

Ahsay Cloud Backup Suite v7

AhsayCBS Appliance On Microsoft Azure Upgrade Guide

Ahsay Systems Corporation Limited

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Revision History

Date	Descriptions	Type of modification
7 November 2017	First Draft	New
31 Oct 2017	Ch. 1 Pre-requisite requirements	Updated

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1 Summary

This guide details the steps of how to upgrade your AhsayCBS appliance on Microsoft Azure.

Pre-requisite requirements

1. FreeBSD OS version 10.3 or above has been installed.
2. AhsayCBS installation path: `/usr/local/cbs`
3. OpenJDK Version 1.7.0_76 or above has been installed and its installation path: `/usr/local/openjdk`
4. The login credentials for 'root' to the FreeBSD server.
5. The download link for the latest AhsayCBS release.

The URL of the latest AhsayCBS version can be found from following web page https://www.ahsay.com/jsp/en/home/index.jsp?pageContentKey=ahsay_downloads_latest_software_ahsaycbs

Example: AhsayCBS v7.13.0.6 release



The screenshot shows the Ahsay Backup website interface. The top navigation bar includes links for Home, Solutions, Products, Pricing, Support, Services, Download, Partners, About Us, Contact Us, and Buy. The breadcrumb trail indicates the path: Home > Download > Latest Software > AhsayCBS. The main content area features the AhsayCBS logo and the version number v7.13.0.6, along with the release date (14-Aug-2017) and a 'Click here' link for release notes. An 'Important' section contains several bullet points regarding license requirements and upgrade procedures. Below this, there are two 'Download' buttons: one for 'New Installation / Upgrade: Windows' and one for 'New Installation / Upgrade: Linux'. The 'Linux' button is highlighted with a red rectangular box. At the bottom of the page, there is a link to 'Download Upgrade/Migration Guide'.

Right click on the “New Installation / Upgrade: Linux” **Download** button and copy the link location.

6. At least one of the following utilities must have been installed:

- i. *wget*
- ii. *fetch* (This utility should be pre-installed in FreeBSD)
- iii. *curl*

NOTE

If you need to install any of the utilities above, please refer to the following link for installation instructions:

<https://www.freebsd.org/doc/handbook/pkgng-intro.html>

2 Upgrade AhsayCBS

Upgrade Procedures

1. Use PuTTY or other SSH client software to connect to “ahsaycbs4%**MyName**%.cloudapp.net” (replace %**MyName**% with your own name).
2. Switch to root user.

```
$ su
```

```
Edit /etc/motd to change this login announcement.  
$ su
```

3. Stop the AhsayCBS service and NFS service (for AhsayCBS v7.9.0.0 or above).
 - i. Stop the AhsayCBS service with the following command:

```
root@ahsaycbs:~ # sh /usr/local/cbs/bin/shutdown.sh
```

```
root@ahsaycbs:/ # sh /usr/local/cbs/bin/shutdown.sh  
-----  
You may set SYSTEM_DEBUG=0 to disable the debug message  
-----  
Current User Name      : admin  
Using SYSTEM_TYPE     : bsd  
Using SYSTEM_ARCH     : amd64  
-----  
Using CBS_HOME        : /usr/local/cbs  
Using JAVA_HOME       : /usr/local/cbs/java  
Using CATALINA_HOME   : /usr/local/cbs/tomcat  
Using JAVA_OPTS       : -Djava.library.path=/usr/local/cbs/lib/FbdX64 -DCATALINA_PID=/var/run/obsr.pid -Dsun.net.inetaddr.ttl=3600 -Dnetworkaddress.cache.ttl=3600 -Dsun.net.inetaddr.negative.ttl=300 -Dnetworkaddress.cache.negative.ttl=300 -Dsun.nio.PageAlignDirectMemory=true -Djava.net.preferIPv4Stack=true -Djava.util.logging.manager=org.apache.juli.ClassLoaderLogManager -Djava.util.logging.config.file=conf/logging.properties -Dtc.work.path=work -Dtc.log.path=logs -Djavax.servlet.context.tempdir=work  
Using CATALINA_OPTS   :  
Using CATALINA_PID    : /var/run/obsr.pid  
-----  
Stopping AhsayCBS service  
root@ahsaycbs:/ #
```

