IBM P2090-008

IBM InfoSphere Streams Technical Mastery Test v1

Version: 4.0

QUESTION NO: 1

Which host tags are defined by Streams?

A. compile, execute
B. execution, build
C. build, run
D. compile, run

Answer: B
Explanation:

QUESTION NO: 2

Which statement is CORRECT?

A. A composite operator does not belong to any namespace.
B. All operators in a composite operator must belong to the same namespace.
C. Primitive operators all belong to the com.ibm.primitive name space.
D. It is always acceptable to use fully qualified operator names (i.e. names that include the namespace).

Answer: D
Explanation:

QUESTION NO: 3

Which command gives the health status of the individual processing elements of a submitted Streams job?

A. streamtool lsjobs
B. streamtool lspes
C. streamtool getresourcestate
D. streamtool getnsentry

Answer: B
Explanation:

QUESTION NO: 4

Which statement is TRUE regarding InfoSphere Streams?

A. A stream is defined as an infinite sequence of tuples.
B. The tuples in a stream can be of different types.
C. A Processing Element (PE) can only contain a single operator.
D. An operator port can accept streams of different types as long as they are properly defined.

Answer: A
Explanation:

QUESTION NO: 5

Which Streams Studio component displays output generated by running various streamtool commands?

A. Console
B. Error Log file
C. SPL Application Graph
D. Project Explorer

Answer: A
Explanation:

QUESTION NO: 6

Which Streams Studio tool lets developers view applications running on distributed hosts?

A. Console
B. Explorer
C. Live Graph
D. Application Graph

Answer: C
Explanation:

QUESTION NO: 7

What command can be used following installation to verify that all Streams hosts satisfy the configuration and network connectivity requirements including access to appropriate directories on the shared file system?

A. dependency_checker.sh
B. checkhost
C. connectivity_checker
D. streamtool checkhost

Answer: D
Explanation:

QUESTION NO: 8

In the logic clause of an SPL operator invocation body, what is the purpose of the state label?

A. To share state across all the operators.
B. To persist in-memory state within that operator.
C. To restore operator state from a database.
D. To modify the state of another Streams application.

Answer: B
Explanation:

QUESTION NO: 9

Which statement regarding usage of a shared file system in Streams is TRUE?

A. Streams uses the shared file system to provide a common shared image for instance and configuration information.
B. Streams must be installed on a shared file system in order to be used in a cluster of hosts.
C. Streams must be installed on a shared file system for hosts that are enabled for SELinux (Security-Enhanced Linux).
D. It must be a GPFS shared file system.

Answer: A
Explanation:

QUESTION NO: 10

Which two commands can be used to create a Streams instance? (Choose two.)

A. streamtool mkinstance --hosts streamsadmin
B. streamtool mkinstance --hosttags host1,host2,host3,host4
C. streamtool mkinstance --hosts 10.10.187.156,myhost1
D. streamtool mkinstance --hosts 10.10.187.156,127.0.0.1
E. streamtool mkinstance --numhosts 10.10.187.156,10.10.187.157

Answer: A,C
Explanation:

QUESTION NO: 11

Which statement regarding Streams toolkits is CORRECT?

A. A toolkit must be recompiled for each upgrade of the Streams installation.
B. All toolkits must be installed in /usr/lib.
C. A toolkit is self-contained and cannot depend on other toolkits.
D. A toolkit may contain multiple namespaces.

Answer: D
Explanation:

QUESTION NO: 12

What are two requirements for installing and using Streams on a cluster of hosts in which Streams is installed on each host? (Choose two.)

A. The installation must be performed as root on each host in the cluster.
B. The same version of Streams must be installed on each host in the cluster by the same install owner.
C. All hosts in the cluster must use the PAM (Pluggable Authentication Model) authentication method.
D. The Streams install path name must be the same on each host in the cluster.
E. SELinux (Security-Enhanced Linux) must be enabled on each host in the cluster.

