

Zmanda Cloud Backup 3.0.x FAQ

The first sections of this document cover general questions regarding <u>features</u>, <u>cloud</u>, and <u>support</u>; the last section lists <u>error messages</u> and what to do about them.

Terminology

What is Zmanda Cloud Backup?

What do the terms "backup," "restore," "upload," and "download" mean in the context of Zmanda Cloud Backup?

What is a backup set?

What is amandabackup user?

What is Backup Folder (or why doesn't ZCB backup directly to cloud)?

Features

What are the new features in ZCB 3.0.x?

What levels of backup are supported?

Can I do backup and upload at the same time?

Can I do upload and download at the same time?

Can I copy the backup folder to another machine?

Configuration

What platforms/applications are supported?

Can I run ZCB as a user not belonging to Administrator group?

How do I enable VSS (Volume Shadow Services)?

How large should the backup folder be?

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?

How do I restore to different machine?

Can I backup data from a mapped network drive?

Can I use a mapped network drive as the backup folder (Local folder in Backup Where page)?

How do I backup NAS shares?

Can I backup Linux clients?

Does ZCB support FAT32 filesystem?

How do I configure ZCB to back up an SQL Server 2000 database?

How long are the backups retained in the local backup folder and on S3 storage?

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?

Does ZCB log events to Windows Event Viewer?

Why is the **Backup Size** on the Backup pane different from the **Upload size** on the Upload pane in the ZCB Monitor UI?

What are the three files in the **Total Backup Archives to Upload** on the Upload pane in the ZCB Monitor UI?

Amazon S3 Cloud

How can I verify the validity of the S3 Certificate and Connection?

How secure is my data with ZCB and Amazon S3?

How to purchase Amazon S3 subscriptions?

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

How do I use a different Amazon S3 account?

Who sends the monthly bill?

Support

I have a question not covered here. How do I get an answer?

Terminology

What is Zmanda Cloud Backup?

Zmanda Cloud Backup (ZCB) for Amazon S3 is part of the Zmanda Cloud Backup family of products; ZIB and Zmanda Cloud Backup (ZCB) are one and the same.

What do the terms "backup," "restore," "upload," and "download" mean in the context of Zmanda Cloud Backup?

When a backup is performed, ZCB creates a local backup archive, which consists of the data being backed up (compressed in a .ZIP file), the backup index, and metadata associated with the backup. The local backup archive is then uploaded to S3 storage.

ZCB allows you to schedule the local backup and remote upload as a single operation or as separate operations, depending on the backup type you select. For example, **Backup to S3** backup type copies the data to the local directory specified on the **Backup Where** tab and then immediately uploads the data to S3. Alternatively, **Backup to Disk** and **Upload to S3** backup types perform these same actions separately, which allows you to schedule the upload when Internet traffic is light.

What is a backup set?

All activities in ZCB are applied to backup sets. A backup set defines the parameters (the what, where, and when) 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 and Windows System state in the same backup set.

Backup sets are listed along the left edge of the ZCB display. You can create, edit, activate, and deactivate backup sets by right-clicking on them 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.

What is amandabackup user?

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

If ZCB machine is part of the domain and *amandabackup* user already exists in the domain, ZCB verifies the password of the *amandabackup* user. If the user does not exist in the domain and machine is the domain controller, the *amandabackup* user is created in the domain.

If the machine is not in a domain or the user does not exist in the domain and the machine is not a domain controller, a local user *amandabackup* is created with password that is provided.

The amandabackup local user may be deleted at the time of installation depending on whether or not you

choose to preserve data during uninstallation.

What is Backup Folder (or why doesn't ZCB backup directly to cloud)?

ZCB provides disk based backup as well as cloud backup. The backup folder is a backup to disk location and can be used for restoration. To increase the performance as well improve reliability, ZCB writes backup images to Backup Folder before uploading the images to Amazon S3 cloud.

Backing up directly to cloud would be unreliable because the data transfer over internet is unreliable. Backup folder minimizes the impact of communication failure/interruptions.

Features

What are the new features in ZCB 3.0.x?

