

Ahsay Online Backup Restorer v7 User Guide for Linux

Ahsay Systems Corporation Limited

1 November 2017

A wholly owned subsidiary of Ahsay Backup Software Development Company Limited HKEx Stock Code: 8290

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Revision History

Date	Descriptions	Type of modification
1 November 2017	First Draft	New
17 Oct 2017	Added comparison of online and offline installation for Ch.4 ; Added Offline installation for Ch.4.1, 4.2 ;	New

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1 Overview

What is this software?

Ahsay brings you specialized restore software, namely Ahsay Online Backup Restorer (AhsayOBR), to provide a quick and secure solution for restoring your backup data anytime and anywhere. This software is designed specifically as a one-time restorer and is not served for performing backup and configuring any backup user settings. The software supports restoring data that is backed up with AhsayACB or AhsayOBM.

System Architecture

Below is the system architecture diagram illustrating the major elements involved in the process when you are using the AhsayOBR to restore data.

In this user guide, we will focus on information to get you started with using the software, as well as instructions on performing an end-to-end restore process.



*Original location – the backed up data will be restored on the computer running the AhsayOBR under the same directory path as on the machine storing the backup source. For example, if the backup source files are stored under **root/Downloads** folder, the data will be restored to **root/Downloads** as well on the computer running the AhsayOBR.



Why should I use AhsayOBR to restore backup data?





There may be times when you wish to restore your backed up data but have no access to the computer with the Client backup Agent (e.g. AhsayOBM) installed. AhsayOBR is exactly designed to cater to your needs under such circumstances.

You can now download and launch the OBR anytime and anywhere you like as long as you have a computer with a web browser installed and Internet connection.

Fast Download and Launch

Unlike a Client Backup Agent (e.g. AhsayOBM) which is significantly larger in file size and takes longer time to install on your computer, AhsayOBR is a compact solution that can be downloaded and launched in a short period of time in just a few clicks.

Besides, the AhsayOBR is designed as a one-time restorer that will be removed from your computer completely after it is closed. All the restore log files or settings will also be removed from the computer altogether. So you would not need to spend the time on uninstalling the software after you finished the restore.

Leave no Footprint

When you are trying to restore your backed up data remotely, the computer you use for restore may not have the same level of security settings as the one you normally use for backup and restore onsite. Therefore, it may not be completely secure to install a Client Backup Agent (e.g. AhsayOBM) to restore data because the backup agent will store information such as the backup user's personal info, backup set settings, backup/restore logs, etc. Using a Client Backup Agent for restore under such circumstances may pose potential thread to your personal and confidential information.

That is why the AhsayOBR is designed as a single-purpose restorer with high level of security protection. The restorer takes you right to the restore start point after login, where you can start performing a restore right away. It will also be removed completely after the restore is done, so you don't have to worry about leaving important information behind in the restore logs which could be viewed by a third party.

Features comparison between Client Backup Agent and AhsayOBR

While you can still download a Client Backup Agent (AhsayACB / AhsayOBM) to restore data, AhsayOBR gives a quick, direct and secure solution just for the data restore purpose. Below is a table comparing some major features of both tools, and the pros and cons of using them.

Feature	Tool	Pros	Cons	
Installation	AhsayOBR	No installation requiredFaster to launch	Required to launch every time when you use	
	Client Backup Agent	One-time installation	Larger installer size hence longer installation time	
Run Direct Restore	AhsayOBR	N/A	Run Direct restore for VMware and Hyper V servers is NOT supported. Since AhsayOBR is not a Client Backup Agent and therefore NFS is not bundled along with the software. NFS is a mandatory item for performing Run Direct restore for VMware and Hyper V servers.	
	Client Backup Agent	Support Run Direct restore for both VMware and Hyper V servers.	N/A	
Cross platform	AhsayOBR	Although both tools are available for use on various platforms, e.g. Windows, Mac, Linux, etc., cross platform restore is NOT		
usage	Client Backup Agent	recommended. For example, files backed up on Windows are not recommended to restore on a Mac/Linux machine.		
Compatibility	AhsayOBR	Support restore of backup set created on either AhsayACB / AhsayOBM	N/A	
	Client Backup Agent	N/A	Support restore of backup set created by the same type of Client Backup Agent only. E.g. backup set created on AhsayOBM can only be restored by AhsayOBM.	

2 About This Document

What is the purpose of this document?

This document aims at introducing the AhsayOBR software and its features, providing all necessary information to download and launch the AhsayOBR software and instructions on performing restore.

What should I expect from this document?

After reading through this documentation, you can expect to have sufficient knowledge to download and launch the AhsayOBR software, as well as to perform a restore.