- ii. Stop the NFS service with the following command:

```
root@ahsaycbs:~ # sh /usr/local/cbs/nfs/bin/shutdown.sh
```

```
root@ahsaycbs:/ # sh /usr/local/cbs/nfs/bin/shutdown.sh  
Stopping NFS Service (Ahsay Systems Corporation)
```

4. Ensure the AhsayCBS service and NFS service is stopped. This can be verified by running the following command:

- i. AhsayCBS service

```
root@ahsaycbs:~ # ps -aux|grep java
```

If AhsayCBS service has been stopped, it would be like following:

```
root@ahsaycbs:/ # ps -aux|grep java
root 41524 0.0 0.3 18832 2328 0 S+ 4:43PM 0:00.00 grep java
```

- ii. NFS service (for AhsayCBS v7.9.0.0 or above)

```
root@ahsaycbs:~ # ps -aux|grep nfs
```

If NFS service has been stopped, it would be like following:

```
root@ahsaycbs:/ # ps -aux | grep nfs
root 41557 0.0 0.0 392 312 0 R+ 4:46PM 0:00.00 grep nfs
```

5. Ensure the ports 80, 443 and 111 are **NOT** being listened in active internet connection. This can be verified by running the following command:

```
root@ahsaycbs:~ # netstat -an|more
```

```
root@ahsaycbs:/ # netstat -an|more
Active Internet connections (including servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         (state)
tcp4      0      64 100.104.2.45.22        220.246.32.45.30947    ESTABLISHED
tcp4      0      0 100.104.2.45.22        220.246.32.45.21235    ESTABLISHED
tcp4      0      0 127.0.0.1.25          *.*                      LISTEN
tcp4      0      0 *.22                  *.*                      LISTEN
tcp6      0      0 *.22                  *.*                      LISTEN
udp4      0      0 100.104.2.45.123      *.*                      *
udp4      0      0 127.0.0.1.123         *.*                      *
udp6      0      0 fe80::1%lo0.123      *.*                      *
udp6      0      0 ::1.123               *.*                      *
udp4      0      0 *.123                 *.*                      *
udp6      0      0 *.123                 *.*                      *
udp4      0      0 *.514                 *.*                      *
udp6      0      0 *.514                 *.*                      *
Active UNIX domain sockets
Address Type Recv-Q Send-Q Inode Conn Refs Nextref Addr
fffff800128ce2d0 stream 0 0 0 fffff800128ce0f0 0 0
fffff800128ce0f0 stream 0 0 0 fffff800128ce2d0 0 0
fffff8010ddb9780 stream 0 0 0 fffff8010ddb9870 0 0
fffff8010ddb9870 stream 0 0 0 fffff8010ddb9780 0 0
fffff80003b0bb40 stream 0 0 fffff80003a961d8 0 0 /
var/run/devd.pipe
fffff80003b0b2d0 dgram 0 0 fffff80003b0b870 0 fffff80003
b0b3c0
fffff80003b0b3c0 dgram 0 0 fffff80003b0b870 0 fffff80003
b0b4b0
fffff80003b0b4b0 dgram 0 0 fffff80003b0b870 0 fffff80003
b0b780
fffff80003b0b780 dgram 0 0 fffff80003b0b870 0 0
fffff80003b0b870 dgram 0 0 fffff80003bba1d8 0 fffff80003b0b2d0
0 /var/run/logpriv
fffff80003b0b960 dgram 0 0 fffff80003bba3b0 0 0 0 /
var/run/log
fffff80003b0ba50 seqpac 0 0 fffff80003a96000 0 0 0 /
var/run/devd.seqpacket.pipe
root@ahsaycbs:/ #
```

6. Download the upgrade files to the new installation directory.
 - i. Rename the existing installation directory “/usr/local/cbs” to be “usr/local/cbs.bak”:

```
root@ahsaycbs:~ # mv /usr/local/cbs /usr/local/cbs.bak
```

```
root@ahsaycbs:/ # mv /usr/local/cbs /usr/local/cbs.bak
```


- ii. Create a new installation directory “`/usr/local/cbs`” for the upgrade files:

```
root@ahsaycbs:~ # mkdir /usr/local/cbs
```

```
root@ahsaycbs:/ # mkdir /usr/local/cbs
```

