

# ZCB - Frequently Asked Questions

## Table of Contents

- Table of Contents
- Terminology
  - What is Zmanda Cloud Backup (ZCB)
  - What is a backup set
  - What is the amandabackup user
  - What do you mean by "full", "differential" and "incremental" backup levels
- ZCB Features
  - What are the different ways in which ZCB can perform backups
    - "Backup to Cloud"
    - "Backup to Disk"
    - "Backup to both Disk and Cloud"
  - Can I do backup and upload at the same time
  - Can I install ZCB on multiple machines and use the same license on all of them
  - What file extensions you support
  - Is ZCB HIPAA compliant
- Using ZCB
  - How do I enable VSS (Volume Shadow Services)
  - How can I manage my backup sets
  - What happens when I "deactivate" or "validate" a backup set
  - When should I use differential or incremental backup levels
  - What do I configure in the "Local Storage" section on the Backup page
  - Can I backup data from a mapped network drive
  - Can I use a mapped network drive as the Local Storage on the backup page
  - How do I backup NAS shares
  - Can I backup Linux clients
  - Does ZCB support FAT32 filesystem or Netware shares
  - How do I configure ZCB to back up SQL Server, MS Exchange and Oracle servers
  - How long are the backups retained in the local backup folder and on the cloud
  - Do I need to restore a full backup and then restore the incremental/differential backup(s) to restore to a point in time
  - How do I restore to a different directory
  - Can I control the bandwidth being used by ZCB for upload/download
  - My backups take a long time to complete. What can I do to speed it up
  - I cannot use the machine when backups are running. What can I do
  - Why can't I change the cloud location for a backup set
  - How can I delete old backup data from cloud
  - Why do I see so many User Access Control pop-up messages while using ZCB
- Advanced Operations
  - Can I move existing local backups to a different disk location
  - How do I restore to a different machine
  - Does ZCB log events to Windows Event Viewer
  - Why is the Backup Size on the Backup Page different from the Total Upload Size reported on the ZCB Monitor Page
- Cloud Storage
  - How can I verify the validity of the Cloud Certificate and Connection
  - I'm getting subscription failure errors trying to access the Zmanda Network Downloads page. Why
  - How secure is my data with ZCB and the cloud
  - How to purchase cloud subscriptions
  - How much are we spending? How much have we spent in the past
  - How do I use a different account
  - Who sends the monthly bill
- Support
  - I am facing a technical issue. How do I get support

## Terminology

### What is Zmanda Cloud Backup (ZCB)

ZCB is the complete backup solution for Windows servers. It backs up file systems and live applications such as Microsoft Exchange and SQL Server to a highly dependable storage cloud – Amazon S3 or Google Cloud Storage.

[back to top](#)

## What is a backup set

A backup set defines the parameters (the what, where, when, and how) for backing up a group of directories or an application such as Exchange. Each backup set can only be of a single type. For example, you cannot back up an Exchange server and Windows System state in the same backup set. Instead, you must make a backup set for each.

[back to top](#)

## What is the amandabackup user

All ZCB services run as *amandabackup* user. During installation, the *amandabackup* user is added to "Backup Operators", "Administrators" and "Users" user groups. This user is essential for ZCB functionality.

Please see [What is the amandabackup user?](#) for more details.

[back to top](#)

## What do you mean by "full", "differential" and "incremental" backup levels

ZCB supports full, differential and incremental backups.

- **Full backup:** ZCB will back up all the data associated with the backup set. This is also called backup level 0.
- **Differential backup:** ZCB will back up only the data which has changed since the last successful full backup. This is also called backup level 1.
- **Incremental backup:** ZCB will back up only the data which has changed since the last successful full or last incremental backup. This is also called backup level 2 or more.

For more information, please see [What are Incremental and Differential backups?](#)

[back to top](#)

## ZCB Features

### What are the different ways in which ZCB can perform backups

ZCB supports the following ways to perform backups:

#### "Backup to Cloud"

This operation means that ZCB will start uploading data as it begins getting backed up. No local copies of backup data will be available. Since the data is only available on the cloud, the retention policy configured under the "Cloud Storage" heading of "Backup Where" section will be applicable.