- Incremental and Differential backups of NTFS file systems.
- Support for Exchange Server 2010.
- Differential backups of SQL server and Exchange servers.
- Recovery of Exchange backups to Recovery Storage Groups.
- Backup encryption no longer requires **Zmanda** Key Container and makes the data encryption configuration easier.
- Support for S3 cost effective storage and Cloud Storage with Enhanced Redundancy.
- Cloud features
 - Backup images can be stored in Amazon US (Standard and Northern California) or EU (Ireland) data centers.
 - Support for multiple compression levels (fast and best compression methods).
 - Throttling of network bandwidth used for backup for all backup sets and for specific backup sets.
 - Pause and Cancel backup uploads to the Cloud.

What levels of backup are supported?

ZCB supports both full, differential and incremental backups. Differential backup (backup level 1) contains changes since the last full backup (backup level 0). Choosing differential and incremental backup reduces the amount of data to be backed up and uploaded to Amazon S3. Differential backups contain all changes since the full backup. Incremental backups contain all changes since most recent full or incremental backup. Incremental backups can be smaller in size compared to Differential backups. Differential backups allow for faster restoration compared to incremental backups.

It is not possible to do mix incremental and differential backup for a backup set. If you configure a backup set to do differential backups, you cannot use incremental backups for the backup set.

Can I copy the backup folder to another machine?

Not directly. To move a backup folder to a different machine, first upload from the source machine to S3, then restore the backup catalog to the target machine as described in <u>How do I restore to different machine?</u>.

Can I do backup and upload at the same time?

Yes. You can watch their progress in monitor page.

Can I do upload and download at the same time?

Yes. You can perform this operations for different backup sets or the same backup set.

Configuration

What platforms/applications are supported?

Platforms: Windows 2003 server, 2008 server, Windows 7 Windows XP and Windows Vista.

Applications: can be NTFS file system, System state (active directory, registry, certificate server), MySQL 5.x, SQL server 2000, 2005 and 2008, Microsoft Exchange 2003, 2007 and 2010, Share Point 2010 and 2007 and Oracle 11g running on any of the listed platforms.

Can I run ZCB as a user not belonging to Administrator group?

No. A Windows user belonging to Administrator's group can install and perform ZCB operations using the UI.

On Windows XP and Windows 2003 server, if an user that does not belong to Administrator's group launches ZCB UI, the error message **Write permission denied** is displayed. User can right click on ZCB UI short cut and select **Run As** option. Specify the Administrator user password to launch ZCB UI.

On Windows Vista, Windows 7 and Windows 2008 server, if an user that does not belong to Administrator's group launches the UI using ZCB short-cut, the **User Access Control** dialog will appear. Enter Administrator user account name and password. ZCB UI will be launched.

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:

1. Right-click the My Computer icon and choose Manage from the popup menu.

- 2. Expand the Services and Applications tree and locate the Volume Shadow Copy Service.
- 3. If it is not started, do so.
- 4. If necessary, change the General Properties to make the Startup Type **Automatic** rather than **Manual**.

How large should the backup folder be?

The size you should allocate for the backup folder depends on number of backup sets, backup levels, backup and upload schedule. You should allow sufficient space to hold the number of backups specified by the retention policy. In general, the size of cloud storage depends on

- 1. Size of backup images in the backup set
- 2. Backup scheduling used for the backup set (Backup, Backup+Upload)
- 3. Upload success or failures which depends on Amazon data centers and communication reliability

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

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

How do I restore to a different directory?

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

How do I restore to different machine?

The backup must reside in S3 storage; backups stored in the local backup folder cannot be restored to another machine.

- 1. Install and run Zmanda Cloud Backup on the restore target machine.
- 2. If the backup is encrypted, make sure the required encryption certificates from the backup machine(s) are available on the restore target machine. If the backup archives have been created using ZCB prior to 3.0 release, the **Zmanda** key container is also required on the restore target machine.
- 3. From the **Tools** menu, choose **Restore Catalog** to restore the backup. You must supply a host (host name of the original server) and backup set name to identify the backup used for the restore. If backup set name is not specified, all backup sets found in the original server, will be recovered on the new server.
- 4. You can also restore the catalog to a temporary directory instead of the ZCB directory for testing.
- 5. All the recovered backup sets will be named "<backup set name> (<original hostname>)"
- 6. Use ZCB to restore the files as if they were on the original machine. You can also look at the reporting information for the recovered backup sets.

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.