- iii. Move the old files to the new installation directory:

```
root@ahsaycbs:~ # mv /usr/local/cbs.bak /usr/local/cbs
```

```
root@ahsaycbs:/ # mv /usr/local/cbs.bak /usr/local/cbs
```

- iv. Change working directory to the new installation directory:

```
root@ahsaycbs:~ # cd /usr/local/cbs
```

```
root@ahsaycbs:/ # cd usr/local/cbs
```

- v. Download the upgrade files using any one of the following command, depending on which utility you have installed:

- `wget`

```
root@ahsaycbs:/usr/local/cbs# wget http://ahsay-dn.ahsay.com/v7/71306/cbs-nix.tar.gz
```

- `fetch`

```
root@ahsaycbs:/usr/local/cbs# fetch http://ahsay-dn.ahsay.com/v7/71306/cbs-nix.tar.gz
```

- `curl`

```
root@ahsaycbs:/usr/local/cbs# curl -Ok http://ahsay-dn.ahsay.com/v7/71306/cbs-nix.tar.gz
```

For example: Use “`fetch`” command to download the upgrade files of AhsayCBS version 7.13.0.6.

```
root@ahsaycbs:/usr/local/cbs # fetch http://ahsay-dn.ahsay.com/v7/71300/cbs-nix.tar.gz
cbs-nix.tar.gz                               10% of 540 MB 2463 kBps 01m08s
```

Note

The above URL “`http://ahsay-dn.ahsay.com/v7/71306/cbs-nix.tar.gz`” is the example for AhsayCBS version 7.13.0.6.

7. Extract the upgrade gz file

- i. Extract the upgrade file with the following command:

```
root@ahsaycbs:/usr/local/cbs# tar -xvzf cbs-nix.tar.gz bin
icons licenses tomcat build download nfs font lib util
termsofuse webapps version.txt
```

```
root@ahsaycbs:/usr/local/cbs # tar -xvzf cbs-nix.tar.gz bin icons licenses tomcat build
download nfs font lib util termsofuse webapps version.txt
```

- ii. The following folders should be extracted: `bin`, `build`, `download`, `font`, `icons`, `lib`, `licenses`, `termsofuse`, `tomcat`, `util`, `version.txt` and `webapps` and `nfs`.

```

root@freebsd103:/usr/local/cbs # ls -la
total 553412
drwxr-xr-x  15 root  wheel      512 Jul 27 10:27 .
drwxr-xr-x  16 root  wheel      512 Jul 26 18:29 ..
drwxr-xr-x   7 root  wheel      512 Jul 27 10:21 bin
drwxr-xr-x   4 root  wheel      512 Jul 10 09:50 build
-rw-r--r--   1 root  wheel 566427161 Jul 14 19:30 cbs-nix.tar.gz
drwxr-xr-x  20 root  wheel      512 Jul 26 18:29 cbs.bak
drwxr-xr-x   5 root  wheel      512 Jul 27 10:21 download
drwxr-xr-x   2 root  wheel      512 Jul 10 09:50 font
drwxr-xr-x   2 root  wheel      512 Jul 27 10:21 icons
drwxr-xr-x   7 root  wheel     5120 Jul 27 10:22 lib
drwxr-xr-x   7 root  wheel      512 Jul 27 10:21 licenses
drwxr-xr-x   3 root  wheel      512 Jul 14 08:57 nfs
drwxr-xr-x   2 root  wheel     1024 Jul 27 10:21 termsofuse
drwxr-xr-x   5 root  wheel      512 Jul 27 10:21 tomcat
drwxr-xr-x   4 root  wheel      512 Jul 14 08:57 util
-rwxr-xr-x   1 root  wheel       8 Jul 14 08:40 version.txt
drwxr-xr-x   7 root  wheel      512 Jul 10 09:50 webapps
root@freebsd103:/usr/local/cbs #

```

8. Copy the symbolic links of old folders to the new installation directory.

i. Change working directory to the old version folder “cbs.bak”

```
root@ahsaycbs:/usr/local/cbs# cd cbs.bak
```

```
root@ahsaycbs:/usr/local/cbs # cd cbs.bak
```

ii. Copy the symbolic links of old folders to the new installation directory.

```
root@ahsaycbs:/usr/local/cbs/cbs.bak# cp -R conf java logs
system temp user work ..
```

```
root@ahsaycbs:/usr/local/cbs/cbs.bak # cp -R conf java logs system temp user work ..
```

9. Start AhsayCBS service in the bin folder of the new installation directory and NFS service in the nfs/bin folder.

i. Change working directory to the new installation directory.

```
root@ahsaycbs:/usr/local/cbs/cbs.bak# cd ..
```

ii. Start the service.

