Appendix D: Filtering in Windows shared folder on Linux/ FreeBSD OS

1. Filter that starts with uppercase letter C on a windows shared folder.


```
Filter Name = Filter that starts with uppercase letter C

Matching Pattern = C

Filter Mode = Include Them

Exclude all others = True
```

```
Matching Type = Simple Comparison | Starts With

Apply To = File

Directory = /mnt/backupfiles
```

As a result, these are the total files and directories that have been successfully backed up:

Total New Files = 6

1. CloudBackup_001.txt

2. CloudBackup_002.txt

3. CloudBackup_003.txt

4. Configuration_Guide2016.docx

5. Configuration_Guide2017.docx

6. Configuration_Guide2018.docx

Total New Directories = 5

1. /

2. /mnt

3. /root

4. /usr

5. /usr/local

Explanation:

All the files that starts with uppercase letter C have been successfully backed up including the directories but excluding all the other files that did not match the filter. This example is the same as the one on the simple comparison – starts with filter, the only difference is that the source destination is a Windows shared folder.

This filter only applies to a specific folder which is mnt, and since the File, under the "Apply to" field, has been set to true, only the files have been backed up even if there are available folders that matched the set criteria.

Here are the reports using the AhsayCBS web console and CLI:

Backup Report from AhsayCBS Web Console

Backup Set Settings

Field	Value
Backup Source	
Filter	[Enabled: true][Name: Filter that starts with uppercase letter C, Type: starts with, Top Directory: /mnt, Include: Yes, Exclude all unmatched files/folders: Yes, Apply to: No, Apply to files: Yes, Pattern: [C]]
Backup Schedule	[Computer Name:][Daily:][Weekly:][Monthly:][Custom:]
Continuous Data Protection	[Enabled: No]
In-File Delta	[Enabled: Yes, Default Type: D, Block Size: -1, Minimum Size = 26214400, Maximum No. of Delta = 100, Delta Ratio = 50, Weekly: [], Monthly: [, Day: 0, Criteria: Friday, Day of selected months in yearly variations: First]
Retention Policy	[Type: Simple, Period: 7, Unit: Day(s)]
Command Line Tool	
Reminder	Logout Backup Reminder: , Off-line Backup Reminder: , Off-line Notification Day: 1 Days 0 hours
Bandwidth Control	[Enabled: No, Mode: Share, Bandwidth Control:]
Others	Remove temporary files after backup: Yes, Follow Link: Yes, Volume Shadow Copy: Yes, File Permissions: No, Compression Type: Fast (Compressed size larger than normal)

Backup Files

No.	Type	Dirs/Files	Size	Last Modified
1	new	/	260 / 260 (0%)	03/19/2019 13:43
2	new	/mnt	4k / 4k (0%)	03/28/2019 16:17
3	new	/root	4k / 4k (0%)	03/26/2019 16:32
4	new	/usr	155 / 155 (0%)	02/15/2017 09:29
5	new	/usr/local	142 / 142 (0%)	03/25/2019 13:18
6	new	/mnt/CloudBackup_002.txt	208 / 8k (97%)	03/28/2019 16:15
7	new	/mnt/CloudBackup_001.txt	208 / 8k (97%)	03/28/2019 16:15
8	new	/mnt/CloudBackup_003.txt	208 / 8k (97%)	03/28/2019 16:15
9	new	/mnt/Configuration_Guide2016.docx	400 / 16k (97%)	03/28/2019 16:16
10	new	/mnt/Configuration_Guide2017.docx	400 / 16k (97%)	03/28/2019 16:16
11	new	/mnt/Configuration_Guide2018.docx	400 / 16k (97%)	03/28/2019 16:16

