

Vendor: EMC

Exam Code: E20-515

Exam Name: Symmetrix Solutions Specialist Exam for

**Technology Architects** 

Version: Demo

What is required for Open Replicator hot push or pull operations?

- A. All ports with access to the control devices must be able to access the remote devices.
- B. One or more ports with access to the control devices must be able to access the remote devices.
- C. One or more ports with access to the remote devices must be able to access the control device.
- D. Ports on the remote array must be able to access the control devices.

#### Correct Answer: A

#### **QUESTION 2**

A customer is planning a data migration from a DMX to a VMAX. They have a limited maintenance window for the cutover which will not allow enough time for a full synchronization. Which method do you recommend to meet their requirements?

- A. Activate a hot push session from the DMX prior to the maintenance window and perform an incremental refresh during the maintenance window
- B. Create a cold push session with the precopy option from the VMAX prior to the maintenance window and activate the session during the maintenance window
- C. Create a hot pull session with the precopy option from the DMX prior to the maintenance window and activate the session during the maintenance window
- D. Activate a hot push session with the precopy option from the VMAX prior to the maintenance window and activate the session during the maintenance window

#### **Correct Answer:** A

#### **QUESTION 3**

In an Open Replicator environment data will be migrated from a DMX to a VMAX. The average utilization of the FA ports is less than 50%. The hot push method will be used. Which Open Replicator parameter needs to be in place so that migrating the data will not interfere with the port utilization for the host while still completing in a timely manner?

- A. Ceiling 30
- B. Pace 5
- C. Pace 0
- D. Ceiling 5

## **Correct Answer:** A

## **QUESTION 4**

A customer reports that an Open Replicator session is not copying data from the control devices fast enough. They have not changed the default settings. What action will improve migration performance?

- A. Change the pace to 0
- B. Change the pace to 9 and set the ceiling to 0%
- C. Set the ceiling to 0%
- D. Change the pace to 9

## Correct Answer: A

## QUESTION 5

What are the appropriate names for devices in a Open Replicator migration?

- A. Control, Remote
- B. R1, R2
- C. Gatekeeper, Target

D. Source, Target

#### **Correct Answer:** A

#### **QUESTION 6**

A customer would like to perform a data migration from a CLARiiON to a VMAX and they would like to control the migration from the VMAX. Which EMC product will you recommend?

- A. Open Replicator
- B. FLM
- C. SANCopy
- D. SRDF

#### Correct Answer: A

#### **QUESTION 7**

An error occurred with an active FLM session between a donor DMX and a VMAX causing an automatic fail back. What is the current state?

- A. DMX devices are set to host active mode and all host I/O is directed back to the DMX.
- B. VMAX devices are set to host active mode and all I/O is directed to the VMAX.
- C. Existing device reservations remain on the VMAX and I/O is directed back to the DMX.
- D. DMX devices are set to host passive mode and VMAX devices are set to host active mode.

#### Correct Answer: A

#### **QUESTION 8**

Which Open Replicator operation does Federated Live Migration use?

- A. Hot Pull with Donor Update
- B. Hot Push with Precopy
- C. Differential Hot Push
- D. Hot Pull with Consistency

## **Correct Answer:** A

## **QUESTION 9**

Federated Live Migration will be used to migrate data from a Symmetrix DMX to a Symmetrix VMAX 40K array. What happens when the Federated Live Migration session is created?

- A. VMAX devices assume the geometry and identity of the DMX devices
- B. DMX devices assume the geometry and identity of the VMAX devices
- C. DMX devices are set to Not Ready and VMAX devices are set to Host Passive
- D. VMAX devices are set to Not Ready and DMX devices are set to Host Passive

#### **Correct Answer:** A

#### **QUESTION 10**

An application host is zoned to FAs 7E:0 and 10E:0. The RecoverPoint appliances are zoned to FAs 8E:0 and 11E:0 of the same VMAX 10K. LUNs have been masked to the RecoverPoint appliances. The RecoverPoint splitter is unable to split the writes to the LUNs. What requirement for using RecoverPoint has not been met?

- A. RecoverPoint appliances must be zoned to the same FA ports as the replicated host
- B. The replicated LUN must be configured as an SRDF/R1 device
- C. RecoverPoint appliances must be zoned to a minimum of 4 FA ports
- D. The RecoverPoint splitter is only available for use with the VMAX 20K and VMAX40K.

#### **QUESTION 11**

Which underlying product is used by the Symmetrix RecoverPoint splitter?

- A. Open Replicator
- B. TimeFinder
- C. SRDF
- D. FLM

#### Correct Answer: A

#### **QUESTION 12**

Where on a Symmetrix is the I/O split for RecoverPoint?

- A. FA
- B. RF
- C. Cache
- D. DX

#### Correct Answer: A

#### **QUESTION 13**

What is a requirement for using the Symmetrix RecoverPoint splitter?

- A. Zone host and RPA to the same port.
- B. Zone host and RPA to different ports.
- C. Journal devices must be tagged.
- D. Zone host and RPA to local and remote array.

#### **Correct Answer:** A

#### **QUESTION 14**

What are the slices on the physical disks in a Symmetrix called?

- A. Splits
- B. LUNs
- C. Logical volumes
- D. Symmetrix devices

## **Correct Answer:** A

## **QUESTION 15**

A customer uses TimeFinder/Snap for local replication in a Symmetrix VMAX. The customer recently added a VMAX at the disaster recovery site and enabled SRDF/A. The customer wants to enable SRDF/A Delta Set Extension at the local site but finds no SAVE devices available for DSE. What do you advise the customer to do?

- A. Configure a separate pool.
- B. Add more SAVE devices to the default pool.
- C. Rename the default pool.
- D. Associate the SRDF group with the default pool.

#### **Correct Answer:** A

#### **QUESTION 16**

Click on the calculator icon in the upper left. A customer requested assistance in using the symcli symconfigure command to create one 8-way 1 TB striped meta bound to POOL\_A. Which parameters do

#### you provide?

- A. Create dev count=1, size=1118480 cyl, config=tdev, emulation=fba, meta\_member\_size=139810, meta\_config=striped, binding to pool=POOL\_A
- B. Create dev count=1, size=1048576 cyl, config=tdev, emulation=fba, meta\_member\_size=131072, meta\_config=striped, binding to pool=POOL\_A
- C. Create dev count=1, size=1118480 cyl, config=tdat, emulation=fba, meta\_member\_size=139810, meta\_config=striped, binding to pool=POOL\_A
- D. Create dev count=8, size=1048576 cyl, config=tdat, emulation=fba, meta\_member\_size=131072, meta\_config=striped, binding to pool=POOL\_A

#### Correct Answer: A

#### **QUESTION 17**

When adding new disks to a VMAX, which lock is taken to perform this activity?