Requirements:

- 1. The **amandabackup** user must be a valid user on the machine whose network share is being accessed by ZCB machine. The password must be the same.
- 2. If the ZCB machine and the machine where the Network share is present, are part of a Windows domain, then make sure that the **ZWCService** is started with the domain **amandabackup** account i.e. **domainname**\mandabackup.
- 3. The drive must be mapped using **Administrator** user account.
- 4. Make sure that **amandabackup** user has read access rights on the Network share.

Can I use a mapped network drive as the backup folder (Local folder in Backup Where 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:

- 1. Ensure that **amandabackup** user has read and write access to the network share.
- 2. Map the network share as a mapped drive using the backup user (**Administrator** user).
- 3. In ZCB UI **Backup Where** page, use the browse button for the **Local Folder** to select the mapped drive.
- 4. You will have to modify the ZCB scheduler entries in the Windows Task Scheduler to run as **amandabackup** local or domain user.

How do I backup NAS shares?

Map the NAS share as a network drive. See the answer to the question <u>Can I backup data from a mapped network drive?</u>

Can I backup Linux clients?

Yes using Samba. ZCB can backup data from mapped Samba shares from the Linux machine without using VSS (locked and open files are not backed up). There is no Linux ZCB client. <u>Amanda Enterprise edition</u> provides this functionality. Please contact Zmanda Sales (Email <u>zsales@zmanda.com</u>) for more information.

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.

How do I configure ZCB to back up an SQL Server 2000 database?

- 1. Install and run Zmanda Cloud Backup on the server you intend to back up.
- 2. Choose **Backup** from the **Tasks** menu in the upper right, then the **What** tab.
- 3. Choose **SQL Server** as the **Backup Type**.

Zmanda Cloud Backup will discover all the SQL Server 2000 instances and automatically adds them to the backup set. Automated server discovery works the same way for the other application types supported such as MS Exchange and Oracle.

How long are the backups retained in the local backup folder and on S3 storage?

Local and S3 backups are retained as specified by the retention policies entered in the **Backup Where** tab. You can choose to retain backups for months, days, or even years based on space availability and recovery requirements. Make sure that you have sufficient space (both locally and on S3) to meet the requirements of your backup retention policy.

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

The upload speed depends on bandwidth availability. If necessary, adjust the schedule so that uploads occur when maximum bandwidth is available. You can upload multiple backup sets at the same time.

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 application. But because system resources such as CPU cycles and memory are shared, the impact can not be entirely eliminated. Compression in particular can consume significant system resources.

This is why ZCB allows you to schedule backups separately from S3 uploads.

Does ZCB log events to Windows Event Viewer?

Yes. All Backup, Upload, Download and Restore successful and failure events are logged. Following output shows an example of Backup failure. Windows log events can be used to trigger email and other notifications using various log monitoring tools available for Windows platform.

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.

Why is the Backup Size on the Backup pane different from the Total Upload Size on the Upload pane in the ZCB Monitor UI?

The Backup Size on the Backup pane shows the size of Backup archive. The Total Upload Size on the Upload pane 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 meta data and catalog is required to recover the catalog in case of disaster recovery of ZCB machine.

What are the three files in the Total Backup Archives to Upload on the Upload pane in the ZCB Monitor UI?

The three files that are uploaded are always Backup meta data, Backup catalog for the archive and Backup archive. The size of Backup meta data and catalog are usually significantly smaller to the size of backup archive. During upload, Upload so far (current file) value shows the amount of data uploaded for the file being uploaded.

Amazon S3 Cloud

How can I verify the validity of the S3 Certificate and Connection?

Choose Tools->Check Amazon S3 Connection. This causes ZCB to connect to S3 and validate the required S3 subscription and keys. You can use this test to validate your installation, or to troubleshoot failed uploads/downloads.

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

To access Zmanda Network downloads page, please use the following URL http://network.zmanda.com/index.php?redirect=download.php

Do not access using http://www.amazon.com/dp-applications or https://aws-pubmed.com/dp-applications or <a href="https://aws-pubmed.com/d portal.amazon.com/gp/aws/user/activation/index.html or http://network.zmanda.com/questionnaire.php to access ZCB product. Please note that this process ends up regenerating your Amazon S3 certificate which renders your old/current S3 certificate useless and ZCB will 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.

How secure is my data with ZCB and Amazon S3?

