



Backup

User Guide

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Backup Overview

Backup

Backup (KBU) provides real-time automated disk backup, disk imaging, file level backup and bare metal restore for Windows servers and workstations.

Automation, superior performance, ease of use and security are the cornerstone features of **Backup**. Unlike conventional file-based back-up products, **Backup** creates an image of the entire system state, including operating system, user settings, applications, and data. Applications and servers are always available since the backup process does not require system downtime.

Once a backup is created, **Offsite Replication** ensures that image and folder backups are immediately and automatically transferred and stored safely away from the business location. This process is completely automated and eliminates the need for a person to remember to take backup media, such as tapes, home or drop them off at a location for storage.

Data can be recovered quickly and easily with **Backup**. Whether it is a simple need to recover a few files, restore a system from a crash or recover systems from bare-metal in the event of a disaster, **Backup** provides IT Managed Service Providers and IT users with the most comprehensive, reliable, and cost effective server and workstation protection.

Fully Automated Real-Time Backup

- No user intervention required
- No system downtime required
- Schedule full and incremental imaging
- Schedule folder and file backups
- All processes are automated and occur when scheduled

Complete Disk Imaging

- Sector level backup
- Multiple partitions
- Full and incremental images provided for granular restoration points and reduced file size transfer for offsite replication
- Complete data protection of all programs, settings, configuration, system, and user data

Fully Automated Offsite Replication

- Scheduled time periods
- Occurs automatically without user intervention
- No downtime required
- No tapes or other media to transport
- Synthetic backups on offsite servers
- Supports synthetic encrypted backups of folder and files.

Fast and Easy Recovery

- Granular date selection for recovery
- Remotely mount drive volumes
- Complete system image restoration
- Drag and drop restoration of folders and files
- Bare-metal image restoration
- Minimizes downtime

Flexible Configuration and Control

- Configure globally, by group, OS type, etc.
- Granular by server or workstation
- Scheduled and unattended backup and file restoration
- Remote and automated deployment
- No need to physically visit the server or workstation or customer site
- No additional hardware or software is required

Functions	Description
Backup Status	Displays the status of scheduled backups for any machine.
Schedule Volumes	Schedules backups for selected hard disk volumes on any managed machine.
Pre/Post Procedure	Specifies a procedure to run before and/or after Volume Backup
Schedule Folders	Schedules backups for individual folders.
Backup Sets	Displays a list of the current backup sets you have stored, for both volumes and folders.
Backup Logs	Displays the logs generated by every backup action.
Explore Volumes	Mounts a backup as a new drive letter on the managed machine.
Explore Folders	Copies the folder backup to the managed machine.
Verify Images	Verifies any volume or folder backup image.
Image to VM	Converts an existing backup file to one of three types of virtual machine file formats: Virtual PC, VMware and ESX
Auto Recovery	Selects a volume backup image to automatically restore to a selected machine. Requires the machine can still boot and the agent can communicate with the server.

CD Recovery	Boots the managed machine from a CD and then automatically restore a selected volume backup image.
Universal Restore	Provides instructions for creating a boot CD and restoring a backup image manually by walking through a wizard.
Offsite	Specifies a machine to act as an offsite server and receive files from a local server.
Local Servers	Specifies a machine to act as a local server and send files to an offsite server.
Offsite Alert	Generates alerts when a local server fails to connect to an offsite server.
Schedule Transfer	Sets up a day by day schedule for each local server to push files to an offsite server.
Install/Remove	Installs and uninstall the backup driver and software on any managed machine.
Image Location	Sets the path to the backup storage location.
Image Password	Lists the passwords used to protect backup images and enables image encryption.
Folder Backup	Specifies a list of folders to backup during Schedule Folders.
Backup Alert	Activates/deactivates alerts associated with backup events.
Compression	Sets compression level used by both volume and folder backups.
Max File Size	Sets a maximum file size used for backup images. Images larger than this maximum are broken into multiple files.
Max Log Age	Sets the maximum number of days to save backup log data.
Secure Zone	Installs a secure zone to support Auto Recovery.

Uninstalling Other Backup Products

If other backup products are installed on a managed machine, this may cause problems with **Backup**. Uninstall other backup products before backing up volumes and folders using **Backup**. A warning message displays on the **Backup Status** page if other backup products are installed.

Volume Backups vs FolderBackups

When you perform a backup using **Schedule Folders**, only the data, along with the folder tree, is compressed and stored.

Backing up disks and partitions is performed in a different way: **Schedule Volumes** stores a sector-by-sector snapshot of the disk, which includes the operating system, registry, drivers, software applications and data files, as well as system areas hidden from the user.

This procedure is called **creating a disk image**, and the resulting backup archive is often called a disk/partition image.

Only those hard disk parts that contain data are stored. Further, it does not back up swap file information. This reduces image size and speeds up image creation and restoration.

Partition Backups

You can backup individual drive letters (partitions) or entire disk drives.

A partition image includes all files and folders independent of their attributes (including hidden and system files), boot record, FAT (file allocation table), root and the zero track of the hard disk with master boot record (MBR).

A disk image includes images of all disk partitions as well as the zero track with master boot record (MBR). To **ensure recovery from complete disk failure**, you should backup entire disk drives. Only by backing up entire disks **will you capture hidden recovery partitions** that may have been installed by your PC system vendor.

Full Backups, Incremental and Differential Backups

Full backups take significant time to complete compared with incremental or differential backups. To save time and disk space, schedule full backups to run less frequently than incremental or differential backups. Typically full backups are scheduled once per week or once per month, while incremental or differential backups run daily. All files required for a full backup, including all incremental or differential backups, are saved together in a backup set. You may save any number of full backup sets you wish.

Verification of Backups

Verification spot checks that backups are completed and can be used to restore from successfully. Verification does *not* involve comparing the backup to the original source files, so any other machine with an agent can be used to perform the verification of the backup file so long as the machine has read access to the image location. Successful backups may fail to verify if the backup image file was not copied successfully to the **Image Location** path. This problem typically only occurs in slow or unreliable networks. On slow networks, consider selecting the **Verify Backup** option in **Schedule Volumes** and **Schedule Folders** to verify the backup every time.

Dynamic Disks



Dynamic storage involves dividing a physical disk into multiple volumes or combining a physical disk with other physical disks to form volumes that are greater in size than any one physical disk. A traditional disk volume is called a "basic" disk volume. **Backup** supports the following basic and dynamic backup and restore combinations:

- backup basic disks
- backup dynamic disks

- restore basic volumes to basic disks
- restore basic volumes to dynamic disks
- restore dynamic volumes to basic disks
- restore dynamic volumes to dynamic disks

Disk-Based Backups of Dynamic and GPT Disks

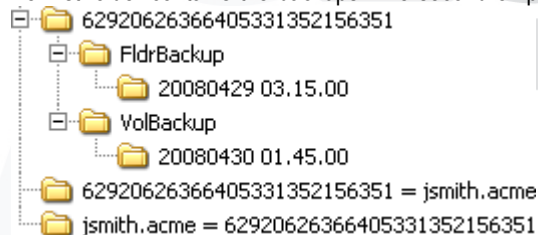
Backup clients ABR10 and ABR11 support disk-based backups of Dynamic and GPT disks. Previous to ABR10, only **partition-based backups** were supported for these types of disks. Restoring disk-based backups of Dynamic and GPT disks requires Universal Restore. Auto Recovery and CD Recovery of Dynamic and GPT Disks are not supported. ABR11 also supports EFI-based systems, where Windows is installed on a GPT volume (partition style is GPT)

Backup Folder Structure

Separate **Image Location** paths may be specified for volume and folder backups. Volume backups and folder backups are saved as full backup sets. Each backup set gets its own folder. Backup files have a *.tib extension.

Backup folders are organized by the GUID used to uniquely identify each machine ID. By using the GUID instead of the machine ID, renaming the machine ID or assigning the machine ID to a different group does not cause the backup to become unavailable. Two extras, empty, folders in the same backup image location folder identify the machine ID associated with each GUID. For instance, if you have a machine ID named **Jsmith.acme** and its GUID is 62920626366405331352156351 then folders might be organized as follows in the image location folder:

The first folder contains the backups. The second empty folder identifies the machine ID for a GUID. The third empty folder



identifies the GUID for a machine ID. If you have backups for many machine IDs all stored in the same image location folder, you can use either of the two empty cross-reference folders to identify the appropriate GUID backup folder, either by machine ID or by GUID.

Backing Up the CloudActiv8 Server

Do not attempt to backup the CloudActiv8 Server using **Backup** while the CloudActiv8 Server is running, even if VSS is enabled. Doing so can cause problems when the CloudActiv8 attempts to write information about the backup to a database that is being backed up. CloudActiv8 Server data is backed up automatically each time a database maintenance cycle is run. Database maintenance cycle frequency is set using the **Run database backup / maintenance every <N> Days @ <Time>** option in System > Server Management > **Configure**.

You can use **Schedule Folders** to backup the folder containing the CloudActiv8 database backup files.

For maximum flexibility and resiliency when using **Backup** backups of CloudActiv8-related files, CloudActiv8 recommends that you configure a **Folder Backup** to back up the following folders on your CloudActiv8 Server in addition to any other backups that you run on the server:

```
C:\<CloudActiv8_Installation_Directory>\UserProfiles
C:\<CloudActiv8_Installation_Directory>\WebPages\ManagedFiles
C:\<CloudActiv8_Installation_Directory>\WebPages\banner\default\images\new
C:\<CloudActiv8_Installation_Directory>\WebPages\compact\default\images\new
C:\<CloudActiv8_Installation_Directory>\WebPages\themes\default\images\new
C:\<CloudActiv8_Installation_Directory>\WebPages\Access
```

Confirm that the **Schedule Folders** schedule does not coincide with the CloudActiv8 database backup configured on the System > Server Management > **Configure** page, and that the folder you have configured as the backup folder on the CloudActiv8 Server is included in folders in the **Folder Backup**.

You should not attempt to stop SQL services or CloudActiv8 Server services while running any **Backup**, backup of your CloudActiv8 Server, as CloudActiv8 requires write access to the SQL database in order to update the backup results.

CloudActiv8 Backup Local UI

A **CloudActiv8 Backup Local UI** installs in the background on each end-point that has the backup client installed. With this version you can:

- Verify folder and volume backup.
- Mount volume backups that you wish to restore from.
- Restore all files from a folder backup.
- Convert volume backups to a virtual hard disk. The **CloudActiv8 Backup Local UI** is typically located:
- On 32-bit machines at `c:\Program Files\CloudActiv8\<CloudActiv8_ID>\Backup\CloudActiv8BackupLocalUI.exe`
- On 64-bit machines at `c:\Program Files (x86)\CloudActiv8\<CloudActiv8_ID>\Backup\CloudActiv8BackupLocalUI.exe`

The <CloudActiv8_ID> is a unique identifier that correlates to your CloudActiv8. There is also a shortcut in the Acronis folder to this path.