Who should read this document?

This documentation is intended for backup users who need to perform restore while they have no access to their Client Backup Agent (e.g. AhsayOBM).

Overview of Document Content Structure

Below is a flow chart illustrating the major chapters this document will cover in sequence.



3 Prepare for Using AhsayOBR

Hardware Requirements

You can launch the AhsayOBR on a physical machine or on a virtual machine. The hardware requirements for launching AhsayOBR is the same as installing AhsayOBM.

Refer to the link below for details of the minimum and recommended requirements for launching the software.

FAQ: Ahsay Hardware Requirement List (HRL) for version 7.3 or above (5000).

Software Requirements

Make sure Linux is installed with GUI desktop environment, i.e. GNOME, KDE, Cinnamon, etc.

4 Download and Launch AhsayOBR

There are two ways to download and launch the AhsayOBR on your Linux machine. You can either use the Linux GUI directly on the machine itself **OR** remotely access the Linux machine via a SSH client with X11 forwarding.

From version 7.15.0.0 onwards, there are two installation modes of AhsayOBR, online installation and offline installation. Below is the table of comparison between online installation and offline installation.

	Online Installation	Offline Installation
Version Supported	From v7.3.2.0 onwards.	From v7.15.0.0 onwards.
Installation Time	 Takes more time as it needs to download the binary and component files (80MB to 140MB depending on operating system) each time the installation is run. Online installer size is 9KB to 3.5MB depending on operating system as it contains only the initial installation package files. 	 Takes less time as all the necessary binary and component files are already available in the offline installer and offline installer can be downloaded once but reused many times. Offline installer size is 80MB to 140MB depending on operating system as it contains all the necessary binary and component files.
Deployments	 Suitable for sites with fast and stable internet connection as internet connection is needed each time when an installation is run. A slow internet connection will result in longer installation time and interrupted or unstable internet connection may lead to unsuccessful installation. Ensures the latest version of the product is installed. 	 Suitable for client sites with metered internet connections as once the offline installer is downloaded, internet connection is not needed each time when an installation is run. May not be the latest version.

Method 1 - Using Linux GUI

This section aims at providing instructions on downloading and launching AhsayOBR using the Linux GUI directly on the machine.

Download AhsayOBR

- 1. Download the AhsayOBR from your backup service provider's website. Click the blue download icon at the top right corner as shown.
 - English 🗸 📩
- 2. In the **Restore** tab of the download page, you can choose the AhsayOBR installer by operating system.

G AhsayCBS		
AhsayOBM AhsayACB Mobile	Restore	
Choose operating system.		
Windows		Download (Online)
📺 Mac OS X		 ▲ Download (Online) ▲ Download (Offline)
👌 Linux		 ▲ Download (Online) ▲ Download (Offline)
🧉 FreeBSD		▲ Download (Online) ▲ Download (Offline)
solaris Solaris (x86)		 ▲ Download (Online) ▲ Download (Offline)
Ubuntu		 ▲ Download (Online) ▲ Download (Offline)

3. In the Linux section, click on the Download (Online) or Download (Offline) button to download the AhsayOBR installation package.





Launch AhsayOBR

Option 1: Online Installation Option

1. Create a folder under the /usr/local directory. You could name the folder obr.



- 2.
- Open the folder and then move the file you have just downloaded into it.



3. Click **Applications** at the top menu bar, then select **System Tools>Terminal**.



4. Use the command highlighted in red to enter the **usr/local/obr** folder.

[root@[machine's name]~]# cd /usr/local/obr

- 5. Use the command highlighted in red to execute the launcher.
 [root@[machine's name] obr]# sh [name of the file you downloaded]
- 6. The following scripts show while the launcher is being downloaded.