- A. CE Config lock
- B. Front-end device lock
- C. Back-end device lock
- D. Director lock

## Correct Answer: A

#### **QUESTION 18**

The customer has noticed when using SYMCLI and VMAX and Unisphere responses to commands are unusually slow. What might be the problem?

- A. Additional gatekeepers need to be provisioned.
- B. Solutions Enabler must be upgraded.
- C. The size of the gatekeepers need to be increased to 3GB.
- D. The currently provisioned gatekeepers need to be shared across more hosts.

#### Correct Answer: A

## **QUESTION 19**

What is an optimized read miss on a Symmetrix VMAX 40K?

- A. In case of a read miss, the data read from the backend disk is sent directly to the FA buffer bypassing the cache.
- B. In case of a read miss, the optimizer moves the requested tracks to other spindles with lower utilization for faster processing.
- C. In case of a read miss, the read and pre-fetch operations are optimized by reading 8 subsequent tracks of data and loading them on cache.
- D. In case of a read miss, I/O is quiesced on the FA to avoid buffer overflow until the requested I/O is delivered to the FA.

## **Correct Answer:** A

#### **QUESTION 20**

A customer needs four (4) 500 GB volumes for a new mission critical database project. Their Symmetrix VMAX 10K is pre-configured with a thin pool. The pool has 3 TB of free space. What device configuration should be recommended?

- A. 500 GB striped thin meta devices
- B. 500 GB concatenated thin meta devices
- C. 500 GB thin devices with 100% preallocation
- D. 500 GB thick devices

#### **QUESTION 21**

How many backend Read & Write operations occur in a VMAX for a Random Host Write on a standard RAID-6 device?

- A. 3 Reads + 3 Writes
- B. 0 Reads + 2 Writes
- C. 2 Reads + 2 Writes
- D. 1 Read + 1 Write

#### Correct Answer: A

#### **QUESTION 22**

What is the maximum number of cylinders allowed for a single volume in a Symmetrix VMAX array?

- A. 262668
- B. 512000
- C. 32768
- D. 18414

#### **Correct Answer:** A

#### **QUESTION 23**

Which types of locks can be taken during a configuration change session?

- A. Director, Frontend, Backend and Configuration
- B. Adapter, Frontend, Backend and Configuration
- C. Director, Frontend, Backend and Cache
- D. Adapter, Frontend, Backend and Cache

#### **Correct Answer:** A

#### **QUESTION 24**

What is a valid consideration when using a meta volume?

- A. A BCV meta device must be composed of the same BCV types.
- B. When a meta is formed at least 2 members must be added.
- C. The head must be unmapped to form a concatenated meta.
- D. The entire meta is mapped and masked to the host.

#### **Correct Answer:** A

#### **QUESTION 25**

Where does the Consistent LUN option need to be set to ensure that each device is presented with the same LUN address on each port?

- A. Initiator Group
- B. Storage Group
- C. Port Group
- D. Masking View

#### **Correct Answer:** A

## **QUESTION 26**

A customer needs to replace an HBA on an existing host connected to their Symmetrix VMAX array and is unsure how to update the host masking to reflect the new HBA WWN. What is the most efficient way to complete the host masking update?

- A. Use the symaccess replace command.
- B. Create a new initiator group for the new HBA WWN.
- C. Use the symmask replace command.
- D. Add the new HBA WWN to the existing initiator group.

#### **QUESTION 27**

Which Symmetrix VMAX Autoprovisioning groups can be cascaded?

- A. Initiator and Storage Groups
- B. Port and Initiator Groups
- C. Storage and Port Groups
- D. Device and Port Groups

#### Correct Answer: A

#### **QUESTION 28**

A customer needs to enable the Volume Set Addressing flag for an HP-UX host. Where should the flag be set if the VMAX FAs to be used are shared with other open systems hosts?

- A. Initiator Group
- B. Port Group
- C. Individual Initiators
- D. Initiator and Port Groups

#### Correct Answer: A

## **QUESTION 29**

Which Unisphere for VMAX view shows all the components of a masking view including the members of the various groups (port, storage and initiator)?

- A. Masking View > Connections
- B. Masking View > Details
- C. Hosts > Masking Views
- D. Storage Groups > Details

#### **Correct Answer:** A

## **QUESTION 30**

What are two characteristics of Autoprovisioning Port Groups in a Symmetrix VMAX family array?

- A. Ports can belong to multiple port groups and must have ACLX flag enabled
- B. Ports can belong to multiple port groups and must have VCM flag enabled
- C. Ports cannot belong to multiple port groups and port groups must contain an even number of ports
- D. Ports cannot belong to multiple port groups and only Fibre and GigE ports are allowed

#### **Correct Answer:** A

#### **QUESTION 31**

A customer has created a masking view for a host including several new thin devices, but they are presented as not ready. What step needs to be performed?

- A. Bind the TDEV to a pool
- B. Add at least 1 TDAT to a pool
- C. Assign the RAID protection for the thin device

D. Use symcli to change the thin device to ready

#### **Correct Answer:** A

#### **QUESTION 32**

When planning a configuration using a Symmetrix Thin Pool what is a design consideration for use by an application?

- A. The Data Devices comprising a Thin Pool should have the same performance and protection properties.
- B. Different tiers of storage can reside in the same pool.
- C. All Data Devices should be spread across as few DA's and drives as possible.
- D. Many pools with fewer Data Devices is a best practice.

#### **Correct Answer:** A

#### **QUESTION 33**

How is data read from a compressed track on a Symmetrix thin device?

- A. The track is uncompressed into the reserved storage area and then read.
- B. The track is written in an uncompressed form to the thin device and then read.
- C. The track is read directly from the pool in a compressed form.
- D. The data is read directly from Symmetrix thin device.

#### Correct Answer: A

#### **QUESTION 34**

A Symmetrix VMAX 40K with 6 engines can have a maximum of how many Terrabytes (TB) of compressed data?

- A. 60 TB
- B. 10 TB
- C. 600 TB
- D. 100 TB

## **Correct Answer:** A

#### **QUESTION 35**

A Symmetrix VMAX customer is using Virtual Provisioning. A thin pool has been created and ten 10 GB data devices have been added and enabled. The Maximum Subscription Percent has been set to 300. How many 10 GB thin devices can be bound to the thin pool?