• Start AhsayCBS service with the following command:

```
root@ahsaycbs:/usr/local/cbs # sh bin/startup.sh
```

```

root@ahsaycbs:/usr/local/cbs # sh bin/startup.sh
-----
You may set SYSTEM_DEBUG=0 to disable the debug message
-----
Current User Name   : admin
Using SYSTEM_TYPE  : bsd
Using SYSTEM_ARCH  : amd64
Using PHYSICAL_MEM : 743 (MB)
-----
Using CBS_HOME     : /usr/local/cbs
Using JAVA_HOME    : /usr/local/cbs/java
Using CATALINA_HOME : /usr/local/cbs/tomcat
Using JAVA_OPTS    : -Djava.library.path=/usr/local/cbs/lib/FbdX64 -DCATALINA_PID=/var/
run/obsr.pid -Xrs -Xms128m -Xmx1024m -Xss384k -XX:PermSize=64m -XX:MaxPermSize=128m -XX:
MaxDirectMemorySize=512m -XX:NewRatio=4 -XX:SurvivorRatio=4 -XX:MinHeapFreeRatio=25 -XX:
MaxHeapFreeRatio=50 -XX:+UseParNewGC -XX:+UseConcMarkSweepGC -Dsun.net.inetaddr.ttl=3600
-Dnetworkaddress.cache.ttl=3600 -Dsun.net.inetaddr.negative.ttl=300 -Dnetworkaddress.ca
che.negative.ttl=300 -Dsun.nio.PageAlignDirectMemory=true -Djava.net.preferIPv4Stack=tru
e -Djava.util.logging.manager=org.apache.juli.ClassLoaderLogManager -Djava.util.logging.
config.file=conf/logging.properties -Dtc.work.path=work -Dtc.log.path=logs -Djavax.servl
et.context.tempdir=work
Using CATALINA_OPTS :
Using CATALINA_PID  : /var/run/obsr.pid
-----
Starting AhsayCBS service
root@ahsaycbs:/usr/local/cbs # █

```

- Start NFS service in the nfs/bin folder with the following command:

```
root@ahsaycbs:/usr/local/cbs # sh nfs/bin/startup.sh
```

```

root@ahsaycbs:/usr/local/cbs # sh nfs/bin/startup.sh
Starting NFS Service (Ahsay Systems Corporation)

```

- Check if Java and NFS service is running. This can be verified by running the following command:

- For Java:

```
root@ahsaycbs:/usr/local/cbs # ps -aux|grep java
```

If Java is running on the AhsayCBS the following output will show:

```

root@ahsaycbs:/usr/local/cbs # ps -aux | grep java
root  42661 20.1 32.6 1424184 248356 0  S   6:12PM   2:44.51 /usr/local/cbs/java/bin/ja
root  42874 0.0 0.0    392    312 0  R+   6:19PM   0:00.00 grep java

```

- For NFS:

- Check whether NFS service is running on AhsayCBS with the following command:

```
root@ahsaycbs:/usr/local/cbs # ps -aux|grep nfs
```

If NFS is running the following output will show:

```

root@freebsd11:/usr/local/cbs/nfs/bin # ps -aux | grep nfs
root  800  0.0  0.1   19044   4244 0  S   15:50   0:00.06 /usr/local/cbs/nfs/bin/NfsFbdX64 -logf
root  817  0.0  0.1   14796   2372 0  S+  15:51   0:00.00 grep nfs

```

- Check the NFS service related domain socket with the following command:

```
root@ahsaycbs:~ # netstat -an|more
```