Log Time: Wed Nov 2 14:50:26 HKT 2016 Downloading package jre-std-linux-amd64.tar.gz... % Total % Received % Xferd Average Speed Time Time Time Current Dload Upload Total Spent Left Speed 100 43.7M 100 0 0 19.8M 0 0:00:02 0:00:02 --:--:--43.7M 22.7M Download completed Downloading package app-common.tar.gz... % Total % Received % Xferd Average Speed Time Time Time Current Dload Upload Total Spent Left Speed 100 26.8M 100 26.8M 0 0 20.6M 0 0:00:01 0:00:01 --:--:--21.3M Download completed Downloading package app-native-nix-x64.tar.gz... % Total % Received % Xferd Average Speed Time Time Time Current Dload Upload Total Spent Left Speed 100 521k 100 521k 0 0 6581k 0 --:--:-- --:-- 14.9M Download completed Downloading package app-nix-obm.tar.gz... % Total % Received % Xferd Average Speed Time Time Time Current Dload Upload Total Spent Left Speed 100 10785 100 10785 0 0 218k 0 --:--:-- --:-- 2106k Download completed Untar component file : /usr/local/obr/RestoreWizard/ components/app-common.tar.gz Untar component file : /usr/local/obr/RestoreWizard/ components/app-inst-nixobm.tar.gz Untar component file : /usr/local/obr/RestoreWizard/ components/app-native-nixx64.tar.gz Untar component file : /usr/local/obr/RestoreWizard/ components/app-nix-obm.tar.gz tar: bin/cbCoreRes_ar.properties: time stamp 2016-11-02 14:51:02 is 19.1162135 s in the future tar: bin/cbCoreRes_bg.properties: time stamp 2016-11-02 14:51:02 is 19.106552357 s in the future tar: bin/cbCoreRes ca.properties: time stamp 2016-11-02 14:51:02 is 19.105111126 s in the future tar: bin/cbCoreRes cs.properties: time stamp 2016-11-02 14:51:02 is 19.103632315 s in the future tar: bin/cbCoreRes da.properties: time stamp 2016-11-02 14:51:02 is 19.102470297 s in the future



7. AhsayOBR is launched successfully when you see the following screen.

0	AhsayOBM		_ 🗆 🗙
		English 🗸	
			No.
	O AhsayOBM		-A
	Login name		
	Password		
	Save password		
	Forgot password		
	Show advanced option	ок	

Option 2: Offline Installation Option

1. Right click on the AhsayOBR installation package .gz file to extract.



2. Open the folder to check the extracted installation package.



3. Create a folder under the /**usr/local** directory. You could name the folder **obr**. Open the folder and then move the file you have just extracted into it.



4. Click **Applications** at the top menu bar, then select **System Tools>Terminal**.



5. Use the command highlighted in red to enter the **/usr/local/obr** folder.

[root@[machine's name]~]# cd /usr/local/obr

- 6. Use the command highlighted in red to execute the launcher.
 [root@[machine's name] obr]# sh [name of the file you extracted]
- 7. The following scripts show while the launcher is being launched. And the installation is completed when **Done** shows at the end of the script.

```
Log Time: Tue Oct 17 11:03:12 HKT 2017
Using package in Log Time: Tue Oct 17 11:03:12 HKT
2017/app.pkg
Package version: 7.15.0.0
Untar jre-std-linux-amd64.tar.gz to /tmp/ obm.171017110312/jvm
Untar app-common.tar.gz to /tmp/ obm.171017110312
Untar app-native-nix-x64.tar.gz to /tmp/_obm.171017110312
Untar app-nix-obm.tar.gz to /tmp/ obm.171017110312
Untar aua-common.tar.gz to /tmp/ obm.171017110312
Untar aua-native-nix-x64.tar.gz to /tmp/ obm.171017110312
Untar aua-nix-obm.tar.gz to /tmp/ obm.171017110312
Untar util-common.tar.gz to /tmp/ obm.171017110312
Untar util-nix-obm.tar.gz to /tmp/_obm.171017110312
Untar properties-common.tar.gz to /tmp/ obm.171017110312
Untar app-inst-nix-obm.tar.gz to /tmp/ obm.171017110312
Untar aua-inst-nix-obm.tar.gz to /tmp/ obm.171017110312
Configure Application Path: /home/admin/Downloads/obr-
linx/RestoreWizard
Log Time: Tue Oct 17 11:03:18 HKT 2017
Verifying current user privilege ...
Current user has enough privilege to "config".
Start configuration on Generic Linux Platform (Linux)
Installation Path: /home/admin/Downloads/obr-
linx/RestoreWizard
Minimum supported JVM version
Maximum supported JVM version: 1.8
Current JVM version is supported for installation.
Create Backup Manager JVM, Path: /home/admin/Downloads/obr-
linx/RestoreWizard/jvm/bin/bJW
Create Scheduler Service JVM, Path: /home/admin/Downloads/obr-
linx/RestoreWizard/jvm/bin/bJW
Setup File Permissions
localuser: root being added to access control list
Startup Ahsay Online Backup Manager ...
Done
```

8. AhsayOBR is launched successfully when you see the following screen.

0	AhsayOBM		
		English	
	AhsayOBM		
	Login name		
	Password		
	Save password Forgot password		
	Show advanced option	ОК	

Method 2 - Using SSH to remotely download and launch for a Linux machine with X11 forwarding

This section aims at providing instructions on using a SSH client to remotely log in to the Linux machine on which you wish to download and launch the AhsayOBR. After completing the download and launch, with the use of X Windows System, a projection of the Linux UI image is made possible, where you can follow the on-screen instructions on the AhsayOBR interface to perform a restore remotely.