There are several levels of security provided by ZCB and Amazon S3 that ensure privacy and security of

your data:

- ZCB provides an option to encrypt your backup data by using Digital Certificates from Trusted Certificate Authorities.
- In addition to encrypting the backup data, ZCB provides an option to transfer your data from your computer to Amazon S3 via secure 128-bit SSL.
- Amazon S3 provides access controls that only permit authenticated access by ZCB with your own unique security certificate. You, and only you, maintain full control over who has access to your backup data. See this white paper from Amazon (requires Adobe Acrobat reader) for details.

How to purchase Amazon S3 subscriptions?

Please click on **Tools-> Purchase Subscription** to buy Amazon S3 subscriptions for Zmanda Cloud Backup. The purchase process requires Zmanda Network login information. Please join Zmanda Network for free at http://network.zmanda.com/

After your purchase, Amazon S3 certificate will be available for download from Zmanda Network. Please download the certificate to the ZCB Windows server and import the certificate into ZCB configuration.

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

Please click on **Tools-> S3 Billing** to get browse monthly billing activity and see what is being spent so far this month. You will need your Amazon account information to access the bill.

How do I use a different Amazon S3 account?

An additional S3 account requires an additional subscription, available from the **Zmanda Network**.

Who sends the monthly bill?

Monthly bill for ZCB license, storage and transfer cost will be provided by Amazon. It will appear in financial statements (credit card statements) under heading **AMZN PMTS(Services and Merchandise)**. Zmanda does not bill the customer directly. The bill will have specific entries for Zmanda Cloud Backup in addition to entries for other Amazon Web Services if you are using them.

Support

I have a question not covered here. How do I get an answer?

Please click on **Help->Contact Support.** This will open your browser and direct it to the Zmanda Support Forums. Once logged in, you can ask your question in the Zmanda Cloud Backup support forum. If there is specific problem, you can open a support case using your Zmanda Network account.

How do I access the forums to see if my question has been answered previously?

Use your browser to access http://forums.zmanda.com and search the ZCB forums.

Error Messages

Failed to write registry. Verify that Remote Registry service is running.

This error during ZCB installation. ZCB installer writes to the registry. If the Remote Registry Service is not running, the installer will fail with this error message and installation will be rolled back. Start the **Remote Registry Service** on ZCB machine before installation and run the installer again.

backup failed

This error appears when the backup failed for any of a number of reasons, such as snapshot failure or running out of physical volume extents. Before contacting the Zmanda Support Team, choose **Collect Logs** from the ZCB **Tools** menu. ZCB then collects all the relevant files into an archive, displaying its name and location. Be patient; collecting the logs can take a few minutes. Attach the log file to your support request. Zmanda Support may ask you to set the log level to **Debug** (**Tools->Log level->Debug**) whe troubleshoot.

Backup root directory not found

This error indicates either of the following:

- An invalid/non-existent Backup Folder has been specified in the backup set.
- ZCB lacks the necessary permissions on the directory.

Note: The Backup Folder refers to the directory path specified for the backup set in the **Backup Where** tab. Make sure that Backup Folders are present and accessible to ZCB.

Backup Set directory not found

This error indicates either of the following:

- An invalid/non-existent Backup Folder has been specified in the backup set.
- ZCB lacks necessary permissions on the directory.

Note: The Backup Folder refers to the directory path specified for the backup set in the **Backup Where** tab. Make sure that Backup Folders are present and accessible to ZCB.

can not parse this index file

This error indicates either of the following:

- An invalid/non-existent Backup Folder has been specified in the backup set.
- ZCB lacks necessary permissions on the directory. (Backup Folder)

Note: The Backup Folder refers to the directory path specified for the backup set in the **Backup Where** tab. Make sure that Backup Folders are present and accessible to ZCB.

Can not open index file

This error indicates either of the following:

- An invalid/non-existent Backup Folder has been specified in the backup set.
- ZCB lacks necessary permissions on the directory.

Note: The Backup Folder refers to the directory path specified for the backup set in the **Backup Where** tab. Make sure that Backup Folders are present and accessible to ZCB.

Restore failed

There can be many reasons for a restore to fail. Before contacting the Zmanda Support Team, choose **Collect Logs** from the ZCB **Tools** menu. ZCB then collects all the relevant files into an archive, displaying its name and location. Be patient; collecting the logs can take a few minutes. Attach the log file to your support request.

