

## Establishing Multiple MCS Threads on ADMe Windows Staging Server:

The bat file named **wthreads.bat** can be used to automatically establish additional MCS threads on a ADMe Windows staging server. Going forward this file will be included within the ADMe tar file bundle. Several checks are performed to ensure consistency in naming convention, file locations and prevention of inadvertent updates to any existing threads. A total of 12 threads are supported however this quantity is intended primarily to be used on a Networker server to support the need for a dedicated thread when using its parallel saveset streams. For actual migration threads to a specific staging server it is suggested not to exceed a total of 8 threads.

### Usage Instructions:

1. Install Avamar FS plug-in as normal
2. Place the bat file in install folder under **avs\etc\scripts**
3. Bat file takes two arguments as follows:
  - Staging server name as it is currently known to Avamar
  - The name of the target Avamar server
4. Sample execution:  
**wthreads.bat <my-staging-srv-name> <my-target-avamar-name>**

```
C:\Program Files\avs\etc\scripts> wthreads.bat nw-01.brsvlab.local ave-03

=====
Preparing to configure MCS thread using the following parameters:
=====

Avamar FS Plug-IN install folder:      C:\Program Files\avs
Using Base-Client-Name:                nw-01.brsvlab.local
Using Thread-Number:                   4
Using Target-Avamar-Name:              ave-03

=====
Confirm above parameters are correct, enter [yes or no] to proceed: yes
```

The confirmation prompt above must be answered with a value of “yes” in order to proceed; all other responses including just pressing enter will result in exiting the bat file. Note the thread number which will increase with each execution.

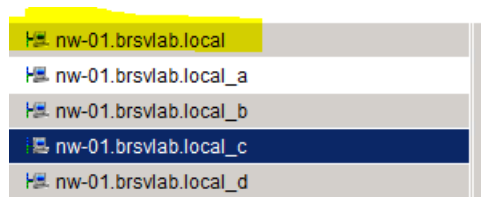
A series of o/p lines are generated and near the end you should see lines similar to the following with key lines to take note of highlighted:

```
avagent Info <6601>: Hostnamelist: nw-01.brsvlab.local,192.168.1.38,nw-
01.brsvlab.local,127.0.0.1
avagent Info <5472>: Registering with the MCS (ave-03)
avagent Info <6610>:
***** Current MCS name 'ave-03' *****
avagent Info <7502>: Registration of client /ADME/nw-01.brsvlab.local_c with MCS ave-
03:28001 successful.
avagent Info <5405>: avagent returning with exitcode 0
[SC] CreateService SUCCESS
The Backup Agent4 service is starting.
The Backup Agent4 service was started successfully.

=====
Created new MCS Client-Name: /ADME/nw-01.brsvlab.local f Using Port: 28035
=====
```

You should now be able to see the added MCS client name in Avamar Admin panel, a refresh may be needed. Also, confirm its presence in the Backup and Recovery panel and verify you can browse its file

system layout. Note the original client hostname is used to establish the additional threads with \_a, \_b ... appended to it for each thread created.



If not, a port may be blocked by **avfirewall**. Check whether the firewall is active using **service avfirewall status**, if running issue **service avfirewall stop** then verify whether the FS can now be browsed from backup recovery panel. The firewall supports ports 28030-28038 for ADMe allowing for a total of 9 threads before encountering a higher port that may be blocked by the firewall. The firewall port range can be tweaked to include a couple of ports above 28038.

The above process can be repeated for each additional thread by using up arrow to repeat the same **wthreads** command and the next sequential thread will be configured automatically. Repeat as often as required up to the maximum thread count supported which is 11 + the original.

Since these are net new threads the addition of the following option is added to its avtar.cmd file as a convenience as it is requirement to support directed recoveries which ADMe does.

**--reparse-restore-option=linksasfilesfolders**

## Removing a Configured Thread

If a thread needs to be deleted use the following procedure to remove its definition:

- Stop the service on staging server you want to remove if it exists
 

Backup Agent	The EMC A...	Running	Automatic	Local Syste...
Backup Agent2		Running	Automatic	Local Syste...
Backup Agent3		Running	Automatic	Local Syste...
Backup Agent4			Automatic	Local Syste...
- Delete the appropriate client definition from Avamar under **/ADME** domain

**From a CMD prompt:**

- Delete the appropriate **<install-path>\avs\var?** folder using the following syntax:

**rmdir /Q /S <install-path>\avs\var?**

Where ?=numeric value representing thread number

- Delete the appropriate service name for example to delete Thread-4:  
**sc delete avbackup4**