Download and Launch AhsayOBR

Option 1: Online Installation Option

- Before logging in to the Linux machine using a ssh client, please make sure you have the X Windows System installed on the machine, which is used to project the Linux UI image on your Windows. If you do not have one, the URL below is one of those you can download from the Internet. <u>https://sourceforge.net/projects/xming/</u>
- 2. Launch the SSH client that you are using to connect to the Linux machine.

🕵 PuTTY Configuratio	n	X
Category:		
Session		Basic options for your PuTTY session
Logging		Specify your connection by host name or IP address
E. Terminal		Host Name (or IP address) Port
Bell		22
Features		Protocol:
🚊 Window		<u>R</u> aw
···· Appearance ···· Behaviour		Load, save or delete a stored session
Translation		Sav <u>e</u> d Sessions
Selection	Ξ	
Colours		Default Settings
···· Data ···· Proxv		Save
Telnet		Delete
···· Rlogin		
⊟ SSH		
Kex Auth		Close <u>w</u> indow on exit:
- X11		Always Never Only on clean exit
- Tunnels	Ŧ	
About		<u>O</u> pen <u>C</u> ancel

3. Enter the host name and port of the Linux machine.

🕵 PuTTY Configuratio	n	×
Category:		
Session		Basic options for your PuTTY session Specify your connection by host name or IP address
⊡ ·· Terminal -··· Keyboard -··· Bell		Host Name (or IP address)Port10.21.2.3522
····· Features ⊡·· Window ···· Appearance		Protocol: ◎ Raw ◎ Telnet ◎ Rlogin ◎ SSH
	=	Load, save or delete a stored session Saved Sessions
Colours Connection Data Proxy Telnet Rlogin		Default Settings Load Save Delete
⊡- SSH Kex Auth X11 Tunnels	•	Close window on exit: Always Never Only on clean exit
About		Open Cancel

 Navigate to the Connection>SSH>X11 section. Enable the X11 forwarding feature and then enter the IP address of the machine on which you wish the Linux UI image to be projected on.



5. Click **Open** to connect to the Linux machine when you are done with the settings.



6. Login using the root account.

🛃 10.21.2.35 - PuTTY	
login as: root	·

7. Enter the password for login if necessary.

🚰 10.21.2.35 - PuTTY	
login as: root	
root@10.21.2.35's password:	
	-

8. Create a new folder to launch the AhsayOBR under the **/usr/local** directory using the red command line below.

[root@[machine's name]]# mkdir -p /usr/local/obr

- 9. Navigate to the folder you have just created using the red command line below.
 [root@[machine's name]]# cd /usr/local/obr
- 10. You now have to copy for download URL of the AhsayOBR Linux launcher from your backup servicer provider. Open the CBS login page provided by your backup service provider on a web browser, then click the blue download icon at the top right corner.

English 🗸 🛃	
-------------	--



11. Click on the **Restore** tab.



12. Right click on the **Download (Online)** button in the Linux section, then click on **Copy** Link Location to copy the download URL.





13. Use the wget command in red below to download the AhsayOBR launcher from the CBS server.

```
[root@[machine's name] obr]# wget --no-check-certificate
https://10.3.1.8/cbs/download/o br-nix-443-10.3.1.8-https.sh
--2016-11-04 18:17:43-- https://10.3.1.8/cbs/download/obr-nix-
443-10.3.1.8-https.sh
Connecting to 10.3.1.8:443... connected.
WARNING: cannot verify 10.3.1.8âs certificate, issued by
â/C=CN/ST=Hong Kong (SA R)/L=Hong Kong/O=Ahsay System
Corporation Limited/OU=Information System Departme nt/CN=Ahsay
System Corporation Limited/emailAddress=ca@ahsay.comâ
 Self-signed c ertificate encountered.
WARNING: certificate common name âNot Secureâ10.3.1.8â
 HTTP request sent, awaitin g response... 200 OK
Length: 10875 (11K) [application/octet-stream]
Saving to: âobr-nix-443-10.3.1.8-https.shâ
100%[=====>] 10,875 --.-K/s
in Os
2016-11-04 18:17:43 (46.1 MB/s) - âobr-nix-443-10.3.1.8-
https.shâ
[root@cos6x-2-35 ~]#
```