Offsite Replication

Offsite replication safely and securely transfers backup images from a LAN to a remote location. Offsite replication transfers all *changes* to files and sub-directories in a **Local Server** directory to a specified **Offsite Server** directory.

- File transfers are scheduled using **Schedule Transfer**.
- **Image Location** directories should be defined as subdirectories of a local server directory to be included in these transfers.
- The **Offsite Alert** page creates an alert when a specified local server cannot connect to its offsite server.
- Offsite replication supports the use of **Synthetic Full Backups**.

Offsite Server Configuration

Any machine ID may act as an offsite server. You may also have as many offsite servers as you like. Offsite server configuration examples include:

- **One global offsite server** - A local server at each managed LAN pushes data to the global offsite server.
- **Multiple offsite servers** - Several local servers are assigned to each offsite server. Multiple offsite servers are used to balance the load.
- **Cross offsite servers** - Supports offsite replication for companies with multiple locations. For example, two company sites each act as the offsite server location for the other company site.

Local Servers

The **Local Servers** page defines the machine ID and directory on the local LAN used to transfer all new files to an **Offsite Server**. Offsite replication transfers all *changes* to files and sub-directories in the local server directory to a specified offsite server directory. File transfers are scheduled using **Schedule Transfer**.

Image Location directories should be defined as subdirectories of a **Local Server** directory to be included in these transfers.

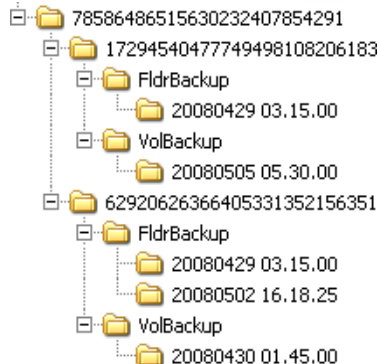
For each local server specify:

- The offsite server to push files to.
- The local directory path to push to the offsite server.
- Optional bandwidth limit.

The local server directory can be a UNC path pointing to a directory on a network file share. *Do not specify a local server directory using a mapped drive.* The local server must have an agent **credential** set in order to access the network.

Offsite Folder Structure

The offsite server stores data received from local servers in the directory specified. The top level GUID folder is the GUID of the local server the data is coming from. Second level GUID folders are the GUIDs of the machine IDs being backed up. The following diagram illustrates a typical offsite server directory structure.



File Transfers

Only file changes are pushed to the offsite server. Broken file transfers are automatically restarted at the point left off. Restarting the file transfer from the beginning is not required. Offsite replication uses the same communications technology used in agent/server communications. All traffic is 256-bit encrypted.

Using the Same Machine for the Local Server and Offsite Server

You may assign the offsite server to be the same machine as the local server, but note the following:

- You'll need to open a port just to replicate across drives, whereas other replication tools can do so locally.
- The files aren't copied offsite. You'll lose the disaster recovery benefit of an offsite backup.

Setting the Name/IP Address and Port




Select a target machine with an agent that will act as the offsite server. The offsite server is always running and listens for connections from local servers using any TCP port you specify. The port cannot be used by any other application. Try using 9721 as it is similar to the agent check-in port. Offsite server ports are restricted to between 1024 and 49151.

You must specify a DNS name or IP address that can be resolved from the local server. Typically, this is the *external* name/IP address of the gateway/firewall/router used by the target machine. Configure **port range**

forwarding on your gateway/firewall/router to direct requests for port 9721—or whatever port number you've chosen—to the internal IP address of the machine ID acting as the offsite server.

Testing the Offsite Configuration

Once you have configured the offsite server, check pending procedures on the offsite server machine:

1. Click the  or  or  icon.
2. Click the **Live Connect** Asset > Procedures > Pending tab.
3. Ensure the *Start Offsite Server* procedure ran successfully.

Try to connect to the offsite server component using Telnet. In the command below replace the string `your.offsiteServer.com` with your Name/IP address. Replace `9721` with the port number you are using.

`telnet your.offsiteServer.com 9721`

If the connection is successful you should only see a blinking cursor. Once you can verify the offsite server is ready, You can configure the **local servers**.

Synthetic Full Backups

A synthetic full backup is created by consolidating existing incremental or differential backups with the previous full backup image. This is sometimes called an 'Incremental Forever Backup'. Unlike traditional full backups, synthetic full backups are not transferred from the local server to the offsite server. Instead, after the *first* full backup is transferred, only the incremental or differential files are transferred to the offsite server. A synthetic backup component on the offsite server recreates the next full synthetic backup in parallel with the local server. This eliminates the need to transfer full backups between the local server and offsite server. With synthetic full backups, bandwidth requirements for transferring full backups are eliminated, but the offsite

server's access to its own file server may need to be enhanced to handle the processing of its synthetic full backups.


If synthetic full backups are being used on a KBU managed machine and the **Image Location** or **Offsite Servers** local directory is a UNC path, such as `\\server\share`, then **Copy the Files Locally First** is enabled by default instead of **Access the Network Directly**. To use this robust consolidation option effectively, appropriate hard disk space is required on the managed machine. For more information, see the [CloudActiv8 knowledgebase](#)

Configuring synthetic full backups involves the following steps:

These first three steps apply to ANY Offsite Server.

1. Install an agent on a local server. Typically, the backup image locations of machine IDs being backed up point to the local server.
2. Install an agent on the offsite server.
3. Define a machine ID as an offsite server using Backup > **Offsite Servers**.
These steps apply to Offsite Servers using Synthetic Full Backups.
4. Click the **Schedule Install** hyperlink on the Backup > **Offsite Servers** page for the machine ID you want to schedule synthetic support on. A dialog box displays. Schedule the installation of synthetic support components to the offsite server.
5. When using Backup > **Schedule Volumes - Schedule Folders** to create backups for machine IDs, ensure the **Synthetic Full** checkbox is checked. These are machine IDs that store backups on local servers that transfer backups to the offsite server you defined above.
6. Check the progress of scheduled synthetic backups using the **Backup Status** page. The **Offsite Server Status** and **Local Server Status** sections on this page display a **Synthetic Backups Queued** column. The column displays counts for each machine ID with synthetic backups scheduled. Click the link to display a window showing the queue status of each synthetic full backup.

Hidden Preferences

Alt+clicking the Synthetic Full backup  icon in the header panel of **Schedule Volumes** or **Schedule Folders** displays five tabs of preferences that can be applied individually to each machine.

Synthetic Full tab

- **When performing synthetic full backups** - If synthetic full backups are being used on a KBU managed machine and the **Image Location** or **Offsite Servers** local directory is a UNC path, such as `\\server\share`, then **Copy the Files Locally First** is enabled by default instead of **Access the Network Directly**. To use this robust consolidation option effectively, appropriate hard disk space is required on the managed machine. See the [CloudActiv8 knowledgebase](#) for more information.
- **Run synthetic full backups <N> time(s) until successful** - Sets the **Synthetic Full Attempts** count for synthetic full backups.
- **Retry after <N> days(s)** - Sets the **Retry after (days)** count.

Installer tab

- **Max Number of Concurrent Downloads** - Sets the maximum number of concurrent downloads.

Offsite Replication tab

- **Verification method used to check Offsite data integrity** - Selects the verification method used to check offsite data integrity.
 - *Quickest File Verification using File Size and Last Modified Time*
 - *Quick File Verification with SHA-1 Hash for Partial Files only*
 - *File Verification with SHA-1 Hash for Partial Files and Complete Files*

Diagnostics tab

- **Run AcronisInfo on selected machines** - Runs *Acronis Info* on selected machines. *Acronis Info* is a utility that automatically gathers User Rights Assignment list, Windows Event Log, Msinfo32, Acronis registry keys, Acronis logs, Acronis Scheduler report, Acronis Disks Report and list of user's Active Directory groups. This information is placed inside a *AcronisInfo.zip* file. The *AcronisInfo.zip* file can then be downloaded from a link that displays in the **Acronis Link Info** column of selected machines.

Backup Options tab

- **Use multivolume snapshot option** - This option applies only to machines with VSS for Volume Backup and only to the **Schedule Volumes** page. If checked, snapshots of all volumes being backed up are created simultaneously. Use this option to create a time-consistent backup of data spanning multiple volumes, for instance, database files. If unchecked, volume snapshots are taken one after the other. Backups of data spanning several volumes may not be consistent.

Backup Module Minimum Requirements

CloudActiv8 Server



Requirements for Each Managed Machine

- 512 MB of RAM
- 2.3 GB of free disk space
- Microsoft Windows Server 2008, 2008 R2, 2012, 2012 R2, 2016
- Microsoft Windows 7, 8, 8.1, 10

Backup

Backup Status

Backup > Backup Status

- Similar information is provided using Info Center > Reporting > Reports > Backup.

The **Backup Status** page provides a dashboard view of the backup status of machine IDs that have the backup client installed.

Show Status for Last <N> <Periods> and Refresh

Specify the number of periods to collect the results shown on this page, then click the **Refresh** button.

Dashboard Panes

The dashboard is organized into the following panes:

- **In Process Backups** - Lists backups in process and the percentage complete.
- **Backup Status at a Glance** - Displays pie charts showing scheduled, succeeded, skipped, failed and canceled backups. Click any slice of the pie chart or any label of the pie chart to display a list of individual machines belonging to that slice.
- **Backup Status by Machine** - Shows the status of backups scheduled, succeeded, skipped, failed or canceled for each machine. Also shows when the last successful backup ran, and if the backups are being replicated via offsite replication.
- **Offsite Server Status** - Displays the total files, files remaining to upload, and data remaining to upload on offsite servers. Clicking any of the hyperlinked counters displays the files on the *offsite server*. A red/yellow/green status icon indicates the *lowest* status among all local servers connected to that offsite server. So if a single local server among several local servers is inactive the icon is red. Clicking this icon opens a panel which displays the status of all local servers associated with this offsite server.

Check the progress of scheduled synthetic backups on *offsite servers* using the **Synthetic Backups Queued** column. The column displays counts for each machine ID with synthetic backups scheduled. Click the link to display a window showing the queue status of each synthetic backup.
- **Local Server Status** - Displays the total files, files remaining to upload, data remaining to upload on local servers. Clicking any of the hyperlinked counters displays the files on the *local server*. Clicking the local server red/yellow/green status icon redirects to the **Local Servers** page.

