

Best Practice for AhsayOBS to AhsayCBS Upgrade and Data Migration

Ahsay Systems Corporation Limited

2 November 2017



www.ahsay.com

Copyright Notice

© 2017 Ahsay Systems Corporation Limited. All rights reserved.

The use and copying of this product is subject to a license agreement. Any other use is prohibited. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system or translated into any language in any form by any means without prior written consent of Ahsay Systems Corporation Limited. Information in this manual is subject to change without notice and does not represent a commitment on the part of the vendor, Ahsay Systems Corporation Limited does not warrant that this document is error free. If you find any errors in this document, please report to Ahsay Systems Corporation Limited in writing.

This product includes software developed by the Apache Software Foundation (http://www.apache.org/).

Trademarks

Ahsay, Ahsay Cloud Backup Suite, Ahsay Online Backup Suite, Ahsay Offsite Backup Server, Ahsay Online Backup Manager, Ahsay A-Click Backup, Ahsay Replication Server, Ahsay BackupBox Firmware, Ahsay Universal Backup System, Ahsay NAS Client Utility are trademarks of Ahsay Systems Corporation Limited.

Amazon S3 is registered trademark of Amazon Web Services, Inc. or its affiliates.

Apple and Mac OS X are registered trademarks of Apple Computer, Inc.

Dropbox is registered trademark of Dropbox Inc.

Google Cloud Storage and Google Drive are registered trademarks of Google Inc.

Lotus, Domino, Notes are registered trademark of IBM Corporation.

Microsoft, Windows, Microsoft Exchange Server, Microsoft SQL Server, Microsoft Hyper-V, Microsoft Azure, One Drive and One Drive for Business are registered trademarks of Microsoft Corporation.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Oracle, Oracle 10g, Oracle 11g and MySQL are registered trademarks of Oracle Corporation.

Rackspace and OpenStack are registered trademarks of Rackspace US, Inc.

Red Hat, Red Hat Enterprise Linux, the Shadowman logo and JBoss are registered trademarks of Red Hat, Inc. www.redhat.com in the U.S. and other countries. Linux is a registered trademark of Linus Torvalds.

ShadowProtect is registered trademark of StorageCraft Technology Corporation.

VMware, ESX, ESXi, vCenter are registered trademarks of VMware, Inc.

All other product names are registered trademarks of their respective owners.

Disclaimer

Ahsay Systems Corporation Limited will not have or accept any liability, obligation or responsibility whatsoever for any loss, destruction or damage (including without limitation consequential loss, destruction or damage) however arising from or in respect of any use or misuse of reliance on this document. By reading and following the instructions in this document, you agree to accept unconditionally the terms of this Disclaimer and as they may be revised and/or amended from time to time by Ahsay Systems Corporation Limited without prior notice to you.

www.ahsay.com

Revision History

Date	Descriptions	Type of modification
16 Jun 2016	First Draft	New
30 Aug 2016	Removed chapters on CRC check and user home backup	Modification
22 Sept 2016	Modified Chapter 1.6	Modification
13 Jan 2017	Added a note in Appendix (Details – Step 4)	Modification
5 Apr 2017	Added Step 4 – Backup Set Index Check Modified Step 3 - User Profile Check	New Modification
31 Oct 2017	Modified Step 4 – Backup Set Index Check, Appendix Step 1, Step 5, Step 10, Step 11	Modification

Table of Contents

1	Overview of AhsayOBS to AhsayCBS Upgrade and Backup Data Migratic	n1
	Step 1 - Software License Check	1
	Step 2 - Backup your AhsayOBS and Users Configuration	1
	Step 3 - User Profile Check	1
	Step 4 - Backup Set Index Check	1
	Step 5 - OS and Application Support Check	2
	Step 6 - Build Your AhsayCBS Installation File (If Necessary)	2
	Step 7 - Upgrade AhsayOBS to AhsayCBS	2
	Step 8 - Disable the Auto Update (AUA) and Data Migration Settings Temporarily	2
	Step 9 - Upgrade AhsayOBM / AhsayACB with Auto Update (AUA) in Stages	3
	Step 10 - Storage and Version Requirement Check for Data Migration	3
	Step 11 - Perform Data Migration for All Backup Data in Stages	3
Ар	pendix	4
	Details - Step 1	4
	Details - Step 2	4
	Details - Step 3	5
	Details - Step 4	7
	Details - Step 5	8
	Details - Step 6	8
	Details - Step 7	9
	Details - Step 8	9
	Details - Step 9	. 10
	Details - Step 10	. 11
	Details - Step 11	. 12

