NetApp NAS tuning to work with EFT in HA mode

THE INFORMATION IN THIS ARTICLE APPLIES TO:

- EFT, v7.0 and later

DISCUSSION

NetApp servers provide remote storage services used by EFT. In cases where EFT is making a huge amount of file service requests, NetApp Filers can stop responding and give a 'Resource Unavailable' error in the Windows Event Logs. This will cause Folder Monitor Event Rules to stop processing. The settings listed below can be used to remedy the 'Resource Unavailable' error.

NOTE: Consult NetApp Support for a full explanation and steps on how to implement these settings.

Settings unique to NetApp NAS devices

NetApp Settings for increasing Multiple CIFS connections

http://community.netapp.com/t5/Network-Storage-Protocols-Discussions/Multistore-max-mpx/td-p/40935

The parameters to control buffer size and buffer delay are cifs.neg_buf_size, cifs.changenotify.buffersize, and smb_boxcar_expire_ms. The smb_boxcar_expire_ms parameter can only be seen and changed in privileged mode.

The ranges for these values are as follows:

- **cifs.neg_buf_size**: 4356 to 65535 (default = 33028); 65535 recommended
- **cifs.changenotify.buffersize**: 4 to 64 (default = 4); 64 recommended
- **smb_boxcar_expire_ms**: unlimited (default = 500); Set to 200ms and monitor for acceptable rate of empty CIFS notifications; further reduce to 100ms, 50ms, etc. as needed.

cifs.max_mpx This option controls how many simultaneous operations the filer reports that it can process. An "operation" is each I/O the client believes is pending on the filer including outstanding change notify operations

Default: 50

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Values: 50, 126, 253, 1124

Effective: Immediately

Refer to this article for a better understanding of CIFS Max Multiplex:

https://kb.netapp.com/app/answers/answer_view/a_id/1004306/loc/en_US

GlobalSCAPE Knowledge Base
https://kb.globalscape.com/Knowledgebase/11215/NetApp-NAS-tuning-to-work-wi...