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**Q. How can I setup Agent for VMware to backup ESX server VMs?**

A. To setup Agent for VMware to backup ESX server VMs:

- Install Client Agent for Windows on VCB backup proxy Windows 2003 server.
- Install Agent for VMware along with ARCserve Primary or Standalone server.

The Agent for VMware is licensed from the ARCserve Primary or Standalone server.

**Q. Can I use the Agent for VMware to protect VMs residing on the local disk of ESX server?**

A. No. To protect VMs on the local disk of ESX server, you have to use the scripted solution provided by CA. The solution can be downloaded as a patch from the CA website.

**Q. What are the logging options provided with Agent for VMware?**

A. The logging options provided with Agent for VMware are:

**Agent Logs** - For every VMware Agent backup job, the log information is recorded in a file named – ca\_vcbpopulatedb.log located in Client Agent for Windows installation directory in the backup proxy server. This file records information about the mount and unmount operation for each VM selected for backup. Additionally, job specific NT Agent logs are generated inside the LOG folder in the Client Agent for Windows installation directory in the backup proxy server (similar to any regular client agent job log).

**Server Logs** – Activity Log records information about the VMware Agent Job along with the appropriate error messages for failed jobs. Job Log records information about the VMware Agent Job similar to a regular backup job. Job History displays details of job in Job view and Host name view.

**Q. Which type of backup mode is preferred – File or Raw mode?**

A. The type of backup mode to choose depends on your requirements. For a Disaster Recovery operation, Raw mode backup is preferred. For recovery of files deleted accidentally you can use a File mode backup.

**Q. What can I do, if I get an error – “Skip session not supported” during VMware session restore?**

A. The most likely cause of the error is that you tried to restore to a location on your local 32-bit Windows server. The workaround for this is to add the local machine with a fictitious name and real IP address in the Destination tab of the Restore Manager. Thereafter, select a folder in the local machine and perform the restore operation.

**Q. What can I do if I get an error – “AE0521 - VM Mount operation failed” during VMware agent backup job?**

A. This error can appear due to various reasons. For a list of possible causes and the suggested actions, refer online help for error AE0521. You can also view the file ca\_vcbpopulatedb.log located in the Client Agent for Windows installation directory in the backup proxy server.

**Q. Does the Agent for VMware work with VirtualCenter server?**

A. Yes. The Agent for VMware works transparently with VirtualCenter server in exactly the same way as it works with ESX server. The view in Backup Manager shows all VMs contained in multiple ESX servers managed by a single VirtualCenter server and backup proxy server.

**Q. How can I backup specific folders inside a volume in a Windows VM?**

A. Specific folders can be backed up by specific filters at local VM level. To backup specific folders inside a volume on a Windows VM, specify local filters (say C:\Windows\system32) at VM level. You can also specify global filters which would apply to all the File level VM backups. In case of a conflict between global and local filters, local filters take precedence.

**Q. What are the different kinds of backups that can be performed for ESX server VMs?**

A. The different kinds of backups that can be performed for ESX server VMs are File and Full (Raw) mode.

**Q. Can VC server and VCB proxy co-exist on the same machine?**

A. Theoretically, yes you can have both the applications running on the same machine. However, VMware does not recommend such a kind of setup as there are chances of a conflict in the services of both the applications.

**Q. Where can I find the log details if there are any problems while populating the data?**

A. If there are any problems while populating the data, you can find the log details in ca\_vcbpopulatedb.log located in the Client Agent home directory on VCB proxy. This log will help you identify the reason for VCBUI.exe failure. The log prints the return code from 0-9 which indicates the probable cause of failure.

**Q. How can I schedule to populate the ARCserve database periodically?**

A. You should periodically populate the ARCserve database using the ARCserve VMware Configuration Tool or the ca\_vcbpopulatedb command line utility to ensure that the CA ARCserve Backup database contains up to date information about the VMs and volumes in an ESX server system.

If you install CA ARCserve Backup on the backup proxy system, and the backup proxy system is a Primary/Member server, you can use the Generic Job Scheduler to execute the ca\_vcbpopulatedb utility periodically. For more information about using the Generic Job Scheduler to schedule jobs, see the CA ARCserve for Windows Administration Guide.

**Q. How do I calculate the space required on the proxy server to mount the VMs?**

A. Say your VM size is X GB, it means the size of your vmdk file is X GB. Say your mount point on VCB proxy is 'D:\Mount'

For File mode backup you do not need any space on the proxy server, since in file mode backup, VCB only does a mount of the volumes from SAN VM to the mount point on VCB proxy server (similar to map network volume).

