

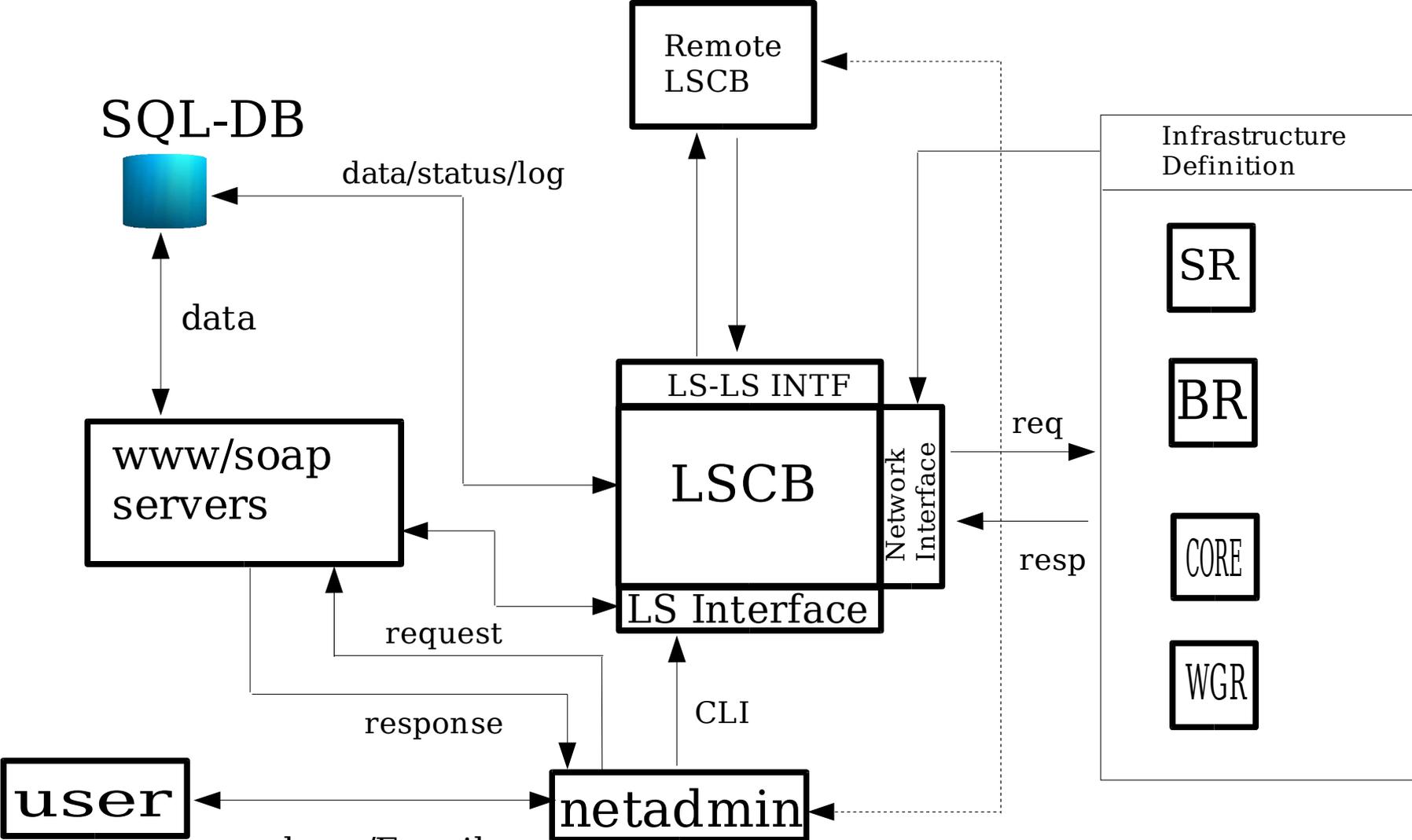
preLambda Station project

Fermilab, CD/CCF/DCN,
Andrey Bobyshev 06/24/2004
- 08/05/04 -added test PBR setup

Our objectives:

- configuring policy routing (PR) ACLs on StarLight router
- configuring PR ACLs on internal routers
- schedule mechanism
- configuration mechanisms
- state information (previous, current, future)
- access to end system
- reverse path verification/notification

preLamda Station Design



LSCB – lamdaStation Control Box
 SR – StarLight Router(s)
 BR – border router(s)
 Core/Backbone router(s)
 WGR – workgroup router(s)