14. Execute the AhsayOBR launcher using the red command line below.

```
[root@[machine's name] obr]# sh obr-nix-443-10.3.1.8-https.sh
Log Time: Fri Nov 4 18:27:59 HKT 2016
Downloading package jre-std-linux-amd64.tar.gz...
% Total % Received % Xferd Average Speed Time Time Time
Current
Dload Upload Total Spent Left Speed
100 43.7M 100 43.7M 0 0 18.8M 0 0:00:02 0:00:02 --:--:- 22.0M
Download completed
```



```
Downloading package app-common.tar.gz...
  % Total % Received % Xferd Average Speed Time Time
Current
  Dload Upload Total Spent Left Speed
100 26.8M 100 26.8M 0 0 18.4M 0 0:00:01 0:00:01 --:-- 18.9M
Download completed
Downloading package app-native-nix-x64.tar.gz...
  % Total % Received % Xferd Average Speed Time Time
Current
  Dload Upload Total Spent Left Speed
100 521k 100 521k 0 0 6686k 0 --:--:-- --:-- 15.4M
Download completed
Untar component file :
/usr/local/obr/RestoreWizard/ components/app-common.tar.gz
Untar component file :
/usr/local/obr/RestoreWizard/ components/app-inst-nix-
obm.tar.gz
Untar component file :
/usr/local/obr/RestoreWizard/ components/app-native-nix-
x64.tar.gz
tar: bin/cbCoreRes ar.properties: time stamp 2016-11-04
18:28:38 is 24.306280921 s in the future
tar: bin/cbCoreRes_bg.properties: time stamp 2016-11-04
18:28:38 is 24.303767291 s in the future
tar: bin/cbCoreRes_ca.properties: time stamp 2016-11-04
18:28:38 is 24.301673124 s in the future
tar: bin/cbCoreRes cs.properties: time stamp 2016-11-04
18:28:38 is 24.299822553 s in the future
tar: bin/cbCoreRes da.properties: time stamp 2016-11-04
18:28:38 is 24.296303028 s in the future
tar: bin/cbCoreRes de.properties: time stamp 2016-11-04
18:28:38 is 24.294428585 s in the future
Untar component file :
/usr/local/obr/RestoreWizard/ components/util-common.tar.gz
Untar component file :
/usr/local/obr/RestoreWizard/ components/util-nix-obm.tar.gz
Untar jvm and component files finished
Configure Application Path: /usr/local/obr/RestoreWizard
Log Time: Fri Nov 4 18:28:14 HKT 2016
Verifying current user privilege ...
Current user has enough privilege to "config".
Start configuration on Generic Linux Platform (Linux)
Installation Path: /usr/local/obr/RestoreWizard
Minimum supported JVM version: 1.7
Maximum supported JVM version: 1.8
Current JVM version is supported for installation.
Create Backup Manager JVM, Path:
/usr/local/obr/RestoreWizard/jvm/bin/bJW
Create Scheduler Service JVM, Path:
/usr/local/obr/RestoreWizard/jvm/bin/bschJW
Setup File Permissions
```

localuser:root being added to access control list
X Error of failed request: BadValue (integer parameter out of
range for operation)
Major opcode of failed request: 109 (X_ChangeHosts)
Value in failed request: 0xe
Serial number of failed request: 7
Current serial number in output stream: 9
Startup Ahsay Online Backup Manager ...

15. AhsayOBR is launched successfully when you see the following screen.

Image: Contract of the image: Cont	AhsayOBM			X
Contraction Contra				
Login Login name Password Save password			English	-
Login Login name Password Save password				
Login name Password Save password		AhsayOBM		
Login name Password Save password				
Save password				
Save password		Decruerd		
		rassword		
Forgot password				
		Forgot password		
Show advanced option		Show advanced option	ок	

Option 2: Offline Installation Option

If you would like to use offline installation option, replace the steps 12-15 of <u>online</u> <u>installation option</u> with the following steps:

 Right click on the Download (Offline) button in the Linux section, then click on Copy Link Location to copy the download URL.



 Use the wget command in red below to download the AhsayOBR launcher from the CBS server.

```
[root@localhost obr]# wget --no-check-certificate
https://10.120.10.30/cbs/download/obr-linux.tar.gz
--2017-10-17 12:21:11--
https://10.120.10.30/cbs/download/obr-linux.tar.gz
Connecting to 10.120.10.30:443... connected.
WARNING: cannot verify 10.120.10.30's certificate, issued by
"/C=CN/ST=Hong Kong
                      (SAR)/L=Hong Kong/O=Ahsay System
Corporation Limited/OU=Information System Depa
rtment/CN=Ahsay System Corporation
Limited/emailAddress=ca@ahsay.com":
  Self-signed certificate encountered.
    WARNING: certificate common name "Not Secure" doesn't
match requested host n ame "10.120.10.30".
HTTP request sent, awaiting response... 200 OK
Length: unspecified [application/octet-stream]
Saving to: "obr-linux.tar.gz"
    Γ
       <=>
                                               ] 138,710,125
3.34M/s in 32s
2017-10-17 12:21:47 (4.12 MB/s) - "obr-linux.tar.gz" saved
[138710125]
```

