



StoRM IPv6 Status

StoRM overview

- Developers claim IPv6 support
 - "Last time I checked we didn't have support from the network here@CNAF to do real IPv6 testing"
 - "Anyway, if things are working for you I think we should be mostly fine." - StoRM developers"

IPv6 Testing

- Dual stack machine at QMUL
 - IPv4 OK
 - IPv6 OK

Known Issues

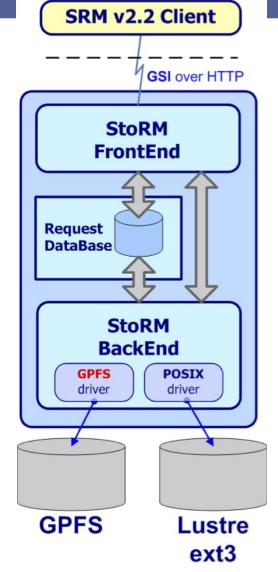
- Gridftp reporting of IP address (GGUS#102900)
 - Will be fixed in globus GT6 alpha2



StoRM Testing at QMUL

Dual stack test VM

- Network
 - Static IPv4 / IPv6 address
 - Edit gai.conf
 - Jumbo frames
 - Iptables / Ip6tables
- StoRM
 - Frontend
 - Backend
 - Database (MySQL)
 - GridFTP
 - GridHTTPs
 - Filesystem via IPv4





Results

Current Network Status

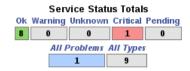
Last Updated: Mon Jun 9 23:21:46 BST 2014
Updated every 601 seconds
Nagios® Core™ 3.3.1 - www.nagios.org
Logged in as /C=UIVO=eScience/OU=QueenMaryLondon/L=Physics/CN=christopher walker

Host Status Totals
Up Down Unreachable Pending

1 0 0 0

All Problems All Types

0 1



View History For This Host View Notifications For This Host View Service Status Detail For All Hosts

Service Status Details For Host 'se02.esc.qmul.ac.uk'

Host ★♥		Service ★◆		Status 4	*	Last Check ★▼	Duration ★▼	Attempt ★◆	Status Information
se02.esc.qmul.ac.uk	W.	nr.srce.SRM2-CertLifetime		CRITICAL		06-09-2014 23:11:14	13d 4h 40m 32s	2/2	(null)
		org.sam.SRM-All-ipv6.hepix.org		ок		06-09-2014 22:26:10	0d 6h 55m 36s	1/4	OK: success.
		org.sam.SRM-Del-ipv6.hepix.org	? [ок		06-09-2014 22:26:23	4d 5h 10m 20s	1/4	OK: File was deleted from SRM.
		org.sam.SRM-Get-ipv6.hepix.org	? [ок		06-09-2014 22:26:23	4d 5h 10m 20s	1/4	OK: File was copied from SRM. Diff successful.
		org.sam.SRM-GetSURLs-ipv6.hepix.org	? [ок		06-09-2014 22:26:10	4d 5h 10m 36s	1/4	OK: Got SRM endpoint(s) and Storage Path(s) from BDII
		org.sam.SRM-GetTURLs-ipv6.hepix.org	? [ок		06-09-2014 22:26:21	4d 5h 10m 22s	1/4	OK: protocols OK-[root, file, https, gsiftp]
		org.sam.SRM-Ls-ipv6.hepix.org	? [ок		06-09-2014 22:26:13	4d 5h 10m 32s	1/4	OK: listing [/ipv6.hepix.org/testfile-put-1402349170-7bdafd6a291c.txt]-ok:
		org.sam.SRM-LsDir-ipv6.hepix.org	? [ок		06-09-2014 22:26:10	0d 6h 55m 36s	1/4	OK: Storage Path[/ipv6.hepix.org/]-ok:
		org.sam.SRM-Put-ipv6.hepix.org	? [ок		06-09-2014 22:26:13	4d 5h 10m 32s	1/4	OK: File was copied to SRM.

9 Matching Service Entries Displayed

- Components on different machines not tested
 - Rumours of mysql not supporting IPv6
- Issues
 - GridFTP incorrectly logs of IPv6 addresses (GGUS 102900)
 - Backend doesn't correctly start after a reboot
 - 10/06/14 May be a QMUL specific problem of the company of the comp



Conclusions

- StoRM works OK in testing
- Known issues
 - Need updated gai.conf to prefer dual stack (GGUS 99461)
 - GridFTP reporting of IP address (GGUS 102900)
 - Backend not starting correctly on reboot
 - Needs investigation
 - If you use IP instead of the hostname in your SURLs you have to add the IPv6 full SRM endpoint to the list of the SRM endpoints managed by the Backend. GGUS 99461
- QMUL likely to turn on IPv6 on one GridFTP server in production soon