#### "Backup to Disk"

This means that ZCB will backup data to local disk. Please note that under this operation, ZCB will not upload backed up data automatically. It is expected that user will launch an upload operation separately at a later time, according to user's preference. If the user doesn't upload backup data, only the retention policy configured under the "Local Storage" heading of "Backup Where" section will be applicable.

#### "Backup to both Disk and Cloud"

This means that ZCB will make two copies of backup data – one each on disk and the cloud. To make backup operations fast, this operation is a two stage process. First, the data is backed up to local disk. Once this is complete, a copy of data is uploaded to the cloud.

Since the data is available both on disk and the cloud, the retention policies under both "Local Storage" and "Cloud Storage" headings on "Backup Where" section will be applicable.

[back to top](#)

### Can I do backup and upload at the same time

Yes, you can choose the "Backup to Cloud" operation which starts uploading data as it is getting backed up. However, please note that no local copies of data will be available in this case.

[back to top](#)

## Can I install ZCB on multiple machines and use the same license on all of them

Yes, a single ZCB license can be shared across an unlimited number of systems. Please note that all such systems can potentially access the data backed up by other systems (via **Tools>Restore Catalog** menu option). Any machine that needs to be completely separated should have its own license. Encryption can also be used to prevent data cross-contamination.

[back to top](#)

## What file extensions you support

ZCB supports backup and restore of all types of files.

[back to top](#)

## Is ZCB HIPAA compliant

ZCB supports various requirements to comply with HIPAA regulations when it is properly configured and is implemented as part of a fully HIPAA compliant solution. When applied to cloud backup, HIPAA regulations largely apply in two areas - data privacy and data security.

**Data privacy:** The backup data is transmitted to cloud datacenters over 128 bit SSL channel. The backup data can be encrypted on the ZCB machine, before it leaves the customer site. Encryption is performed using standard RSA RC4 algorithm and the encryption keys are owned and managed completely by users and hence once data is encrypted, it can't be decrypted by either Zmanda, Inc or the cloud provider.

**Data security:** ZCB provides support for backup to multiple cloud geographic locations to mitigate the risk of failure. ZCB backup data is never transmitted to Zmanda, Inc servers and is stored only on datacenters managed by the cloud provider.

Since customer authentication details are known to Zmanda, Inc, the data stored on cloud servers can be accessed by Zmanda, Inc technical support engineers to resolve customer issues. This access, however, is only upon customer request and is stringently monitored by Zmanda, Inc management.

The backups are stored in the cloud in special buckets that can be accessed only by ZCB. Once ZCB transfers data to cloud data centers, the cloud provider safeguards and manages the data as per their published security policy document. Please refer to documentation provided by Google Cloud Storage or Amazon S3 for more details on data privacy and data security measures.

For more information about HIPAA compliance, please see <http://www.hhs.gov/ocr/privacy/hipaa/administrative/securityrule/securityruleguidance.html>

[back to top](#)

## Using ZCB

### How do I enable VSS (Volume Shadow Services)

The Volume Shadow Copy Service must be enabled for ZCB backups. Although the Volume Shadow Service is enabled by default, it may have been turned off after Windows installation.

To ensure that it is running:

- Right-click the **My Computer** icon and choose **Manage** from the popup menu.
- Expand the Services and Applications tree and locate the Volume Shadow Copy Service.
- If it is not started, do so.
- If necessary, change the General Properties to make the Startup Type **Automatic** rather than **Manual**.

[back to top](#)

### How can I manage my backup sets

Backup sets are listed along the left edge of the ZCB display. You can delete, deactivate, or validate a backup set by right-clicking on it and choosing from the pop-up menu.

Backup set names are limited to 32 alphanumeric characters. A backup set must be activated (which is the default state) for the backups it

defines to actually be performed as scheduled.

