

Azure File Share Quota Exceeded During File Access_Storage

Last updated by | Kerry McCullagh | Apr 25, 2022 at 8:59 AM PDT

Tags

cw.Azure-Files-All-Topics

cw.TSG

At any point of time if you are unable to force close file handles due to permission issues, please file EEE ICM stating reason for filing the ICM with EEE.

Contents

- Symptoms
 - Windows
 - Symptom 1
 - Symptom 2
 - Symptom 3
 - Linux
 - Symptom 4
 - Symptom 5
- Cause
- Resolution
 - Using Azure Support Center
 - Using Windows tools
 - Handles.exe
 - Using Azure REST API(Customer ready)
 - File Recovery
- Case Coding
- More Information
- Need additional help or have feedback?

Symptoms

Error "Not enough quota is available to process this command" when trying to open an Azure Files share.

Windows

Symptom 1

1816 ERROR_NOT_ENOUGH_QUOTA

Symptom 2

0xc0000044 STATUS_QUOTA_EXCEEDED

Symptom 3

Invalid handle value GetLastError: 53

Linux

Symptom 4

<filename> [permission denied]

Symptom 5

Disk quota exceeded

Cause

If you see the following in a network trace, it indicates the customer has reached the upper limit on the number of SMB-based requests:

XS_STATUS_SMB_TOO_MANY_HANDLES or XS_STATUS_SMB_TOO_MANY_LOCKS or XS_STATUS_SMB_TOO_MANY_NOTIFICATIONS

Most times the issue seems to occur when the number of concurrent open handles for a file or a folder reaches the upper limit at Azure File storage .


The maximum handles per file or folder is 2000 (as of 12/6/2016) at the Azure File storage, post which customer will see the "STATUS_QUOTA_EXCEEDED" followed by losing the mount point or share.

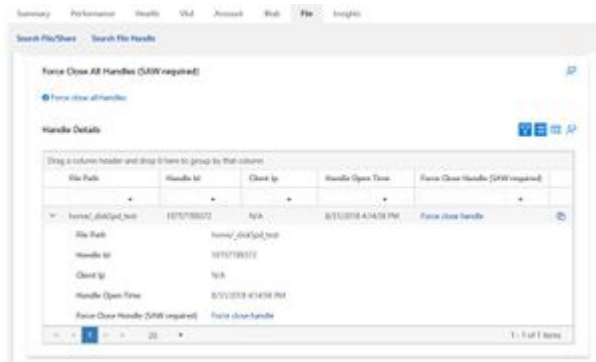
Customer might have an application which could be opening and closing a file or a folder, and in the process may not be closing the file or the folder properly (a handle leak), thus getting into this issue.

Resolution

Customer needs to identify the Process/Daemon/Application/Code which creates such requests and reduce the number of concurrent open handles by closing some handles and retry. The next approaches can help you investigate further the issue.

Using Azure Support Center

1. Launch [Azure Support Center](#)  (ASC).
2. Navigate to Resource Explorer and search for the affected Storage Account resource.
3. Select the File tab from the Storage Account information.
4. Navigate to the subsection "Search File Handle" and input the **Azure File Share, Directory or File** to search for the handle amount. Format: {fileshare}/{file or directory path} Example: [Search Handles for a directory in an AFS](#).
5. Review the report for all open handles.



6. Instruct the customer to ensure that all unnecessary handles are closed.
7. With customer consent, you may proceed to Force closure of a handle or Force the closure of all handles.
8. Create ICM with the details of the Handle/s to be closed and Storage Account information. ICM Template: <https://portal.microsofticm.com/imp/v3/incidents/create?tmpl=RK24oB>

1. If you are member of project [TM-CSSStgRec](#) :

1. Auto assign the ICM.
2. Proceed to open the "**Force close handle**" link in the ASC report or execute the Jarvis Action "XStore-> Resource Property Retrieval -> [Force Close File Handle Operation](#) **Example(Image)**.