- A. 30
- B. 10
- C. 40
- D. 300

#### Correct Answer: A

#### **QUESTION 36**

A Symmetrix VMAX customer created five thin devices and added them to a storage group. The storage group is part of a masking view for an HP-UX Server. The administrator scans for the five new devices and sees that the devices are Not Ready. What is the reason for this?

- A. Devices have not been bound
- B. Devices have not been mapped
- C. TDATs should be assigned, not TDEVs
- D. There are not enough TDATs in the pool

#### **QUESTION 37**

A customer is decommissioning a Windows 2003 server which has access to Symmetrix VMAX thin devices. The objective is to free up space on the array. What needs to be done?

- A. Delete the masking view and unbind the thin devices.
- B. Delete the masking view and the storage group
- C. Remove the thin devices from the storage group
- D. Delete the initiator group, port group and the storage group

**Correct Answer:** A

#### **QUESTION 38**

A Symmetrix VMAX 40K customer is planning to use Virtual Provisioning and FAST VP for their Microsoft SQL Server Database.

--Thin Pool 1 is a EFD RAID-5 pool configured with 100 GB of free space. --Thin Pool 2 is a FC RAID-1 pool configured with 300 GB of free space --Thin Pool 3 is a SATA RAID-6 pool configured with 1TB of free space --The database server needs four (4) 100 GB LUNs.

Two (2) of the LUNs are mission critical and should never encounter an I/O error because of a thin pool being full.

How should the mission critical LUNs be configured to ensure this?

- A. Bound to Pool 2 and fully preallocated
- B. Bound to Pool 1 and pinned
- C. Bound to Pool 1 and fully preallocated
- D. Bound to Pool 3 and pinned

**Correct Answer:** A

## **QUESTION 39**

When binding a TDEV to a thin pool, what is the total size of extents allocated to a 4-way meta volume while using "preallocate=0"?

- A. 3072 KB
- B. 48 KB
- C. 0 KB
- D. 768 KB

**Correct Answer:** A

## **QUESTION 40**

When performing a VLUN migration of a thin device to a different pool, which status must be reached and which command must be used to end the session?

A. Status: Migrated

CommanD. Terminate

- B. Status: Synchronized CommanD. Split
- C. Status:Enabled CommanD. Split
- D. Status:Copied

CommanD. Terminate

Correct Answer: A

Virtual LUN migration is used to change the local protection of an SRDF R1 volume from RAID 1 to RAID 5 (7+1). How many mirror positions are occupied during the LUN migration process?

- A. 3
- B. 1
- C. 2
- D. 4

**Correct Answer:** A

#### **QUESTION 42**

Which technology enables storage virtualization?

- A. VLUN migration
- B. VP/Snap
- C. VP/Clone
- D. Virtual LUN DP

**Correct Answer:** A

### **QUESTION 43**

A customer has performed a VLUN migration of a TDEV bound to pool A to pool B non- disruptively. However, new extents for the TDEV are still being allocated from pool A. What step needs to be performed for new extents to be allocated from pool B?

- A. Rebind the TDEV to pool B
- B. Delete the TDEV in the pool A
- C. Unbind TDEV from pool A
- D. Extend the TDEV in pool B

**Correct Answer:** A

#### **QUESTION 44**

How many RAID groups can be simultaneously attached to a volume's mirror positions under the RAID Virtual Architecture?

- A. Two
- B. One
- C. Four
- D. Maximum number of mirror positions available on the volume

**Correct Answer:** A

## **QUESTION 45**

At the end of the VLUN migration to unconfigured space, what happens to the original RAID group of the Symmetrix device?

- A. Deleted
- B. VTOC'd
- C. iVTOC'd
- D. Left Not Ready

Correct Answer: A

## **QUESTION 46**

A customer is using VLUN Migration to move a 2TB thin device. It is 50% preallocated and has 400GB of user data written to it. How much data will be moved?

- A. 400GB
- B. 2TB
- C. 1TB
- D. 200GB

#### **QUESTION 47**

You are designing a FAST VP solution for a Symmetrix VMAX 40K array. What is a required step to enable FAST VP Compression?

- A. Set FAST VP time to "compress" parameter
- B. Enable FAST VP compression when associating storage groups
- C. Set FAST VP compression rate
- D. Enable FAST VP compression when adding thin pools to tiers

#### Correct Answer: A

#### **QUESTION 48**

A Symmetrix VMAX 40K customer is planning to use Virtual Provisioning and FAST VP. All the devices will be under FAST VP. They would like some of their critical devices to always stay in the EFD tier. Which feature will enable this?

- A. Device Pinning
- B. Persistent Pre-allocation
- C. Allocation by Policy
- D. VLUN Migration VP

## **Correct Answer:** A

#### **QUESTION 49**

A customer has deployed a Symmetrix VMAX that is shared among several departments. Each department is charged for its use of storage:

- -- They want to deploy FAST DP using three tiers of storage with different cost structures: Tier0, Tier1 and Tier2.
- -- The customer wants to set up a FAST policy that makes it easy to compute the storage used by each department.

Which FAST policy would be most suitable?

A. Max Allocation for Tier 0=10%

Max Allocation for Tier 1=30%

Max Allocation for Tier 2=60%

B. Max Allocation for Tier 0=50%

Max Allocation for Tier 1=50% Max Allocation for Tier 2=50%

C. Max Allocation for Tier 0=100%

Max Allocation for Tier 1=100%

Max Allocation for Tier 2=100%

D. Max Allocation for Tier 0=30%

Max Allocation for Tier 1=30%

Max Allocation for Tier 2=30%

## **Correct Answer:** A

## **QUESTION 50**

A Symmetrix VMAX has 3 storage tiers, A, B, and C with A being the fastest tier. FAST VP will be implemented. From a performance perspective, which tier allocation policy would you recommend?

- A. A 100%. B 100%, C 100%
- B. A 33%, B 33%, C 33%
- C. A 50%, B 50%, C 0%
- D. A 25%, B 50%, C 75%

#### **QUESTION 51**

On a Symmetrix array without any DRVs configured, which process will FAST DP use to relocate a device to another tier?

- A. Only a move
- B. Only a swap
- C. Either a swap or a move
- D. TimeFinder/Clone

#### Correct Answer: A

#### **QUESTION 52**

A storage group is associated to a FAST VP policy and the customer would like to prevent a device within the storage group from being promoted to a higher tier. Which function of FAST VP can be used for this?