1 Overview of AhsayOBS to AhsayCBS Upgrade and Backup Data Migration

The following is an overview of 11 Key Steps for AhsayOBS v6 to AhsayCBS v7 upgrade, and backup set data migration (the conversion of backup set data from v6 format to v7 block format):

Step 1 - Software License Check

Confirm that your software license has sufficient client access licenses (CAL), replication modules, redirection module, and the AhsayCBS licensee fee and rebranding module (if necessary) is purchased.

The licensing model has changed in version 7. Upgrade from AhsayOBS to AhsayCBS requires additional AhsayCBS instance, client access and replication fee, which are priced on a per device basis.

Refer to Details - Step 1 in Appendix for more details.

Step 2 - Backup your AhsayOBS and Users Configuration

Backup your AhsayOBS server configuration before the upgrade. The configuration backup will provide you with a fallback plan, if the upgrade does not go according to the plan.

Refer to Details - Step 2 in Appendix for more details.

Step 3 - User Profile Check

Check on the user profile of all backup accounts.

Confirm that the user profiles for all backup accounts are valid, to ensure that all accounts will be properly migrated during the upgrade process.

Refer to Details - Step 3 in Appendix for more details.

Step 4 - Backup Set Index Check

Ensure that all backup set indexes are valid on your AhsayOBS v6 backup server to avoid post v7 upgrade index related backup/restore and data migration issues (the conversion of backup set data from v6 format to v7 block format).

Refer to <u>Details – Step 4</u> in Appendix for more details.

Note

From v7.15.0.0 onwards this step does not have to be performed on AhsayOBS v6 for all backup sets prior to upgrade, as AhsayCBS will automatically perform a rebuild of the indexes on each v6 backup set before it proceeds with the migration of v6 indexes files to v7 format.

However, if you have previously encountered corrupted index or data issues with specific backup sets, you may want to rule this out by running a single user rebuild with the "Verify Checksum" option to "enable" to perform an additional data integrity check.

Step 5 - OS and Application Support Check

Review the new Software Compatibility List for version 7.

The Software Compatibility List (SCL) has been updated for version 7, operating system such as Windows XP, Server 2003, or software platform such as Exchange 2003 are no longer supported. Review the list to ensure that all changes are taken into consideration (e.g. you may need to inform users that their OS / software platforms are no longer supported, that they will need to remain on version 6, or to upgrade their OS / software to stay up-to-date)

Refer to Details - Step 5 in Appendix for more details.

Step 6 - Build Your AhsayCBS Installation File (If Necessary)

If your AhsayOBS is customized with your branding, build a customized CBS installation file via the AhsayCBS console.

The branding process of Ahsay software has been enhanced in version 7. Customized CBS (server application) and OBM / ACB (client application) installation files are now built via the AhsayCBS console, instead of the Ahsay Customization Portal.

Refer to Details - Step 6 in Appendix for more details.

Step 7 - Upgrade AhsayOBS to AhsayCBS

Upgrade your production AhsayOBS server after performing all the checking above.

The upgrade process will migrate all server and user settings automatically. However, the process will not migrate any existing backup data to version 7 data format (data migration will be covered in a later step in this overview).

Note

Since AhsayCBS version 7.9, a new service Ahsay Cloud Backup Suite NFS Service (along with Ahsay Cloud Backup Suite) is installed upon installation / upgrade of AhsayCBS. Make sure that the following ports are opened:

- > 111 Port mapper
- > 1058 Port required for Run Direct
- > 2049 Port for the NFS service

Refer to Details - Step 7 in Appendix for more details.

Step 8 - Disable the Auto Update (AUA) and Data Migration Settings Temporarily

Temporarily disable the Auto Update (AUA) and Data Migration settings on the AhsayCBS server.

