

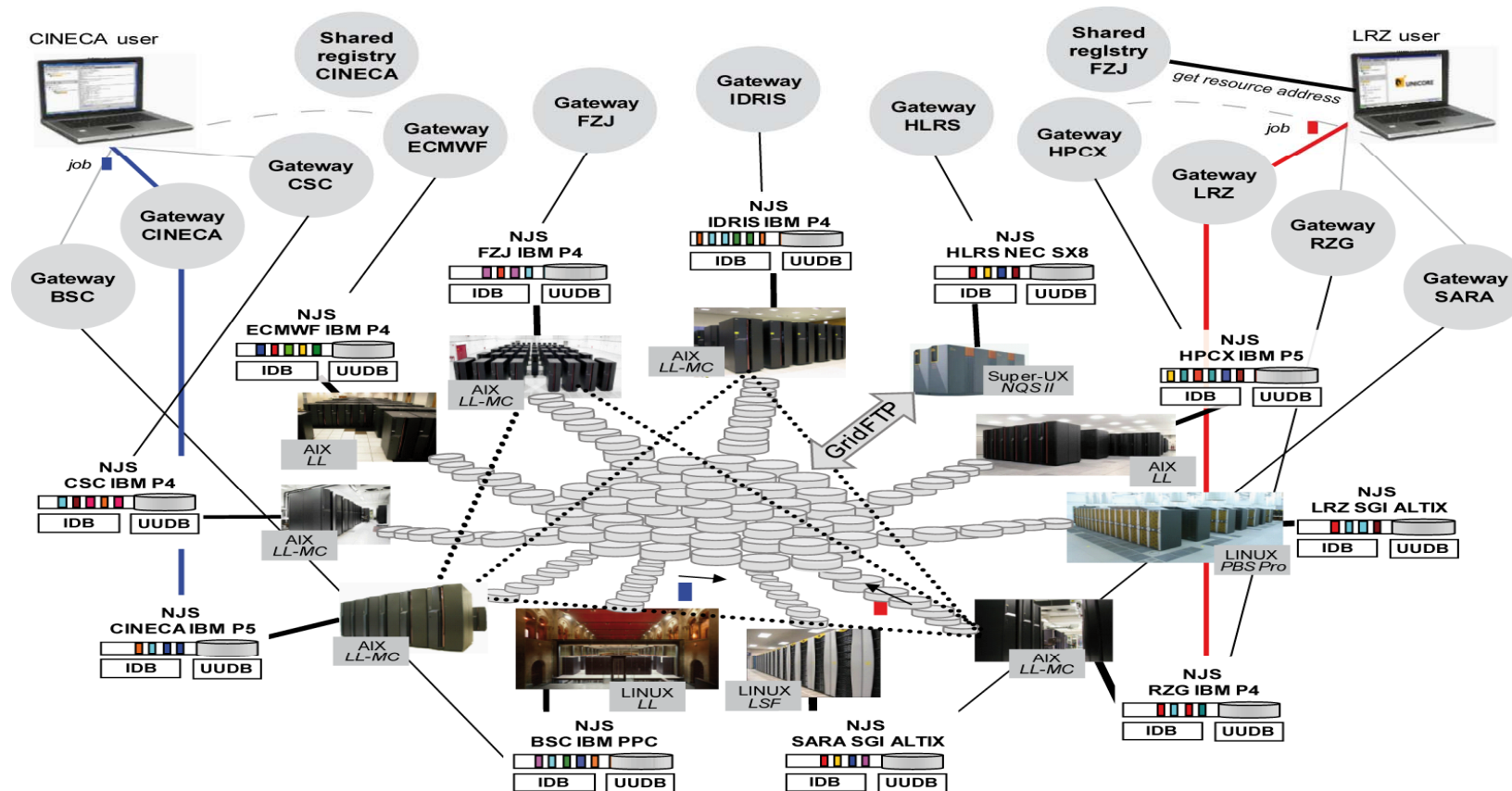
Experiences with UNICORE 6 in Production