Check the progress of scheduled synthetic backups on *local servers* using the **Synthetic Backups Queued** column. The column displays counts for each machine ID with synthetic backups scheduled. Click the link to display a window showing the queue status of each synthetic backup.

Schedule Volumes

Backup > Schedule Volumes




The **Schedule Volumes** page schedules the backup of volumes for selected machine IDs. The list of machine IDs you can select depends on the machine ID / group ID filter and the scope you are using. To display on this page, machine IDs must have backup software installed on the managed machine using the Backup > **Install/Remove** page.

See **Uninstalling Other Backup Products, Volume Backups vs Folder Backups, Full Backups, Incremental and Differential Backups, Verification of Backups, Synthetic Full Backups, Dynamic Disks, Backup Folder Structure and Backing Up the CloudActiv8 Server** for a general description of KBU.

Actions

- **Schedule Full** - Click to schedule a new full backup of selected machine IDs using the backup options previously selected. Backup options set using the four **Apply** buttons are applied to selected machine IDs when **Schedule Full** is clicked.
- **Cancel** - Click **Cancel** to clear pending backups for selected machine IDs, including backup options set using the four **Apply** buttons.
- **Backup Now** - Click to start a full backup on selected machines IDs if no backups exist. Otherwise, clicking **Backup Now** creates an incremental or differential backup.
- **Apply** - Click to apply a row of settings to selected machine IDs without changing the backup schedule.










Scheduling Options

- **Date/Time** - Enter the year, month, day, hour, and minute to schedule this task.
- **Stagger by** - You can distribute the load on your network by staggering this task. If you set this parameter to 5 minutes, then the task on each machine ID is staggered by 5 minutes. For example, machine 1 runs at 10:00, machine 2 runs at 10:05, machine 3 runs at 10:10, ...
- **Skip if Machine Offline** - Check to perform this task only at the scheduled time, within a 15 minutes window. If the machine is offline, skip and run the next scheduled period and time. Uncheck to perform this task as soon as the machine connects after the scheduled time.
- **(Backup Set Type)** - Select the type of backup set to schedule. Click **Apply** to apply these settings to selected machine IDs without changing the backup schedule.
 - **Incremental**  - Captures only the files that have changed *since the previous full or incremental backup*. Restoring from an incremental backup requires all previous incremental image files plus the original full backup. Do not remove files from the full backup set directory.
 - **Last Differential**  - Captures all changes to the target system *since the last full backup*. To save disk space, only the latest differential backup is saved with each full backup set. Select **Last Differential** to minimize backup storage requirements.
 - **All Differentials**  - Captures all changes to the target system *since the last full backup*. Saves all differential backups in addition to the last differential backup.






- **Every <N> Periods** - Incremental and differential backups are always performed as a recurring task. Enter the number of times to run this task each time period. Click **Apply** to apply these settings to selected machine IDs. Enter 0 to disable the scheduling of incremental or differential backups.
- **Full Every <N> Periods** - Full backups are always performed as a recurring task. Enter the number of times to run this task each time period. Click **Apply** to apply these settings to selected machine IDs.
- **Save last <N> backup sets** - Specify the number of full backup sets to keep. A **backup set** is a full backup plus all incremental backups or differential backups referencing that full backup. Starting a new full backup creates a new full backup set. So, entering 3 here maintains the current full backup, plus that last two full backup sets. Click **Apply** to apply these settings to selected machine IDs without changing the backup schedule.
- **Synthetic Full** - If checked, creates a new full backup by consolidating existing incremental or differential backups with the previous base full backup image.
- **Verify Backup** - If checked, **verifies** each backup image immediately after each full, incremental, or differential backup completes. **Verify takes the same amount of time as the original backup to complete.** Only verify in situations where you question the integrity of the network connection to the backup file location. You do not generally need to use this option. Use the **Verify Images** function to spot check backup files at any time.
- **Delete before running backup** - If checked, the system deletes any backup sets not being saved using **Save last <N> backup sets** before creating a new backup set. If blank, backup sets scheduled for deletion are deleted only after the new backup set is successfully created.
- **Enable VSS Support** - Enables **Volume Shadow Service (VSS)** on 2003 servers. VSS ensures completion of all transactions before the backup process starts. Click **Apply** to apply these settings to selected machine IDs without changing the backup schedule.

Tables Columns

- **Select All/Unselect All** - Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.
- **(Check-in Status)** - These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

-  Online but waiting for first audit to complete
-  Agent online
-  Agent online and user currently logged on.
-  Agent online and user currently logged on, but user not active for 10 minutes
-  Agent is currently offline
-  Agent has never checked in
-  Agent is online but remote control has been disabled
-  The agent has been suspended
-  An agent icon adorned with a red clock badge is a temporary agent.

- **Machine.Group ID** - A unique machine ID / group ID / organization ID name for a machine in the CloudActiv8.

- **Disks** - The list of local hard drive disks available on a machine, by disk number. Disk numbers are assigned by a machine's BIOS. Check a disk number to include it in a volume backup. Backup an entire disk to ensure any hidden partitions that may have been installed by your PC vendor are also backed up. These hidden partitions may be required to boot your system in the event of a restore.
- **Sets** - The number of backup sets maintained at any one time.
- **Inc / Diff** - The type of backup set maintained:  - Incremental
 - Differential  - All differential  - Synthetic full
- **Delete Before Backup** - If checked, the system deletes any backups sets not being saved before creating a new backup set.
- **Last Backup** - The last time a backup was performed.
- **Partitions** - The list of available drive letter partitions available on a machine. Check a driver letter to include it in a volume backup.
- **Skip if Machine Offline** - If a checkmark  displays and the machine is offline, skip and run the next scheduled period and time. If no checkmark displays, perform this task as soon as the machine connects after the scheduled time.
- **Next Backup** - The next scheduled backup. Overdue date/time stamps display as **red text with yellow highlight**.
- **Period (full)** - The scheduled interval between full backups.
- **Period (inc/diff)** - The scheduled interval between incremental or differential backups.
- **Verify VSS** - If checked, **Volume Shadow Service (VSS)** is enabled when performing a backup.


Pre/Post Procedure: Backup

Backup > Pre/Post Procedure

Use the **Pre/Post Procedure** page to run agent procedures either before a **Schedule Volumes** backup starts or after it completes. Does not apply to **Schedule Folders** backups.

Use this page to suspend services that may lock files and prevent volume backup from completing. You may also wish to force a system service, such as Exchange or a database, to write all its data to disk prior to system backup. Typically, this can be done **without** requiring the service in question to be down during backup. All critical services can be left fully operational at all times. For example, to backup an Exchange Server, a snapshot of the database is needed prior to the backup start. A procedure will quickly start and stop Exchange to take the snapshot of the database prior to the start of the backup.

To Run a Pre/Post Procedure

1. Select machine IDs. Click the **select script** link to select an agent procedure to run before a **Schedule Volumes** backup starts or after it completes. 
2. If running an agent procedure after a backup completes, specify whether the agent procedure should run after a backup completes with any status, with success or with failure.
3. Click **Set**. Click **Set** to run the selected agent procedures before a **Schedule Volumes** backup starts or after it completes.

Run <select script> before backup starts

If checked, runs the selected agent procedure *before* a **Schedule Volumes** backup starts.

Run <select script> after backup completes









If checked, runs the selected agent procedure *after* a **Schedule Volumes** backup completes. For agent procedures run after completion, specify whether the agent procedures should run with any status, with success or with failure.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Check-in status

These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

-  Online but waiting for first audit to complete
-  Agent online
-  Agent online and user currently logged on.
-  Agent online and user currently logged on, but user not active for 10 minutes
-  Agent is currently offline
-  Agent has never checked in
-  Agent is online but remote control has been disabled
-  The agent has been suspended

Machine.Group ID

The list of Machine.Group IDs displayed is based on the Machine ID / Group ID filter and the machine groups the user is authorized to see using System > User Security > Scopes.

Pre Script / Postscript

This column lists the agent procedures set to run before a **Schedule Volumes** backup starts or after it completes.

Schedule Folders

Backup > Schedule Folders

The **Schedule Folders** page schedules the backup of folders for selected machine IDs. The folders backed up are specified using Backup > **Folder Backup**. The list of machine IDs you can select depends on the machine ID / group ID filter and the scope you are using. To display on this page, machine IDs must have backup software installed on the managed machine using the Backup > **Install/Remove** page.

Sector Level Backups




Folder backups perform sector level backups of selected folders. Sector level copying allows the system to backup locked and in-use files so you can safely backup at any time of the day.

See **Uninstalling Other Backup Products, Volume Backups vs Folder Backups, Full Backups, Incremental and Differential Backups, Verification of Backups, Synthetic Full Backups, Dynamic Disks, Backup Folder Structure and Backing Up the CloudActiv8 Server** for a general description of KBU.

Actions















- **Schedule Full** - Click to schedule a new full folder backup of selected machine IDs using the backup options previously selected. Backup options set using the four **Apply** buttons are applied to selected machine IDs when **Schedule Full** is clicked.
- **Cancel** - Click **Cancel** to clear pending backups for selected machine IDs, including backup options set using the four **Apply** buttons.
- **Backup Now** - Click to start a full backup on selected machines IDs if no backups exist. Otherwise, clicking **Backup Now** creates an incremental or differential backup.
- **Apply** - Click to apply a row of settings to selected machine IDs without changing the backup schedule.

Scheduling Options

- **Date/Time** - Enter the year, month, day, hour, and minute to schedule this task.
- **Stagger by** - You can distribute the load on your network by staggering this task. If you set this parameter to 5 minutes, then the task on each machine ID is staggered by 5 minutes. For example, machine 1 runs at 10:00, machine 2 runs at 10:05, machine 3 runs at 10:10, ...
- **Skip if Machine Offline** - Check to perform this task only at the scheduled time, within a 15 minutes window. If the machine is offline, skip and run the next scheduled period and time. Uncheck to perform this task as soon as the machine connects after the scheduled time.
- **(Backup Set Type)** - Select the type of backup set to schedule. Click **Apply** to apply these settings to selected machine IDs without changing the backup schedule.
 - **Incremental**  - Captures only the files that have changed *since the previous full or incremental backup*. Restoring from an incremental backup requires all previous incremental image files plus the original full backup. Do not remove files from the full backup set directory. (R)
 - **Last Differential**  - Captures all changes to the target system *since the last full backup*. To save disk space, only the latest differential backup is saved with each full backup set. Select **Last Differential** to minimize backup storage requirements.
 - **All Differentials**  - Captures all changes to the target system *since the last full backup*. Saves all differential backups in addition to the last differential backup.

