

IBM Spectrum Protect™ Snapshot for VMware®

4.1.3 Installation Planning Sheet

The purpose of this document is to provide an overview of items that should be considered before performing the IBM Spectrum Protect™ Snapshot for VMware installation and configuration procedures.

It is recommended to review the Pre-Installation Checklist first before going through this document.

Tip: Beginning with Version 4.1.3, IBM Tivoli Storage FlashCopy Manager is now IBM Spectrum Protect™ Snapshot. Some applications such as the software fulfillment systems and IBM License Metric Tool use the new product name. However, the software and its product documentation continue to use the Tivoli Storage Manager product name. To learn more about the rebranding transition, see <http://www.ibm.com/support/docview.wss?uid=swg21963634>.

What to read?

The intention of this document is to provide the relevant information for an initial IBM Spectrum Protect™ Snapshot for VMware installation and configuration, in particular listing the most important parameters that must be provided for an initial configuration. The set of parameters depends on the selected storage types. Hence, the document is split into sections each providing the right set of parameters applicable to your specific environment.

For VMware specific settings refer to the **VMware** section.

For DS, SVC, and Storwize V7000 storage systems, refer to section **DS8000 / SVC / Storwize V7000**.

For IBM XIV storage systems, refer to section **XIV**.

For IBM N Series and NetApp storage systems, refer to section **IBM N Series and NetApp**

VMware

The following parameters queried by the setup wizard should be considered. For parameters not listed here, the default value can be accepted. If there is an entry in the "Value" column, this means that the entry is the recommended value for the parameter.

Note: The parameter names used in the following tables are those as prompted by the console based setup wizard. The GUI based configuration wizard queries for the same information but does not reflect the parameter names in exactly the same wording.

Name	Description	Value
VCENTER_SERVER	<p>The hostname or IP address of the vCenter(TM) server managing the vSphere(TM) environment protected by this installation.</p> <p>Note: The vCenter server is already prompted during the installation of the product and the entered value is automatically preset in the profile.</p>	
VCENTER_SERVER_USER	<p>This parameter specifies the username needed to log in to the vCenter(TM) server. Ensure that this user has the necessary privileges. Please review the User's Manual, chapter "VMware vCenter Server user privilege requirements" for further details.</p> <p>Note: The vCenter server is already prompted during the installation of the product and the entered value is automatically preset in the profile.</p>	
AUXILIARY_ESX_HOST	<p>The auxiliary ESX host is used to offload backups to IBM Spectrum Protect™ for Virtual Environments and for mount operations as part of a restore operation. Specify a fully qualified host name.</p>	
HOST_NAME_MAPPING	<p>This parameter specifies how an ESX host in the vSphere environment is mapped to the corresponding host name that is used for this server on the storage subsystem. Multiple ESX hosts can be mapped to the same host name by using a cluster that is defined on a storage subsystem, for example XIV®, that covers more than one ESX host. In this case the parameter value specified is the name of this cluster. If an ESX host does not have an explicit mapping specified by this parameter, IBM Spectrum Protect™ Snapshot for VMware applies an implicit mapping: If the ESX host name is a fully qualified hostname, IBM Spectrum Protect™ Snapshot for VMware uses the portion up to the first dot and assumes this portion to be the corresponding name on the storage device for this</p>	

	<p>host.</p> <p>This parameter can be specified multiple times within this section of the profile. The parameter value format is <Auxiliary ESX host name> : <storage subsystem host name> for example HOST_NAME_MAPPING esxserv1.domain.com:esxserv1_xivname where esxserv1.domain.com is the fully qualified ESX server host name as known in the vSphere environment and esxserv1_xivname the name of this host as defined on the XIV storage subsystem.</p> <p>Note: For DS8K use PREASSIGNED_VOLUMES as <storage subsystem host name>. The target set volumes need to be statically mapped to the auxiliary ESX server.</p> <p>For SVC use PREASSIGNED_VOLUMES as <storage subsystem host name> in case you use static volume mapping to the auxiliary ESX server.</p> <p>For NFS datastores on IBM System Storage N series and NetApp storage systems the 'storage subsystem host name' is the IP address of the VMkernel interface of the ESX host.</p>	
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DS8000 / SVC / Storwize V7000

The storage device related parameters listed here should be checked with the storage admin. For parameters not listed here the default value can be accepted. If there is an entry in the "Value" column, this means that the entry is the recommended value for the parameter.