19. Mai 2010 | Michael Rambadt, Mathilde Romberg, Sandra Bergman, Rebecca Breu, Nadine Lamla

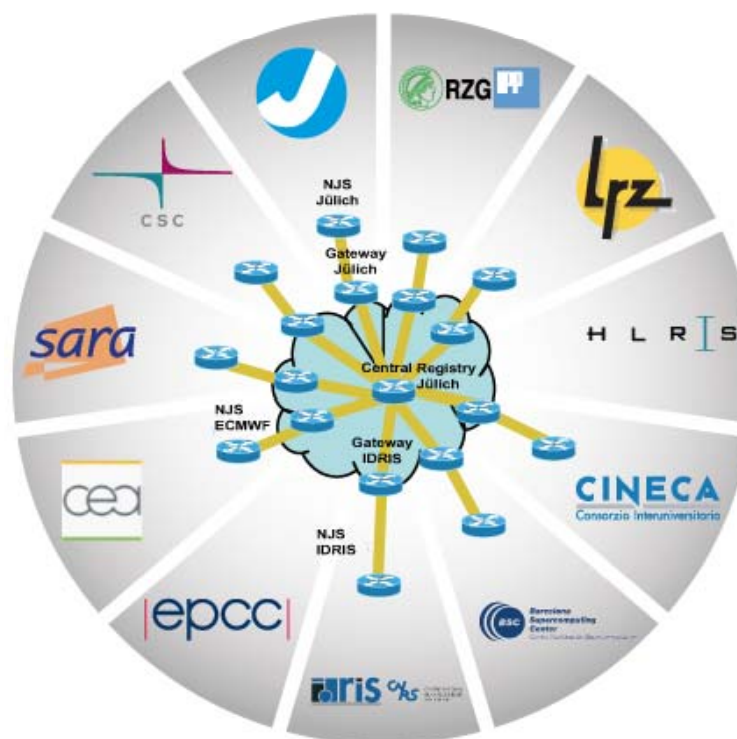
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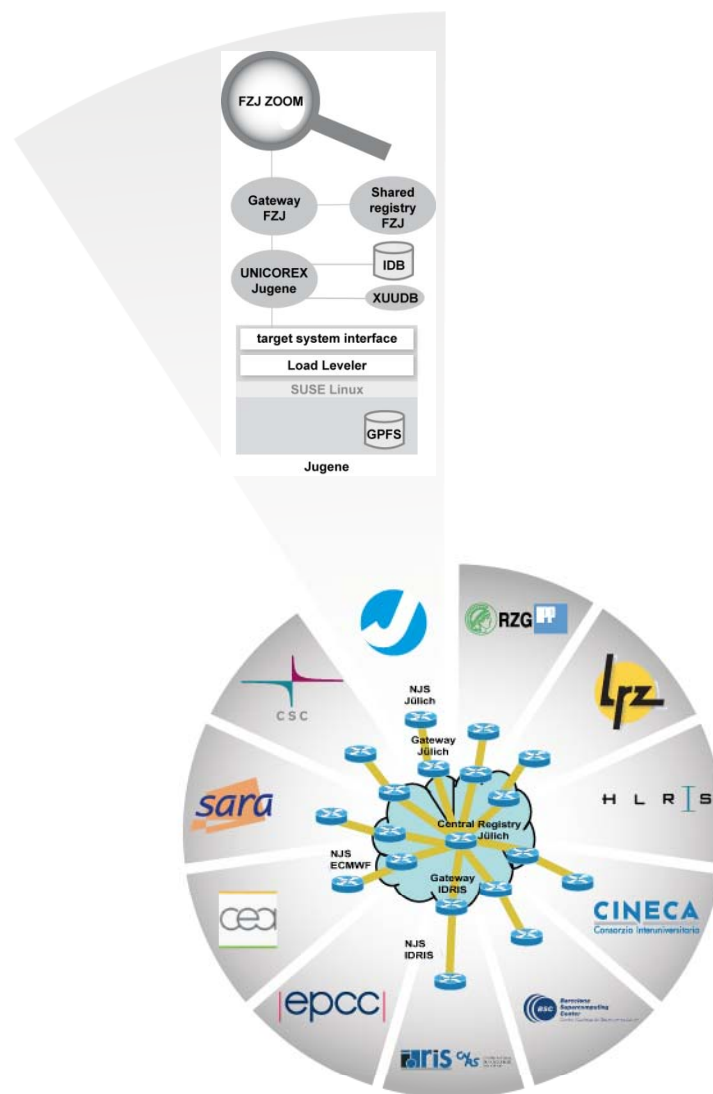
Introduction