Backup Logs from Command Line Interface (CLI)

```
#cd /root/.obm/log/1553761650657/Backup

#cat 2019-03-28-16-29-38.log

[2019/03/28 16:29:56] [info] [-] Start [ Linux 3.10.0-514.10.2.el7.x86_64
(centos7), AhsayOBM v8.1.0.95 ]

[2019/03/28 16:29:56] [cbs] [1553761710628] start,"Start [ Linux
3.10.0-514.10.2.el7.x86_64 (centos7), AhsayOBM v8.1.0.95 ]",0,0,0,,,

[2019/03/28 16:29:56] [info] [-] Saving encrypted backup set encryption keys
to server...

[2019/03/28 16:29:56] [cbs] [-] info,Saving encrypted backup set encryption
keys to server...,0,0,0,,,

[2019/03/28 16:29:57] [info] [1553761710628] Start Backup ... [In-File
Delta: Differential]

[2019/03/28 16:29:57] [info] [1553761710628] Using Temporary Directory
/root/tmp/1553761650657/OBS@1553761710628

[2019/03/28 16:29:57] [cbs] [1553761710628] info,Using Temporary Directory
/root/tmp/1553761650657/OBS@1553761710628,0,0,0,,,

[2019/03/28 16:29:57] [info] [-] Start running pre-commands

[2019/03/28 16:29:57] [cbs] [-] info,Start running pre-commands,0,0,0,,,

[2019/03/28 16:29:57] [info] [-] Finished running pre-commands
```

```
[2019/03/28 16:29:57] [cbs] [-] info,Finished running pre-commands,0,0,0,,,

[2019/03/28 16:29:57] [info] [1553761710628] Downloading server file list...

[2019/03/28 16:29:58] [info] [1553761710628] Downloading server file list...
Completed

[2019/03/28 16:29:59] [info] [1553761710628] Reading backup source from hard
disk...

[2019/03/28 16:29:59] [info] [1553761710628] Reading backup source from hard
disk... Completed

[2019/03/28 16:29:59] [info] [1553761710628] [New Directory]... /

[2019/03/28 16:29:59] [cbs] [1553761710628] new,/,260,260,1552974191000,,,D

[2019/03/28 16:29:59] [info] [1553761710628] [New Directory]... /mnt

[2019/03/28 16:29:59] [cbs] [1553761710628]
new,/mnt,4096,4096,1553761058000,,,D

[2019/03/28 16:29:59] [info] [1553761710628] [New Directory]... /root

[2019/03/28 16:29:59] [cbs] [1553761710628]
new,/root,4096,4096,1553589172000,,,D

[2019/03/28 16:29:59] [info] [1553761710628] [New Directory]... /usr

[2019/03/28 16:29:59] [cbs] [1553761710628]
new,/usr,155,155,1487122181000,,,D

[2019/03/28 16:29:59] [info] [1553761710628] [New Directory]... /usr/local

[2019/03/28 16:29:59] [cbs] [1553761710628]
new,/usr/local,142,142,1553491132000,,,D

[2019/03/28 16:30:00] [info] [1553761710628] [New File]... 100% of
"/mnt/CloudBackup_002.txt"

[2019/03/28 16:30:00] [info] [1553761710628] [New File]... 100% of
"/mnt/CloudBackup_001.txt"

[2019/03/28 16:30:00] [cbs] [1553761710628]
new,/mnt/CloudBackup_002.txt,208,8219,1553760909000,,,F

[2019/03/28 16:30:00] [cbs] [1553761710628]
new,/mnt/CloudBackup_001.txt,208,8219,1553760909000,,,F

[2019/03/28 16:30:00] [info] [1553761710628] [New File]... 100% of
```

```
"/mnt/CloudBackup_003.txt"

[2019/03/28 16:30:00] [cbs] [1553761710628]
new,/mnt/CloudBackup_003.txt,208,8219,1553760909000,,,F

[2019/03/28 16:30:00] [info] [1553761710628] [New File]... 100% of
"/mnt/Configuration_Guide2016.docx"

[2019/03/28 16:30:00] [cbs] [1553761710628]
new,/mnt/Configuration_Guide2016.docx,400,16440,1553761012000,,,F

[2019/03/28 16:30:00] [info] [1553761710628] [New File]... 100% of
"/mnt/Configuration_Guide2017.docx"

[2019/03/28 16:30:00] [info] [1553761710628] [New File]... 100% of
"/mnt/Configuration_Guide2018.docx"

[2019/03/28 16:30:00] [cbs] [1553761710628]
new,/mnt/Configuration_Guide2017.docx,400,16440,1553761012000,,,F

[2019/03/28 16:30:00] [cbs] [1553761710628]
new,/mnt/Configuration_Guide2018.docx,400,16440,1553761012000,,,F

[2019/03/28 16:30:01] [info] [1553761710628] Total New Files = 6

[2019/03/28 16:30:01] [info] [1553761710628] Total New Directories = 5

[2019/03/28 16:30:01] [info] [1553761710628] Total New Links = 0

[2019/03/28 16:30:01] [info] [1553761710628] Total Updated Files = 0

[2019/03/28 16:30:01] [info] [1553761710628] Total Deleted Files = 0

[2019/03/28 16:30:01] [info] [1553761710628] Total Deleted Directories = 0

[2019/03/28 16:30:01] [info] [1553761710628] Total Deleted Links = 0

[2019/03/28 16:30:01] [info] [1553761710628] Total Moved Files = 0

[2019/03/28 16:30:01] [info] [1553761710628] Saving encrypted backup file
index to 1553761650657/blocks at destination AhsayCBS...

[2019/03/28 16:30:02] [info] [1553761710628] Saving encrypted backup file
index to 1553761650657/blocks/2019-03-28-16-29-38 at destination AhsayCBS...

[2019/03/28 16:30:02] [info] [-] Start running post-commands

[2019/03/28 16:30:02] [cbs] [-] info,Start running post-commands,0,0,0,,,

[2019/03/28 16:30:02] [info] [-] Finished running post-commands
```

```
[2019/03/28 16:30:02] [cbs] [-] info,Finished running post-commands,0,0,0,,,

[2019/03/28 16:30:05] [info] [1553761710628] Deleting temporary file
/root/tmp/1553761650657/OBS@1553761710628

[2019/03/28 16:30:05] [info] [1553761710628] Backup Completed Successfully

[2019/03/28 16:30:05] [cbs] [1553761710628] end,BS_STOP_SUCCESS,0,0,0,,,
```