It is important that the AhsayCBS application is running properly with minimal error, before upgrading your clients to version 7, or migrating data to the new version 7 data format.

Refer to Details - Step 8 in Appendix for more details.

Step 9 - Upgrade AhsayOBM / AhsayACB with Auto Update (AUA) in Stages

Enable the Auto Update (AUA) option for backup accounts progressively.

Prioritize and divide all backup accounts into small batches. Stage the upgrade process by enabling Auto Update for batch of users, one batch at a time. Review the process (e.g. check on the client version, check for backup issue after the upgrade), then continue with the next batch of users, until all clients are upgraded.

Refer to Details - Step 9 in Appendix for more details.

Step 10 - Storage and Version Requirement Check for Data Migration

Check on the User Home; ensure that there are sufficient disk spaces available for the data migration process to take place.

The minimum required storage is 100 GB, but if there is a backup set of size larger than 100 GB, then the disk space requirement will be 150% x size of the largest backup set that resides on the User Home location.

Check on the AhsayOBM / ACB client versions of all users. The data migration process is triggered when a backup job is performed; all client applications must be on version 7.7.0.0 or above to start the data migration process.

Refer to Details - Step 10 in Appendix for more details.

Step 11 - Perform Data Migration for All Backup Data in Stages

Enable the Data Migration setting for backup accounts progressively.

Similar to the client upgrade process, prioritize and divide all backup accounts into small batches. Stage the data migration process, by enabling data migration for batch of users, one batch at a time, to minimize the I/O impact on the User Home volume.

Review the process (e.g. check on the migration process, check for backup issue after the data migration), then continue with the next batch of users, until all data are migrated.

Refer to Details - Step 11 in Appendix for more details.

Appendix

Details - Step 1

Check on your current AhsayOBS license, the licensing model has changed in version 7.

Additional AhsayCBS license fee is required for running AhsayCBS as a backup server, a replication server, or a redirector, this requirement applies to both purchase and meter licenses. Also note that, AhsayCBS replication module is required if you are currently using AhsayRPS and would like to continue to replicate your data.

Refer to the following URL for more details on the new license requirement / model: <u>https://www.ahsay.com/jsp/en/home/index.jsp?pageContentKey=ahsay_pricing_backup-software_v7_list-price</u>

Important to note that, the pricing for AhsayOBM, AhsayACB clients, as well as the replication and redirection module in version 7 are calculated Per Device basis. If you currently have AhsayOBM accounts that are setup for multiple devices, extra licenses will be required per device. You can calculate the extra client access license required, by referring to the instruction provided in the following FAQ: How to determine the number of client licenses required before upgrading from AhsayOBS version 6 to AhsayCBS version 7?

Consult with Ahsay sales representatives if you need any further clarification to the new pricing model / upgrade license requirement of version 7.

Important

Ensure that all license requirements are met before upgrading your AhsayOBS to AhsayCBS.

Details - Step 2

Backup your AhsayOBS server configuration.

- 1. Login to the AhsayOBS web management console.
- 2. Select [Manage System], [Routine Job].
- 3. Check if the [Configuration Archival] system routine job is enabled.

IConfiguration Archival] is enabled

Then you can restore a copy of your server configuration files and all user profiles on the AhsayOBS web management console at [Manage System], [Server Configuration], [Configuration Recovery].

Select the latest date from the [Date] dropdown menu, and then enter the corresponding directory path in the [Path] field. Click [Restore] to restore the files (in a zipped file) to the corresponding path on the AhsayOBS server.

Iconfiguration Archival] is disabled

Then you need to re-enable the [Configuration Archival] system routine job. On the AhsayOBS web management console at [Manage System], [Routine Job], enable the [Configuration Archival] routine job. Adjust the time to start the job immediately, then click [Update].

Once the job is completed, refer to the steps provided in **[Configuration Archival] is enabled** just above, to restore a copy of your server configuration files and all user profiles.

Details - Step 3

Check on the user profile of all backup accounts.