[back to top](#)

## What happens when I "deactivate" or "validate" a backup set

**Deactivating a backup set:** Doing this on a backup set would mean that no operations, except restores, can be performed on that backup set. All scheduled tasks for this backup set are disabled too.

**Validating a backup set:** This is a simple way to check whether the essential configuration for the backup set is correct or not. If there are errors during validate, it indicates that the ZCB won't be able to use the configuration provided by the user to perform backup/restore operations correctly.

[back to top](#)

## When should I use differential or incremental backup levels

Choosing differential and incremental backup reduces the amount of data to be backed up and uploaded to the cloud. Incremental backups can be smaller in size compared to differential backups. But, differential backups allow for faster restoration compared to incremental backups. Please see [What are Incremental and Differential backups?](#)

[back to top](#)

## What do I configure in the "Local Storage" section on the Backup page

If you want to keep backup data just on the cloud, you don't need to configure the **Local Storage** section. This will be the case when you use **Backup to cloud** operation in ZCB 4.0 and above.

However, if you wish to put backup data to a local disk (**Backup to Disk** or **Backup to both Disk and Cloud** operations) then you would need to configure the fields in the **Local Storage** section.

[back to top](#)

## Can I backup data from a mapped network drive

Yes. ZCB supports backing up mapped drives provided the shares are accessible by **amandabackup** user. ZCB supports both Windows and SMB shares mapped as drives. Backup of NTFS encrypted files on mapped network drive will fail with **Access Denied** error.

Please see [How to use external or mapped network drives with ZCB](#).

[back to top](#)

## Can I use a mapped network drive as the Local Storage on the backup page

Yes. You can use a mapped network drive to store backup images. To configure mapped network drive as the backup folder, perform the following steps:

- Ensure that **amandabackup** user has read and write access to the network share.
- Map the network share as a mapped drive using the backup user and as **amandabackup**.
- In ZCB **Backup** page, under the Local Storage section, use the browse button next to Location box to select the mapped drive.

[back to top](#)

## How do I backup NAS shares

Please see [Can I backup data from a mapped network drive?](#)

Backups of a NAS share will behave in the exact same manner.

[back to top](#)

## Can I backup Linux clients

Yes, using Samba. ZCB can backup data from mapped Samba shares from the Linux machine. However, locked and open files are not backed up.

There is no Linux ZCB client. [Amanda Enterprise](#) provides this functionality. Please contact [zsales@zmanda.com](mailto:zsales@zmanda.com) for more details.

[back to top](#)

## Does ZCB support FAT32 filesystem or Netware shares

ZCB can backup only NTFS filesystem. FAT32 filesystem can be used for Backup Folder if backup encryption is not required, and if the total backup size is less than 4GB.

[back to top](#)

## How do I configure ZCB to back up SQL Server, MS Exchange and Oracle servers

The steps are:

- Install and run ZCB on the server you intend to back up.
- Go to Backup page.
- In the "Backup What" section, choose the desired **Backup Type**.
- ZCB will discover all the instances of the chosen server and automatically add them to the backup set.

Please see your User Guide for important details and requirements for backup of live applications.

[back to top](#)

## How long are the backups retained in the local backup folder and on the cloud

Retention is defined by the user. We offer two types of retention

1. Users may choose to keep a certain number of full backups. When the number of full backups exceeds the number chosen, the oldest full backup is removed. Any differential or incremental backups associated with a full backup are removed at the same time the full backup is removed.
2. You can choose to retain backups for months, days, years or forever, based on space availability and recovery requirements.

In both cases, separate values can be set for local backups and for cloud backups.

[back to top](#)

## Do I need to restore a full backup and then restore the incremental/differential backup(s) to restore to a point in time

No. ZCB lets you select any point in time (based on when the last backup was performed), and then automatically determines which backups must be restored.

[back to top](#)

## How do I restore to a different directory

The **Restore Page** includes an option to restore to a different directory.

[back to top](#)

## Can I control the bandwidth being used by ZCB for upload/download

Yes. By default, ZCB always attempts to use the maximum bandwidth you have available.