A backup set with the same name already exists.

Duplicate backup set names are not allowed. Choose a different name.

Restore Catalog command failed. Please look in the log file for more details.

The restore catalog command failed for any of a number a reasons, perhaps due to S3 connection problems or insufficient space on the local folder. Check the logs for further information.

Unable to create backup set Backup set name

Check that the local disk has not run out of space.

Backup Set with name Backup set name already exists.

Duplicate backup set names are not allowed. Choose a different name.

Unable to create temp file

Make sure that ZCB has permission to write to ZCB installation directory\misc.

Unable to save Backup Where parameters for backup set Backup_set_name

Make sure that ZCB has permission to write to ZCB_installation_directory\conf\Hostname+Backup_set_name.

Failed to save Backup What parameters for backup set Backup_set_name

Make sure that ZCB has permission to write to ZCB installation directory\conf\Hostname+Backup set name.

The format of the restore time not correct.

Restore time must be specified in HH:MM format.

Collection of ZCB logs failed.

On Windows Vista, Windows 7 and 2008 Server, the Tools->Collect Logs can have errors if they are not run as *Administrator* user. To resolve this issue, right click on **ZCB Support** in **Start->Programs** menu and click on **Run as Administrator**.

Failed to Validate encryption certificate: <CertificateName>

The encryption certificate name entered in ZCB UI **Backup What** for the backup set is invalid. Encryption certificate name must have been imported into the *amandabackup* user profile on the ZCB machine.

Decryption initialization failed while finding certificate : < CertificateName >

The encryption certificate **CertificateName** used at the backup time must be available for restoration of encrypted backup images. It should be have been imported into the *amandabackup* user profile on the ZCB machine where restoration is being done.

Decryption initialization failed while importing session key.

You might encounter this error, if you are restoring on a machine different from where the archive, or if the amandabackup user profile on the same machine was deleted manually or as part of uninstallation or the password for **amandabackup** user has changed. This is a result of not importing the encryption key container used during encryption. To resolve this, you will have to import the necessary key container from the machine where the archive was backup encrypted. See **Getting Started** (**Help** → **Getting Started** in the UI or Zmanda Network documentation) guide for information on how to import key containers. Note: If you are using encrypted backups, Please make sure the **amandabackup** user password remains the same for the backup and recovery process.

Failed to initialize COM for VSS.

Failed to initialize VSS.

Failed to collect writers information.

Error Backup failed for more than 100 or 50% of the selected files. Check Volume Shadow Copy services.

Writers status is not stable. Try after restarting Volume Shadow Copy service. Please run 'vssadmin list writers' to identify the problem vss writer.

These error messages related to VSS (Volume Shadow Services) can be seen during backup or validation of backup set. The application event logs should be checked for errors. Based on error codes in the logs, corrective action should be performed. The Windows command "vssadmin list writers" can also be useful to identify VSS writer problems. Restarting Volume Shadow Copy service fixes most VSS writer problems.

The list of files that were not backed up in the last backup run can be found in *BackupErrors.txt* file in the ZCB Debug folder. A similar debug file is available for restore failures (*RestoreErrors.txt* in the ZCB Debug folder). Some errors found in this log file can be ignored.

Amazon S3 Certificate not found in the installation directory. Backups and Restores to the S3 cloud will not work. Please purchase S3 subscription or download S3 certificate from Zmanda network.

Backing up to Amazon S3 and restoring from S3 requires an authentication certificate. This certificate is available as part of product subscription. Please use **Tools->Purchase Subscription** to purchase a subscription. If you are already a product subscriber, download the certificate from Zmanda network account and import the certificate into ZCB using **Tools->Import Cloud Certificate**.

Time-mismatch: Difference between Amazon S3 time and System time is too large. Please check your server date and time.

Amazon cloud requires the system time of ZCB machine to be correct. Please synchronize the system time with valid time (NTP) server.

Invalid User token: The provided token is malformed or otherwise invalid.

Failed to connect to Amazon S3 due to invalid certificate

Invalid access key: The AWS Access Key Id you provided does not exist in our records.

Invalid Secret key: The request signature we calculated does not match the signature you provided. Check your key and signing method.

The Amazon S3 certificate installed on the machine is not valid. Please download S3 certificate from Zmanda Network and import the certificate to ZCB. Check Amazon S3 subscription using **Tools->S3 Billing**.