- **Every <N> Periods** - Incremental and differential backups are always performed as a recurring task. Enter the number of times to run this task each time period. Click **Apply** to apply these settings to selected machine IDs. Enter 0 to disable the scheduling of incremental or differential backups.
- **Full Every <N> Periods** - Full backups are always performed as a recurring task. Enter the number of times to run this task each time period. Click **Apply** to apply these settings to selected machine IDs.
- **Save last <N> backup sets** - Specify the number of full backup sets to keep. A **backup set** is a full backup plus all incremental backups or differential backups referencing that full backup. Starting a new full backup creates a new full backup set. So, entering 3 here maintains the current full backup, plus that last two full backup sets. Click **Apply** to apply these settings to selected machine IDs without changing the backup schedule.
- **Synthetic Full** - If checked, creates a new full backup by consolidating existing incremental or differential backups with the previous base full backup image.
- **Verify Backup** - If checked, **verifies** each backup image immediately after each full, incremental, or differential backup completes. **Verify takes the same amount of time as the original backup to complete.** Only verify in situations where you question the integrity of the network connection to the backup file location. You do not generally need to use this option. Use the **Verify Images** function to spot check backup files at any time.
- **Delete before running backup** - If checked, the system deletes any backup sets not being saved using **Save last <N> backup sets** before creating a new backup set. If blank, backup sets scheduled for deletion are deleted only after the new backup set is successfully created.
- **Enable VSS Support** - Enables **Volume Shadow Service (VSS)** on 2003 servers. VSS ensures completion of all transactions before the backup process starts. Click **Apply** to apply these settings to selected machine IDs without changing the backup schedule.

Tables Columns

- **Select All/Unselect All** - Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.
- **(Check-in Status)** - These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.
 -  Online but waiting for first audit to complete
 -  Agent online
 -  Agent online and user currently logged on.
 -  Agent online and user currently logged on, but user not active for 10 minutes
 -  Agent is currently offline
 -  Agent has never checked in
 -  Agent is online but remote control has been disabled
 -  The agent has been suspended
 -  An agent icon adorned with a red clock badge is a temporary agent.
- **Machine.Group ID** - A unique machine ID / group ID / organization ID name for a machine in the CloudActiv8.
- **Sets** - The number of backup sets maintained at any one time.
- **Inc / Diff** - The type of backup set maintained:  - Incremental  - Differential  - All differential  - Synthetic full
- **Delete Before Backup** - If checked, the system deletes any backups sets not being saved before creating a new backup set.
- **Last Backup** - The last time a backup was performed.
- **Skip if Machine Offline** - If a checkmark  displays and the machine is offline, skip and run the next scheduled period and time. If no checkmark displays, perform this task as soon as the machine connects after the scheduled time.
- **Next Backup** - The next scheduled backup. Overdue date/time stamps display as **red text with yellow highlight**.
- **Period (full)** - The scheduled interval between full backups.
- **Period (inc/diff)** - The scheduled interval between incremental or differential backups.
- **Verify VSS** - If checked, **Volume Shadow Service (VSS)** is enabled when performing a backup.

Backup Sets

Backup > Backup Sets

The **Backup Sets** page displays a list of the *current* backup sets you have stored, for both volumes and folders. If you specified 5 backup sets using either **Schedule Volumes** or **Schedule Folders** this page displays 5 backups sets. This page also displays all backups that have *failed* while trying to store up to the specified number of backup sets. You can also:

- Clear all backups sets for a volume or folder.
- Cancel a backup in progress.
- Click the backup link to display the log details of a backup, in XML format.

You should never need to look at this log file unless backup reports strange or unexplained failures. In those cases, the log may provide more insight into the cause of the backup failure such as identifying corrupt files or disk sectors.

The backup set table lists:

- **Set Name** - The date and time of the backup set.
- **End Time** - The time the backup set was completed.
- **Type** - backup: full, differential, or incremental.
- **Disk(s) / Volume(s)** - The disk numbers or volume numbers included in a volume backup. Disk numbers are assigned by a machine's BIOS.
- **Duration** - Time required to perform the backup.
- **Size** - Size of the backup.
- **Result** - Whether the backup succeeded or failed. If failed, an error message also displays.

The list of machine IDs you can select depends on the machine ID / group ID filter and the scope you are using. To display on this page, machine IDs must have backup software installed on the managed machine using the Backup > **Install/Remove** page.

Clear

Click the **Clear** button to manually remove all volume backup sets or folder backup sets. This might be necessary to remove a "stuck" backup set or to free up disk space.

Cancel

Click **Cancel** to cancel an in-process backup.



Backup Logs

Backup > Backup Logs

The **Backup Logs** page displays a list of *all* backups you have performed, for both volumes and folders, local and offsite, up to the number of days specified for backup logs using Backup > **Max Log Age**. Click a machine ID to display a log containing the date, type, duration, result and description of each backup operation performed.

The list of machine IDs you can select depends on the machine ID / group ID filter and the scope you are using.

To display on this page, machine IDs must have backup software installed on the managed machine using the Backup > **Install/Remove** page. **Offsite Servers** that have *synthetic full components* installed also display on this page.

Recovery

Explore Volumes

Backup > Explore Volumes

The **Explore Volumes** page mounts a volume backup **as a new read only drive letter** on the **same machine** or on a **different machine**. The backup volume can be browsed, just like any other drive, with Windows Explorer. Individual files or folders can be copied from mounted backup volumes to any other folder on your local machine you have write access to. Mounted volume backups remain available for browsing unless the computer is rebooted or the drive is unmounted by clicking the **Unplug All** button.

Click a machine ID to select a volume backup to mount. The list of machine IDs you can select depends on the machine ID / group ID filter and the scope you are using. To display on this page, machine IDs must have backup software installed on the managed machine using the Backup > **Install/Remove** page.

Mount to machine ID

Select **Mount to machine ID** to mount the backup image to the same machine ID that the backup image was made on.

Mount to select machine ID

Select **Mount to select machine ID** to mount the backup image to a different machine ID than the backup image was made on.

Mount

To explore a full or incremental/differential backup, click the radio button next to the date listed. Select the drives to include. The complete image, **as of that date**, gets mounted on the managed machine as new drive letters. Click the **Mount** button to generate a procedure to mount the backup image. The screen automatically refreshes every 5 seconds and reports status of the mount until the mount procedure completes execution.

Unplug All

Click **Unplug All** to remove any mounted volume backups.

Explore Folders

Backup > Explore Folders

The **Explore Folders** page restores folder backups to a specified directory on a target machine, maintaining the same structure they had in the backup. Unlike **Explore Volumes**, this page can not mount the data as a new drive letter. Manually delete restored backup folders to remove them.

Restore to <machine ID>

If selected, the folder backup is restored to the same machine ID the folder backup was made on.

Restore to <select machine ID>

If selected, the folder backup is restored to a different machine ID the folder backup was made on.

Restore



Click **Restore** to restore a selected folder backup to a selected machine ID.

Create new folder in

Enter the path on the target machine where the folder backup will be restored.

(Folder Backup)

Click the radio button next to the date of a folder backup to select it.

Verify Images

Backup > Verify Images

The **Verify Images** page performs a onetime verification of any selected volume or folder backup. Verification spot checks that backups are completed and can be used to restore from successfully. Verification does *not* involve comparing the backup to the original source files, so any other machine with an agent can be used to perform the verification of the backup file so long as the machine has read access to the image location. Successful backups may fail to verify if the backup image file was not copied successfully to the **Image Location**. This problem typically only occurs in slow or unreliable networks. On slow networks, consider selecting the **Verify Backup** option in **Schedule Volumes** and **Schedule Folders** to verify the backup every time.

Click a machine ID to select a volume backup to mount. The list of machine IDs you can select depends on the machine ID / group ID filter and the scope you are using. To display on this page, machine IDs must have backup software installed on the managed machine using the Backup > **Install/Remove** page.

Verifying Manual Backups

The **Verify Images** page can verify images created by Acronis directly, so long as the version of Acronis is a version supplied by CloudActiv8.

Verify from <machine ID>

Select **Verify from machine ID** to verify the backup on the same machine ID that the backup image was made on.

Verify from <select machine ID>

Select **Verify from select machine ID** to verify the backup on a different machine ID than the backup image was made on.

Verify Volume

To verify a full or incremental/differential volume backup, select the radio button next to the date listed and click the **Verify Volumes** button. An additional identifier, such as `/harddisk:1`, indicates the image type and disk number.

Verify Folder

To verify a full or incremental/differential folder backup, click the radio button next to the date listed and click the **Verify Folders** button.

Image to VM

Backup > Image to VM

The **Image to VM** page converts an existing volume backup image to one of three types of virtual machine file formats: Virtual PC, VMware and ESX. This enables you to install a backup to a virtual machine environment.

Any other machine with an agent can be used to perform the conversion of the backup file so long as the machine has read access to the image location.

Successful and failed **Image to VM** conversion log entries are listed in **Backup Logs**.

Click a machine ID to select a volume backup to convert. The list of machine IDs you can select depends on the machine ID / group ID filter and the scope you are using. To display on this page, machine IDs must have backup software installed on the managed machine using the Backup > **Install/Remove** page.

Convert from <machine ID>

Select **Convert from machine ID** to convert the backup using the same machine ID that the backup image was made on.

Convert from <select machineID>

Select **Convert from select machine ID** to convert the backup using a different machine ID.

Destination Virtual Hard Drive Image Type

Select one of the following virtual hard drive image types:

- **Virtual PC** - Microsoft's brand of virtual machine manager. Virtual PC is installed on top of a Windows OS.
- **VMware** - Creates a VMware image type file compatible with a Windows-based VMware product such as VMware Server or VMware Workstation. VMware Server is installed on top of a Windows OS and depends on Windows to manage hardware partitioning and access.
- **ESX** - ESX is VMware's version of a virtual machine hypervisor. A hypervisor is a thin OS that is installed on the hardware directly, bypassing the use of a general-purpose server OS, such as Microsoft Server.

Converted image will be written to Volume Path

Identifies the path where the converted VM image will be written.

Destination File Name

Enter a unique filename for the VM image file you are about to create.

Convert Image

Select one of the existing volume backups to convert, then click **Convert Image** to begin the conversion. An additional identifier, such as /harddisk:1, indicates the image type and disk number.

Auto Recovery

Backup > Auto Recovery

The **Auto Recovery** page restores any volume backup image to the same machine the backup was created on. **Auto Recovery** requires:

- The target machine's **agent can still communicate with the CloudActiv8 Server**.
- **Secure Zone** be installed on the target machine ID.

Auto Recovery lets you select any volume backup image (full, incremental, or differential) for the selected machine ID to restore **without any user interaction at all**. The restore may be scheduled to run at any time of day or on a recurring schedule. Set a **recurring schedule to auto restore** a machine in a public area subject to abuse by random users.