For Raw (full) mode backup VCB exports the volumes from SAN VM to the mount point on VCB proxy server. So here you need space on the D:\ volume in proxy. The space required depends on the actual used space by the volumes in the VM. So suppose your X GB VM has two volumes C:\ - X1 GB and E:\ - X2 GB. Out of this, C:\ has used space of Y1 GB and E:\ used space is Y2 GB.

So in your mount point volume (D:\) on proxy you need a total of at least (Y1+Y2) GB of free space for Raw mode VM backup. Similar calculation applies if you are backing up X GB Linux VM.

**Q. Where is a snapshot stored?**

A. Taking a snapshot means VCB is trying to capture a consistent image of the disk (vmdk) which can be backed up. Normally while a VM is running, there are I/O operations going on in the VM disk so you cannot backup a running VM (hot backup) with regular client agent procedure. Hence VCB provides a mechanism to capture a snapshot of the running VM. VCB internally calls a set of pre and post scripts:

**Pre-script** - Takes a snapshot (xxx.vmsn) and creates a delta file (xxx-delta.vmdk). The snapshot and delta files are stored in the same folder as VM.

**Post-script** - Removes the snapshot and merges the delta file back to the vmdk.

VCB snapshot has the name - \_VCB-BACKUP\_ as you can see in the Snapshot Manager of the VM for which backup is in progress

**Q. Do I need to unmount VMware Agent after backup or does it unmount itself once the backup is complete?**

A. VMware Agent unmounts the VM selected for backup from the mount directory after the backup job is complete.

**Q. Can I restore the files backed up using Raw mode on to a Linux box and then copy it to the ESX server?**

A. No. Restore for Raw mode sessions require two passes. First you restore the session files to a Windows box and then copy them to your ESX server. The first pass is mandatory. Otherwise it is similar to restore of Windows NTFS files to a Linux box through Linux client agent which fails with error E8531 - "Request denied by client agent".

**Q. Does CA support iSCSI configuration in r12?**

A. Yes. To be more specific from VMware Agent point of view, CA supports backup of ESX server VMs which reside on iSCSI storage LUN through VCB. This is in addition to the backup of ESX server VMs which reside on SAN storage LUN through VCB. The iSCSI support has been added from VMware starting version ESX 3.0.2-VCB 1.0.3, so in r12 CA has added support for the same.

**Q. Does CA support backing up of multiple ESX clusters?**

A. Yes. CA supports backing up of multiple ESX clusters at VC level. You need to ensure that you backup at VC level which means you first run VCBUI with VC name and credentials as parameters. Once the VCBUI finishes, ASDB is populated with details for all the VMs residing on all the ESX servers. Thereafter, you can submit backups using Backup Manager (Expand VMware VCB Systems - VCB proxy - VC) in r12.

**Q. Does CA support backup/restore of VMs that are running on 64-bit Windows?**

A. Yes. To backup/restore VMs, you need to have 64-bit Windows client agent running on the Windows VM if you want to restore a file level VMware session. In r12, even for 32-bit Windows VM, you need to have 32-bit client agent running on the VM for file level VM restore.

**Q. When I take backup at file level or VM level will the data consistency and integrity be maintained?**

A. There is no application level consistency support when backing up data using a backup proxy system. To protect application level data, you can create custom prescripts and postscripts that let you keep application level data in a consistent state. You can use the custom scripts as pre-freeze and post-thaw scripts. For more information about pre-freeze and post-thaw scripts, please see the VMware Virtual Machine Backup Guide.

## Disk Staging

- Q. If I cannot install Disk to Disk to Tape option with Member server, does it mean that I cannot use this option with member server?**
- A. No. Even if you cannot install Disk to Disk to Tape option with Member server, you can still use this option with the Member server by providing appropriate license.
- Q. Can I use the same File System Device (FSD) as staging and destination device for taking a backup from disk to tape?**
- A. No. You cannot use the same device group as staging and destination device for taking backup from disk to tape. Once you configure any File System Device (FSD) as a staging device that group disappears under the Destination tab and is visible only under the Staging tab along with a small icon in the Backup Manager.
- Q. Can I use the same device group as staging and destination device for taking a backup from tape to tape?**
- A. Yes. If you have more than one drive available in the same device group you can use the same device group as a staging and destination device for taking backup from tape to tape. If you do not have more than one drive available in the same device group, select a different group under the Staging and the Destination tab in the Backup Manager.
- Q. Is there a provision to migrate data at a later point for a staging job that is submitted with "Do not copy data" in staging policy?**
- A. If the data has NOT already been purged, you can perform a tape copy manually to achieve it.
- Q. What are the different types of reports that I can generate for a Staging job?**
- A. The different types of reports that you can generate for a Staging job are:
- Staging Migration
  - Staging Purge Failed
  - Staging SnapLock
  - Staging Summary
- Q: Is the Disk Staging option available for Linux platforms?**
- A: Yes. Disk Staging option is available for Windows, UNIX, and Linux platforms.