Name	Description	Value
COPYSERVICES_HARDWARE_TYPE	DS8000 (For IBM DS8000 series) SVC (For IBM SAN Volume Controller and IBM Storwize V7000 using static target allocation) SVCDDTA (For IBM SAN Volume Controller and IBM Storwize V7000 using dynamic target allocation)	
COPYSERVICES_PRIMARY_SERVERNAME or COPYSERVICES_SERVERNAME (SVCDDTA)	Defines the TCP/IP address or hostname of the host running the CIM Agent for DS Open API (which can manage the primary and secondary Copy Services servers of the DS8000 cluster), the SVC master console, or embedded CIM Agent.	
COPYSERVICES_USERNAME	cim user - to connect to CIM Agent for DS Open API svc user - to connect to the primary copyservices server	
COPYSERVICES_REMOTE (SVC / DS8000 only)	Determines if the backup is taken at the local or the remote site when using Metro or Global Mirror on SVC or Storwize V7000. The options are YES and NO. The default option is set to NO.	
COPYSERVICES_REMOTE_SERVERNAME (SVC / DS8000 only)	Specifies the IP address or hostname for the secondary cluster. If the COPYSERVICES_REMOTE parameter is set to YES, the parameter is required.	
COPYSERVICES_REMOTE_USERNAME (SVC / DS8000 only)	Specifies the user name used to connect to the secondary cluster. The default option is superuser.	

Name	Description	Value
TARGET_SETS (SVC / DS8000 only)	Specify the target volumes to be used in the FlashCopy operation using one of these values: <ul style="list-style-type: none"> VOLUMES_FILE <list of target set names> (see also TARGET_NAMING) 	
VOLUMES_FILE (SVC / DS8000 only)	Only applicable if TARGET_SETS is set to VOLUMES_FILE. Specify the name of the target volumes file (.fct).	
TARGET_NAMING (SVC only)	Only applicable if TARGET_SETS lists the target set names. Using this parameter, target volume names can be derived from source volume names according to a certain naming pattern specified by this parameter: <string with wildcards %SOURCE and %TARGETSET> For more details please refer to the User's Manual.	
SVC_SSHKEY_FULLPATH (SVCDTA only)	Fully qualified file name of the local private key file used for connecting to the SVC CLI via ssh. See the User's Manual for more details (chapter "Configuring to use the Storwize family and SAN Volume Controller with dynamic target allocation (SVCDTA)	

XIV

The storage device related parameters listed here should be checked with the storage admin. For parameters not listed here the default value can be accepted. If there is an entry in the "Value" column, this means that the entry is the recommended value for the parameter.

Name	Description	Value
COPYSERVICES_HARDWARE_TYPE	IBM XIV® Storage System	XIV
COPYSERVICES_SERVERNAME	Specify the hostname of the IBM XIV® Storage System.	
COPYSERVICES_USERNAME	Username to log in to the XIV® system.	
COPYSERVICES_REMOTE	Determines if the backup is taken at the local or the remote site when using XIV Remote Mirroring. The options are YES and NO. The default option is set to NO.	
COPYSERVICES_REMOTE_SERVERNAME	Specifies the IP address or hostname for the secondary cluster. If the COPYSERVICES_REMOTE parameter is set to YES, the parameter is required.	
COPYSERVICES_REMOTE_USERNAME	Specifies the user name used to connect to the secondary cluster. The default option is superuser.	

IBM N Series and NetApp

The storage device related parameters listed here should be checked with the storage administrator. For parameters not listed here the default value can be accepted. If there is an entry in the "Value" column, this means that the entry is the recommended value for the parameter.

Name	Description	Value
COPYSERVICES_HARDWARE_TYPE	IBM N Series and NetApp	SAN_NSERIES or NAS_NSERIES
COPYSERVICES_SERVERNAME	Specify the TCP/IP hostname of the storage system.	
COPYSERVICES_USERNAME	Username to log in to the storage system.	
COPYSERVICES_COMMPROTOCOL	Protocol to be used for communication with the storage system. HTTP Communication in non-secure mode HTTPS Communication in secure mode Note: To access a vfiler the HTTPS protocol can not be used.	HTTPS

Passwords

The setup wizard will prompt for the following passwords:

- ACS daemon:
Password the client uses for connecting to the ACS management daemon. This can be any string, the password will be encrypted and saved in a file. The password will never have to be entered again since it is read from the password file by the clients and the ACS daemon.
- vCenter server:
Password to connect to the vCenter server.
- Device sections:
One password for each individual storage system / CIM agent.
Note: No password is prompted for device sections of type SVCDDTA. A private key file is used for authentication instead.

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