The server and agent configure the hidden **Secure Zone** partition to automatically restore the selected backup image from the **Image Location** path. Once configuration completes, the agent reboots the machine **without warning**. The machine boots into the secure zone partition and automatically restores the selected backup image.

See also:

- **Restore Failure**
- **Dynamic Disk Restores**

Schedule

Click **Schedule** to schedule restore of volume backup images to selected machine IDs using the restore parameters previously selected. Remember, the restore reboots the machine and restores an image **without warning the user** first.

Date/Time

Enter the year, month, day, hour, and minute to schedule this task.

Cancel

Click **Cancel** to clear a scheduled restore of selected machine IDs.

Restore Now

Click **Restore Now** to restore volume backup images to selected machine IDs immediately.

Run recurring every <N> <period>

Check this box to make this task a recurring task. Enter the number of times to run this task each time period.

Staggerby

You can distribute the load on your network by staggering this task. If you set this parameter to 5 minutes, then the task on each machine ID is staggered by 5 minutes. For example, machine 1 runs at 10:00, machine 2 runs at 10:05, machine 3 runs at 10:10, ...

Skip if Machine Offline









Check to perform this task only at the scheduled time, within a 15 minutes window. If the machine is offline, skip and run the next scheduled period and time. Uncheck to perform this task as soon as the machine connects after the scheduled time.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Check-in status

These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

-  Online but waiting for first audit to complete  Agent online
-  Agent online and user currently logged on.
-  Agent online and user currently logged on, but user not active for 10 minutes  Agent is currently offline
-  Agent has never checked in
-  Agent is online but remote control has been disabled  The agent has been suspended

Machine.Group ID

The list of Machine.Group IDs displayed is based on the Machine ID / Group ID filter and the machine groups the user is authorized to see using System > User Security > Scopes.

Select backup to restore

Select a backup image to restore from the drop-down control listing all available backups for the selected machine ID. Last Restore

The last time an image was restored to this machine ID.

Next Restore

The next time an image is scheduled to be restored. Overdue date/time stamps display as red text with yellow highlight.

Interval

The interval for the scheduled task to recur.

Restore Failure

Restores can fail for the following reasons:

- **The Image Location points to a local drive letter** - When Windows boots, drive letters are automatically assigned to hard drives starting with C:. With the disk manager, you can reassign these to any other unused drive letter. For example, you may decide to turn your D: drive into G: and set the **Image Location** path to G:\backups. The recovery boot process will not know about the drive letter mapping and will assign D: to the hard disk. The restore will then fail trying to access G:\backups. You can resolve this problem by setting your image location to D:\backups prior to selecting the restore options. Restore will then successfully access D:\backups.
- **Image stored on a USB drive** - Similar to the issue above, when the recovery boot process assigns drive letters, it may assign the USB drive a different drive letter than Windows assigned it. You can resolve this problem by setting your **Image Location** to the new drive letter prior to selecting the restore options. Restore will then successfully access the USB drive.
- **Image stored on a network drive** - If the remote drive, or the machine hosting the drive, is not turned on, or if the username and password have changed, then the recovery boot process will not be able to access the network drive.
- **Operation completed with errors** - If you see **Operation Completed with errors**, the process has been unable to create a log file in the **Image Location** directory, even though the transfer may still be going. *Rebooting at this time will cause the machine to not be bootable, since it is in the middle of restore.* If you wait for the restore to finish, then the restore should be successful. For more information see the CloudActiv8 **knowledge base**
- **Unable to establish a network connection** - **CD Recovery** allows the recovery of an image without the need for the user to enter details such as the image to be restored, its location, the password, etc. Instead the machine connects to the CloudActiv8 Server to retrieve this information.

However, if there is a proxy between the managed machine and the CloudActiv8 Server, or DHCP is not enabled, that machine may not be able to establish a network connection to get out to the internet and retrieve the settings. In cases where a DHCP server is not enabled or there is a proxy in place, use **Universal Restore** *page* as there is no way to configure network connection information for **CD Recovery**.

CD Recovery

Backup > CD Recovery

The **CD Recovery** page restores volume backup images to the same machine or same type of machine that the backup was created on. **CD Recovery** requires the target machine be booted from a CD.

The **CD Recovery** method is useful when:

- The network drivers on the agent's operating system are corrupted, so the agent cannot talk to the CloudActiv8 Server.
 - The operating system itself is unbootable, and thus the agent cannot check in.
 - The hard disk is new and there is currently no operating system.

The target machine must be physically connected to a network that provides access to the CloudActiv8 Server. *Once the target machine boots up from the CD, no further user interaction is required.* The network card is configured automatically. The CloudActiv8 Server automatically downloads and restores a backup image to the target machine.

See:

- **Restore Failure**
- **Dynamic Disk Restores**

Procedure

1. **Create an ISO file** - If an ISO image file record doesn't already exist in the paging area, create a new ISO image file by clicking the **Create New ISO** button. The same ISO file is created each time this button is clicked, but with a different *filename*. It is the ISO *filename* on the recovery CD that tells the CloudActiv8 Server which machine ID and backup image to restore from.
2. **Select a Machine ID** - Associate a machine ID with the ISO file. The machine ID must specify an **Image Location** that contains the backup image you want to restore.
3. **Select a Backup Image** - Associate a backup image timestamp with the ISO filename and machine ID.
4. **Download the ISO image** - Download the created ISO file to a workstation that can write the ISO file to a CD.
5. **Create the Recovery CD** - Use a CD recording application to write the ISO file *as an image* to a CD. Do not simply copy the ISO file to the CD as a data file.
6. **Boot the target machine using the recovery CD** - The target machine must be physically connected to a network that provides access to the CloudActiv8 Server. No further user interaction is required.


Create New ISO

Click **Create New ISO** to create a new ISO image file, if one does not already exist that you can use. Creating a new ISO image file creates a new record in the paging area.

Delete

Click the delete icon  to delete an ISO image file record.

Edit

Click the edit icon  to change the **Title** of an ISO image file record.

Share

By default, ISO images are private to the user that created it. You can **share** an ISO image with other users, user roles, or make the ISO image file public.

Title

if the backup image being restored.



Universal Restore

Backup > Universal Restore

The **Universal Restore** page enables you to restore the backup image of a system. The restore can be to a different hardware platform or to a virtual machine. **Universal Restore** requires someone at the machine to boot from the CD and navigate through the recovery wizard to restore the backup image. Manual recovery requires a user with knowledge of the **Image Location** path and the **Image Password** to restore a backup image.

A damaged boot volume may prevent a system from even booting. To restore images to the system partition, requires that the system boot from a separate partition. This recovery CD provides that image. Follow the **onscreen instructions** to create the recovery CD and restore a volume.

ISO Image File Builds

A recovery boot CD is created using an ISO image file that you download and burn to a CD. If you discover the recovery boot CD you are using fails to restore a particular backup image file, try creating a new recovery boot CD using a different build version of the ISO image file. You can display the list of ISO image file versions supported by CloudActiv8 by clicking the hyperlink in the sentence If there are any problems with the Recovery Boot CD, you may download additional builds here.

Dynamic Disk Restores

Dynamic storage involves dividing a physical disk into multiple volumes or combining a physical disk with other physical disks to form volumes that are greater in size than any one physical disk. A traditional disk volume is called a "basic" disk volume.

Backup supports the following basic and dynamic backup and restore combinations:

- backup basic disks
- backup dynamic disks
- restore basic volumes to basic disks
- restore basic volumes to dynamic disks
- restore dynamic volumes to basic disks
- restore dynamic volumes to dynamic disks



Disk-Based Backups of Dynamic and GPT Disks

Backup clients ABR10 and ABR11 support disk-based backups of Dynamic and GPT disks. Previous to ABR10, only **partition-based backups** were supported for these types of disks. Restoring disk-based backups of Dynamic and GPT disks requires Universal Restore. Auto Recovery and CD Recovery of Dynamic and GPT Disks are not supported. ABR11 also supports EFI-based systems, where Windows is installed on a GPT volume (partition style is GPT).

Offsite Replication

Offsite Servers

Backup > Offsite Servers

The **Offsite Servers** page safely and securely transfers backup images from a LAN to a remote location. Offsite replication transfers all *changes* to files and sub-directories in the Local Server directory to a specified offsite server directory. File transfers are scheduled using **Schedule Transfer Image Location** directories should be defined as subdirectories of a **Local Server** directory to be included in these transfers.

Create

Click **Create** to create an offsite server using the options previously selected.

<Select Machine ID>

Select the machine ID you want to act as the offsite server.

Name/IP

Enter the IP DNS name or IP address of the offsite server.

Full path to directory (UNC or local) which receives all data transfers









Enter the full path to the directory, either UNC or local, which receives all data transfers. *Do not specify an offsite server directory using a mapped drive.* When specifying a UNC path to a share accessed by an agent machine—for example `\\machinename\share`—ensure the share's permissions allow read/write access using the **agent credential** specified for that agent machine in Agent > Manage Agents.

Keep only one backup set per agent

If checked, only one backup set is stored on the offsite server per backup agent, regardless of how many sets are saved by the client. If unchecked, all sets specified using the **Save last <N> backup sets** option on the **Schedule Volumes** or **Schedule Folders** pages are stored on the offsite server.

Check-in status

These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

-  Online but waiting for first audit to complete
-  Agent online
-  Agent online and user currently logged on.
-  Agent online and user currently logged on, but user not active for 10 minutes
-  Agent is currently offline
-  Agent has never checked in
-  Agent is online but remote control has been disabled
-  The agent has been suspended


Delete Icon

Click the delete icon  to delete an offsite server record.

Edit Icon

Click a row's edit icon  to populate header parameters with values from that row. You can edit these values in the header and re-apply them.

Restart Icon

Click the restart icon  to restart a service on a local server or offsite server. You can determine whether this is necessary by displaying the Remote Control > Task Manager process list for a local server or offsite server. You should see KORepCln.exe running on the local server and KORepSrv.exe running on an offsite server. If not, click the restart icon for the respective local server or offsite server. Other symptoms include:

- One local server is inactive, and the others are fine: restart local server.
- All local servers are inactive: restart offsite server.

Machine.Group ID

The list of Machine.Group IDs displayed is based on the Machine ID / Group ID filter and the machine groups the user is authorized to see using System > User Security > Scopes.

Name/IP



The DNS name or IP address used by the offsite server. **Directory Path**

The directory path used by the offsite server.

Synthetic Full Support

If checked, **synthetic full backup** components are installed on this machine.