### TLO/SAN

**Q. If I have a single tape drive with multiple slots, do I require a TL option?**

A. No. Only the Autoloader/Library with more than one drive requires TL option.

**Q. Is TLO required for SAN Option?**

A. Yes. SAN can share the device with more than one drive.

**Q. Can I set multiple cleaning slots in r12?**

A. Yes. From Library Properties, either by Clean by slot or Clean by barcode you can set multiple cleaning slots.

**Q. Can I install SAN option on a Standalone server?**

A. No. SAN option can be installed only on the Primary server.

### Exchange

**Q. Does CA ARCserve r12 support brick level backups?**

A. No. CA ARCserve r12 does not support brick level backups.

**Q. For which previous versions of tapes can I perform brick level restores?**

A. You can perform brick level restores from BAB r11.5, r11.1, r9.01, and their Service Packs.

### Agent

**Q. Do I require a Client Agent for local backups in r12?**

A. Yes. Client Agent is a must for local backups in r12.

**Q. Will the Client Agent upgrade be automatically selected while trying to upgrade to r12?**

A. Yes. Client Agent is automatically selected during the upgrade process.

**Q. Does CA ARCserve r12 support backward compatibility for previous agents?**

A. You can use BrightStor ARCserve Backup r11.5 and all the latest Service Packs and BrightStor ARCserve Backup r11.1, SP2 to backup data from the CA ARCserve Backup server.

**Q. How do I troubleshoot if data migration is not successful?**

A. If there is an error during data migration, you have to review the following logs to find out the cause of the error.

- << CA ARCserve *Install Directory*>>/Log/DBMigration.log
- << CA ARCserve *Install Directory*>>/Log/ServerMigration.log

**Q. What happens if I do not choose “session details migration” and “catalog migration” which are optional fields to select?**

A. We cannot see file level details of sessions backed up in the restore view.

**Q. How can I migrate data manually after I upgrade to r12?**

A. To migrate data manually after upgrade to r12, you have to explicitly invoke the server migration << CA ARCserve *Install Directory*>>\ServerMigration.exe.

**Q. Can I use SQL Express as the database for Windows IA64 machine?**

A. No. You cannot use SQL Express as the database for Windows IA64 machine as it is not supported by IA64 machine. During ARCserve install on IA 64 machine the Radio button for SQL express is grayed out.

**Q. What is the default database that comes with CA ARCserve r12?**

A. SQL Express is the default database that comes with CA ARCserve r12.

**Q. Is it mandatory to migrate data immediately after upgrade?**

A. No. You can migrate data at a later time.

**Q. Can I upgrade my r11.5 license to r12 or do I have to apply for a new license?**

A. Yes. You can upgrade your r11.5 license to r12 by providing an upgrade license key.

**Q. How database migration is handled for shared DB configurations?**

A. For shared DB configurations, the recommended configuration for the upgrade is to make one of the servers as Primary server which uses the same database and upgrade all the other servers as Member servers to the same Primary server. For all the Member servers, database migration does not happen again, as the Primary server already contains data related to all the servers.

**Q. Is there an option for me to perform database maintenance operations from ARCserve?**

A. Yes. You can perform database maintenance operations from ARCserve in two ways:

- a. Run the maintenance operation as part of the Database Pruning job.
- b. Run the maintenance operation independent of the Database Pruning job.

Use the Job Scheduler Wizard to create individual jobs that use ca\_dbmgr command line utility to facilitate the database maintenance operations

The maintenance operations that are provided are Update Statistics, Re-build Indexes, Check DB Integrity and Reduce DB Size.

**Q. Is it possible to move ARCserve to a different drive while keeping the existing configuration intact?**

A. Yes. It is possible to move ARCserve to a different drive while keeping the existing configuration intact. For more information please refer to the CA ARCserve for Windows Administration Guide.

**Q. Can I change the database from SQLE to SQL after installation?**

A. Yes. You can change the database from SQLE to SQL after installation. You can do this by using the “Server Configuration Wizard” provided by ARCserve. The wizard can be invoked from <<System Drive>>→Programs→CA→ARCserve Backup→Server Configuration Wizard. Even if there is some data existing in the database, the data migration from SQL Express edition to SQL server edition is taken care by exptosql executable internally.

**Q. What are the various DB migration combinations supported during the upgrade?**

A. The following DB migration combinations are supported during the upgrade:

- Raima to SQLE
- Raima to SQL
- SQL to Remote SQL

**Note:** DB Migration from SQL to SQLE is not supported.

## Clusters

**Q. What are the components that CA ARCserve supports as cluster aware?**

A. CA ARCserve supports server and database as cluster aware components while Agents are not cluster aware.

**Q. How do I recover SQL ASDB in a cluster?**

A. You can recover SQL ASDB in a cluster using ca\_recoverdb utility. For more information, please refer to the CA ARCserve for Windows Administration Guide.