Confirm on the number of backup accounts display on the AhsayOBS web management console under [Manage User], [List User] (select [All] to show all users), compare the number of users listed, to the number of user folders (e.g. folder names with username) found in all User Home(s):

%User_Home%\%username1%

```
%User_Home%\%username2%
```

%User_Home%\%username3%

•••

Example 1:

4 backup accounts are listed on the AhsayOBS web management console: username, username3, username4 and username5, but there are 5 user folders within the User Home. The backup account username2 is not displayed on the AhsayOBS web management console.



For any missing backup accounts (e.g. accounts that have a user folder within the User Home, but are not displayed on the AhsayOBS web management console), check if the user profile of the affected account is corrupted.

Example 2:

Any corrupted user profiles will also be recorded in the AhsayOBS system log. For example, the profile for user 't1' is corrupted.

anage	System Manag	e Log Manage L	iser Manag	e Group Policy Manage System User Administrator's Guide Select La	nguad
ysten	Log Backup Jo	b Restored File	Backup Erros	r Replication Log Advertisement Log	Load
Date (YYYY-MM-DD) :	2017-01-24 💌		Rows/Page: 50	
				<< 1 3 4 5 6 7 8 >>	
No.	Timestamp	Login Name	Owner	Messare	
351	04:05:19 PM	t1		[UserCacheManager.login] Profile corrupted 't1'.	
352	04:05:19 PM	÷.		[info][system] User Module Job starting.	
353	04:05:19 PM	t1		[error][system] [UsrModuleCheck.checkUser] main	
354	04:05:19 PM	t1		[UserCacheManager.login] Profile corrupted 't1'.	
355	04:05:19 PM			[info][system] User Module Job ending.	
356	04:05:19 PM	**	(44)	[info][system] OBS is started up. The product version is 6.27.0.2	
357	04:05:32 PM			[info][www][System][Logon] admin "system" logged on successfully. IP=127.0.0.1 session=635839166789082EA8A8A143CEA35AA3	
358	04:06:00 PM			[info][system][Thread][Job][SystemCleanup]Starting system cleanup	
359	04:06:00 PM			[info][system][Thread][Job][SystemCleanup]Start: System Cleanup	
360	04:06:00 PM			[info][system][Thread][Job][SystemCleanup][PendingEmailCacheCleaning]Start: System Cleanup Removing obsolete pending backup job report	÷
361	04:06:00 PM		(72)	[info][system][Thread][Job][SystemCleanup][PendingEmailCacheCleaning]End: System Cleanup: Removing obsolete pending backup job report	
362	04:06:00 PM	**		[info][system][Thread][Job][SystemCleanup]End: System Cleanup	

Recover the corrupted user profile with the instruction provided in the following URL: <u>https://forum.ahsay.com/viewtopic.php?f=161&t=9997</u>

Example 3:

Another common user profile issue, is duplicated folders/profiles which may occur after relocating or moving user accounts to different user homes. When the original user account folders are not cleaned up properly.

The following messages will be recorded in the AhsayOBS system log if there are duplicated folders.

375	04:18:29 PM	t1	 [info][system]User 't1' is duplicated in directory 'C:\user\t1'.
376	04:18:29 PM		 [info][system] User Module Job starting.
377	04:18:29 PM		 [info][system] User Module Job ending.
378	04:18:31 PM	t1	 [info][system]User 't1' is duplicated in directory 'C:\user\t1'.
379	04:18:31 PM		 [info][system] User Module Job starting.
380	04:18:31 PM		 [info][system] User Module Job ending.
381	04:18:31 PM	t1	 [info][system]User 't1' is duplicated in directory 'C:\user\t1'.
382	04:18:31 PM		 [info][system] User Module Job starting.
383	04:18:31 PM		 [info][system] User Module Job ending.
384	04:18:32 PM	t1	 [info][system]User 't1' is duplicated in directory 'C:\user\t1'.
385	04:18:32 PM		 [info][system] User Module Job starting.
386	04:18:32 PM		 [info][system] User Module Job ending.
387	04:18:32 PM	t1	 [info][system]User 't1' is duplicated in directory 'C:\user\t1'.
388	04:18:32 PM		 [info][system] User Module Job starting.
389	04:18:32 PM		 [info][system] User Module Job ending.