2. Filter that contains the word Backup on a Windows shared folder.

Filter

Name

Filter that contains the word Backup Regular Expression

Matching pattern

➕ 🗑

☐ | Pattern ▦

☐ | ^.*Backup.*$

For each of the matched files/folders under top directory

◉ Include them

◯ Exclude them

Exclusion

☑ Exclude all unmatched files/folders

Match file/folder names by

◯ Simple comparison starts with ▾

◉ Regular expression (UNIX-style)

How to Apply This Filter

Apply this filter to all files/folders in

◯ All hard disk drives

◉ This folder only

/mnt

Apply to

☑ File ☐ Folder

```
Filter Name = Filter that contains the word Backup Regular Expression

Matching Pattern = ^.*Backup.*$

Filter Mode = Include Them
```

```
Exclude all others = True

Matching Type = Simple Comparison | Starts With

Apply To = File

Directory = /mnt/backupfiles
```

As a result, these are the total files and directories that have been successfully backed up:

Total New Files = 3

1. Cloud[Backup_]001.txt

2. Cloud[Backup_]002.txt

3. Cloud[Backup_]003.txt

Total New Directories = 5

1. /

2. /mnt

3. /root

4. /usr

5. /usr/local

Explanation:

All the files that contains the word version, whether it is located at the beginning, middle, or end of the file name, have been successfully backed up including the directories but excluding all the other files that did not match the filter.

Looking closely, unlike in the Appendix A using simple comparison, we're using the Regular expression (UNIX-style) with pattern ^.*Backup.*$. This filter only applies to a specific folder which is mnt, and since the File, under the "Apply to" field, has been set to true, only the files have been backed up even if there are available folders that matched the set criteria.

