NFS-GANESHA: list of features to be add to the product

January, 21 2009

Security Features	Workload	Deadline	Status
Finalize RPCSEC_GSS support with krb5's gssrpc	in progress		Done 0.99.43
Implement RPCSECGSS support with librpcsec_gss	2 weeks		
Validate TI-RPC's implementation of RPCSEC GSS	2 weeks		

FSAL	Workload	Deadline	Status
Add corrrect "su" in FSAL_PROXY with RPCSEC_GSS	4 days		
FSAL on top of LUSTRE	heavy		
FSAL on top of FSAL/DMU	Internship?		
FSAL on top of ZFS	heavy		
Optimize and stress FSAL_PROXY	1 week		
FSAL on top of SLURM	Internship?		
FSAL on top of Ext2 (via LOFS)	1 month	31/03/09	in progress
FSAL_POSIX port to MySQL	1 month	31/01/09	in progress
FSAL on top of PVFS2	Internship?		

NFS implementation	Workload	Deadline	Status
OP OPEN4 prefetch the file			
OP_CLOSE4 could dispose the file	3 days		
Implement correct NFS4ERR_DELAY and			
NFS3ERR_JUKEBOX	1 day		
Coherency in case of multi nfsd for a single // namespace	Internship?		
attribute fs.location (multiple servers, load balancing)	1 week		
READ delegations	heavy		
WRITE delegations	wait for client		
DRC for seqid	1 month		
Makes FSAL_XAttrs tunable by user via sqlite.	1 month		
Attributes for extended attributes objects	2 weeks		in progress
"ghost directory" to manage extended attributes	1 week		Done 0.99.42

Internals	Workload	Deadline	Status
coherency for the errors in between the different layers	3 days		
NFSv4 state machine to be cleaned up	1 week		Done 0.99.44
Metadata writeback (as a FSAL ?)	heavy		
dump for the md cache	heavy		
Versions and snapshots	heavy		
datacache used LOFS to produce big files	1 month		
Use nodesets supports in Configuration file	1 week		Done 0.99.43
(HPSS) LOFS's big files staged and migrated on demand	1 week		

Interoperability	Workload	Deadline	Status
TI-RPC support to be added and validated	2 weeks		Done 0.99.44
Ipv6 support via TI-RPC	1 week		Done 0.99.45
Port to FreeBSD and BSD variants	1 week		Done 0.99.50
Port to FreeBSD and BSD variants	2 months		Done 0.99.50
Test with FreeBSD clients (vmware)	1 week		
Test with Solaris / OpenSolaris clients (vmware)	1 week		
Test with Windows clients (NFS Maestro)	2 weeks		
Compile on a PowerPC Linux Box	3 weeks		Done 0.99.49

Publications	Workload	Deadline	Status
WiP Topic for FAST'09, abstract	1 day	27/01/09	Done