However, if you wish to specify the limits for bandwidth to be used by ZCB, you can specify these two values:

- **Max Upload Rate:** This value, in kilobits per second, refers to the maximum bandwidth ZCB will use for uploading backup data to the cloud.
- **Max Download Rate:** This value, in kilobits per second, refers to the maximum bandwidth ZCB will use for download backup data from the cloud.

ZCB allows you to set these two values both at a global level and at a backup set level. For configuring these values globally, across all the

backup sets, please go to **Preferences > Bandwidth**. For configuring these limits at a backup set level, so that they override the global values, please go to **Cloud Storage** sub-section on the **Backup Where** section.

ZCB also supports **Time-based Throttling** so that uploads can be throttled when necessary and left at full speed at other times.

[back to top](#)

## My backups take a long time to complete. What can I do to speed it up

The upload speed depends on bandwidth availability. Please see [How long does it take to back up to the cloud?](#)

However, if you believe that ZCB is not using the available bandwidth completely, please do the following:

- Make sure that bandwidth throttling limits are not configured. Please see the FAQ [Can I control the bandwidth being used by ZCB for upload/download?](#)
- Tweak the thread count in **Preferences > Advanced**. If you increase the number of threads, the upload/download generally speeds up due to concurrent data transfers. However, beyond a point the performance might not improve further, or it might even fall due to other overheads.
- Adjust the schedules so that uploads occur when maximum bandwidth is available. You can upload multiple backup sets at the same time.

[back to top](#)

## I cannot use the machine when backups are running. What can I do

ZCB uses the Windows Volume Shadow Services (VSS) to perform backups. VSS minimizes impact on the system. But because system resources such as CPU cycles and memory are shared, the impact cannot be entirely eliminated.

Compression in particular can consume significant system resources.

[back to top](#)

## Why can't I change the cloud location for a backup set

The cloud storage locations are all totally different from each other. If backup data is spread across multiple cloud locations, it will be difficult for ZCB to perform restores. Hence, once you choose a cloud storage location and save a backup set, you can't change it. If you wish to use a different cloud storage location, please create a different backup set.

[back to top](#)

## How can I delete old backup data from cloud

You can configure ZCB to automatically delete old backup data by configuring suitable [retention policies](#).

However, if you wish to manually delete data which has not expired as per the retention policy, please see [How to delete backup data from disk or cloud](#).

[back to top](#)

## Why do I see so many User Access Control pop-up messages while using ZCB

When ZCB is run using a non-Administrator user, one will see UAC messages on Win Vista, Win 7 & Win 2008. ZCB requires elevated privileges to create, delete & query schedules. So, when ZCB tries to create, delete or query the Windows scheduler, it throws a UAC pop-up so as to make sure that the actions are run under elevated privileges.

[back to top](#)

## Advanced Operations

### Can I move existing local backups to a different disk location

Yes. If you have been using ZCB to keep backup data on your local disk and now wish to move this old data to a new location on your machine (a different drive for instance), you can do so. For this, you will have to use the **movebackup** option of **zwcontroller.exe** program which ships with ZCB.

Please refer to the movebackup operation documentation in the **Administration** section of the ZCB user guide.

[back to top](#)

## How do I restore to a different machine

The **Restore Catalog** function found in Tools > Restore Catalog allows users to import their backup sets to ZCB on any other machine. Once the Restore Catalog function has been successfully run, the restore of data can be performed as usual.

Database applications, such as Exchange and Microsoft SQL Server, have special requirements that must be met for restores to a new machine. Please refer to your User's Guide for more information on how to perform restores.

[back to top](#)

## Does ZCB log events to Windows Event Viewer

Yes. All Backup, Upload, Download and Restore successful and failure events are logged. In addition, if email notifications have been configured on ZCB, any failure while sending emails will also be logged in the Windows Event Viewer.