Storage cloud communication errors

Communication with Cloud failed. Detailed error message is available in the log files. Use **Tools- Check Amazon S3 Connection** to verify connectivity to the cloud. If the connection is good, try resuming the upload operation will work. Failed uploads can be resumed from Reports page. Select the backup job report and right click to perform retry upload operation. The failed upload resumes from the

failed block (not from the beginning of the backup image).

Check to see if you have configured HTTP proxy information on the **Tools->Advanced Options** correctly.

mysqldump: Got error: 2003: Can't connect to MySQL server on <IP address/name> (10061) when trying to connect

Backup of MySQL database fails with this error message. Check to see if the MySQL server is running on the server with the IP address or name mentioned in the message. Backup of MySQL database requires MySQL server to be running.

Cannot run program "mysql": Create process error=2, The system cannot find the file specified.

Please check MySQL Utilities Path is specified correctly in the Backup What page in the UI. The value should be path where MySQL client utilities are installed.

Upload failed due to backup run failure

This message appears in Upload pane of Monitor page. Failed backups cannot be uploaded. Look at Backup pane in the Monitor page for backup errors.

ERROR: You have launched 'Collect Logs' using <user name> user. The tool will fail to collect logs correctly for any user other than Administrator. Please run 'Start Menu > Programs > Zmanda > Zmanda Cloud Backup > ZCB Support' using 'Run as Administrator' option

ZCB log collection for Zmanda support must be performed as Administrator user.

Validation of backup set
backup set name> failed. Check if ZCB service ports (see Tools > Advanced Options) are used by another software using netstat command

ZWC service could not be started. Please check if ZCB ports (Tools > Advanced Options) are in use ZCB uses two TCP ports for its operations. Default port numbers are 10080 and 10081. If these ports are used by some other software installed on the ZCB machine, the above error message is displayed. Users can change ZCB ports from the UI using Tools > Advanced Options. Use netstat command from the Windows command shell to determine the list of ports used by software applications running on the machine.

Could not open file

ZCB does not have the necessary read/write permission on the Backup Folder. Ensure that ZCB has write permissions on the Backup Folder.

Nothing to do

This message indicates you are trying to restore an unsuccessful backup.

Backup root directory not specified, Assigning default value

This error indicates either of the following:

- An invalid/non-existent Backup Folder has been specified in the backup set.
- ZCB lacks necessary permissions on the directory.

Note: The Backup Folder refers to the directory path specified for the backup set in the **Backup Where** page. Make sure that Backup Folders are present and accessible to ZCB.

Backup info fields not specified

This error indicates either of the following:

• An invalid/non-existent Backup Folder has been specified in the backup set.

• ZCB lacks necessary permissions on the directory.

Note: The Backup Folder refers to the directory path specified for the backup set in the **Backup Where** page. Make sure that Backup Folders are present and accessible to ZCB.

Restoring from a backup which was not successful

This message indicates you are trying to restore an unsuccessful backup.

Backup status is not available in the index file

This message indicates you are trying to restore an unsuccessful backup.

Restoring from this may not be successful

This message indicates you are trying to restore an unsuccessful backup.

Unable to access following File(s)/Folder(s) that are part of the <backup set name> backup configuration:

st of file(s)>

Please save backup set.

This warning message appears if some files that were part of backup set are no longer in the system. The message identifies the list of files that are missing. Users are expect to save the backup set so that the missing files are removed from the backup set.

Please perform a Full Backup before a Differential/Incremental backup

At least one full backup must be performed for a backup set before incremental or differential backup can be performed. Incremental/Differential backup contains changes since the full backup of the backup set.

Cannot run an incremental backup after a differential backup

Cannot run a differential backup after an incremental backup

Cannot add a differential backup schedule as an incremental backup schedule is already present Cannot add an incremental backup schedule as a differential backup schedule is already present

Users cannot switch from incremental to differential backup (level 1) and vice versa for a backup set. A backup set can have full and differential backup or full and incremental backups.

Validation of backup set not done. Another operation already in progress

Validation of a backup set cannot be performed when backup or restore operation in the backup set is in progress. The backup set configuration is saved. The backup set should be validated later using **File>Validate Backup Set**.