- 3. Use the tar command in red below to extract the downloaded AhsayOBR launcher .gz file.
 [root@localhost obr]# tar zxvf obr-linux.tar.gz
- 4. Execute the AhsayOBR launcher using the red command line below.

```
[root@localhost obr]# sh obr-linux.sh
Log Time: Tue Oct 17 13:40:08 HKT 2017
Using package in /usr/local/obr/app.pkg
Package version: 7.15.0.0
Untar jre-std-linux-amd64.tar.gz to /tmp/_obm.171017134008/jvm
Untar app-common.tar.gz to /tmp/_obm.171017134008
Untar app-native-nix-x64.tar.gz to /tmp/ obm.171017134008
```

```
Untar app-nix-obm.tar.gz to /tmp/_obm.171017134008
Untar aua-common.tar.gz to /tmp/_obm.171017134008
Untar aua-native-nix-x64.tar.gz to /tmp/ obm.171017134008
Untar aua-nix-obm.tar.gz to /tmp/_obm.171017134008
Untar util-common.tar.gz to /tmp/_obm.171017134008
Untar util-nix-obm.tar.gz to /tmp/_obm.171017134008
Untar properties-common.tar.gz to /tmp/_obm.171017134008
Untar app-inst-nix-obm.tar.gz to /tmp/ obm.171017134008
Untar aua-inst-nix-obm.tar.gz to /tmp/ obm.171017134008
Configure Application Path: /usr/local/obr/RestoreWizard
Log Time: Tue Oct 17 13:40:13 HKT 2017
Verifying current user privilege ...
Current user has enough privilege to "config".
Start configuration on Generic Linux Platform (Linux)
Installation Path: /usr/local/obr/RestoreWizard
Minimum supported JVM version: 1.7
Maximum supported JVM version: 1.8
Current JVM version is supported for installation.
Create Backup Manager JVM, Path:
/usr/local/obr/RestoreWizard/jvm/bin/bJW
Create Scheduler Service JVM, Path:
/usr/local/obr/RestoreWizard/jvm/bin/bschJW
Setup File Permissions
xhost: unable to open display ""
Startup Ahsay Online Backup Manager ...
Exception in thread "main" java.awt.HeadlessException:
No X11 DISPLAY variable was set, but this program performed an
operation which requires it.
        at java.awt.GraphicsEnvironment.checkHeadless(Unknown
Source)
        at java.awt.Window.<init>(Unknown Source)
        at java.awt.Frame.<init>(Unknown Source)
        at java.awt.Frame.<init>(Unknown Source)
        at javax.swing.JFrame.<init>(Unknown Source)
        at com.ahsay.cloudbacko.ui.JMainFrame.<init>(Unknown
Source)
        at com.ahsay.cloudbacko.ui.JMainFrame.<init>(Unknown
Source)
        at com.ahsay.obc.ui.JMainFrame.<init>(Unknown Source)
        at com.ahsay.obc.ui.JMainFrame.k(Unknown Source)
        at Gui.main(Unknown Source)
Done
```

	5.	AhsayOBR is launched successfull	y when y	you see the	e following screen.
--	----	----------------------------------	----------	-------------	---------------------

AhsayOBM			- • ×
		English 🗸	
	O AhsayOBM		
	Login name		
	Password		
	Save password Forgot password		
	Forgot password		
	Show advanced option	ОК	

5 Login to AhsayOBR

This section provides information on how to log in to the AhsayOBR as well as the necessary network settings for login.

1. The AhsayOBR launches automatically and you will see the following screen. Click **Show** advanced option to enter the network settings.

0	AhsayOBM	_ □ ×
		English
	O AhsayOBM	
	Login name	
	Password	
	Save password	
	Show advanced option	ок

2. Enter the Backup Server address provided by your backup service provider. If you need to use proxy to access the Internet, enable the Proxy feature and fill in the relevant information as well. Click **OK** when you are done with the settings.

0		AhsayOBM		×
	Backup Server http 10.16.4.28 Proxy (HTTP) Use proxy to access the Internet off			
				OK Cancel
	7			

3. Enter the login name and password of your Client Backup account, then click **OK** to login.

•	AhsayOBM	_ = ×
		English
	O AhsayOBM	
	Login name	
	username	
	Password	
	Save password	
		ок

6 Restore Backup

The following is a typical end-to-end process for a file restore. The actual steps may slightly vary depending on the module you are restoring.