Answer: B,D
Explanation:

QUESTION NO: 13

Which is NOT required in order to install and enable Streams on an SELinux (Security-Enhanced Linux) system?

A. The SELinux system is set to enforcing or permissive mode.
B. The SELinux system is set to use LDAP (Lightweight Directory Access Protocol) for user authentication.
C. The SELinux system is set to use a targeted policy.
D. Streams is installed by a user with root authority.

Answer: B
Explanation:

QUESTION NO: 14

Starting and stopping Streams runtime services produces what kind of log files?

A. PE logs
B. Runtime boot logs
C. Runtime service logs
D. Runtime trace rolling logs

Answer: B
Explanation:

QUESTION NO: 15

Which Source and Sink operators are included in the standard toolkit?

A. FileSource, FileSink, TCPSource, TCPSink, UDPSource, and UDPSink
B. FileSource, FileSink, MQSource, MQSink, UDPSource, and UDPSink
C. HTTPSource, HTTPSink, MQSource, MQSink, UDPSource, and UDPSink
D. FileSource, FileSink, HTTPSource, HTTPSink, MQSource, and MQSink

Answer: A
Explanation:

QUESTION NO: 16

Which programming languages should be part of your skill set in order to become a full-fledged Streams Application Developer?

A. SPL, Java, PHP
B. SPL, C++, Perl, Java
C. SPL, C++, Ruby, Java
D. SPL, Python, JavaScript

Answer: B
Explanation:

QUESTION NO: 17

What is the purpose of the SPL Import/Export operators?

A. To exchange data between management and application nodes.
B. To exchange data between multiple jobs running in the same instance.
C. To exchange data between different operators in one application.
D. To exchange data with other vendor products.

Answer: B
Explanation:

QUESTION NO: 18

Which statements are supported inside SPL operator logic?

A. if-else, foreach, do-while
B. if-else, foreach, while
C. if-else, for(x in y), while
D. if-else, for(x=0;x<10;x++), do-until

Answer: C
Explanation:

QUESTION NO: 19

Which of the following is the correct set of deployable artifacts produced by the Streams compiler?

A. JAR files
B. Shared object library files
C. PEs and an ADL file
D. DLL files

Answer: C
Explanation:

QUESTION NO: 20

How do you display the graph topology of an SPL application that is not running?

A. In the Project Explorer, right-click on the main composite; in the context menu, select Show Application Graph.
B. In the Streams Explorer, right-click on the instance; in the context menu, select Show Application Graph.
C. In the Instance Graph, right-click on the job; in the context menu, select Show Application Graph.
D. In the Streams Explorer, right-click on the instance; in the context menu, select Show Instance Graph.

Answer: A
Explanation:

QUESTION NO: 21

Which streamtool command is used to remove PE and runtime log data?

A. getlog
B. removelog
C. clearlog
D. cleanlog

Answer: D

Explanation:

QUESTION NO: 22

Which statement is CORRECT?

A. The InfoSphere Streams runtime environment does not have to be installed to run a standalone SPL program.
B. The InfoSphere Streams runtime environment does not have to be installed to run a distributed SPL program.
C. Standalone programs can talk to other standalone programs by exporting and importing streams.
D. A standalone program can be visualized by the Live Graph function of the Streams-Studio IDE.

Answer: A
Explanation:

QUESTION NO: 23

Which data analysis problem is most suitable for a streams processing solution?

A. Correlating data from multiple database management systems.
B. Transforming historic call center recordings to text files.
C. Identifying best wind turbine locations using past weather data.
D. Combining data from multiple sensors to create situational awareness.

Answer: D
Explanation:

QUESTION NO: 24

The Join operator CANNOT perform which operation?

A. Combining attributes from tuples on different streams.
B. Filtering out tuples that don't meet specific criteria.
C. Grouping tuples according to the values in an attribute.
D. Routing tuples according to the values in an attribute.

