CITRIX ADC FILE SYSTEM & PROCESS CHEAT SHEET

COMMON SYSTEM DIRECTORIES, FILES, PROCESSES/DAEMONS, AND LOGS

VIEWING FILE SYSTEM STRUCTURE

Use the shell/unix command: # df -h

Example Output: # df -h

File stystem	Size	Used	Avail	Capacity	Mounted on
/dev/md0	354M	342M	5.2M	98%	/
devfs	1.0k	1.0k	0B	100%	/dev
procfs	4.0k	4.0k	0B	100%	/proc
/dev/ad0s1a	1.4G	556M	775M	42%	/flash
dev/ad0s1e	13G	8.2G	4.4G	65%	/var

FILE SYSTEM (Flash Storage) /flash

nsconfig/	Configuration files (ns.conf)
nsconfig/ssl	SSL certificate and key files
nsconfig/license	License files
nsconfig/pooledlicense.conf	Conf. file for pooled license
nsconfig/monitor	Custom monitors
boot (dir)	FreeBSD bootstrap program
ns-12.1-50.28.gz	ADC firmware image (example)

FILE SYSTEM (Hard Disk Drive) /var

log/	BSD and ADC plaintext log files
nslog	ADC newnslog format log files
nstrace/	Nstrace files
core/ & /crash/	Process/Kernel core dump files
netscaler/	ADC docs, SSL cert. GUI help files
nssync/	Nssync support files
nsinstall/	ADC install firmware images
nsbackup/	ADC backup images
tmp/support	Collector support bundles

FILE SYSTEM (RAM) /

Volatile, image is contained in kernel

OS config files, etc.

KEY PROCESSES

-nsppe	Packet Engine (PE)
-nsnetsvc	Configuration engine
-nsaaad	Authentication daemon
-nsaggregatord	Packet Engine data aggregator
-nsclusterd	Cluster daemon
-nsconfigd	Config daemon
-nsprofmon	Continuous NS profiling
-nsfsyncd	HA File sync daemon
-aslearn	AppFW learning daemon
-bgpd	BGP daemon
-bsclfsyncd	Cluster file sync daemon
-nsrised	Rise daemon
-ospfd	OSPF daemon
-snmpd	SNMP daemon
-nscollect	Stats gathering for historical reporting

COMMON LOG FILES IN /var/log/

/var/log/messages*	All FreeBSD shell commands, console messages
/var/log/ns.log*	All ADC CLI commands and other events
/var/log/notice.log*	All bash notice logs
/var/log/nitro.log*	Nitro logs
/var/log/bash.log*	Bash logs
/var/log/httpaccess*	HTTP requests logs (GETs, POSTs, etc.)
/var/log/auth.log*	Authorization details
/var/log/nsfsyncd.log	Synchronization details between HA nodes
/var/log/license.log	License logs

COMMON LOG FILES IN /var/nslog

/var/nslog/newnslog*	ADC propriety logging file for performance stats
/var/nslog/dmesg.*	FreeBSD boot up message file
/var/nslog/aslearn.log	AppFW Learning Feature log
/var/nslog/snmpdebug.*	SNMP debugging log

OTHER IMPORTANT INFORMATION

When the amount of disk space is low in /var directory of Citrix ADC, it may prevent logging in the ADC or create other issues.
Citrix recommends to remove old log files to create free space in /var directory.

Below are some common directories that may have old and large files to remove:

- **/var/core/ or /var/crash/ -large core or crash dump files**
- **/var/tmp/support/ -collector, technical support bundle files**
- **/var/install/ -firmware image files /var/nstrace/ -ADC packet capture / trace files**
- **/var/nstrace/ - ADC packet capture/trace files**

Note: Find the largest size directories using the following shell/unix command:# du -sh /var/* | sort -nr | grep G

When looking at processes using the shell command, top, it will display NSPPE-XX running at 100%.
This is expected behavior and doesn't indicate the CPU is running at 100%.
CPU utilization can be checked with CLI commands, stat ns or stat cpu

PID	USERNAME	THR	PRI	NICE	SIZE	RES	STATE	C	TIME	WCPU	COMMAND
1060	root	1	44	r0	487M	487M	CPU1	1	661:21	100.00%	NSPPE-00

- Citrix ADC newnslog aggregates ADC specific counters, events, console messages, etc. from all the Packet Engines (PE)
- nsconmsg tool is used for reading the newnslog files
- All newnslog files are located under /var/nslog/newnslog*
- nsconmsg/newnslog cheat sheet has been published under CTX231777