This example is the same as the one on the regular expression – contains filter, the only difference is that the source destination is a Windows shared folder.

Here are the reports using the AhsayCBS web console and CLI:

Backup Report from AhsayCBS Web Console

Backup Set Settings

Field	Value
Backup Source	
Filter	[Enabled: true][Name: Filter that contains the word Backup Regular Expression, Type: Custom, Top Directory: /mnt, Include: Yes, Exclude all unmatched files/folders: Yes, Apply to: No, Apply to files: Yes, Pattern: [`.*Backup.*$`]]
Backup Schedule	[Computer Name:][Daily:][Weekly:][Monthly:][Custom:]
Continuous Data Protection	[Enabled: No]
In-File Delta	[Enabled: Yes, Default Type: D, Block Size: -1, Minimum Size = 26214400, Maximum No. of Delta = 100, Delta Ratio = 50, Weekly: [], Monthly: [, Day: 0, Criteria: Friday, Day of selected months in yearly variations: First]
Retention Policy	[Type: Simple, Period: 7, Unit: Day(s)]
Command Line Tool	
Reminder	Logout Backup Reminder: , Off-line Backup Reminder: , Off-line Notification Day: 1 Days 0 hours
Bandwidth Control	[Enabled: No, Mode: Share, Bandwidth Control:]
Others	Remove temporary files after backup: Yes, Follow Link: Yes, Volume Shadow Copy: Yes, File Permissions: No, Compression Type: Fast (Compressed size larger than normal)

Backup Files

No.	Type	Dirs/Files	Size	Last Modified
1	new	/	260 / 260 (0%)	03/19/2019 13:43
2	new	/mnt	4k / 4k (0%)	03/28/2019 16:17
3	new	/usr	155 / 155 (0%)	02/15/2017 09:29
4	new	/root	4k / 4k (0%)	03/26/2019 16:32
5	new	/usr/local	142 / 142 (0%)	03/25/2019 13:18
6	new	/mnt/CloudBackup_002.txt	208 / 8k (97%)	03/28/2019 16:15
7	new	/mnt/CloudBackup_001.txt	208 / 8k (97%)	03/28/2019 16:15
8	new	/mnt/CloudBackup_003.txt	208 / 8k (97%)	03/28/2019 16:15

Backup Logs from Command Line Interface (CLI)

```
#cd /root/.obm/log/1553761787740/Backup

#cat 2019-03-28-16-36-59.log

[2019/03/28 16:37:18] [info] [-] Start [ Linux 3.10.0-514.10.2.el7.x86_64
(centos7), AhsayOBM v8.1.0.95 ]

[2019/03/28 16:37:18] [cbs] [1553762165503] start,"Start [ Linux
3.10.0-514.10.2.el7.x86_64 (centos7), AhsayOBM v8.1.0.95 ]",0,0,0,,,

[2019/03/28 16:37:18] [info] [-] Saving encrypted backup set encryption keys
to server...

[2019/03/28 16:37:18] [cbs] [-] info,Saving encrypted backup set encryption
keys to server...,0,0,0,,,

[2019/03/28 16:37:19] [info] [1553762165503] Start Backup ... [In-File
Delta: Differential]

[2019/03/28 16:37:19] [info] [1553762165503] Using Temporary Directory
/root/tmp/1553761787740/OBS@1553762165503

[2019/03/28 16:37:19] [cbs] [1553762165503] info,Using Temporary Directory
/root/tmp/1553761787740/OBS@1553762165503,0,0,0,,,

[2019/03/28 16:37:19] [info] [-] Start running pre-commands

[2019/03/28 16:37:19] [cbs] [-] info,Start running pre-commands,0,0,0,,,

[2019/03/28 16:37:19] [info] [-] Finished running pre-commands
```

[2019/03/28 16:37:19] [cbs] [-] info,Finished running pre-commands,0,0,0,,,

[2019/03/28 16:37:19] [info] [1553762165503] Downloading server file list...