Local Servers

Backup > Local Servers

The **Local Server** page defines the machine ID and directory on the local LAN used to transfer all new files to an **Offsite Server**. Offsite replication transfers all *changes* to files and sub-directories in the local server directory to a specified offsite server directory. File transfers are scheduled using **Schedule Transfer**. **Image Location** directories should be defined as subdirectories of a **Local Server** directory to be included in these transfers.

For each local server specify:

- The offsite server to push files to.
- The local directory path to push to the offsite server.
- Optional bandwidth limit.

The local server directory can be a UNC path pointing to a directory on a network file share. *Do not specify a local server directory using a mapped drive.* The local server must have a **credential** set in order to access the network.

Create

Click **Create** to create a local server using the options previously selected.

<Select Machine ID>

Select the machine ID you want to act as the local server.

Offsite Server

Select the offsite server to transfer backup files to.



Bandwidth Limit

- **No Limit** - The local server transfers data to the offsite server **as fast as possible**.
- **<N> kBytes/Sec** - The local server limits data transfer to the rate specified.

Full path to directory (UNC or local) to push to offsite replication server









Enter the full path to the directory, either UNC or local, which sends data transfers. The local server sends the total contents of this directory to the offsite server. *Do not specify a local server directory using a mapped drive.* When specifying a UNC path to a share accessed by an agent machine—for example `\\machinename\share`—ensure the share's permissions allow read/write access using the **agent credential** specified for that agent machine in Agent > Manage Agents.

Check Status


Click **Check Status** to check the amount of data left to be written to the offsite server immediately. Normally this check is performed only at the end of an active transfer cycle.

Check-in status


These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

-  Online but waiting for first audit to complete
-  Agent online
-  Agent online and user currently logged on.
-  Agent online and user currently logged on, but user not active for 10 minutes
-  Agent is currently offline
-  Agent has never checked in
-  Agent is online but remote control has been disabled
-  The agent has been suspended


Delete Icon

Click the delete icon  to delete a local server record.

Edit Icon

Click a row's edit icon  to populate header parameters with values from that row. You can edit these values in the header and re-apply them.




Restart Icon

Click the restart icon  to restart a service on a local server or offsite server. You can determine whether this is necessary by displaying the Remote Control > Task Manager process list for a local server or offsite server. You should see `KORepCln.exe` running on the local server and `KORepSrv.exe` running on an offsite server. If not, click the restart icon for the respective local server or offsite server. Other symptoms include:

- One local server is inactive, and the others are fine: restart local server.
- All local servers are inactive: restart offsite server.

Status

The status of the local server. At the **end of each active cycle**, the system checks the local server and reports back the amount of data **left to be written**.

- **Active** -  - The local server is connected to the offsite server and sending files to the offsite server when they are changed.
- **Suspended** -  - The local server is suspended per the schedule set out in **Schedule Transfer**
- **Inactive** -  - The local server cannot connect to the offsite server.

Offsite Server

The name of the offsite server being sent backup files from this local server.

BW Limit

The bandwidth limit assigned to this local server.

Directory Path

The directory on the local server sending data to the offsite server.

Status Last Updated

The date and time the local server was last updated.

Offsite Alert

Backup > Offsite Alert

The **Offsite Alerts** page creates an alert when the specified local server cannot connect to its offsite server. [®] Alarms are only generated during the times allowed by **Schedule Transfer** for each local server. Once defined, you can apply this alert immediately to any machine ID displayed on this page.

The list of machine IDs you can select depends on the machine ID / group ID filter and the scope you are using. To display on this page, machine IDs must be defined as a local server using Backup > **Local Servers**.

To Create an Offsite Alert

1. Check any of these checkboxes to perform their corresponding actions when an alert condition is encountered:
 - Create **Alarm**
 - Create **Ticket**
 - Run **Script**
 - Email Recipients
2. Set additional email parameters.
3. Set additional offsite alert specific parameters.
4. Check the machine IDs to apply the alert to.
5. Click the **Apply** button.

To Cancel an Offsite Alert

1. Select the machine ID checkbox.
2. Click the **Clear** button.
The alert information listed next to the machine ID is removed.

Passing Alert Information to Emails and Procedures

The following types of offsite alert emails can be sent and formatted:

- **Offsite failed**

The following variables can be included in your formatted email alerts and are passed to agent procedures assigned to the alert.

Within an Email	Within a Procedure	Description
<at>	#at#	alert time
<db-view.column>	not available	Include a view.column from the database. For example, to include the computer name of the machine generating the alert in an email, use <db-vMachine.ComputerName>
<gr>	#gr#	group ID
<id>	#id#	machine ID
<op>	#op#	offsite replication server ip:port
	#subject#	subject text of the email message, if an email was sent in response to an alert
	#body#	body text of the email message, if an email was sent in response to an alert

Create Alarm

If checked and an alert condition is encountered, an alarm is created. Alarms are displayed in Monitor > Dashboard List, Monitor > Alarm Summary and Info Center > Reporting > Reports > Logs > Alarm Log.

Create Ticket

If checked and an alert condition is encountered, a ticket is created.

Run Script

If checked and an alert condition is encountered, an agent procedure is run. You must click the **select agent procedure** link to choose an agent procedure to run. You can optionally direct the agent procedure to run on a specified range of machine IDs by clicking **this machine ID** link. These specified machine IDs do not have to match the machine ID that encountered the alert condition.

Email Recipients

If checked and an alert condition is encountered, an email is sent to the specified email addresses.

- The email address of the currently logged on user displays in the **Email Recipients** field. It defaults from System > Preferences.
- Click **Format Email** to display the **Format Alert Email** popup window. This window enables you to format the display of emails generated by the system when an alert condition is encountered. This option only displays for master role users.
- If the **Add to current list** radio option is selected, when **Apply** is clicked alert settings are applied and the specified email addresses are added without removing previously assigned email addresses.
- If the **Replace list** radio option is selected, when **Apply** is clicked alert settings are applied and the specified email addresses replace the existing email addresses assigned.
- If **Remove** is clicked, all email addresses are removed **without modifying any alert parameters**.
- Email is sent directly from the CloudActiv8 Server to the email address specified in the alert. Set the **From Address** using System > Outbound Email.

Apply

Click **Apply** to apply parameters to selected machine IDs. Confirm the information has been applied correctly in the machine ID list. 

Clear

Click **Clear** to remove all parameter settings from selected machine IDs.

Offsite Alert Parameters









- **Check every <N> periods** - Specifies how often to check the connection between the local server and the offsite server.
- **Alarms if connection fails for <N> periods** - Triggers an alarm if the connection fails for greater than the number of periods specified.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Check-in status

These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

-  Online but waiting for first audit to complete
-  Agent online
-  Agent online and user currently logged on.
-  Agent online and user currently logged on, but user not active for 10 minutes
-  Agent is currently offline
-  Agent has never checked in
-  Agent is online but remote control has been disabled
-  The agent has been suspended

Machine.Group ID

The list of Machine.Group IDs displayed is based on the Machine ID / Group ID filter and the machine groups the user is authorized to see using System > User Security > Scopes.

ATSE



The ATSE response code assigned to machine IDs or SNMP devices:

- A = Create **A**larm
- T = Create **T**icket
- S = Run Agent Procedure
- E = Email Recipients

Email Address

A comma separated list of email addresses where notifications are sent.

Interval

The number of periods to wait before checking the connection between the local server and the offsite server.

Duration

The number of periods to wait before triggering an alert.

Schedule Transfer

Backup > Schedule Transfer

The **Schedule Transfer** page specifies the time of day each local server sends files to the offsite server, based on the time zone used by the CloudActiv8 Server. You may set different start and end times for each day of the week.

For example, to schedule transfers for all night Tuesday, set the **Start Time** for **Tuesday** at 6:00 pm and the **End Time** for **Wednesday** at 6:00 am.

The list of machine IDs you can select depends on the machine ID / group ID filter and the scope you are using. To display on this page, machine IDs must be defined as a local server using Backup > **Local Servers**.

Apply

Click **Apply** to apply weekly schedule settings to selected local servers.









Select All/Unselect All



Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Check-in status

These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

-  Online but waiting for first audit to complete
-  Agent online
-  Agent online and user currently logged on.
-  Agent online and user currently logged on, but user not active for 10 minutes
-  Agent is currently offline
-  Agent has never checked in
-  Agent is online but remote control has been disabled
-  The agent has been suspended

Edit Icon

Click a row's edit icon  to populate header parameters with values from that row. You can edit these values in the header and re-apply them.

Machine.Group ID

The list of Machine.Group IDs displayed is based on the Machine ID / Group ID filter and the machine groups the user is authorized to see using System > User Security > Scopes.

Weekday Start-End

Displays the start and end times for each day of the week that backup files are transferred from each local server to its offsite server.

Configure

Install/Remove: Backup

Backup > Install/Remove

The **Install/Remove** page installs or uninstalls **Backup** (KBU) software on selected machine IDs. Each **Backup** installation on a managed machine uses up one **Backup** license. The number of licenses available depends on the total number of licenses purchased and allocated to each group ID using System > **License Manager**.

Backup licenses are purchased and allocated separately for workstations and servers.

- If other backup products are installed on a managed machine, this may cause problems with **Backup**. Uninstall other backup products before backing up volumes and folders using **Backup**. A warning message displays on the **Backup Status** page if other backup products are installed.
- See **System Requirements** for the types of agent operating systems supported.
- Backups require additional agent capability so you may be prompted to update the agent prior to installing backup.

Installing the Backup Client

Backup R95 uses Acronis Backup & Recovery 11.7-50214, which provides faster and more reliable backups than previous versions of Acronis. If you are experiencing issues with earlier versions of Acronis, upgrading to **Backup** R95 is recommended. To use the full range of **Backup** features, such as encryption, synthetic backup and image conversion, endpoints must have Acronis TrueImage 9.7 or later.

Customers are not required to install the latest **Backup** client. **Backup** works with a mix of Acronis TrueImage installed client versions 9.7, 10.0, 11.5 and the new client version 11.7-50214. You can upgrade to **Backup** R95 without updating existing clients to ABR11.7-50214. Any new clients you install will be installed using ABR11.7-50214.

Sometimes new builds become available with bug fixes. The **Latest Version / Version** column displays the latest version available. To update **Backup** clients to the latest version, select the machine(s) and schedule a new installation using the **Install/Reinstall** button.

CloudActiv8 Agent Version Considerations

CloudActiv8 agents must be updated to version 6.5.0.0 or later to cancel a backup with 9.7 or later clients.

CloudActiv8 recommends updating all agents that have the new backup client software. Use the **Force update even if agent is at...** option in the Agent > **Manage Agents** page to force the agent to update to 6.5.0.0 or later.