NOTES

- 1. AhsayOBR can be used to restore data that is backed up with AhsayACB or AhsayOBM.
- 2. Clicking **Cancel** then **Yes** at any point during the steps below will close the software completely. After the software is closed, you will have to launch it again according to the instructions in <u>Download and Launch AhsayOBR</u> if you wish to use it.
 - 1. After logging in to your backup account successfully, you should see a screen showing all the available backup sets for restore. Double click on the one you would like to restore.



2. Click on the location from which you would like to restore the data from.



3. Select to restore files from a specific backup job, or from all files available, then select the files or folders that you would like to restore.

There are two options from the Select what to restore drop-down menu:

Choose from files as of job – this option allows you to select a backup version from a specific date and time to restore.

Select what to restore	
Choose from files as of job	♥ 03/11/2016 ♥ Latest ♥
Choose from files as of job	
Choose from ALL files	Name
P G CBS	□ 🚅 \\LAUREL\Departments
Select what to restore	
Choose from files as of job	✔ 03/11/2016 ✔ Latest ✔
Show filter	03/11/2016
Folders	02/11/2016
	□ 🖵 \\LAUREL\Departments
Select what to restore	
Choose from files as of job	✓ 02/11/2016 ✓ Latest ✓
Show filter	Latest
Folders	Na 18:51
e G CBS	🗌 坖 \\LAUREL\Departm 18:50

Choose from ALL files – this option allows you to restore all the available backup versions for this backup set. Among all the available backup versions, you can even select only some of the backup versions of a file to restore.

	AhsayOBM	
Select You	r Files To Be	Restored
Select what to restore		
Choose from ALL files 🛛 👻		
Show filter		
- 🖸 🖵 \\LAUREL\Departments	 File snapshot testing.txt File snapshot testing.txt 	Size Date modified 49 bytes 02/11/2016 11:10 34 bytes 02/11/2016 18:51 22 bytes 02/11/2016 18:50 10 bytes 02/11/2016 18:47
Search	Items per page	50 V Page 1/1 V
		Previous Next Cancel He

Below is an example showing all the available backup versions of the file **File snapshot testing.txt**. The latest version is shown in solid black color and all the previous versions are shown in grey color. You can identify the file version from the **Date modified** column.

Name	Size	Date modified
🗹 🗋 File snapshot testing.txt	49 bytes	03/11/2016 11:10
🗹 📗 File snapshot testing.txt	34 bytes	02/11/2016 18:51
🗖 📗 File snapshot testing.txt	22 bytes	02/11/2016 18:50
File snapshot testing.txt	10 bytes	02/11/2016 18:47

When the restore is done, you will see all the selected backup versions in the restore destination. The latest backup version has the file name as the original file, while the previous versions have the time stamps added to their file names for easy identification.

LAUREL\Departments\Customer Services\Common\KMT\Steven\Others\File snapshot testing.txt
LAUREL\Departments\Customer Services\Common\KMT\Steven\Others\File snapshot testing_2016-11-02-18-49-37.txt
LAUREL\Departments\Customer Services\Common\KMT\Steven\Others\File snapshot testing_2016-11-02-18-50-43.txt
LAUREL\Departments\Customer Services\Common\KMT\Steven\Others\File snapshot testing_2016-11-02-18-51-43.txt
Linux OBR restore 12 items, Free space: 4.9 GB

4. Click **Next** to proceed when you are done with the selections.

- 5. Select to restore the files to their **Original location**, or to an **Alternate location**, then click **Next** to proceed.
 - Original location the backed up data will be restored to the computer running the AhsayOBR under the same directory path as on the machine storing the backup source. For example, if the backup source files are stored under root/Downloads folder, the data will be restored to root/Downloads as well on the computer running the AhsayOBR.

Choose Where The	Files To Be Restored
Restore files to	
Original location Alternate location	Browse
Show advanced option	
	Previous Next Cancel Help

 Alternate location – you can choose to restore the data to a location of your choice on the computer where AhsayOBR is running.

0		AhsayOBM		×
	Choose Wh	Public Desktop temp Documents Templates Downloads Videos NewFolder Pictures Folder name: Froot Files of type: All Files OK Cancel	Pee	
		Previous	t Cancel Help	

Click Show advanced option to configure other restore settings:				
Choose Where The Files To Be				
Restore files to Original location Alternate location Show advanced option				
 Restore file permissions Delete extra files Follow Link Resolve Link Hide advanced option 				

\odot **Restore file permissions**

By enabling this option, file permissions of the operating system files will be restored. File permission defines, for example, the right to view or change a file by the system owner/group/individual. If file permission is not restored properly, there is a potential risk that the restored data could be viewed by group/individual who is not supposed to have the access to.