The following output shows an example of a backup failure.

```
Event Type: Error
Event Source: ZCB
Event Category: Backup-Restore
Event ID: 501
Date: 7/7/2009
Time: 5:40:33 PM
User: N/A
Computer: EXCH-SERVER-1
Description:
BackupSet3 - Backup failed with errors.
Error Details : File system not supported.
Please check log files for details.
```

[back to top](#)

## Why is the Backup Size on the Backup Page different from the Total Upload Size reported on the ZCB Monitor Page

The **Backup Size** on the Backup page shows the size of Backup archive. The **Total Upload Size** on the Monitor page includes the backup meta data and catalog for the archive in addition to the backup archive. So the **Total Upload Size** will be greater or equal to the **Backup Size** value. The backup archive metadata and catalog is required to recover the catalog in case of disaster recovery of ZCB machine.

[back to top](#)

## Cloud Storage

### How can I verify the validity of the Cloud Certificate and Connection

Choose Cloud->**Check Cloud Connection**. This causes ZCB to connect to the cloud and validate the required subscription and keys. You can use this test to validate your installation, or to troubleshoot failed uploads/downloads. [top](#)

[back to top](#)

## I'm getting subscription failure errors trying to access the Zmanda Network Downloads page. Why

To access Zmanda Network downloads page, please [click here](#).

If you have chosen ZCB with Amazon, do not access ZCB product using <http://www.amazon.com/dp-applications> or <https://aws-portal.amazon.com/gp/aws/user/activation/index.html> or <http://network.zmanda.com/questionnaire.php>. Using these pages will re-generate your Amazon S3 certificate, which renders your old/current S3 certificate useless. ZCB will then fail to upload data to S3 and restore data from S3. You will have to download new S3 certificate and import it in ZCB using ZCB user interface.

[back to top](#)

## How secure is my data with ZCB and the cloud

There are several levels of security provided by ZCB and the cloud providers that ensure privacy and security of your data. ZCB offers Private Key Encryption. Users of Zmanda Cloud Backup with Google Cloud Storage also have an automatic, server-size encryption option. Furthermore, ZCB utilizes Secure Socket Layer transfers for all backups to the cloud by default.

Please see [How to use encryption](#) for more information.

[back to top](#)

## How to purchase cloud subscriptions

If you bought ZCB from the Zmanda Website and downloaded both the ZCB installer and the cloud certificate, you don't need to do anything else. You can simply import the certificate to ZCB using **Cloud > Import Cloud Certificate** menu.

However, if you have installed ZCB but don't have a cloud certificate, then you must purchase a subscription. Please click on **Cloud > Purchase Cloud Subscription** to buy a Google Cloud Storage subscription for ZCB. The purchase process requires Zmanda Network login information. Please join Zmanda Network for free at <http://network.zmanda.com/>

After your purchase, your cloud certificate will be available for download from Zmanda Network. Please download the certificate to the ZCB Windows server and import the certificate into ZCB.

[back to top](#)

## How much are we spending? How much have we spent in the past

This question applies only to customers who have chosen ZCB with Amazon S3 storage.

Please click on **Cloud > Cloud Billing** to view billing activity and see what is being spent so far this month. You will need your Amazon account information to access the bill.

[back to top](#)

## How do I use a different account

Every additional account requires an additional subscription, available from the [Zmanda Network](#).

[back to top](#)

## Who sends the monthly bill

This question applies only to customers who have chosen ZCB with Amazon S3 storage.

Monthly billing for ZCB license, storage and transfer cost will be provided by Amazon. The bill will have specific entries for ZCB in addition to entries for other Zmanda, Inc services, if you are using them.

Customers who have chosen ZCB with Google Cloud Storage do not have monthly bills. ZCB-Google subscriptions are purchased annually.

[back to top](#)

## Support

### I am facing a technical issue. How do I get support

You can contact our support by clicking on **Help > Contact Support** within ZCB itself. This will open your browser and direct it to the [Zmanda Network](#). After logging in using your Zmanda Network account, you can open a support case from the **Support** tab.

[back to top](#)