**Q. How can I take a full backup of an active node incase of DR?**

A. To take a full backup of an active node, all the cluster resources should be owned by the active node. Add only the physical name (not IP) of the active node using Add Machine/Object. Select the complete node and then submit a full backup job.

**Q. What happens to my backup job when a failover occurs?**

A. When a planned failover Job is executed, job is in crashed state (on node 1) and the same job starts on the other node after failover is done.

**Q. What are the sessions created for ARCserve after SQL Express cluster database backup?**

A. Two sessions are created after the backup of ASDB database using virtual name:

1. sqlldr@ARCSERVE\_DB
2. dbasql@ARCSERVE\_DB

**Q. How do I backup my applications in a cluster environment?**

A. ARCserve should be browsed using only virtual name of ARCserve cluster. All the cluster aware applications should be backed up using virtual name.

**Q. What CA ARCserve cluster resources are created after installation of CA ARCserve on MSCS cluster?**

A. ARCserve HA, ARCserve Share, and ARCserve Registry are the three resources created after installation. Also if the database is clustered, SQL Express ARCserve ASDB resource is created along with the above three resources.

**Q. How do I install ARCserve on cluster?**

A. Installation of ARCserve on cluster requires shared disk, virtual name, and virtual IP as prerequisites. As the application is cluster aware a check box appears during installation. Specify the shared disk path and domain name which should be a common name across all the nodes during the installation procedure.

**Q. Where is the SQL Express ASDB database located if it is installed on a cluster?**

A. If SQL Express database is installed on a cluster as cluster aware, ASDB alone is stored in shared disk while ARCserve is installed in the folder called SQLASDB.

## Data Encryption

**Q: Is CA ARCserve Backup FIPS compliant?**

A: Yes. CA ARCserve Backup r12 is FIPS compliant. It uses FIPS-compliant algorithms to back up and restore the data including username and password credentials.

**Q: Does CA ARCserve Backup support tape drives that provide FIPS compliant hardware encryption?**

A: Yes. CA ARCserve Backup supports tape drives (from external third-party vendors) that provide FIPS compliant hardware encryption. This is in addition to the FIPS compliant tape or disk encryption provided by CA ARCserve Backup software.

### Database and Catalog

**Q: How does Catalog Browsing work?**

A: Catalog DB and Catalog Browsing are enabled by default in CA ARCserve r12. Two index files are created for each catalog file under Catalog DB folder with .abd and .abf extensions. The .abd contains directory info and .abf contains file info and both of them internally point to the content of catalog files under Catalog DB.

### SharePoint

**Q. Can I upgrade SharePoint 2003 agent to SharePoint 2007 agent?**

A. No. Upgrade from SharePoint 2003 agent to SharePoint 2007 agent is not supported. You will have to uninstall older agent and install the new agent.

**Q. Can I manage CA ARCserve r11.5 SharePoint 2003 agent with CA ARCserve r12 backup server?**

A. Yes. You can manage CA ARCserve r11.5 SharePoint 2003 agents with CA ARCserve r12 backup server.

**Q. Can I use the existing r11.5 SharePoint 2003 agent license to back up SharePoint 2007 using r12 SharePoint 2007 Agent?**

A. No. You cannot use the existing r11.5 SharePoint 2003 agent license to back up SharePoint 2007 agent.

**Q. I need to restore individual documents in Microsoft SharePoint 2007. What can I do as ARCserve r12 SharePoint agent does not directly provide this ability?**

A. CA ARCserve Backup r12 does not directly provide the ability to recover individual documents from SharePoint backup. However, the following capabilities in Microsoft SharePoint 2007 allows extremely efficient recovery of individual documents from the SharePoint environment itself, without involving the backup server or the backup administrator.

- Microsoft SharePoint server offers 2 levels of Recycle bin. This allows you to recover documents easily in case anything is deleted by mistake.
- SharePoint also includes 'Version/History' tracking. By enabling this functionality you can very easily recovery previous versions of documents.

For recovering individual documents using CA ARCserve r12, the SharePoint agent supports restore to alternate location. So ARCserve backups can be restored to an alternate SharePoint server and the documents copied back to the original server after the restore.

Leveraging the above capabilities to gain document level restore gives you the advantage of performing just a single backup of your Microsoft SharePoint farm at both the database and document level. Dedicated document level recovery solutions usually involve performing two sets of backups – one for the full SharePoint database and the other for individual documents. This is a huge and unacceptable overhead for most customers.