- A. Device pinning
- B. VLUN Migration
- C. External (FTS) Tier
- D. FAST VP Tier Ranking

#### **Correct Answer:** A

#### **QUESTION 53**

Which performance metrics are taken into consideration by FAST to determine if a device or its data must be moved to a different tier?

- A. DA Logical Volumes Reads + DA Logical Volumes Writes
- B. DA Logical Volumes Reads + FA Logical Volumes Reads
- C. FA Logical Volumes Reads + Device Write Pending Counts
- D. FA Logical Volumes Reads + Logical Volumes Pre-fetch

## **Correct Answer:** A

#### **QUESTION 54**

What are dynamic reallocation volumes (DRV) used for within a Symmetrix VMAX array?

- A. FAST DP Swaps
- B. FAST VP Swaps
- C. Virtual LUN Migration
- D. TimeFinder/Snap

## **Correct Answer:** A

#### **QUESTION 55**

On a Symmetrix array, which process could FAST DP use to relocate a device to another tier?

- A. Either swap or move
- B. Only swaps
- C. Only moves

#### D. TF/Clone

#### **Correct Answer:** A

#### **QUESTION 56**

Federated Tiered Storage has been implemented on a Symmetrix VMAX 40K array. Standard provisioning has been used to encapsulate a number of external LUNs. All the encapsulated devices are geometry limited. What must be done to remove the geometry limitation?

- A. VLUN migrate the devices to unconfigured space on an internal disk group
- B. VLUN migrate the devices to configured space on an internal disk group
- C. Set a user defined geometry on the devices
- D. Create TimeFinder/Clone replicas and use the replicas

#### **Correct Answer:** A

#### **QUESTION 57**

Virtual Provisioning encapsulation will be used to encapsulate a CLARiiON LUN. Which VMAX entities are created when using SYMCLI to execute the encapsulation?

- A. eDisk, data device and thin device
- B. eDisk and Symmetrix device
- C. External disk group, data device and thin device
- D. eDisk and external disk group

#### **Correct Answer:** A

#### **QUESTION 58**

What is the purpose of a DX port on a VMAX array?

- A. It is used for connecting external disk arrays to VMAX for FTS
- B. It is used for connecting external hosts used by EMC DiskXtender
- C. It is used for connecting the VMAX engines directly to the X-bar on fabric switches.
- D. It is used for connecting the VMAX engines to backend Disk Enclosures.

## **Correct Answer:** A

#### **QUESTION 59**

Federated Tiered Storage has been implemented on a Symmetrix VMAX 40K array. Virtual provisioning has been used to encapsulate a number of external LUNs. All the encapsulated devices are geometry limited. What must be done to remove the geometry limitation?

- A. VLUN migrate the devices to an internal thin pool
- B. VLUN migrate the devices to unconfigured space on an internal disk group
- C. Set a user defined geometry on the devices
- D. VLUN migrate the devices to configured space on an internal disk group

#### Correct Answer: A

#### **QUESTION 60**

What is the minimum number of Symmetrix VMAXDX ports required to support FTS?

- A. 4
- B. 2
- C. 8
- D. 1

## **Correct Answer:** A

Which Unisphere for VMAX section is used to facilitate the encapsulation of a VNX LUN?

- A. Storage > External Storage
- B. Storage > Disk Groups
- C. Storage > Volumes
- D. Data Protection > Migration

#### Correct Answer: A

#### **QUESTION 62**

A Symmetrix VMAX 40K customer would like to manage their virtualization environment with Unisphere for VMAX. Which virtualization platforms are supported?

- A. Microsoft Hyper-V and VMware ESX/ESXi
- B. Citrix XenServer and VMware ESX/ESXi
- C. Citrix XenServer and Microsoft Hyper-V
- D. Microsoft Hyper-V and Oracle VirtualBox

#### **Correct Answer:** A

#### **QUESTION 63**

What is needed to provision storage for an ESXi host in a VMAX array when using the VSI plug-in?

- A. The array must be registered in USM.
- B. SMI-S profile must exist.
- C. Thick devices must already exist on the array.
- D. The access profile must be imported into USM.

#### **Correct Answer:** A

#### **QUESTION 64**

Which EMC Virtual Storage Integrator feature will help determine the Symmetrix Thin Pool used by a VMware vSphere VMFS datastore?

- A. Storage Viewer
- B. Unified Storage Management
- C. Path Management
- D. Storage Pool Management

#### **Correct Answer:** A

#### **QUESTION 65**

A Symmetrix VMAX customer would like to use the Solutions Enabler symvm command in their Microsoft Hyper-V environment. What is a consideration?

- A. Detailed disk information requires the EMC SMI-S provider
- B. Mapping of pass through disks requires the EMC SMI-S provider
- C. Detailed disk information requires the SRM Daemon
- D. Mapping of pass through disks requires the SRM Daemon

## **Correct Answer:** A

## **QUESTION 66**

A Symmetrix VMAX 40K customer intends to use EMC Virtual Storage Integrator in their VMware vSphere environment. Which VSI feature will allow them to extend a VMFS datastore with a new Symmetrix thin device?

- A. Storage Viewer
- B. Unified Storage Management
- C. Path Management
- D. Storage Pool Management

#### **QUESTION 67**

A Symmetrix VMAX customer wants to use the Solutions Enabler symvm command in their VMware vSphere environment. What VMware vSphere configuration tasks can be performed by symvm?

- A. Present a Symmetrix device as an RDM to a virtual machine.
- B. Create a VMFS datastore on a Symmetrix device for an ESXi server.
- C. Create a virtual disk on a VMFS datastore for a virtual machine.
- D. Present a Symmetrix device to an ESXi Server.

Correct Answer: A

#### **QUESTION 68**

A storage administrator wants to perform an incremental restore from a previously activated Symmetrix TimeFinder/Clone copy. When attempting to restore the session, the task fails. Why?

- A. The session was created in CopyOnAccess mode.
- B. The Differential option must be enabled on the Clone prior to restore.
- C. The Precopy flag must be enabled prior to restore.
- D. Session is in the Copied state and must first be changed to a split state.

Correct Answer: A

#### **QUESTION 69**

A TimeFinder VP Snap customer has performed a restore of their production database. An attempt to perform a recreate operation fails. How can this be resolved?

