



hardware and zone concept (assignment & synchronization)

global or root zone (physical host)
 Zoned System (running)
 Zoned System (backup)

Lx003 (Linux/Debian)

0
proxy02
myapp01
myapp11
myapp21

fs010 (Solaris11)

/export/lza

ZFS-Replication in order to mirror all data

fs015 (Solaris11)

Mirror of /export/lza

Sx004 (Solaris11)

0	1	2	3	4
5	6	7	8	9
10	11	12	13	14
15	16	17	18	19

ZFS send 1-5, ZFS send 9-13, ZFS send 4-8

Sx005 (Solaris11)

0	1	2	3	4
5	6	7	8	9
10	11	12	13	14
15	16	17	18	19

ZFS send 9-13, ZFS send 4-8

Sx006 (Solaris11)

0	1	2	3	4
5	6	7	8	9
10	11	12	13	14
15	16	17	18	19

ZFS send 4-8

physical & virtual machines

- rosetta11 (01@Sx004) zone no. 01 on the physical host Sx004 (Sun Server X3-2L with 256GB RAM 4*3TB HD RAID z1)
- lxc zone on the (Linux Server with 378GB RAM 6*3TB HD RAID z1)
- ZFS-Filer with 96GB RAM 44*3TB HDs RAID z2
- Oracle 11 database zone with local attached storage
- LoadBalancing virtual host

ip connections

- scp/sftp to copy external data for ingest on port 22
- internet to loadbalancer on port 80/443
- SQL Oracle SQL on port 1521
- NFS4 FileShares on port 2049 (NFS4)
- NFS3 FileShares on port 2049 (NFS3)
- http rosetta Apache JServ Protocol connected to rosettas jBoss- & tomcat-services on port 8991(pds) and port 1801(rosetta)
- ajp myapp Apache JServ Protocol connected to own tomcat service on port 8080

external access

rosetta deposit	
http://rosetta.lza.tib.eu/deposit/	
http://rosetta.test.lza.tib.eu/deposit/	
http://rosetta.develop.lza.tib.eu/deposit/	
rosetta management	
http://rosetta.lza.tib.eu/mng/	
http://rosetta.test.lza.tib.eu/mng/	
http://rosetta.develop.lza.tib.eu/mng/	
myapp	
https://myapp.lza.tib.eu/	
https://myapp.test.lza.tib.eu/	
https://myapp.develop.lza.tib.eu/	
exchange via scp	
scp://dps@exchange.lza.tib.eu:transfer/develop maps to rosetta0Y:/exlibris1/transfer (0<Y<3)	
scp://dps@exchange.lza.tib.eu:transfer/testing maps to rosetta1Y:/exlibris1/transfer (0<Y<5)	
scp://exchange.lza.tib.eu:transfer/product maps to rosetta2Y:/exlibris1/transfer (0<Y<5)	

directory structure

nfs storage

the storage-systems will have nfs4 shares called /net/fs010.rz.tib.eu/export/lza with subdirs {develop,testing,product}/exlibris1/ mounted on each rosetta-system depending of its setup like develop, testing, productive, myapp or exchange

local rosetta

local rosetta directory structure

- /exlibris1/transfer/{default,tib,zbw,zbmed}/
- /exlibris1/permanent/{default,tib,zbw,zbmed}/
- /exlibris1/operational_storage/{default,tib,zbw,zbmed}/

will be expanded for example to

- /exlibris1/operational_storage/default/
- /exlibris1/operational_storage/tib/
- /exlibris1/operational_storage/zbw/
- /exlibris1/operational_storage/zbmed/

DNS entries

official start points		testing system		productive system	
exchange.lza.tib.eu	CNAME exchangeXY.tib.eu	rosetta.test.lza.tib.eu	CNAME proxyXY.tib.eu	rosetta.lza.tib.eu	CNAME proxyXY.tib.eu
lza.tib.eu	CNAME proxyXY.tib.eu	myapp.test.lza.tib.eu	CNAME proxyXY.tib.eu	myapp.lza.tib.eu	CNAME proxyXY.tib.eu
test.lza.tib.eu	CNAME proxyXY.tib.eu	myapp11.test.lza.tib.eu	A 10.114.124.120	myapp21.lza.tib.eu	A 10.114.124.130
develop.lza.tib.eu	CNAME proxyXY.tib.eu	db11.test.lza.tib.eu	A 10.114.124.121	db21.lza.tib.eu	A 10.114.124.131
		rosetta11.test.lza.tib.eu	A 10.114.124.122	rosetta21.lza.tib.eu	A 10.114.124.132
		rosetta12.test.lza.tib.eu	A 10.114.124.123	rosetta22.lza.tib.eu	A 10.114.124.133
		rosetta12.test.lza.tib.eu	A 10.114.124.124	rosetta23.lza.tib.eu	A 10.114.124.134
		rosetta13.test.lza.tib.eu	A 10.114.124.125	rosetta24.lza.tib.eu	A 10.114.124.135
development system					
rosetta.develop.lza.tib.eu	CNAME proxyXY.tib.eu				
myapp.develop.lza.tib.eu	CNAME proxyXY.tib.eu				
myapp01.develop.lza.tib.eu	A 10.114.124.110				
db01.develop.lza.tib.eu	A 10.114.124.111				
rosetta01.develop.lza.tib.eu	A 10.114.124.112				
rosetta02.develop.lza.tib.eu	A 10.114.124.113				