Datafile Collector (DFC) performance baseline results

Performance

The following performance tests can be found in the repo, https://gerrit.onap.org/r/admin/repos/integration, under "test/mocks/datafilecollector-testharness /auto-test". The "README.md" file explains how to run the tests.

Memory and thread consumption

During maximum load, 3500 new files every poll for 24h, the memory consumption vary between 2 and 5,5 GB during file processing. The threads used va

File handling capacity

Note! The simulators (MR, DR, and PNF) are run on the same hardware as the DFC during all the tests below.

700 nodes (700 events) with 1MB file each, 5 polls total 3500 files (3.5 GB) (From polling to all files downloaded and published)						
нw	Test Case	FTP prot	Dublin version: 1.1.2		Dublin version: 1.1.3	
			Execution time (minutes)	Files per second	Execution time (minutes)	Files per second
Ubuntu 16, 8 vCPU, 32GB	FTC10	SFTP	8,5	6,9	6,5	9
Ubuntu 16, 8 vCPU, 32GB	FTC11	FTPS	3,5	16,7	2,5	23

700 nodes (3500 event) with 100 1MB files in 100 polls total 72800 files (72.8 GB) (From polling to all files downloaded and published)						
HW	Test Case	FTP prot	Dublin version: 1.1.2		Dublin version: 1.1.3	
			Execution time (minutes)	Files per second	Execution time (minutes)	Files per second
Ubuntu 16, 8 vCPU, 32GB	FTC20	SFTP	137	8,9	123	9,8
Ubuntu 16, 8 vCPU, 32GB	FTC21	FTPS	68	17,8	60	20

Max load test on DFC, polling 3500 new files every poll for 24h (from 700 nodes)						
HW	Test Case FTP Dublin version: 1.1.2			Dublin version: 1.1.3		
		p. v.	Polled, downloaded and published files	Files per second	Polled, downloaded and published files	Files per second
Ubuntu 16, 8 vCPU, 32GB	MaxFiles1MB_SFT P_24h	SFTP	215000	2,5	365000	4,2
Ubuntu 16, 8 vCPU, 32GB	MaxFiles1MB_FTP S_24h	FTPS	990500	11,5	1063741	12,3

	3 day test. 100 files from 700 nodes in the first event from each node. Then one new file per node every 15 min.						
HW		FTP prot	Dublin version: 1.1.2	Dublin version 1.1.3			
		P	Polled, downloaded and published files				
Ubuntu 16, 8 vCPU, 32GB	Stability 1MB_S FTP_72h	SFTP	270900 (expected number of files)	270900 (expected number of files)			
Ubuntu 16, 8 vCPU, 32GB	Stability 1MB_F TPS_72h	FTPS	270060 (840 files less than target. Not all 72h polls where made probably due to delays in the simulators or too agressive test criterias. However all polled files downloaded and published successfully.)	269780 (1120 files less than target. Not all 72h polls where made probably due to delays in the simulators or too agressive test criterias. However all polled files downloaded and published successfully.)			