- A. Perform a terminate of the restored session followed by a recreate
- B. Perform a terminate followed by a recreate
- C. Perform a split of the restored session followed by a recreate
- D. Perform a recreate with the force option

**Correct Answer:** A

#### **QUESTION 70**

A TimeFinder/Clone customer has performed a restore of their production database. An attempt to perform a recreate operation fails. How can this be resolved?

- A. Perform a split followed by a recreate
- B. Perform a terminate followed by a recreate
- C. Perform a terminate of the restored session followed by a create
- D. Perform a recreate with force option

**Correct Answer:** A

## QUESTION 71

A Symmetrix VMAX 40K customer uses TimeFinder/Clone to replicate their production database. The Symmetrix devices used by the database are actively cached by XtremSW Cache.

What is a consideration when performing TimeFinder/Clone operations in this environment?

- A. Restore operations will require the force flag
- B. Create operations will require the force flag
- C. Activate operations will require the consistent flag
- D. Terminate operations will require the symforce flag

#### **QUESTION 72**

What is a benefit of using TimeFinder VP Snap instead of TimeFinder/Clone when running Enginuity 5876 onward?

- A. TimeFinder VP Snap provides shared target track allocation for clone targets from the same source device.
- B. TimeFinder VP Snap provides cascaded local replication functionality, TimeFinder/Clone does not.
- C. Shared target allocations from a single source device are consolidated and can be relocated across Tiers using FAST VP for greater efficiency.
- D. TimeFinder VP Snap does not require Device Level Write Pacing when in a session with an SRDF R2 device.

#### Correct Answer: A

## **QUESTION 73**

What is a benefit of using TimeFinder VP Snap instead of TimeFinder/Clone when running Enginuity 5876 or later?

- A. TimeFinder VP Snap provides shared target track allocation for clone targets from the same source device.
- B. TimeFinder VP Snap provides cascaded local replication functionality.
- C. Shared target allocations from a single source device are consolidated and can be relocated across Tiers using FAST VP for greater efficiency.
- D. TimeFinder VP Snap does not require Device Level Write Pacing when in a session with an SRDF R2 device.

#### **Correct Answer:** A

#### **QUESTION 74**

A customer uses TimeFinder/Clone for performing daily backups of a database server by mounting the clones on a different host. The targets are permanently provisioned to the backup host to avoid mapping and masking every day. However, it is necessary that the backup host does not access the clone targets until the backup window starts. What option can be used during the clone operation to prevent the backup host from accessing these devices?

- A. Use -not ready option during clone activation
- B. Use -nocopy option during clone activation
- C. Use -nocopy option during clone creation
- D. Use -write disable option during clone creation

## **Correct Answer:** A

## **QUESTION 75**

Which method(s) are used to create and manage Consistency Groups in a Symmetrix VMAX 40K?

- A. Solutions Enabler/SYMCLI
- B. Unisphere for VMAX
- C. Solutions Enabler/SYMCLI and Unisphere for VMAX
- D. Symmetrix Management Console /SMC

#### Correct Answer: A

A Symmetrix VMAX 40K customer uses TimeFinder/Clone to replicate their production database. The Symmetrix devices used by the database are under the control of XtremSW CachE.

- -- An issue with the production database requires a recovery from the TimeFinder/Clone replica. -- Production was stopped in an orderly manner and the production file systems were unmounted.
- -- A TimeFinder/Clone restore was attempted with the default options.
- -- The restore fails.

Why did the restore fail and what should be done for a successful restore?

- A. Production devices are under XtremSW Cache control. Attempt restore with the force option.
- B. Production devices are under XtremSW Cache control. Attempt restore with the symforce option.
- C. Production devices have been held by TimeFinder/Clone. Attempt restore with the force option.
- D. Production devices have been held by TimeFinder/Clone. Attempt restore with the symforce option.

#### Correct Answer: A

#### **QUESTION 77**

A TimeFinder VP Snap session has been created and activated at 10 AM. Subsequently track number 1000 is written to on the Source device. At 11 AM a second TimeFinder VP Snap session is created and activated for the same Source device. After activation of the second session track number 2000 is written to on the Source device.

How will a read request to track 2000 on the target of the second TimeFinder VP Snap session be serviced?

- A. Read request will access shared track in the thin pool used by the targets of the TimeFinder VP Snap sessions
- B. Read request will access track number 2000 on the target of the first TimeFinder VP Snap session
- C. Read request will be re-directed to the Source device
- D. Read request will access track number 2000 on the target of the second TimeFinder VP Snap session

#### **Correct Answer:** A

#### **QUESTION 78**

A TimeFinder VP Snap session has been created and activated at 10 AM. Subsequently track number 1000 is written to on the Source device. At 11 AM a second TimeFinder VP Snap session is created and activated for the same Source device. After activation of the second session track number 2000 is written to on the Source device.

How will a read request to track 1000 on the target of the second TimeFinder VP Snap session be serviced?

- A. Read request will be re-directed to the Source device
- B. Read request will access track number 1000 on the target of the first TimeFinder VP Snap session
- C. Read request will access shared track in the thin pool used by the targets of the TimeFinder VP Snap sessions
- D. Read request will access track number 1000 on the target of the second TimeFinder VP Snap session

#### **Correct Answer:** A

## **QUESTION 79**

How should the target devices for TimeFinder VP Snap be configured?

A. Thin devices bound to the same thin pool

- B. Thin devices bound to different thin pools
- C. Persistently bound thin devices
- D. Pre-allocated thin devices

#### **QUESTION 80**

A customer would like to have four TimeFinder VP Snap copies of the same Source device. How should you configure the target devices so that the potential benefits can be realized?

- A. Target devices should be bound to the same thin pool
- B. Target devices should be bound to different thin pools
- C. Target devices should be thick devices
- D. Target devices should be pre-allocated

#### **Correct Answer:** A

#### **QUESTION 81**

A storage administrator failed to monitor the available capacity in the SAVE pool. What happens on the next write to a full pool?

- A. The target VDEV is set to "not ready"; copyonwrite is disabled; the track on the source device is changed.
- B. The host receives a "device full" message from the Symmetrix; copyonwrite is disabled; the source device remains unchanged
- C. All VDEVs associated with SAVE devs in the full pool are set to "not ready"; copyonwrite is disabled; the source device remains unchanged.
- D. The target VDEV is set to "not ready"; copyonwrite is disabled; the track on the source device remains unchanged.

#### Correct Answer: A

## **QUESTION 82**

How many TimeFinder/Snap sessions are reserved for restore operations in a Symmetrix VMAX 20K?