\odot **Delete extra files**

6.

By enabling this option, the restore process will attempt to synchronize the selected restore source with the restore destination, making sure the data in the restore destination is exactly the same as the restore source. Any data created after backup will be treated as "extra files" and will be deleted from the restore source if this feature is enabled.

Example:

Two files are created under the **Document folder 01**, namely doc 1 & doc 2. i)

Document folder 01 _ 🗆 ×
<u>File Edit View Places H</u> elp
<pre>doc 1.odt Files created initially doc 2.odt</pre>
Document folder 🗸 2 items, Free space: 4.9 GB

ii) A backup is performed for folder **Document folder 01**.

iii) Two new files are created, namely doc 3 & doc 4.



- iv) A restore is performed for the **Document folder 01**, with **Delete extra files** option enabled.
- v) Since doc 3 & doc 4 have never been backed up, therefore they will be deleted from **Document folder 01**, leaving only the two files that have been backed up.



WARNING

Please exercise extra caution when enabling this feature. Consider what data in the restore source has not been backed up and what impact it would cause if those data is deleted.

Prior to the data restore and synchronization, a warning message shows as the one shown below. Only clicking **Yes** will the "extra file" be deleted. You can click **Apply to all** to confirm deleting all the "extra files"at a time.



• Follow Link (Enabled by default)

When this option is enabled, not only the symbolic link will be restored, the directories and files that the symbolic link links to will also be restored.

The table below summarizes the behaviors when a restore is performed with different settings.

Follow Link	Restore to	Behavior	
Enabled	Original location	Symbolic link is restored to the original backup location.	
		Target directories or files are also restored to the original backup location.	
	Alternate location	Symbolic link is restored to the location specified.	
		Target directories or files are also restored to the alternate location specified.	
Disabled	Original location	Symbolic link is restored to the original backup location.	
		Target directories or files are NOT restored to the original backup location.	
	Alternate location	Symbolic link is restored to the location specified.	
		Target directories or files are NOT restored to the alternate location specified.	

Resolve Link (Only for restoring to Alternate Location)

This option must be used in conjunction with the **Follow Link** option. When this option is enabled, the symbolic link, as well as the directories and files that the symbolic link links to will also be restored in the alternate location you have chosen. That means the symbolic link will point to the alternate location instead of the original location.

The table below summarizes the behaviors when a restore is performed with this option turned on and off.

Resolve Link	Behavior		
Enabled	Symbolic link is restored to the alternate location specified, with its target directories and files also restored to the same location in their relative path.		
	Target of the link is updated to the new relative path. In other word, the link now points to the new alternate location.		
Disabled	Symbolic link is restored to the alternate location specified, with its target directories and files also restored to the same location in their relative path.		
	However, target of the link is NOT updated to the new		

	relative path. In other word, the link still points to the original location.
--	---

- 7. Click **Next** to proceed with you are done with the settings.
- 8. Select the temporary directory for storing temporary files, such as delta files when they are being merged.

By default, the temporary files are stored under the temp directory of the user profile directory. However, there is a chance that the same directory path does not exist in the computer you are running the AhsayOBR. In that case, you will have to click **Browse** to define a new location for storing the temporary files, otherwise you will not be able to perform a restore.

0	AhsayOBM	_ = ×
Т	emporary Directory	
Temporary directory f	or storing restore files	
C:\Users\steven.tse\t	emp	Browse
	Previous	lestore Cancel Help

9. Click **Restore** to start the restore.

10. You will see a screen like the one shown below with the restore progress bar.



- 11. The progress bar shows **Restore Completed Successfully** when the restore is done. Click **Close** to exit the confirmation screen.
- 12. To exit AhayOBR, click **Cancel** and then **Yes**, it will then be closed completely. If you wish to use the AhsayOBR again, you will then have to launch it again according to the instructons in <u>Download and Launch AhsayOBR</u>.

7 Contact Ahsay

Technical Assistance

To contact Ahsay support representatives for technical assistance, visit the following website: <u>https://www.ahsay.com/jsp/en/contact/kbQuestion.jsp</u>

Also use the Ahsay Knowledge Base for resource such as Hardware Compatibility List, Software Compatibility List, and other product information: <u>http://wiki.ahsay.com/doku.php?id=public:home</u>

Documentation

Documentations for all Ahsay products are available at: <u>https://www.ahsay.com/jsp/en/home/index.jsp?pageContentKey=ahsay_downloads_documentation_guides</u>

You can send us suggestions for improvements or report on issues in the documentation, by contacting us at: https://www.ahsay.com/jsp/en/contact/kbQuestion.jsp

Please specify the specific document title as well as the change required/suggestion when contacting us.