If there are duplicated folders on your user home, please stop your AhsayOBS server and remove the duplicate folders.

Details - Step 4

The backup set index checks need to be done to ensure that immediately after upgrading your backup server from v6 to v7, your backup and restore jobs will run without errors caused by preexisting problematic indexes. Also, indexes issue could affect data migration of v6 data to v7 block format.

1. The weekly rebuild job on AhsayOBS v6 already performs a check of all index files and automatically fixes any problematic index files.

System Job			Time to run
Inactive User Removal	:	Enable Disable	Daily at 09 💙 : 35 🗸 (HH:MM)
Retention Policy Job	:	Enable Disable	Daily at 09 🗸 : 40 🗸 (HH:MM)
Rebuild User Storage	÷	● Enable ○ Disable	Every Sun v at 09 v : 30 v (HH:MM)
System Log Removal		S Enable C Disable	Keep Logs for 365 V Days
Debug Log Removal	:	● Enable ○ Disable	Daily at 09 v : 10 v (HH:MM) Keep Logs for 60 v Days
Cyclic Redundancy Check (CRC) Checking	:	● Enable ○ Disable	Monthly at 00 v : 00 v (HH:MM) At the 2nd and 4th Saturdays of every month Force to check all backup files
Configuration Archival	:	Enable Disable	Daily at 12 v : 30 v (HH:MM)

If the Rebuild User Storage job is disabled please make sure it is enabled and <u>runs to</u> <u>completion before you schedule an upgrade</u>.

 You can check for index related issues in between the weekly rebuild jobs for specific backup user accounts. By quickly scanning the AhsayOBS system logs to check for corrupted index related errors.

420	04:46:27 PM		 [info][www][System][Logon] admin "system" logged on successfully. IP=127.0.0.1 session=2C192EE0A2DB92777B36B7BD77B3C30D
421	04:46:53 PM	t1	 [error][www][error][www][BackupSetIndex.init]@230278c5 Index corrupted 'E:\AhsayOBS and AhsayRPS\user\t1\files\1485074309343'
422	04:46:53 PM	t1	 [BackupSetIndex.init]@230278c5 Index corrupted 'E:\AhsayOBS and AhsayRPS\user\t1\files \1485074309343'
423	04:46:53 PM	t1	 [BackupSetIndex.getBfsBbd] Unable to open index file@230278c5 Index corrupted 'E:\AhsayOBS and AhsayRPS\user\t1\files\1485074309343'
424	04:46:53 PM	t1	 [BlockDB.init] Error initializing bptree
425	04:46:53 PM	t1	 [Bptree.init] Failed to open 'E:\AhsayOBS and AhsayRPS\user\t1\files\1485074309343\index.bdb'. Error='[BlockFile.init] Failed to use 'E:\AhsayOBS and AhsayRPS\user\t1\files\1485074309343 \index.bdb' as BlockFile'
426	04:46:53 PM	t1	 [BlockFile.init] Failed to use 'E:\AhsayOBS and AhsayRPS\user\t1\files\1485074309343\index.bdb' as BlockFile
427	04:46:53 PM	t1	 [FileHeader.parseFirst] FILE_HEADER_PREFIX is not incorrect
428	04:46:57 PM	t1	 [info][system][BackupSetIndex.loadBackupFileHeader]4ab4faeb Iterating all backup file headers in 'E:\AhsayOBS and AhsayRPS\user\t1\files\1485074309343\Current\root' (ClientPath=)

For example, indexes for user account "t1" are corrupted.

3. You can perform a single user rebuild of indexes on each affected backup set from AhsayOBS v6 web console.

o. Backup Set	Data Area**	Retention Area**	Total Upload*	Total Restore*
. b1 Total	341.36M / 338.87M [0%] [1826] 341.36M / 338.87M [0%] [1826]	0/0[0%][0] 0/0[0%][0]	341.35M [1816] 341.36M [1826]	0[0]
			· · · · -	File Validation Option *
le Validation Option				
Last Check	Verify Checksum		Backup Set	
2017-01-24 09:30:0	⊖ C _{Enable} ⊙ _{Disable}			Check
Init : Compressed Size	[Total No. of Files] e / Uncompressed Size [Ratio] [Total No. of Files]		All	

Note: You can set the "Verify Checksum" option to "enable" to perform an additional data integrity check on the data, to rule out any possible data corruption. But with this option enabled

the single user rebuild process will take longer to complete as each individual file/folder is checked. The actual time taken increases in proportion to the number of files/folders in each backup set.