Requests screen

preLambda Requests Queue - Mozilla

http://www-dcn.fnal.gov/~netadmin/grinder/IdReqs.cgi

preLambda requests Queue Thu Aug 5 10:51:41 2004 *SAB.*

reqStatus match: startTime: endTime:

userGroups: DCN CMS D0 | remotelS: CERN UKLight UCSD | set

id	reqStatus	boardTime	startTime	endTime	userGroup	remotelS	dir	bw
47	expired	08/03/04 17.27:40	08/03/04 17.27:40	08/03/04 18.27:40	DCN	CERN	both	0
46	expired	08/03/04 17.02:07	08/03/04 17.02:07	08/03/04 18.02:07	DCN	CERN	both	0
45	expired	08/03/04 16.46:21	08/03/04 16.46:21	08/03/04 17.46:21	DCN	CERN	both	0
44	expired	08/03/04 15.52:39	08/03/04 15.52:39	08/03/04 16.52:39	DCN	CERN	both	0
43	expired	08/03/04 15.49:07	08/03/04 15.49:07	08/03/04 16.49:07	DCN	CERN	both	0
42	expired	08/03/04 15.08:18	08/03/04 15.08:18	08/03/04 16.08:18	DCN	CERN	both	0
41	expired	08/03/04 15.05:12	08/03/04 15.05:12	08/03/04 16.05:12	DCN	CERN	both	0
40	expired	08/03/04 14.55:33	08/03/04 14.55:33	08/03/04 15.55:33	DCN	CERN	both	0
39	expired	08/03/04 14.39:20	08/03/04 14.39:20	08/03/04 14.40:20	DCN	CERN	both	0
38	expired	08/03/04 13.48:41	08/03/04 13.48:41	08/03/04 13.48:41	DCN	CERN	both	0
37	expired	08/03/04 13.47:12	08/03/04 13.47:12	08/03/04 13.47:12	DCN	CERN	both	0
36	expired	08/03/04 13.46:29	08/03/04 13.46:29	08/03/04 13.46:29	DCN	CERN	both	0
35	expired	08/03/04 13.43:26	08/03/04 13.43:26	08/03/04 13.43:26	DCN	CERN	both	0
34	expired	08/03/04 13.40:24	08/03/04 13.40:24	08/03/04 13.40:24	DCN	CERN	both	0
33	expired	08/03/04 12.49:13	08/03/04 12.49:13	08/03/04 12.49:13	DCN	CERN	both	0
32	expired	08/03/04 12.43:20	08/03/04 12.43:20	08/03/04 12.43:20	DCN	CERN	both	0
31	expired	08/03/04 12.42:42	08/03/04 12.42:42	08/03/04 12.42:42	DCN	CERN	both	0
30	expired	08/03/04 12.34:09	08/03/04 12.34:09	08/03/04 12.34:09	DCN	CERN	both	0
29	expired	08/03/04 12.26:04	08/03/04 12.26:04	08/03/04 12.26:04	DCN	CERN	both	0
28	expired	08/03/04 12.00:42	08/03/04 12.00:42	08/03/04 12.00:42	DCN	CERN	both	0
27	expired	08/03/04 11.55:33	08/03/04 11.55:33	08/03/04 11.55:33	DCN	CERN	both	0
26	expired	08/03/04 11.39:15	08/03/04 11.39:15	08/03/04 11.39:15	DCN	CERN	both	0
25	expired	08/03/04 11.37:29	08/03/04 11.37:29	08/03/04 11.37:29	DCN	CERN	both	0

Request's flows - Mozilla

http://grinder.fnal.gov/~netadmin/grinder/IdReqs.cgi?id=47

Flows associated with the request id 47 .

id	srcIP	dstIP	dscpOut	dscpln
47	131.225.2.33/32	137.138.9.125/32	1	1

Done

preLambda Station Service

- Service name
- direction (OUT, IN, SYMMETRIC)
- requester's identifier to determine point(s) in the network infrastructure that are required to be configured for PBR
- remote station name
- criteria for flows selection (srcIP, dstIP, DSCP and etc.)
- boardingTime - a time stamp when provision of the path is started, and service is not guaranteed
- startTime - a time stamp when service is enabled if provisioning is successful
- endTime or length of service
- required bandwidth

LSI Commands:

- serviceRequest
- requestStatus
- cancelRequest
- extendService
- expireService
- serviceStatus
- serviceReset

LSI Status (local and remote):

- path is configured OUT,IN, BOTH
- path is verified
- ready to go

NI Commands:

- addEntry
- removeEntry
- readACL
- uploadACL