Third Party Tools

Third-Party Tools Overview

A number of high quality, production ready tools have been developed by members of the Lustre community. These include:

lltop

URL: https://github.com/jhammond/lltop

Description: Lustre load monitor with batch scheduler integration. Covered in LUG2011 presentation:

An enhanced version of the tool is also available, called xltop. It is included at the bottom of this page.

Author: John Hammond (TACC)

LMT

https://github.com/chaos/lmt

Description: LMT is a distributed system that provides a "top"-like display of the activity levels of the server-side (MDS, OSSes, and LNET routers) nodes of one or more Lustre-based filesystems.

Author: Christopher J. Morrone (LLNL)

PCP

URL: https://github.com/wtsi-ssg/pcp

Parallel copy tool for Lustre (PCP) is similar to cp -r; simply give it a source directory and destination and pcp will recursively copy the source directory to the destination in parallel.

Robinhood Policy Engine

URL: http://sourceforge.net/apps/trac/robinhood

Robinhood Policy Engine is a multi-purpose tool for managing content of large filesystems: audit FS content, accounting, remove old unused files according to admin-defined policies, customizable alerts based on file properties, backup data to external storage. It has advanced capabilities for Lustre filesystems: leverage OST usage, list or purge files per OST, policy criteria based on pools and OST index, processing of MDT changelogs (Lustre v2).

Shine

URL: http://lustre-shine.sourceforge.net/

Description: Shine is a command line tool designed to setup and manage the Lustre file system on a cluster. It aims at centralize and simplify Lustre filesystem management task with:

- one human-readable configuration file to describe your filesystem
- start, stop, format (and more) your filesystem from a unique machine, thanks to a simple command line interface.

Author: CEA/Bull

tacc-stat

URL: https://github.com/jhammond/tacc_stats

https://github.com/jhammond/tacc_stats

Description: Probe Lustre interfaces and collect statistics.

Author: John Hammond (TACC)

xltop

URL: https://github.com/jhammond/xltop

Description: xltop is a continuous Lustre monitor with batch scheduler intergation.

Client screenshot:

FILESYSTEM		MDS/T	LOAD1	LOADS	LOAD15	TASKS	OSS/T	LOAD1	LOADS	LOAD15	TASKS	NIDS
ranger-work		1/1	1.52	3.48	4.41	609	14/84	2.74	2.08	2.09	1347	4212
ranger-scra	ıtch	1/1	0.13	0.20	0.54	584	50/300	2.52	1.94	1.52	1348	4213
ranger-shar	re	1/1	0.93	1.20	1.72	544	6/36	3.55	1.37	0.90	1203	3960
JOB FS	3			WR_MB/S	S RE	_MB/S	REQS	/S OWI	NER	NAME	HC	STS
2526717 ra	nger-	scratcl	h	321.557	7	5.994	3556.1	33 tg8	303155	NST3.28	-r0	20
login4 ranger-scratch		h	38.489	55.054		469.9	43 NOI	NE	NONE		1	
2530927 ranger-scratch		h	16.526	0.000		39.942 dk		kcira Parametric		ric	1	
2529449 ranger-work			11.754	0.000		24.088 bea		aling PE-OH			4	
2530975 ra	nger-	work		11.108	3	0.007	23.6	20 vi	shnam2	batch		16

Author: John Hammond (TACC)