Installation Requires a Reboot

Backup, can backup all volumes, including the boot volume, while in use. **Backup** accomplishes this through the use of a low-level driver. As such, the **backup client requires a reboot to complete its installation**.

- After installation completes, if a user is logged in, the system asks the user to **Reboot Now** or **Continue Working**. If the dialog is not answered within 5 minutes, **Continue Working** is assumed. If no one is logged in, the system reboots immediately.
- You can avoid displaying this dialog box by clicking the **Do not reboot after install** checkbox.
- A **Reboot Now** button displays in the **Install** column next to a machine ID if **Do not reboot after install** was checked or the **Reboot Now/Continue Working** dialog box on the target machine timed out.
- Installing backup on a server when no one is logged in reboots the server when backup installation completes.





Actions

- **Install/Reinstall** - Click to install or reinstall backup software on selected machine IDs using the options previously selected.
- **Cancel** - Click to cancel execution of this task on selected machine IDs.
- **Verify Install** - Click to confirm the backup software is installed on selected machine IDs. Use this if you suspect someone removed the backup software on managed machines.
- **Remove** - Click to uninstall the backup software from selected machine IDs. A reboot on the machine is required to remove the low-level driver and complete the uninstall.

Install Options

- **Date/Time** - Enter the year, month, day, hour, and minute to schedule this task. Scheduling date and time is based on your System > **Preferences Copy backup settings from <select machine ID>** - Click this link to copy the backup configuration and schedules from an existing machine to all selected machines.
- **Warn if installer pushes from server** - If checked, a warning message displays if the backup file is installed from the CloudActiv8 Server. The backup install file is over 40MB. Avoid file transfer from the CloudActiv8 Server to each machine in a LAN using Patch Management > **File Source**. Select the **File share located on** option. Once set, the CloudActiv8 Server writes a single copy to the LAN file share. The backup installation runs from that location for all managed machines on that LAN.
- **Stagger by** - You can distribute the load on your network by staggering this task. If you set this parameter to 5 minutes, then the task on each machine ID is staggered by 5 minutes. For example, machine 1 runs at 10:00, machine 2 runs at 10:05, machine 3 runs at 10:10, ...
- **Skip if Machine Offline** - Check to perform this task only at the scheduled time, within a 15 minutes window. If the machine is offline, skip and run the next scheduled period and time. Uncheck to perform this task as soon as the machine connects after the scheduled time.
- **Do not reboot after install** - If checked, selected machine IDs are *not* rebooted after the backup software is installed.
- **Install Backup Management Console** - If checked, includes the installation of the Backup Management Console on selected machines along with the installation of the **Backup** client. The Backup Management Console enables machine users to run backup, mounting and restore tasks independently of the CloudActiv8.

Table Columns

- **Select All/Unselect All** - Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.
- **(Check in Status)** - These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.
 -  Online but waiting for first audit to complete
 -  Agent online
 -  Agent online and user currently logged on.
 -  Agent online and user currently logged on, but user not active for 10 minutes

- Agent is currently offline
- Agent has never checked in
- Agent is online but remote control has been disabled
- ⏸ The agent has been suspended
- ⌚ An agent icon adorned with a red clock badge is a temporary agent.
- **Machine.Group ID** - A unique machine ID / group ID / organization ID name for a machine in the CloudActiv8.
- **Installed** - This column displays the status of installed software on selected machines.
 - The date and time the backup software successfully installed.
 - Awaiting reboot - A **Reboot Now** button displays in the **Install** column next to a machine ID if **Do not reboot after install** was checked or the **Reboot Now/Continue Working** dialog box on the target machine timed out.
 - Failed to install - An unsigned driver installation policy may have blocked install
 - Install pending
 - Remove pending
 - Reset Policy pending
 - Unsigned driver policy reset
 - Update Agent required to support backup
 - Verify failed
 - Window v3 installer and up required
- **Latest Version / Version** - Displays the version of Acronis backup software installed on the managed machine. If a new version is available, also displays Update Available. **Latest version** at the top of the column displays the latest version of backup software available. Clicking on the hyper-linked version number will download the Acronis installer to the CloudActiv8 Server and make this version available for installation. To update **Backup** clients to the latest version, select machines and schedule a new installation using the **Install/Reinstall** button.
- **Verified** - Displays one of the following:
 - The date and time the backup software was verified as installed on the machine ID.
 - Verify pending - Displays with a **Cancel** button.
 - Not Verified - Displays with a **Verify** button.
- **Console** - If checked, the Backup Management Console is installed. The console can only be installed on endpoints using the latest backup client.
- **Type** - The type of machine the backup software is installed on:
 - Workstation
 - Server



Image Location

Backup > Image Location

The **Image Location** page specifies the folder on a local network or local drive where volume backups and folder backups are stored. Typically this is a path to a LAN based file server such as `\\LAN_Server\Backups\`. But it can also be as simple as another physical drive on the machine, such as a USB drive, or a shared network drive.

- Separate paths may be specified for volume and folder backup paths.
- You cannot save the backup image to the same drive you are backing up.
- *Mapped drive letters are not supported.* The path must be a full UNC path or a local physical drive.
- When specifying a UNC path to a share accessed by an agent machine—for example `\\machinename\share`—ensure the share's permissions allow read/write access using the **agent credential** specified for that agent machine in Agent > Manage Agents.

The list of machine IDs you can select depends on the machine ID / group ID filter and the scope you are using. To display on this page, machine IDs must have backup software installed on the managed machine using the Backup > **Install/Remove** page.

Tape Drives

Some tape drives have drivers that make it appear in Windows as a removable drive with a drive letter assigned to the tape drive. In this case, writing the backup to the tape drive via the assigned drive letter is supported. For instructions on how to configure the drive in this way, please check with the device vendor. Please note that not all tape drives support this functionality.

Local Servers and ImageLocations

If you are going to configure replication using **Offsite Servers**, then **Image Location** directories should be defined as subdirectories of a **Local Server** directory.

Set

Click **Set** to set the image locations used for backups for selected machine IDs.



Clear

Click **Clear** to remove the image location settings from selected machine IDs.

Volume Path / Folder Path

Enter folder paths to store backups.

Auto Refresh

Selecting this checkbox automatically updates the paging area every five seconds.

Check









You can check the amount of free space available on any machine's image location directory by checking the desired machine IDs and clicking the **Check** button. Also use this check to **verify the credential** is set correctly for the client to access the image location.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Check-in status

These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

-  Online but waiting for first audit to complete
-  Agent online
-  Agent online and user currently logged on.
-  Agent online and user currently logged on, but user not active for 10 minutes
-  Agent is currently offline
-  Agent has never checked in
-  Agent is online but remote control has been disabled
-  The agent has been suspended

Machine.Group ID

The list of Machine.Group IDs displayed is based on the Machine ID / Group ID filter and the machine groups the user is authorized to see using System > User Security > Scopes.



Volume Path / Folder Path

The folder paths specified for each machine ID.

Free Space

The free space available for each machine ID's image location.

Agent

Applies to ABR11 Backup clients only. Optionally set a separate credential to access the UNC path specified on this page. This is only necessary if the image location is on a different domain than the **agent credentials** used by the backup client.

Image Password

Backup > Image Password

The **Image Password** page sets the passwords to access backup files. Folder backup and volume backup .tib files are all **password protected** using a unique password for each machine ID. This password remains constant for each machine ID. You may set the password to anything you like. The same password may be set on multiple machines.

The list of machine IDs you can select depends on the machine ID / group ID filter and the scope you are using. To display on this page, machine IDs must have backup software installed on the managed machine using the Backup > **Install/Remove** page.

View Password Log

Displays a history of the backup image passwords assigned to machine IDs.

Change

Click **Change** to change the backup image password of selected machine IDs to the password entered in **Create Password** and **Confirm Password**.

Enable Password



Create Password / ConfirmPassword

Enter a backup image password.

Suggest Password

Click **Suggest Password** to populate the **Create Password** and **Confirm Password** with a randomly generated alphanumeric string.

Apply

Click **Apply** to apply encryption options.

Enable Image Encryption

If checked, image encryption provides additional security by encrypting the contents of the **.tib** file. The encryption is enabled in conjunction with the password. Three Advanced Encryption Standard (AES) options are available using cryptographic keys of 128, 192, and 256 bits.









- AES 128
- AES 192
- AES 256

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Check-in status

These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

-  Online but waiting for first audit to complete
-  Agent online
-  Agent online and user currently logged on.
-  Agent online and user currently logged on, but user not active for 10 minutes
-  Agent is currently offline
-  Agent has never checked in
-  Agent is online but remote control has been disabled
-  The agent has been suspended



Machine.Group ID

The list of Machine.Group IDs displayed is based on the Machine ID / Group ID filter and the machine groups the user is authorized to see using System > User Security > Scopes.

Password

The backup image password currently assigned to each machine ID.

Encryption

The encryption standard used to create .tib files.

Folder Backup

Backup > Folder Backup

The **Folder Backup** page specifies files and folders backed up by **Schedule Folders** for each machine ID. You may backup any number of files and folders. You can only specify one file or folder at a time.

You can also exclude specific files from being backed up within these folders. For example, you can exclude *.avi, *.mp3, and *.bmp files when backing up someone's My Documents folder.

Folder Backup performs sector level backups. Sector level copying allows the system to backup locked and in-use files so you can safely backup at any time of the day.

The list of machine IDs you can select depends on the machine ID / group ID filter and the scope you are using. To display on this page, machine IDs must have backup software installed on the managed machine using the Backup > **Install/Remove** page.

Include Directories

Click **Include Directories** to apply **Include File or Folder** settings to selected machine IDs.

Include File or Folder

Specify the full path to the file or folder you wish to backup on selected machine IDs. You can only specify one file or folder at a time. Paths can include commas. For example, you can enter the path C:\Program Files\Company, Inc\.

Exclude Files

Specify files or classes of files to exclude from being backed up. Paths are not allowed. Only file names, with or without wild cards, are allowed. For example: *.jpg, outlook.pst. Click **Exclude Files** to apply these exclusions to selected machine IDs. You can only specify one file or class of files at a time.

Remove...









Click **Remove...** to display a dialog box that allows you to select the folders and files to remove from selected machine IDs.

Select All/Unselect All

Click the **Select All** link to check all rows on the page. Click the **Unselect All** link to uncheck all rows on the page.

Check-in status

These icons indicate the agent check-in status of each managed machine. Hovering the cursor over a check-in icon displays the agent Quick View window.