Answer: D
Explanation:

QUESTION NO: 25

Which statement is TRUE?

A. The standard toolkit operators are special and therefore do not belong to any namespace.
B. There is only one namespace for all operators in a toolkit.
C. In one application you may invoke two operators with the same name from two different namespaces.
D. Only IBM approved names can be used when defining namespaces.

Answer: C
Explanation:

QUESTION NO: 26

What are the possible role[s] of the TCP operators in the Standard Toolkit?

A. Server only.
B. Client only.
C. Router only.
D. Client or server.

Answer: D
Explanation:

QUESTION NO: 27

Which runtime service is required to use Streams Console?

A. Streams Debugger
B. Streams Explorer
C. Streams Web Service (SWS)
D. Streams Web Console (SWC)

Answer: C

Explanation:

QUESTION NO: 28

What are two reasons for using the dependency checker script? (Choose two.)

A. To check the Java version.
B. To check the ssh configuration.
C. To validate Streams instance integrity.
D. To check the RSA key.
E. To validate the RPM level.

Answer: A,E
Explanation:

QUESTION NO: 29

What are the permitted trigger polices for a sliding window?

A. count, time, and date
B. count, time, and delta
C. time, date, and punct
D. count, time, date, and punct

Answer: B
Explanation:

QUESTION NO: 30

When you create a Streams instance, you must specify a name for the new instance that satisfies which requirement?

A. The name must be unique among the instances defined by the instance owner.
B. The name can not start with an alphabetic character.
C. The name must be unique among all instances defined by all instance owners.
D. The name must contain a dash (-), an underscore (_), or a period (.).

Answer: A

Explanation:

QUESTION NO: 31

Which of the following best represents the process and threading model for a standalone SPL program?

A. Multiple processes each with multiple threads.
B. Multiple processes each with a single thread.
C. A single process with one or more threads.
D. A single process with only a single thread.

Answer: C
Explanation:

QUESTION NO: 32

What is a Streams toolkit?

A. A set of plug-ins, compilers, and editors for developing SPL applications.
B. A description of valid port configurations, parameters, and attribute values for a primitive operator.
C. A package of SPL types, functions, and operators.
D. A package of compiled and standalone Streams applications.

Answer: C
Explanation:

QUESTION NO: 33

Which command is used to create a Streams instance?

A. streamtool crtinstance
B. streamtool create_instance
C. streamtool mkinstance
D. streamtool make_instance

Answer: C

Explanation:

QUESTION NO: 34

What clauses can an operator invocation have?

A. logic, window, param, output, config
B. logic, view, param, output, error
C. input, view, output, except, config
D. input, window, param, output, error

Answer: A
Explanation:

QUESTION NO: 35

Which runtime platform could be used for Streams?

A. A Linux server.
B. A Windows server.
C. An iPad.
D. An Android phone.

Answer: A
Explanation:

QUESTION NO: 36

In the Instance Graph, what visual cue will show which Streams have had no tuples flowing on them?

A. Dashed line for the stream.
B. Missing line for the stream.
C. Icon on the output port of the operator producing the stream.
D. Icon on the input port of the operator ingesting the stream.

Answer: A
Explanation:

QUESTION NO: 37

Which of the following best describes SPL state variables defined in a logic clause?

A. State variables have the same lifetime as the operator they are defined in.
B. State variables can be shared between different operators.
C. State variables are always immutable.
D. State variables need to be freed before a streams application is terminated.

Answer: A
Explanation:

QUESTION NO: 38

A composite operator definition contains which of the following?

A. A complete Streams application.
B. A reusable stream graph or subgraph.
C. A set of primitive operators implemented in C++ or Java.
D. A set of composite type definitions.

Answer: B
Explanation:

QUESTION NO: 39

In the Instance Graph, you can layout the topology of the applications running by which two types of Streams elements? (Choose two.)