- A. 2
- B. 1
- C. 14
- D. 16

## **Correct Answer:** A

## **QUESTION 83**

What could be a reason for a TimeFinder/Snap session to be placed in a failed state?

- A. The Save Area has run out of space.
- B. Snap Pool thresholds have been exceeded.
- C. The Save Devices have not been spread across enough physical volumes.
- D. Additional Save Devices have not been mounted properly.

#### **Correct Answer:** A

#### **QUESTION 84**

What is a recommended configuration to improve performance when creating a TimeFinder/Snap Save Pool?

- A. Save devices should be spread across as many physical disks as possible
- B. Save devices should be spread across as many logical volumes as possible

- C. Save devices in the Snap pool should be concatenated devices
- D. Save devices in a Snap pool should be configured on EFD/Flash drives

#### **QUESTION 85**

A customer intends to implement TimeFinder/Snap. What is the required target volume type?

- A. VDEV
- B. Thin
- C. Std
- D. SAVE

#### **Correct Answer:** A

#### **QUESTION 86**

Which process does TimeFinder/Snap use?

- A. Copy On First Write
- B. Copy On First Access
- C. ALPO
- D. Continuous Copy

#### **Correct Answer:** A

#### **QUESTION 87**

What must be included in the calculations as to how much cache to purchase and configure for TimeFinder/Snap?

- A. The number of VDEVs
- B. The number of TDATs
- C. The number of FAs involved in the Snap operation
- D. The number of DAs involved in the Snap operation

## **Correct Answer:** A

## **QUESTION 88**

Which type of restore operation can be performed for TimeFinder/Snap copy sessions taken from a standard device?

- A. Incremental restore back to the original source device.
- B. Full restore back to the split TimeFinder Clone BCV.
- C. Full restore to an activated TimeFinder Clone BCV.
- D. Full restore to another VDEV in the session

#### **Correct Answer:** A

#### **QUESTION 89**

A VMAX administrator has excess capacity in a Snap pool. How can this excess space be reallocated to other enabled devices in the same Snap pool?

- A. Disable SAVE devices in the Snap pool.
- B. Unmount SAVE devices in the Snap pool.
- C. Use the drain\_save CLI command.
- D. Use the symsnap terminate CLI command.

#### Correct Answer: A

What must be considered when a host has XtremSW Cache installed and SRDF functionality is required for its volumes?

- A. SRDF operations that will cause data to be copied to an actively cached device will be blocked unless a special command flag is used.
- B. XtremSW Cache has no impact on SRDF since XtremSW Cache is host based and SRDF is Symmetrix based.
- C. XtremSW Cache and SRDF are mutually exclusive due to the potential for writes remaining in XtremSW Cache instead of being written to the R1
- D. SRDF operations that will cause data to be copied to an actively cached R1 device will be blocked unless a special command flag is used, but actively cached R2 devices are not affected.

Correct Answer: A

## **QUESTION 91**

FAST VP coordination for SRDF Device Pairs is enabled/disabled at what level?

- A. Storage Group
- B. Consistency Group
- C. Device Group
- D. SRDF group

**Correct Answer:** A

#### **QUESTION 92**

What will happen if one or more source (R1) devices in an SRDF/S consistency group cannot propagate data to their corresponding target (R2) devices?

- A. Data propagation from all R1 devices in the consistency group to the R2 targets will be suspended.
- B. Data propagation from those specific R1 devices to their corresponding R2 targets will be suspended.
- C. SRDF/S replication will be suspended and a consistent data cleanup will be performed on the R2 targets.
- D. All RDF device pairs in the consistency group will be set to Read Only.

Correct Answer: A

## **QUESTION 93**

A customer creates a device group on the source array using the command "symdg create Replication\_dg". However, they are unable to add RDF source devices to that group. What could be a potential issue?

- A. The group has not been created as an R1 group.
- B. The group has not been registered on the target Symmetrix
- C. The group name exceeds the maximum allowed characters
- D. The group should have been created with 'symrdf create Replication\_dg' command

**Correct Answer:** A

#### **QUESTION 94**

A major bank has a requirement to have 2 remote synchronous mirrors for a production database and would like to use SRDF/S between the 3 Symmetrix arrays. What is a configuration requirement?

- A. Each of the two concurrent mirrors must belong to different RDF groups
- B. Each of the two concurrent mirrors must belong to the same RDF group
- C. It is not possible to have two concurrent mirrors using SRDF/S
- D. A BCV will need to be established with the R2 at the secondary site

#### **QUESTION 95**

Which RDF state in an SRDF/S environment will allow a swap operation?

- A. Failed Over
- B. Consistent
- C. Synchronized
- D. Partitioned

**Correct Answer:** A

#### **QUESTION 96**

SRDF/S has been implemented between two VMAX 40K arrays. The R1 devices are also actively cached by XtremSW Cache. As part of a test the R1 devices have been failed over. The failback operation fails. What must be done for a successful failback?

- A. Use the force flag with failback.
- B. Use the invalidate flag with failback.
- C. Ensure that R1 devices are unmounted. Then failback.
- D. Ensure that R2 devices are unmounted. Then failback.

#### **Correct Answer:** A

#### **QUESTION 97**

What is the purpose of the SRDF/A"Transmit Idle" feature?

- A. Dynamically extends the SRDF/A cycle while masking the effects of an "all SRDF links lost" event.
- B. Enables paging out of data from cache to disk in the event of a prolonged data link loss.
- C. Dynamically resizes the amount of cache reserved to handle SRDF/A writes in the Capture, Transmit and Receive phases.
- D. Enables manual restart of the cycle switching process after the data link is brought back online.

#### Correct Answer: A

#### **QUESTION 98**

What is an advantage of SRDF/A over traditional write ordering implementation of asynchronous replication?

- A. Eliminates the need to timestamp and reorder every single write before destaging to disk.
- B. Requires fewer writes on the source replication array.
- C. Every host write is written to the target array without the need for reordering.
- D. Batches write together to create sequential writes for improved performance.

## **Correct Answer:** A

## **QUESTION 99**

In what two SRDF states, will the R2 device be Read/Write enabled?

- A. Failed Over, Split
- B. Suspended, Split
- C. Consistent, Suspended
- D. Split, Partitioned

#### **Correct Answer:** A

## QUESTION 100

After the tracks are synchronized between R1 and R2 devices, how many cycle-switches should occur for

R2 to become consistent with R1, when you change RDF mode from ACP DISK to ASYNC?