3. Use the "Get Access" button to generate the JIT request
 4. Complete the JIT request by filling the "Work-item Id" field with the previously created ICM, select the Access Level as **PlatformServiceOperator** and submit it. The other fields should auto-populate.
 5. Execute the query. Note: Jarvis Actions should automatically refresh after successfully creating the JIT request.
 6. Confirm with Customer that the handle is released and the file/s can be deleted
 7. Resolve the ICM if issue is resolved.
2. If you are not member of project [TM-CSSStgRec](#) , please complete the below Template and send an email with it to the global TA alias: aivpta@microsoft.com and cssstgrec@microsoft.com to help with the [Force Close File Handle Operation](#) .

Force Close File Handles Template

=====

Case Number:

ICM Number:

StorageAccountName:

File Share or Path:

File Handle Id:

Jarvis Action Query: <Retrieve this value from "Force Close File" Handle link in ASC report>

- If no TA is available to perform this operation, please create an ICM directly using the Template above. Be sure that handles are opened and that customer gave his/her consent to force its closure.

Using Windows tools

Handles.exe

You can use [Handle.exe](#) on a Windows client to check if there are open handles on the client against the Azure File share. This tool searches with partial or full file name and lists the processes holding the handle.

Example: *handle <StorageAccountName>.file.core.windows.net*

```
C:\Users\<User>\Desktop\Handle>handle <StorageAccountName>.file.core.windows.net

NtHandle v4.11 - Handle viewer
Copyright (C) 1997-2017 Mark Russinovich
Sysinternals - www.sysinternals.com

svchost.exe      pid: 1132  type: File      264: \Device\Mup\X:0000000000008de80\<StorageAccountName>.file.core.windows.net\home
explorer.exe     pid: 4844  type: File      9C0: \Device\Mup\<StorageAccountName>.file.core.windows.net\home\
explorer.exe     pid: 4844  type: File      1DF0: \Device\Mup\<StorageAccountName>.file.core.windows.net\home\test
explorer.exe     pid: 4844  type: File      1EEC: \Device\Mup\<StorageAccountName>.file.core.windows.net\home\
explorer.exe     pid: 4844  type: File      2470: \Device\Mup\<StorageAccountName>.file.core.windows.net\home\test
AcroRd32.exe     pid: 252   type: File      460: \Device\Mup\<StorageAccountName>.file.core.windows.net\home\test\Cloud_Application_Architecture_Guide_EN_US.pdf
AcroRd32.exe     pid: 252   type: File      780: \Device\Mup\<StorageAccountName>.file.core.windows.net\home\Cloud_Application_Architecture_Guide_EN_US.pdf
```

Using Azure REST API(Customer ready)

Product group has released an API for customers to be able to close open handles at their end.

List Azure File Share Handles

Force Close Azure File Share Handles

Sample script (AS IS). For better reading, please copy and paste the content in a Notepad or text editor.

► [Click here to expand or collapse this section](#)

File Recovery

- If a file is deleted from a FileShare, it is not possible to recover the files as of now. However SoftDelete for Azure files is being planned and we don't have an ETA yet.
- To overcome this limitation, you could use Shared snapshot feature. <https://docs.microsoft.com/en-us/azure/storage/files/storage-snapshots-files>

Case Coding

Root Cause - Windows Azure\Storage\Files\Client Side Issues (.Net, 3rd Party SDK)


More Information

For more information, see:

<https://azure.microsoft.com/en-us/documentation/articles/storage-performance-checklist> 

<https://docs.microsoft.com/en-us/azure/storage/files/storage-files-scale-targets> 

Need additional help or have feedback?

<i>To engage the Azure Files All Topics SMEs...</i>	<i>To provide feedback on this page...</i>	<i>To provide kudos on this page...</i>
<p>Please reach out to the Azure Files All Topics SMEs  AVA channel via Teams.</p> <p>Make sure to use the Ava process for faster assistance.</p>	<p>Use the Azure Files All Topics Feedback form to submit detailed feedback on improvements or new content ideas for Azure Files All Topics.</p> <p>Please note the link to the page is required when submitting feedback on existing pages! If it is a new content idea, please put N/A in the Wiki Page Link.</p>	<p>Use the Azure Files All Topics Kudos form to submit kudos on the page. Kudos will help us improve our wiki content overall!</p> <p>Please note the link to the page is required when submitting kudos!</p>