Ahsay Backup

Ahsay Cloud Backup Suite **v7**

AhsayCBS Appliance On Microsoft Azure Upgrade Guide

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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 is 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

   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

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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_P
    ID=/var/run/obsr.pid -Dsun.net.inetaddr.ttl=3600 -Dnetworkaddress.cache.ttl=3600
     -Dsun.net.inetaddr.negative.ttl=300 -Dnetworkaddress.cache.negative.ttl=300 -Ds
    un.nio.PageAlignDirectMemory=true -Djava.net.preferIPv4Stack=true -Djava.util.lo
    gging.manager=org.apache.juli.ClassLoaderLogManager -Djava.util.logging.config.f
    ile=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
    -----------------------------------------------------------------------
    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       0 /
var/run/devd.pipe
fffff80003b0b2d0 dgram       0      0          0 fffff80003b0b870         0 fffff80003
b0b3c0
fffff80003b0b3c0 dgram       0      0          0 fffff80003b0b870         0 fffff80003
b0b4b0
fffff80003b0b4b0 dgram       0      0          0 fffff80003b0b870         0 fffff80003
b0b780
fffff80003b0b780 dgram       0      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 versioin 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)
```

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

    i. 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
```

    ii. 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:

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
```


12. Verify the AhsayCBS installation has been successfully upgraded.

    i. Open "*https://<your-backup-server>*" in a browser to login AhsayCBS web management console:
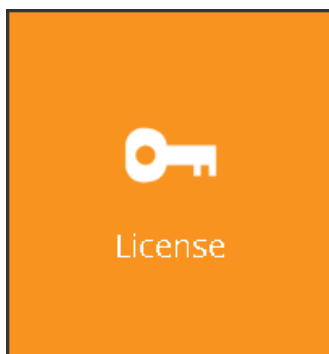
ii.   Go to the license page:

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