- A. Two
- B. One
- C. Three
- D. Four

## **Correct Answer:** A

#### **QUESTION 101**

What is a feature of SRDF/A Group-Level Write Pacing?

- A. Extends its availability by preventing cache overflow.
- B. Configured on RDF director level.
- C. Enables TimeFinder/Snap of R2 devices.
- D. Can only be activated on R2 devices when the SRDF/A session is active.

#### Correct Answer: A

#### **QUESTION 102**

A customer lost the connection between two arrays that were using SRDF/A. As a result there are a large number of invalid tracks. What can the customer do to minimize impact to the associated hosts during resynchronization?

- A. Use Adaptive Copy Disk
- B. Resume normal SRDF/A operations
- C. Use multisession consistency
- D. Use Adaptive Copy Write Pending

## Correct Answer: A

#### **QUESTION 103**

Which Symmetrix feature allows the use of pools to off load data from cache when using SRDF/A?

- A. Delta Set Extension
- B. Transmit Idle
- C. Enginuity Consistency Assist
- D. Consistency Exempt

## **Correct Answer:** A

#### **QUESTION 104**

Which feature should be used to create a TimeFinder/Snap of an SRDF/A R2 device?

- A. Device write pacing
- B. Group write pacing
- C. Enginuity Consistency Assist
- D. Delta Set Extension

## **Correct Answer:** A

#### **QUESTION 105**

What is the default value of SRDF/A session priority?

- A. 33
- B. 44
- C. 64

#### **QUESTION 106**

A customer is planning to use SRDF/S for disaster recovery (DR) of their VMware vSphere VMFS datastores. TimeFinder/Clone will be used at the DR site to replicate the R2 devices. They plan to present the R2 and TimeFinder/Clone target devices to the same DR ESXi server. What is a consideration?

- A. Duplicate extents on the DR ESXi server need to be resolved
- B. R2 devices and Clone target devices should be presented to different ESXi servers
- C. Global LVM EnableResignature should be enabled on DR ESXi server
- D. Device write pacing should be enabled on the R2 array

#### Correct Answer: A

#### **QUESTION 107**

An administrator would like to replicate a VMware VMFS volume with TimeFinder and wants the copied VMFS volume to be presented to the same host as the original VMFS volume. Using the Add Storage Wizard in the vSphere Client, which option would be chosen for the replica LUN?

- A. Assign a new signature
- B. Keep the existing signature
- C. Format the disk
- D. Mount read only

#### **Correct Answer:** A

#### **QUESTION 108**

What is an example of a default behavior when a VMFS replica is presented to a ESXi Host or Cluster?

- A. ESXi Host/Cluster will automatically mask the copy
- B. ESXi Host/Cluster will prompt the VMWare administrator to manually mask the copy
- C. ESXi Host/Cluster will automatically mount the copy
- D. ESXi Host/Cluster will prompt the VMWare administrator to manually mount the copy

## Correct Answer: B

## **QUESTION 109**

TimeFinder/Clone will be used to replicate a VMware VMFS datastore. The Clone target device will be presented to a secondary ESXi server. What will happen by default when a rescan of the secondary ESXi server is performed?

- A. Replica signature will not match the computed signature.
  - Replica will not be mounted.
- B. Replica signature will match the computed signature.
  - Replica will be automatically mounted.
- Replica signature will match the computed signature.
   Replica will not be mounted.
- D. Replica signature will not match the computed signature. Replica will be automatically mounted.

## **Correct Answer:** A

#### **QUESTION 110**

How can you mount a TimeFinder replica on an ESXi host, when the R2 device is also seen by the same host?

- A. Detach the R2 device from the ESXi host.
- B. Detach the R1 device from the ESXi host.
- C. Restart the the ESXi host to rescan the HBA's.
- D. Restart the VM's associated to the duplicate extent.

#### **QUESTION 111**

SRDF has been used to replicate a VMFS volume to a disaster recovery site. When a VMware administrator uses the Add Storage Wizard at the disaster recovery site, only the 'Format the disk' option is enabled. What would cause this situation?

- A. Duplicate extents are visible to the host.
- B. The volume exists as an RDM.
- C. The VMFS volume was not properly copied.
- D. The VMFS volumes are corrupted.

Correct Answer: A

#### **QUESTION 112**

A TimeFinder/Clone replication of a VM which only has RDMs has been completed. What VMware file is critical for bringing up the VM on the secondary ESXi server with the replica RDMs?

- A. vmname.vmx
- B. vmname.vmsn
- C. vmname.vmdk
- D. vmname.nvram

Correct Answer: A

#### **QUESTION 113**

When creating a new Symmetrix logical volume with SYMCLI, which unit can be used to specify the size?

- A. Cylinders
- B. Tracks
- C. Kilobytes
- D. Blocks

**Correct Answer:** C

## **QUESTION 114**

What is the maximum number of initiators allowed per initiator group on a Symmetrix VMAX array?

- A. 32
- B. 24
- C. 16
- D. 64

Correct Answer: D

## **QUESTION 115**

What is the status of a Symmetrix VMAX thin device before it is bound to a thin pool?

- A. Not Ready
- B. Read Write
- C. Write Disabled
- D. Read Only

## **QUESTION 116**

Which two TimeFinder/Clone actions are initiated by performing a symclone establish operation?

- A. Activate and restore
- B. Create and activate
- C. Create and terminate
- D. Recreate and terminate

## **Correct Answer:** C

## **QUESTION 117**

What is the data loss potential in a synchronous SRDF configuration?

- A. Hours of data loss
- B. Minimum of 1 minute data loss
- C. Minimum of 30 seconds data loss
- D. Zero data loss

## **Correct Answer:** B

## **QUESTION 118**

Which devices are required for storing original tracks for TimeFinder/Snap operations?

- A. BCV devices
- B. DSE pools
- C. Save devices
- D. Snap pools

**Correct Answer:** D

#### **QUESTION 119**

Refer to the exhibit.

Port Flags		
	Override	Enable
Common_Serial_Number(C)		
Volume_Set_Addressing(V)		
Avoid_Reset_Broadcast(ARB)		
Environ_Set(E)		
Disable_Q_Reset_on_UA(D)		
SCSI_3(SC3)		
SCSI_Support1(OS2007)		
SPC2_Protocol_Version(SPC2)		
AS400(AS4)		
OpenVMS(OVMS)		
Consistent LUNs		

Which action can one perform from this Unisphere for VMAX screen as related to Volume Set Addressing?