A. Process Elements
B. Operators
C. LDAP Users
D. Jobs
E. Applications

Answer: A,B
Explanation:

QUESTION NO: 40

When a Streams instance is stopped, what happens to the PE log files?

A. They are moved to the Streams install directory.
B. They are deleted from the log directory.
C. They are automatically backed up.
D. They are transferred to user's home directory.

Answer: B
Explanation:

QUESTION NO: 41

How can you examine operator fusion in the Application Graph?

A. In Graph Preferences, select Collect Metrics Information and Layout topology by PE.
B. In Graph Preferences, use Group Operators by Application and Color Operators by Composite.
C. In Graph Preferences, use Group Operators by PE or Color Operators by PE.
D. You can, because fusion is a runtime concept and the Application Graph is based directly on the SPL code.

Answer: C
Explanation:

QUESTION NO: 42

What command can be used to install RedHat RPMs required by Streams?

A. dependency_checker.sh
B. streamtool install
C. yum
D. rpm rpm ?

Answer: C
Explanation:

QUESTION NO: 43

Streams may be the most appropriate solution for which type of processing?

A. A database extract/transform/load job.
B. Algorithmic stock trading.
C. An online web portal.
D. A voicemail retrieval system.

Answer: B
Explanation:

QUESTION NO: 44

A state label may appear in which of the following?

A. The logic clause.
B. The window clause.
C. The exception statement.
D. The config statement.

Answer: A
Explanation:

QUESTION NO: 45

Which data analysis problem is most suitable for a streams processing solution?

A. Prediction of best harvest yield using historic harvest data.
B. Prediction of bus arrival time using current location information.
C. Prediction of manufacturing yield using images in a content management system.
D. Prediction of next quarter earnings using past sales data from a data warehouse.

Answer: B
Explanation:

QUESTION NO: 46

When a tumbling window is full, how will it behave?

A. It will execute the operator behavior and flush all stored tuples before starting over from scratch.
B. It will execute the operator behavior and expel the oldest tuples before processing the next tuple.
C. It will expel the oldest tuples, execute the operator behavior, and flush all processed tuples before starting from scratch.
D. It will expel triggered tuples, execute the operator behavior, and flush unprocessed tuples before starting from the end.

Answer: A
Explanation:

QUESTION NO: 47

What tasks do the source-type operators perform?

A. Reading external data into a Stream Application from various sources.
B. Writing external data from a Stream Application to various sources.
C. Copying data types between Stream applications operators.
D. Extracting data from an internal reservoir of data filled by the Sink operators.

Answer: A
Explanation:

QUESTION NO: 48

Which statement is TRUE?

A. A stream can contain at most a single tuple.
B. A stream can contain many tuples of many different types.
C. A stream can contain many tuples of one type.
D. A stream can contain a tuple of an undefined type.

Answer: C
Explanation:

QUESTION NO: 49

An Application Graph view in the IDE depicts which components?

A. Operators and jobs.
B. Jobs and instances.
C. Operators and streams.
D. Streams and instances.

Answer: C
Explanation:

QUESTION NO: 50

Which component is included in Streams Studio?

A. XML view
B. Graph view
C. Streams Explorer
D. UML view

Answer: C
Explanation:

QUESTION NO: 51

What happens when you use the Export operator inside standalone SPL applications?

A. The application will run slower.
B. The exported stream will be highly optimized.
C. The tuples will be batched before being sent.
D. The tuples will not be sent to the exported stream.

Answer: D
Explanation:

QUESTION NO: 52

What are the criteria for a potential main composite operator?

A. A composite operator with no input or output ports.
B. A composite operator with at most one input and one output port and no parameters.
C. A composite operator called "Main" that is in an SPL source file by itself.
D. A composite operator with no input or output ports and no required parameters.

Answer: D
Explanation:

QUESTION NO: 53

In SPL, which logLevel directive will give you the most verbose application-level logging?

A. Info
B. Trace
C. Error
D. Debug

Answer: B