicate detected application-performance conditions to external operational processes. Email provides a practical integration path for ticket platforms that ingest messages through a monitored mailbox, while SNMP and script-based actions support forwarding structured events or invoking site-specific ticket-creation workflows.

Configure alerts in AppResponse Xpert to send SNMP traps to the existing system. AppResponse Xpert alerting can emit SNMP notifications, allowing an enterprise management platform or ticketing integration that receives traps to correlate the event and open or update an incident. This is a standard operations integration pattern for network and application monitoring systems.

Set up BrowserMetrix to send email alerts to an email gateway. BrowserMetrix synthetic monitoring alerts can be delivered by email; an email gateway or ticketing-system mailbox can then convert the notification into a service ticket or route it to the appropriate support queue. These choices provide supported outbound notification mechanisms rather than requiring direct, product-specific ticketing connectors. Riverbed's product information is available at [Riverbed Products](#) and its documentation resources at [Riverbed Support and Documentation](#).

QUESTION NO: 19

What type of capture agent can AppTransaction Xpert remotely control? (Select 2)

- A. Wireshark
- B. A UNIX-based system running tcpdump.
- C. AppSensor Xpert test engine
- D. A wide-area network (WAN) accelerator device like SteelHead.

ANSWER: B D

Explanation:

AppTransaction Xpert can remotely control a UNIX-based system running tcpdump because tcpdump can be invoked on the remote host to collect a packet trace, after which the resulting capture is made available for analysis in the transaction-analysis workflow. This enables capture at the server, client, or another UNIX monitoring point without requiring an analyst to be physically present at that system. tcpdump is a standard command-line packet-capture utility and produces trace data suitable for offline protocol and application-performance analysis; see the [tcpdump manual page](#).

A wide-area network (WAN) accelerator device like SteelHead is also a supported remotely controlled capture source. SteelHead appliances observe traffic traversing the WAN optimization path and can provide packet captures from a strategically useful point in the network. AppTransaction Xpert can use that remote capture capability to retrieve evidence of application behavior across the WAN, including traffic associated with optimized connections. This is particularly valuable when endpoint capture is impractical or when the investigation needs visibility at the optimization device. Riverbed describes SteelHead as its WAN optimization platform and provides product and documentation resources at [Riverbed SteelHead](#).

QUESTION NO: 20

How does AppResponse Xpert compute the round-trip time (RTT) metric?

- A. Using TCP SYN and SYN-ACK only
- B. Using ping tests
- C. Using Netflow/IP flow information export (FIX) records
- D. Using TCP immediate ACKs

ANSWER: D

Explanation:

AppResponse Xpert computes the RTT metric using TCP immediate ACKs. From passively observed TCP traffic, it identifies a transmitted TCP data segment and the corresponding immediate acknowledgment returned by the peer, then measures the elapsed time between those events. This produces an application-relevant, connection-level RTT estimate based on the actual traffic traversing the monitored interface, rather than on an active synthetic probe. An immediate ACK is important because it acknowledges received data without being combined with a new outbound data segment; this lets the appliance isolate the acknowledgment timing used for the RTT calculation. The metric therefore reflects the observed path and TCP exchange for the specific connection, including network transit and endpoint response behavior represented in that acknowledgment cycle. This passive-measurement approach allows AppResponse Xpert to report RTT for conversations already present in the captured traffic without generating additional packets. Riverbed's AppResponse product documentation and software resources are available through the [Riverbed AppResponse support page](#) and the [Riverbed documentation portal](#).

QUESTION NO: 21

Choose the best answer for how to decode a trace when importing it into AppTransaction Xpert.

- A. Using Wireshark to decode the trace is recommended.
- B. Using Wireshark to decode the trace is mandatory.
- C. AppTransaction Xpert uses its internal decoder to decode the trace.
- D. AppTransaction Xpert uses trace explorer to decode the trace.

ANSWER: A

Explanation:

Using Wireshark to decode the trace is recommended. AppTransaction Xpert analysis depends on accurate identification of the traffic carried in the packet capture, including the protocols and application transactions represented by the packets. Wireshark is the appropriate complementary tool for inspecting a capture before it is brought into AppTransaction Xpert because its protocol dissectors let the analyst verify that traffic is being interpreted as intended. This is particularly useful when a nonstandard port is in use or when protocol identification needs to be checked before performance analysis begins. After reviewing and decoding the capture in Wireshark, the analyst can import the trace into AppTransaction Xpert with greater confidence that the application-flow and transaction analysis are based on correctly understood packet data. The wording “recommended” reflects a sound workflow and troubleshooting best practice: it encourages validation of the trace without treating the external inspection step as an absolute prerequisite for every import. Riverbed identifies AppTransaction Xpert as a packet-based application performance analysis product, while Wireshark documents the protocol-analysis and dissection capabilities used to inspect captured traffic. See [Riverbed AppTransaction Xpert](#) and [Wireshark documentation](#).

QUESTION NO: 22

What parameter is used to identify the originating IP in web transaction analysis?

- A. Business group membership
- B. Three-way handshake
- C. X-Forwarded-For
- D. User session tracking identifier

ANSWER: C

Explanation:

X-Forwarded-For is the HTTP header parameter used to preserve and identify the originating client IP address when web traffic passes through one or more proxy servers, load balancers, or reverse proxies. Because the TCP source address observed by a web server or monitoring platform may belong to the intermediary device rather than the end user, the **X-Forwarded-For** header carries the original client address. When multiple intermediaries add entries, the header can contain a comma-separated chain of IP addresses; the first address is conventionally the original client IP. In web transaction analysis, using this header enables accurate attribution of requests to the client that initiated them, rather than attributing all activity to a proxy or load balancer. Riverbed monitoring and analysis workflows commonly rely on HTTP request metadata such as headers to add context to observed web transactions. The header must be interpreted only when it is inserted by trusted infrastructure, since clients can supply or spoof HTTP headers unless an upstream proxy sanitizes and controls them. See the [MDN X-Forwarded-For header reference](#) and the [RFC 7239 specification for forwarded HTTP information](#).