-  Online but waiting for first audit to complete
-  Agent online
-  Agent online and user currently logged on.
-  Agent online and user currently logged on, but user not active for 10 minutes
-  Agent is currently offline
-  Agent has never checked in
-  Agent is online but remote control has been disabled
-  The agent has been suspended

Machine.Group ID

The list of Machine.Group IDs displayed is based on the Machine ID / Group ID filter and the machine groups the user is authorized to see using System > User Security > Scopes.

Path

Lists the paths of files or folders being backed up for each machine ID. Files or classes of files being excluded from backups display in red text.



Backup Alert

Backup > Backup Alert

Monitor > Agent Monitoring > Alerts

- Select **Backup Alert** from the Select Alert Function **drop-downlist**

The **Alerts - Backup Alert** page alerts for backup events on managed machines.

The list of machine IDs you can select depends on the machine ID / group ID filter and the scope you are using. To display on this page, machine IDs must have backup software installed on the managed machine using the Backup > **Install/Remove** page.

To Create a Backup Alert

1. Check any of these checkboxes to perform their corresponding actions when an alert condition is encountered:
 - Create Alarm
 - Create Ticket
 - Run Script
 - Email Recipients
2. Set additional email parameters.
3. Set additional backup alert specific parameters.
4. Check the machine IDs to apply the alert to.
5. Click the **Apply** button.

To Cancel a Patch Alert

1. Select the machine ID checkbox.
2. Click the **Clear** button.
The alert information listed next to the machine ID is removed.

Passing Alert Information to Emails and Procedures



The following types of backup alert emails can be sent and formatted:

- **Backup failed**
- **Recurring backup skipped if machine offline**
- **Backup Completed Successfully**

- Full Backup Completed Successfully
- Image Location free space below
- Verify backup failed

The following variables can be included in your formatted email alerts and are passed to agent procedures assigned to the alert.

Within an Email	Within a Procedure	Description
<at>	#at#	alert time
<be>	#be#	backup failed error message
<bt>	#bt#	backup type
<db-view.column>	not available	Include a view.column from the database. For example, to include the computer name of the machine generating the alert in an email, use <db-vMachine.ComputerName>
<gr>	#gr#	group ID
<id>	#id#	machine ID
<im>	#im#	backup image location
<mf>	#mf#	megabytes free space remaining
<sk>	#sk#	backup skip count
	#subject#	subject text of the email message, if an email was sent in response to an alert
	#body#	body text of the email message, if an email was sent in response to an alert

Create Alarm

If checked and an alert condition is encountered, an alarm is created. Alarms are displayed in Monitor > Dashboard List, Monitor > Alarm Summary and Info Center > Reporting > Reports > Logs > Alarm Log.

Create Ticket

If checked and an alert condition is encountered, a ticket is created.



Run Script

If checked and an alert condition is encountered, an agent procedure is run. You must click the **select agent procedure** link to choose an agent procedure to run. You can optionally direct the agent procedure to run on a specified range of machine IDs by clicking **this machine ID** link. These specified machine IDs do not have to match the machine ID that encountered the alert condition.

Email Recipients

If checked and an alert condition is encountered, an email is sent to the specified email addresses.

- The email address of the currently logged on user displays in the **Email Recipients** field. It defaults from System > Preferences.
- Click **Format Email** to display the **Format Alert Email** popup window. This window enables you to format the display of emails generated by the system when an alert condition is encountered. This option only displays for master role users.
- If the **Add to current list** radio option is selected, when **Apply** is clicked alert settings are applied and the specified email addresses are added without removing previously assigned email addresses.

Within an Email	Within a Procedure	Description
<at>	#at#	alert time
<be>	#be#	backup failed error message
<bt>	#bt#	backup type
<db-view.column>	not available	Include a view.column from the database. For example, to include the computer name of the machine generating the alert in an email, use <db-vMachine.ComputerName>
<gr>	#gr#	group ID
<id>	#id#	machine ID
<im>	#im#	backup image location
<mf>	#mf#	megabytes free space remaining
<sk>	#sk#	backup skip count
	#subject#	subject text of the email message, if an email was sent in response to an alert
	#body#	body text of the email message, if an email was sent in response to an alert

if the **Replace list** radio option is selected, when **Apply** is clicked alert settings are applied and the specified email addresses replace the existing email addresses assigned.

- If **Remove** is clicked, all email addresses are removed **without modifying any alert parameters**.
- Email is sent directly from the CloudActiv8 Server to the email address specified in the alert. Set the **From Address** using System > Outbound Email.
Click **Apply** to apply parameters to selected machine IDs. Confirm the information has been applied correctly in the machine ID list.

Clear


Click **Clear** to remove all parameter settings from selected machine IDs.

Backup Alert Parameters

The system triggers an alarm whenever the system discovers one of four different backup alert conditions for a selected machine ID:

- **Any Backup Completed** - Alerts when any volume or folder backup completes successfully.
- **Full Backup Completed** - Alerts when a full volume or folder backup completes successfully.
- **Backup Fails** - Alerts when a volume or folder backup stops prior to completion for any reason. Typically, backup fails because the machine is turned off mid-backup or because the network connection to the file server referenced by **Image Location** is lost.
- **Recurring backup skipped if machine offline <N> times** - Alerts when **Skip if machine offline** is set in **Schedule Volumes** (page xi) and the backup is rescheduled the specified number of times because the machine is offline. Use this alert to notify you that backups are not even starting because the machine is turned off at the scheduled volume backup time.
- **Image location free space below <N> MB** - Alerts when the hard disk being used to store the backups is less than a specified number of megabytes.

Three additional parameters can be set:

- **Add** - Adds alert parameters to selected machine IDs when **Apply** is selected without clearing existing parameters.
- **Replace** - Replaces alert parameters on selected machine IDs when **Apply** is selected.
- **Remove** - Clear alert parameters from selected machine IDs. Click the edit icon  next to a machine ID group *first* to select the alert parameters you want to clear.











Select All/Unselect All

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Check-in status

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-  Online but waiting for first audit to complete
-  Agent online
-  Agent online and user currently logged on.
-  Agent online and user currently logged on, but user not active for 10 minutes
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-  Agent has never checked in
-  Agent is online but remote control has been disabled
-  The agent has been suspended

Machine.Group ID

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ATSE

The ATSE response code assigned to machine IDs or SNMP devices:

- A = Create Alarm
- T = Create Ticket
- S = Run Agent Procedure
- E = Email Recipients

Email Address

A comma separated list of email addresses where notifications are sent.



Any Complete

If checked, an alarm is triggered when any backup is completed for this machine ID.

Full Complete

If checked, an alarm is triggered when a full backup is completed for this machine ID.

Backup Fails

If checked, an alarm is triggered when any backup fails for this machine ID.

Backup Skipped

If checked, an alarm is triggered when any backup is skipped for this machine ID.

Compression

Backup > Compression

The **Compression** page specifies the compression level used to backup. Higher compression takes longer to complete a backup. Lower compression produces larger backup file sizes. The compression setting **affects both folder and volume** backup.

The list of machine IDs you can select depends on the machine ID / group ID filter and the scope you are using. To display on this page, machine IDs must have backup software installed on the managed machine using the Backup > **Install/Remove** page.

Sample Compression Ratios

The table below shows the times, reduction and size of a typical Windows XP system drive (C:), with office and other expected applications. These numbers are only a guide and will differ greatly for different types of data. MP3 or other highly compressed files will not compress much, but text or other uncompressed data will compress more.



Backup Type	Original	none	normal	high	maximum
Size (GB)	8.78	8.78	6.29	5.74	5.64
% reduction (%)	0	0	28.36	34.62	35.76
Time (mm:ss)	00:00	19:55	16:21	28:41	43:55

Set



(Compression Option)









- None
- Normal - the default
- High
- Maximum

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Compression

The compression option assigned to each machine ID.

Max File Size

Backup > Max File Size

The **Max File Size** page specifies the maximum file size for image files. When a backup runs, image files get created. The file size specified in this option is the maximum size of each image file. For example, a volume containing 10 GB of data is set to run. The image that gets created for a full backup may be 5 GB. If the max file size is set to 600 MB, the system will create 9 files, 8 that are 600 MB and 1 file with the balance of the data.

- **NTFS** - Unrestricted file sizes are only supported on NTFS formatted disks.
- **FAT32** - FAT32-formatted storage devices only support max files sizes up to 2000MB. Setting a max file size greater than 2000MB creates 2000MB files on FAT32-formatted storage devices.

Set

- **NTFS and FAT32** - The minimum file size permitted is 200MB.
- **CD or DVD** - Select the file size that is appropriate for the media.
- **Volume Backups** - Supported on all versions of backup client.
- **Folder Backups** - Requires backup client 9.5 or later.
- **Synthetic Full** - Not supported.

The list of machine IDs you can select depends on the machine ID / group ID filter and the scope you are using. To display on this page, machine IDs must have backup software installed on the managed machine using the Backup > **Install/Remove** page. Click **Set** to assign a **Max File Size** to selected machine IDs.

Unrestricted file size / Max file size <N> MB









Select either an unrestricted file size or enter the maximum file size allowed for an image file in megabytes.

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Max Size

The maximum file size assigned to each machine ID.

Max Log Age

Backup > Max Log Age

The **Max Log Age** page specifies the number of days to retain log data for backups. Entries older than the specified maximum are automatically deleted.

A log is created for each machine every time a backup operation runs. The log contains the date, type, duration, result, and description of the backup operation performed.

Set

The list of machine IDs you can select depends on the machine ID / group ID filter and the scope you are using. To display on this page, machine IDs must have backup software installed on the managed machine using the Backup > **Install/Remove** page. Click **Set** to assign a maximum number of log days to selected machine IDs.

<N> Days

Enter the maximum number of log days for backups.

Archive









If checked, backup logs are archived. The archive location is specified using System > **Configure**

Select All/Unselect All

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Machine.Group ID

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Max Age

The maximum number of log days assigned to each machine ID.

Secure Zone

Backup > Secure Zone

For Backup clients installed prior to Backup 4.0 the **Secure Zone** page installs a 56 MBytes hidden **boot** partition on managed machines. For these earlier backup clients, secure zones are used by **Auto Recovery** to boot the managed machine and restore backup volume images without any user interaction. Installing or removing a secure zone requires a reboot of the machine.

Install

Click **Install** to create a secure zone partition on the selected machines. Installing the secure zone **reboots the selected machine**.

Remove

Click **Remove** to uninstall the secure zone from the selected machines. Removing the secure zone **reboots the selected machine**.

Cancel

Click **Cancel** to clear a pending task.



Verify

Click **Verify** to verify an install if you suspect someone removed the backup installation at the managed machine.

Show Partitions









If checked, lists the disk drives and partitions on managed machines.

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Secure Zone

If checked, a secure zone is installed on a managed machine.