Please remember to check the user log, to monitor the single user rebuild status and after the job is completed, to verify if the issue has been resolved or if further follow up action is required.

1anaq	e System Man	lage Log Manage User Manage Group Policy Manage System User [t2] Select Langua
Add U	ser List User .	Run Backup Auto Update User Profile Backup Set File Explorer Report Statistics User Log
Date	(YYYY-MM-DD): 2017-01-24 💌 Rows/Page: 50 💌
No.	Timestamp	Message
1	09:30:09 AM	Thread-19Starting single user rebuild
2	09:30:09 AM	Thread-19 [SingleUserRebuild] User='t2' Home='E:\AhsayOBS and AhsayRPS\user\t2'
3	09:30:10 AM	[BackupSetBFS.rebuildBFS] Rebuilding User='t2' BSet='1485077931529' Job='2017-01-22-17-40-28'
4	09:30:10 AM	[BackupSetBFS.rebuildBFS] Rebuilding User='t2' BSet='1485077931529' Job='Current'
5	09:30:10 AM	BackupSetBFS.rebuildIndexDir] Rebuilding User="t2" BSet="1485077931529" Job="Current" Directory="E:\AhsayOBS and AhsayRPS\user \t2\files\1485077931529\Current\0x00\0x19\0x3d\0x7f"
6	09:30:16 AM	Thread-19 [SingleUserRebuild] Finished single user rebuild. User="t2' Owner=" DataSize(compressed)=341.36M DataSize=338.87M DataFileNo=1,826 RetentionSize(compressed)=0 RetentionSize=0 RetentionFileNo=0
7	09:40:02 AM	[Thread][Job][RetentionPolicy] Cleaning retention area for 't2'
8	09:40:02 AM	[Thread][Job][RetentionPolicy] Cleaning retention area for 't2'
9	09:40:02 AM	[Thread][Job][RetentionPolicy] Cleaning retention area for 't2' BackupSet='b1(1485077931529)

Details - Step 5

The list of supported operating system and software platforms for Ahsay software version 7 has been updated. Review the software compatibility list in the <u>FAQ: Ahsay Software Compatibility List</u> (SCL) for version 7.3 or above (5001)

Some important changes include:

- MS Exchange 2003 is not supported.
- MS SQL 2000 is not supported.
- Windows XP, Server 2003 are no longer supported.
- AhsayACB can only be installed on non-server grade Windows platforms.

Review the list to ensure that all changes are taken into consideration (e.g. you may need to inform users that their OS / software platform is no longer supported, they will need to upgrade the OS / software to stay up-to-date with AhsayOBM / ACB, or they can remain on version 6).

For existing AhsayACB installation on server grade Windows platforms, upgrade the backup account to an AhsayOBM account, then re-install AhsayOBM version on the affected computer, or the client can remain on version 6.

Important

For replication from AhsayCBS v7 to AhsayCBS v7 where the backup server was upgraded from v6, all backup sets on the backup server must undergo the data migration process to convert to v7 data format before they can be replicated to the AhsayCBS v7 replication server.

Please refer to the data migration instructions in the **Backup Data Migration** section under chapter **6.1 Backup/Restore Basic Configuration** in the <u>AhsayCBS Administrator's Guide</u>.

Details - Step 6

This step only applies to customized / branded AhsayOBS.

The branding process of Ahsay software has been enhanced in version 7. Customized CBS installation files are built via the AhsayCBS web console, instead of the Ahsay Customization Portal.

- 1. On a stand-alone computer, download and install AhsayCBS: <u>https://www.ahsay.com/jsp/en/home/index.jsp?pageContentKey=ahsay_downloads_latest-</u> <u>software_ahsaycbs</u>
- 2. Login to the AhsayCBS web console, select [System Settings], [License].
- 3. Apply your license with rebranding option, and under valid maintenance plan.