- A. Enable it for the initiators in the initiator group while leaving it disabled for all the other initiators
- B. Enable it for all the initiators that are logged into the array
- C. Enable it for the all the FA ports in the port group associated with the initiator group via a masking view
- D. Enable it for all the FA ports in the group while leaving it disabled for all the other FA ports

#### **Correct Answer:** A

## **QUESTION 120**

What Open Replicator operations can be incremental?

- A. Hot Push, Cold Push
- B. Hot Push, Hot Pull
- C. Cold Push, Hot Pull
- D. Cold Push, Cold Pull

#### **Correct Answer:** A

## **QUESTION 121**

What Open Replicator operation is supported when the Control device is a Virtual Device?

- A. Hot Push
- B. Hot Pull

- C. Cold Push
- D. Cold Pull

#### **QUESTION 122**

What is the permitted state of a Virtual Device when it is the Control device for an Open Replicator session?

- A. Read/Write
- B. Write Disabled
- C. Not Ready
- D. Held

#### **Correct Answer:** C

#### **QUESTION 123**

In an Open Replicator solution what do the terms HOT and COLD refer to?

- A. The state of the Target device
- B. The state of the Remote device
- C. The state of the Control device
- D. The state of the Source device

#### **Correct Answer:** C

#### **QUESTION 124**

A customer would like to use Open Replicator to copy data as quickly as possible. How should Pace and Ceiling be configured?

- A. Pace and Ceiling should be left at the default.
- B. Pace should be left at the default and Ceiling set to 100.
- C. Pace should be set to 9 and Ceiling set to 0.
- D. Pace should be set to 9 and leave Ceiling at the default.

#### Correct Answer: B

## **QUESTION 125**

What is a supported deployment option for Open Replicator?

- A. Incremental Hot Pull Session
- B. Incremental Cold Pull Session
- C. Incremental Cold Push Session
- D. Restore of Incremental Pull Session

## **Correct Answer:** C

#### **QUESTION 126**

How are the tracks on the Control device marked during an Open Replicator Hot Push creation?

- A. Modified tracks
- B. Invalid tracks
- C. Protected tracks
- D. Unprotected tracks

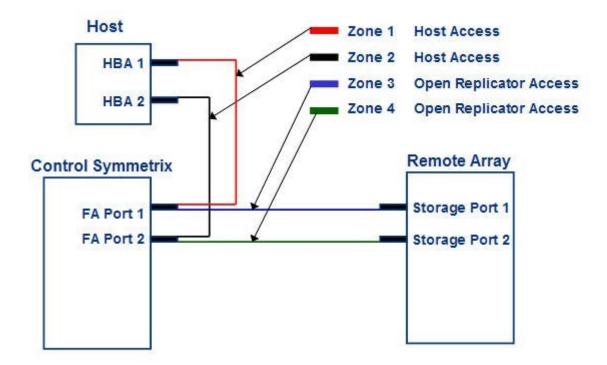
#### **Correct Answer: C**

An Open Replicator create operation failed. The summary of the message indicates that the Remote device is too large. What circumstance could lead to such an error?

- A. Push operation to a larger Remote device
- B. Pull operation to a larger Control device
- C. Pull operation to a smaller Control device
- D. Push operation to a smaller Remote device

**Correct Answer:** C

# QUESTION 128 Refer to the exhibit.



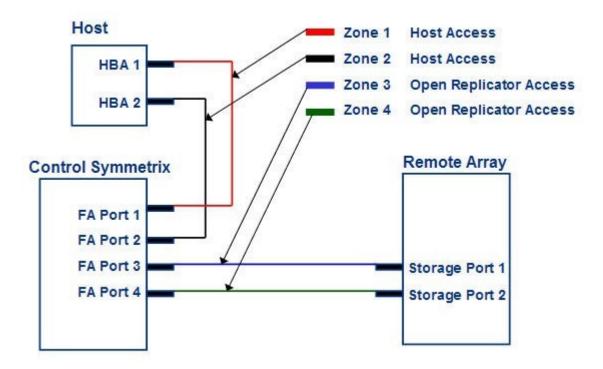
Which Open Replicator operations can be performed between the Symmetrix V-Max array and a third-party array based on the architecture shown in the exhibit?

- A. Cold and Hot Push and Pull
- B. Cold Push and Pull only
- C. Hot Push and Pull only
- D. No operations

**Correct Answer:** A

## **QUESTION 129**

Refer to the exhibit.



Which Open Replicator operations can be performed?

- A. Cold Push and Pull only
- B. Hot and Cold Push and Pull
- C. Hot Push and Pull only
- D. No operations

**Correct Answer:** A

#### **QUESTION 130**

You want to make use of Open Replicator and move data from a Symmetrix device to an undiscovered CLARiiON array. What information has to be specified in the Open Replicator device file?

- A. The CLARiiON Array ID and LUN ID
- B. The WWN of the CLARiiON LUN
- C. The CLARiiON Array ID and WWN of the CLARiiON target device
- D. The WWN and LUN ID of the CLARiiON target device

**Correct Answer:** B

#### **QUESTION 131**

What is a prerequisite for a Hot Push with Open Replicator?

- A. Each FA port on the Control array (with mapped Control devices) must be able to access the corresponding Remote devices.
- B. Each FA port on the Remote array (with mapped Remote devices) must be able to access the corresponding Control devices.
- C. One FA port on the Control array (with mapped Control devices) must be able to access the corresponding Remote devices.
- D. One FA port on the Remote array (with mapped Remote devices) must be able to access the corresponding Control devices.

**Correct Answer:** A

#### **QUESTION 132**

Refer to the exhibit.

# **Trying our product!**

- ★ 100% Guaranteed Success
- ★ 100% Money Back Guarantee
- ★ 365 Days Free Update
- ★ Instant Download After Purchase
- ★ 24x7 Customer Support
- ★ Average 99.9% Success Rate
- ★ More than 69,000 Satisfied Customers Worldwide
- ★ Multi-Platform capabilities Windows, Mac, Android, iPhone, iPod, iPad, Kindle

## **Need Help**

Please provide as much detail as possible so we can best assist you. To update a previously submitted ticket:





## Guarantee & Policy | Privacy & Policy | Terms & Conditions

Any charges made through this site will appear as Global Simulators Limited.

All trademarks are the property of their respective owners.

Copyright © 2004-2015, All Rights Reserved.