[2019/03/28 16:37:20] [info] [1553762165503] Downloading server file list... Completed

[2019/03/28 16:37:21] [info] [1553762165503] Reading backup source from hard disk...

[2019/03/28 16:37:21] [info] [1553762165503] Reading backup source from hard disk... Completed

[2019/03/28 16:37:21] [info] [1553762165503] [New Directory]... /

[2019/03/28 16:37:21] [cbs] [1553762165503] new,/,260,260,1552974191000,,,D

[2019/03/28 16:37:21] [info] [1553762165503] [New Directory]... /mnt

[2019/03/28 16:37:21] [cbs] [1553762165503] new,/mnt,4096,4096,1553761058000,,,D

[2019/03/28 16:37:21] [info] [1553762165503] [New Directory]... /usr

[2019/03/28 16:37:21] [cbs] [1553762165503] new,/usr,155,155,1487122181000,,,D

[2019/03/28 16:37:21] [info] [1553762165503] [New Directory]... /root

[2019/03/28 16:37:21] [cbs] [1553762165503] new,/root,4096,4096,1553589172000,,,D

[2019/03/28 16:37:21] [info] [1553762165503] [New Directory]... /usr/local

[2019/03/28 16:37:21] [cbs] [1553762165503] new,/usr/local,142,142,1553491132000,,,D

[2019/03/28 16:37:21] [info] [1553762165503] [New File]... 100% of "/mnt/CloudBackup_002.txt"

[2019/03/28 16:37:21] [cbs] [1553762165503] new,/mnt/CloudBackup_002.txt,208,8219,1553760909000,,,F

[2019/03/28 16:37:21] [info] [1553762165503] [New File]... 100% of "/mnt/CloudBackup_001.txt"

[2019/03/28 16:37:21] [cbs] [1553762165503] new,/mnt/CloudBackup_001.txt,208,8219,1553760909000,,,F

[2019/03/28 16:37:21] [info] [1553762165503] [New File]... 100% of "/mnt/CloudBackup_003.txt"

```
[2019/03/28 16:37:21] [cbs] [1553762165503]
new,/mnt/CloudBackup_003.txt,208,8219,1553760909000,,,F

[2019/03/28 16:37:22] [info] [1553762165503] Total New Files = 3

[2019/03/28 16:37:22] [info] [1553762165503] Total New Directories = 5

[2019/03/28 16:37:22] [info] [1553762165503] Total New Links = 0

[2019/03/28 16:37:22] [info] [1553762165503] Total Updated Files = 0

[2019/03/28 16:37:22] [info] [1553762165503] Total Deleted Files = 0

[2019/03/28 16:37:22] [info] [1553762165503] Total Deleted Directories = 0

[2019/03/28 16:37:22] [info] [1553762165503] Total Deleted Links = 0

[2019/03/28 16:37:22] [info] [1553762165503] Total Moved Files = 0

[2019/03/28 16:37:23] [info] [1553762165503] Saving encrypted backup file
index to 1553761787740/blocks at destination AhsayCBS...

[2019/03/28 16:37:23] [info] [1553762165503] Saving encrypted backup file
index to 1553761787740/blocks/2019-03-28-16-36-59 at destination AhsayCBS...

[2019/03/28 16:37:24] [info] [-] Start running post-commands

[2019/03/28 16:37:24] [cbs] [-] info,Start running post-commands,0,0,0,,,

[2019/03/28 16:37:24] [info] [-] Finished running post-commands

[2019/03/28 16:37:24] [cbs] [-] info,Finished running post-commands,0,0,0,,,

[2019/03/28 16:37:27] [info] [1553762165503] Deleting temporary file
/root/tmp/1553761787740/OBS@1553762165503

[2019/03/28 16:37:27] [info] [1553762165503] Backup Completed Successfully

[2019/03/28 16:37:27] [cbs] [1553762165503] end,BS_STOP_SUCCESS,0,0,0,,,
```