Note

In order to customize the AhsayCBS web console, client user interface, server and client installation files, the rebranding option must be enabled for your existing license and the support maintenance plan for the license must be valid.

Contact Ahsay sales representatives if you need to purchase the rebranding option, or if you need to renew the support maintenance plan for your license.

- 4. Under [System Settings], [Basic], select [Administrative Access], then [system].
- 5. Customize the server and client application via [Rebrand Web Console] and [Rebrand Clients].
- 6. Build the branded CBS installation file via [Rebrand Web Console], then [Build Installers].

Details - Step 7

Upgrade your production AhsayOBS server after performing all the steps above.

- 1. On the production AhsayOBS server:
 - For default AhsayOBS with no branding, download the AhsayCBS installer at: <u>https://www.ahsay.com/jsp/en/home/index.jsp?pageContentKey=ahsay_downloads_l</u> <u>atest-software_ahsaycbs</u>
 - For customized / branded AhsayOBS, download the AhsayCBS installer that you built from the previous step (e.g. from the stand-alone server with AhsayCBS installed).
- 2. Upgrade the AhsayOBS application to AhsayCBS. Refer to Chapter 4 of the <u>AhsayCBS</u> <u>version 7 Upgrade / Migration Guide</u> for instruction.
- 3. Login to the AhsayCBS web console; review the server settings after the upgrade is completed.

Details - Step 8

Temporarily disable the Auto Update (AUA) and Data Migration settings on the AhsayCBS server.

Ensure that the server is running with minimal error, before upgrading the AhsayOBM / AhsayACB clients to version 7 / before migrating the user data to the new version 7 data format.

- 1. Login to the AhsayCBS web console.
- 2. Disable the Auto Update (AUA) option, under [Backup / Restore], click [Users, Groups & Policies].

- 3. Select all users, then click [Auto Update] (circular button under [Manage Backup User]).
- 4. Select all users, then click [Cancel Auto Update], then [Save].
- 5. Disable the Data Migration option, under [Backup / Restore], click [Basic].
- 6. Under [Backup Data Migration], switch off [Enable Data Migration], then [Save].



- 7. Monitor on the AhsayCBS status via the AhsayCBS web console at [Monitoring], [Dashboard].
- 8. Check for any error displayed under [To Dos], [System Errors].

Resolve any system error that may be displayed. Contact Ahsay support representatives if you require any assistance on resolving system error that is displayed.

9. Allow the AhsayCBS server to run for a few days, continue to the next step when no system error is displayed on the dashboard.

Details - Step 9

Upgrade the client applications for all backup accounts in stages.

1. Prioritize and divide all backup accounts into small batches.

Consider to upgrade clients with existing software issue that are resolved in version 7 / or required a new features introduced in version 7 with higher priority (e.g. support for MS Exchange 2016, Run Direct feature for virtual machine backup). Divide all users into small batches (e.g. 10 users per batch).

- 2. Stage the upgrade process; enable Auto Update for the first batch of users.
- 3. Login to the AhsayCBS console, under [Backup / Restore]; click [Users, Groups & Policies].
- 4. Select all users of the first batch, and then click [Auto Update] (circular button under [Manage Backup User]):

C AhsayCE	S										
Backup User	User Group	Policy Group	Windows Active	Directory Integratio	n						
Manage your ba	ckup users in this	section.									
Manage Bac	kup User 🕜										
+	R 1 1 8			Filter Client Type	User	 Registration 	Date 🖌 Us	ser Group 🔽	Auto	Update 💊	/
Aut	o Update								P	Х	?

5. Select all users, then click [AutoUpdate], then [Save].



6. Review the upgrade process, the client application should be upgraded automatically within 12 hours.

Check on the client version via the Auto Update page, and check for any backup issue after the upgrade. In the AhsayCBS web console at [Monitoring], [Dashboard], [To Dos]. All failed backup jobs are displayed under [Failed Backups].

Resolve all backup errors, contact Ahsay support should you require any assistance to resolve the backup error.

- 7. Repeat the same process for the next batches of users, until all client applications are upgraded.
- 8. Make sure that at least 1 backup job is completed for each backup set.