Restore could not proceed as no VSS writer information is available

During restoration of Exchange or SQL server, the corresponding VSS writer is not running. For MS Exchange, please check **Microsoft Exchange Information Store** service and restart it. Restart the **SQL VSS Writer** service in case of SQL server.

Restore failed as restoring Exchange 2003 data to recovery storage group is not supported

Exchange 2003 backups cannot be restored to recovery storage group. This feature is not supported. Exchange 2007 can be restored to recovery storage group and Exchange 2010 can be restored to recovery database.

Writers status is not stable. Try after restarting Volume Shadow Copy service. Please run vssadmin list writers

The VSS writers are not in Stable state. This can happen if all service packs for Microsoft Windows has

not been installed. It can also happen if you add a SQL server database to the machine and attempt a differential backup. When you add SQL serfMSver database, you should perform a full backup. Restart the failed VSS writers and Volume Shadow Copy service.

Restore could not proceed as VSS initialization failed

- During restore process, Volume Shadow Services is used. The status of VSS writers should be stable. Please check the output of command *vssadmin list writers* and restart failed VSS writers before attempting restoration again.
- This error message can occur during Exchange restoration. Check for errors in the Application Event Logs from **MSExchangelS**. For example: If mailbox stores in a storage group are not dismounted during a restore, the application event logs has message *Restore not permitted because storage group <storage group name> is online*.
- This error can also be seen if the user has not selected "This database can be overwritten by restore" option in the Mailbox Store properties on the Exchange server. The Event log also shows error. An example event log error message "Exchange VSS Writer failed restoring a backup because the database 'MailboxDatabase.edb' in 'C:\Program Files\Microsoft\Exchange Server\Mailbox\FirstStorage Group' of storage group 'First Storage Group' is targeted for restore, but it has not been marked for overwrite"

Fail to connect to MSSQL Server. Check 'amandabackup' user credentials. MSSQL Log backup failed

SQL server backup requires **amandabackup** SQL user with correct credentials for performing backup and recovery. This message implies the user does not appropriate credentials. Please see MS SQL server requirements section in the **Getting Started** manual. Fix the credentials and run **Validate Backup Set** before running backups. Please note SQL server validation will not check to see if amandabackup SQL user has **sysadmin** server role and must be in **SQL security** group.

MSSQL Differential backup failed

Differential backup of MS SQL server failed. This can happen if SQL VSS writer has failed. Check *vssadmin list writers* command output.

Ouery for database recovery model failed. Check logs for more details.

During backup, ZCB queries the MS SQL databases for their recovery model. This error message occurs when the query fails. Please report this error to Zmanda Support Team with the logs (Tools->Collect Logs) for analysis.

The requested application does not seem to be installed on the machine.

This error message occurs during validation of a backup set that contains SQL server or Exchange server. It means the SQL server or Exchange is not installed on the ZCB machine or could not be contacted.

Recovery Storage Group/Database not found

This error occurs during restoration to recovery storage group in Exchange 2007. This error can occur for following reasons:

- 1. If the recovery storage group name specified in **Restore Where** does not match Exchange configuration, this message is displayed. Please provide the correct storage group name.
- 2. The amandabackup user has not been added to the Exchange View-Only Administrators group. Add amandabackup user to Exchange View-Only Administrators group and restart the ZWCService to resolve the error.

Restoring to Recovery Storage Group/Database is not supported for backups taken by previous client version

You cannot restore Exchange backups taken by ZCB version earlier than 3.0 to recovery storage groups/recovery databases.

Failed to create backup directory

Scheduled backups fail with this error when backing up to a mapped drive (mapped drive is specified as the local folder). ZCB scheduled backups run as SYSTEM user and will not have privileges to access mapped drive. As Administrator user, modify the ZCB scheduler entries in the Windows task scheduler to run as local **amandabackup** or domain **amandabackup** user.

Application <pre/post> <restore|backup> script failed. Check ZWCService logs for more details

The pre or post backup or restore script that is configured for the backup set failed. The ZWCService log file in the Debug sub-folder of the ZCB installation directory has more details about the failure. Any non-zero (or special status of 65531) exit status from the script is considered as a failure.

Application skipped the backup. Check ZWCService log file for more information.

The pre backup script returned exit status of 65331. This special exit code allows pre-backup script to skip a backup run. The same exit status from pre restore script cause restore to be skipped. The backup and restore operation is treated as successful.