

Knowledge Base Article: 000534173

DTA 534173: Dell EMC Unity: Windows users may be unable to access Common Internet File System (CIFS) shares when Server Message Block (SMB) 3.1.1 is running which may result in potential data unavailability (000534173)

Primary Product: : Dell EMC Unity Family
 Product : Dell EMC Unity 300F,Dell EMC Unity 300,Dell EMC Unity 350F,Dell EMC Unity 400,Dell EMC Unity 400F,Dell EMC Unity 450F,Dell EMC Unity 500,Dell EMC Unity 500F,Dell EMC Unity 550F,Dell EMC Unity 600,Dell EMC Unity 600F,Dell EMC Unity 650F

Version:: 2 Article Type:: Technical Audience: Level 30 = Customers Last Published: Fri May 24 19:10:24 GMT 2019
 Advisory

Summary:
 Severity Rating: Critical

Severity Rating Potential Data Unavailability

Description:

Impact Description: Impact Description: Dell EMC Unity systems running Operating Environment (OE) 4.2 or later with Server Message Block (SMB) 3.1.1 running may be unable to access their Common Internet File System (CIFS) shares from their Windows 10 version 1903 or Windows Server version 1903 Operating Systems (OS).

Which Systems May Be Affected?

Product (and version)	All Dell EMC Unity models
Running this Core Software (Operating System (OS) or Operating Environment (OE))	Dell EMC Unity OE 4.2 or later
When this condition is true	Accessing CIFS shares running SMB 3.1.1
And when this condition is true	Windows 10 version 1903 Windows Server version 1903

Issue:

User will see the below error message while accessing the SMB share:
Windows cannot access "\\servername" check the spelling.... Error code 0x80004005 Unspecified error

The following error message will appear in Windows event viewer:
The server does not support any dialect that the client is trying to negotiate, such as the client has SMB2/SMB3 disabled and the server has SMB1 disabled.

Error messages in the Unity c4_safe_ktrace.log:
sade:SMB: 3:[nas_serverx] Unrecognized SMB2 negotiate context type 0003
sade:SMB: 3:[nas_serverx] Unrecognized SMB2 negotiate context type 0003

Error message in Network traces:
"STATUS_INVALID_PARAMETER"

Cause:

Due to a recent change in Windows 10 version 1903 and Windows Server version 1903, there may be a SMB communication issue with Dell EMC Unity systems running SMB 3.1.1 which may result in these versions being unable to access CIFS shares.

Resolution:

Product (and Operating System or Operating Environment)	All Dell EMC Unity models impacted have the same workaround.
Action Type	WORKAROUND
	<p><u>Workaround:</u></p> <p>Modify the Dell EMC Unity SMB dialect to SMB version 3.0.2:</p> <ol style="list-style-type: none">1. Run the svc_nas command to add the parameter. <pre>service@spa:/cores/service# svc_nas ALL -param -f cifs -m smb2.maxDialect -v SMB3.0.2 SPA : done</pre>1. Check to confirm the parameter is correctly added to the running configuration: <pre>service@spa:/cores/service# svc_nas ALL -param -f cifs -info smb2.maxDialect -v SPA:</pre>

Action Needed	<pre> name = smb2.maxDialect facility_name = cifs default_value = "" The default_value is an empty string "" specifying the MAX dialect supported by the system release (SMB3.1.1). current_value = SMB3.0.2 configured_value = SMB3.0.2 param_type = global user_action = none change_effective = immediate range = * description = Specifies the upper SMB2 dialect supported </pre> <p><u>Note:</u> The SMB clients must disconnect all the SMB server shares in order to negotiate the appropriate dialect according to the parameter value. The svc_nas -restart command can also be used to force the disconnect of all SMB clients. This operation also restarts the other NAS server services.</p>
Who Can Complete the Action	CUSTOMER
Issue Addressed in this OS, OE or Software	Dell EMC is investigating an enhancement to address this issue. Dell EMC will update customers once more information on this enhancement becomes available to customers under current Dell EMC maintenance contracts.
Solution Considerations	If max dialect SMB 3.1.1 is required, back-rev the Windows 10 version 1903 or Windows Server version 1903 installations to the previous Generally Available (GA) version (1803).

Primary Product Dell EMC Unity Family

Product

Dell EMC Unity 300F, Dell EMC Unity 300, Dell EMC Unity 350F, Dell EMC Unity 400, Dell EMC Unity 400F, Dell EMC Unity 450F, Dell EMC Unity 500, Dell EMC Unity 500F, Dell EMC Unity 550F, Dell EMC Unity 600, Dell EMC Unity 600F, Dell EMC Unity 650F, Dell EMC Unity All Flash, Dell EMC

Unity Family, Dell EMC Unity Hybrid, Dell EMC UnityVSA, Dell EMC UnityVSA (Virtual Storage Appliance), Dell EMC UnityVSA Professional Edition

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