Details - Step 10

- 1. Ensure there are no disk related issues on your AhsayOBS v6 server (by checking the O/S logs).
- 2. Ensure that there are sufficient disk spaces available on your user home drives for the data migration process, and all backup clients are upgraded to 7.7.0.0 or above. Also make sure that at least one backup job had been performed for all backup sets. If you find disk space issues you may need to relocate backup users to another user home drive or add more physical storage before you decide to schedule an upgrade.

During the data migration process, storage capacity of the corresponding backup set will be doubled, as data in version 6 and 7 formats will co-exist temporarily, until the migration process is complete for the backup set. After the backup set has been successfully migrated to version 7 format, the original version 6 data will be automatically removed at the start of next hour by a system job.

Check on the User Home; ensure that there are sufficient disk spaces available. The absolute minimum requirement of free storage is 100 GB; the migration process will not start unless there is 100 GB of free space available.

For User Home with backup set of size larger than 100 GB, the free space requirement will be 150% x size of the largest backup set. Locate backup set of size larger than 100 GB by checking on the size of all backup set folders in the User Home, in the following format:

%User_Home%\username\files\%backupset_id%

Next, check on the client version of all backup accounts. The data migration process is triggered when a backup job is started; all client applications must be on version 7.7.0.0 or above to start the migration request:

- 1. Login to the AhsayCBS web console.
- 2. Under [Backup / Restore]; select [Users, Groups & Policies].

3. Select all users, and then click [Auto Update] (circular button under [Manage Backup User]):

G AhsayCBS	
Backup User User Group Policy Group Window	s Active Directory Integration
Manage your backup users in this section.	
Manage Backup User 🚱	
+ 1 4 7 A B & M	Filter Client Type 💙 User 💌 Registration Date 💙 User Group 👻 Auto Update 💌
Auto Update	🖹 🗙 ?

4. Check on the [Client Version] of each backup account to ensure that they are upgraded to version 7.7.0.0 or above.

Important

For backup set with data migration enabled, the migration process may cause a slight delay to the backup operation with the extra I/O operation on the User Home volume.

Note:

Details of the new index and data format of version 7 can be found in the following <u>FAQ</u>: <u>Frequently Asked Questions about Ahsay Cloud Backup Suite 7 (5005)</u>

Details - Step 11

Migrate data from version 6 data format to the redesigned format of version 7.

1. Prioritize and divide all backup accounts into small batches.

Consider to migrate data for users with backup or restore performance issues with higher priority. Divide all users into small batches (e.g. 10 - 20 users per batch).

- 2. Stage the data migration process, enable data migration for the first batch of users. Login to the AhsayCBS console, under [Backup / Restore]; click [Basic].
- 3. Select [Backup Data Migration], and then switch on [Enable Data Migration].

Note
By default, data migration will be enabled for all backup sets.

- 4. Exclude all users that are not selected for the first batch. Under [Migrate backup data excluded following backup set(s)], click on the [Create] button (circular + button).
- 5. Select the checkboxes beside all backup accounts that are not selected for the first batch.
- 6. Click [Add] afterward, then click [Save].
- 7. Review on the migration process.

On the AhsayCBS web console at [Monitoring], select [Administration Logs], and then [Activities Log]. Change the [Filter] type to [Migrate V6 Data Info] to check on the migration process.

Note

The following log entry can be found when a migration process is started for a backup set:

[Thread][Job][MigrateV6File]Start Migrating v6 data of user 'username', backup set 'backupset_name'

The following log entries can be found when the migration is completed:

[Thread][Job][MigrateV6File]Finish migrating v6 data of user ' username ', backup set ' backupset_name '

[Thread][Job][MigrateV6File]End Migrating v6 data of user ' username ', backup set ' backupset_name '

Check for any backup issue after the data migration. In the AhsayCBS web console at [Monitoring], [Dashboard], [To Dos]. All failed backup jobs are displayed under [Failed Backups].

- 8. Resolve all backup errors; contact Ahsay support should you require any assistance to resolve the backup error.
- 9. Repeat the same process for the next batches of users, until backup sets of all users are migrated to version 7 data format.