If NFS is running the following output of "nfs-server" will show:

```

root@freebds11:/usr/local/cbs/nfs/bin # netstat -an|more
Active Internet connections (including servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         (state)
tcp4    85      0  10.16.30.21.32148      203.186.85.237.443    CLOSE_WAIT
tcp4    85      0  10.16.30.21.32147      203.186.85.237.443    CLOSE_WAIT
tcp4    0        0  127.0.0.1.60024        *,*                     LISTEN
tcp4    0        0  *,443                  *,*                     LISTEN
tcp4    0        0  *,80                    *,*                     LISTEN
tcp4    0        0  10.16.30.21.22        192.168.7.117.4118    ESTABLISHED
tcp4    0        0  127.0.0.1.25          *,*                     LISTEN
tcp4    0        0  *,22                    *,*                     LISTEN
tcp6    0        0  *,22                    *,*                     LISTEN
udp4    0        0  *,10000                 *,*                     LISTEN
udp4    0        0  *,514                   *,*                     LISTEN
udp6    0        0  *,514                   *,*                     LISTEN
Active UNIX domain sockets
Address      Type      Recv-Q Send-Q           Inode           Conn           Refs           Nex
tref Addr
fffff8000455c870 stream    0        0           0               0               0
0
fffff8000455c780 stream    0        0           0               0               0
0
fffff800045b50f0 stream    0        0 fffff800043b33b0 0               0
0 /tmp/nfs-server
fffff800045b51e0 stream    0        0 fffff80004a07ce8 0               0
0 /tmp/.java_pid791.tmp
fffff8000455cb40 stream    0        0 fffff80004370000 0               0
0 /var/run/devd.pipe
fffff80004589690 dgram     0        0           0 fffff80004589870 0
0
fffff8000455c960 dgram     0        0           0 fffff80004589780 0 fffff800045b52d0
52d0
fffff800045b52d0 dgram     0        0           0 fffff80004589780 0
0
fffff80004589780 dgram     0        0 fffff80004642000 0 fffff8000455c960
0 /var/run/logpriv
fffff80004589870 dgram     0        0 fffff800046421d8 0 fffff80004589690
0 /var/run/log
fffff8000455ca50 seqpac   0        0 fffff800043a9ce8 0               0
0 /var/run/devd.seqpacket.pipe
root@freebds11:/usr/local/cbs/nfs/bin # █

```

11. Check if AhsayCBS is listening to both predefined http and https port (i.e. Port 80 and 443) with the “netstat -an|more” command:

```

root@ahsaycbs:~ # netstat -an|more

```

```

root@freebds103:/usr/local/cbs/nfs/bin # netstat -an|more
Active Internet connections (including servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         (state)
tcp4    0        0  10.16.30.22.80        10.120.0.2.51998      ESTABLISHED
tcp4    0        0  10.16.30.22.80        10.120.0.2.51997      TIME_WAIT
tcp4    0        0  127.0.0.1.60024        *,*                     LISTEN
tcp4    0        0  10.16.30.22.22        192.168.7.117.2183    ESTABLISHED
tcp4    0        0  *,443                  *,*                     LISTEN
tcp4    0        0  *,80                    *,*                     LISTEN
tcp4    0        0  127.0.0.1.25          *,*                     LISTEN
tcp4    0        0  *,22                    *,*                     LISTEN
tcp6    0        0  *,22                    *,*                     LISTEN
udp4    0        0  *,10000                 *,*                     LISTEN
udp4    0        0  *,514                   *,*                     LISTEN
udp6    0        0  *,514                   *,*                     LISTEN

```

12. Verify the AhsayCBS installation has been successfully upgraded.
 - i. Open “https://<your-backup-server>” in a browser to login AhsayCBS web management console:

AhsayCBS English

Login Name
system

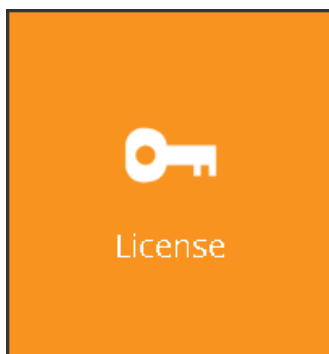
Password

Forgot Password

Remember my login name

LOGIN

- ii. Go to the license page:



- iii. Check that AhsayCBS is running on the version under **Product Version**.

Update License

Update

Product Name
Offsite Backup Software, OEM Edition

Product Version
7.13.0.6

License Type
OEM License

Product Expiry Date
31/12/2017

Maintenance Expiry Date
31/12/2017

Free Upgrade Until
31/12/2017

Max Quota
Unlimited