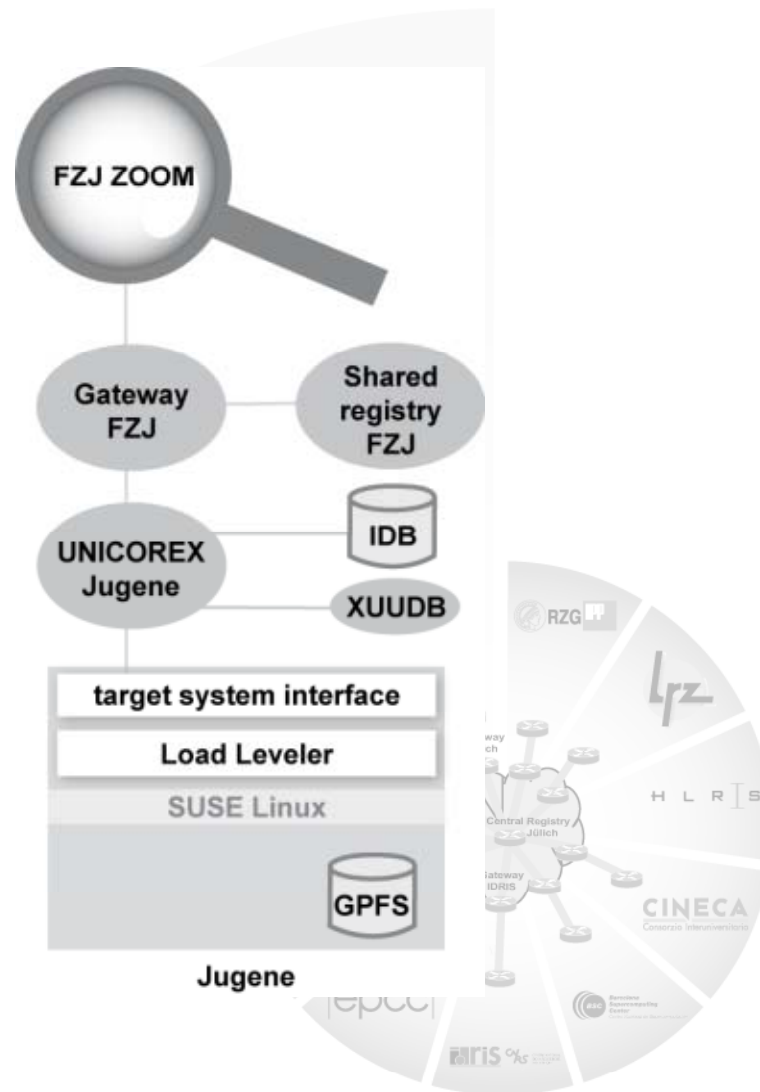
Introduction



Introduction



Introduction



Managing UNICORE Production Environments

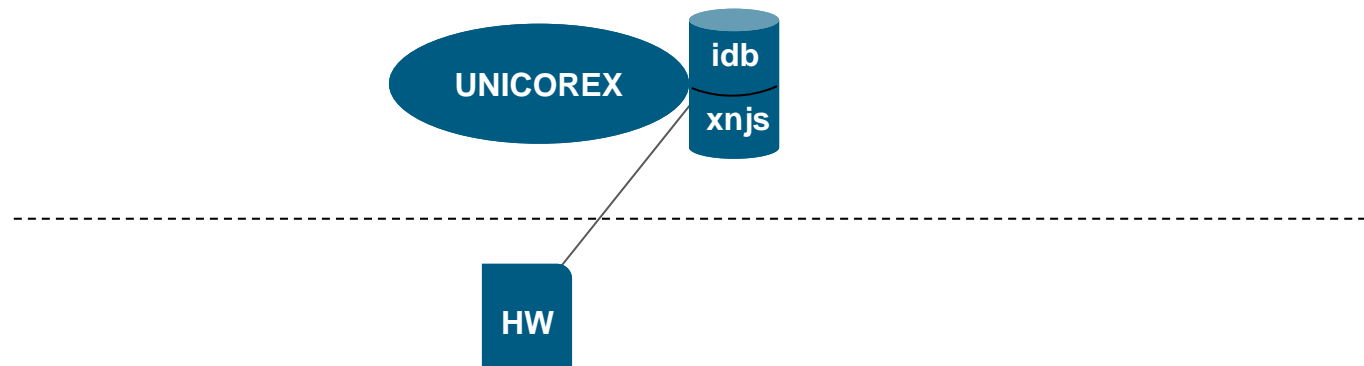


UNICOREX

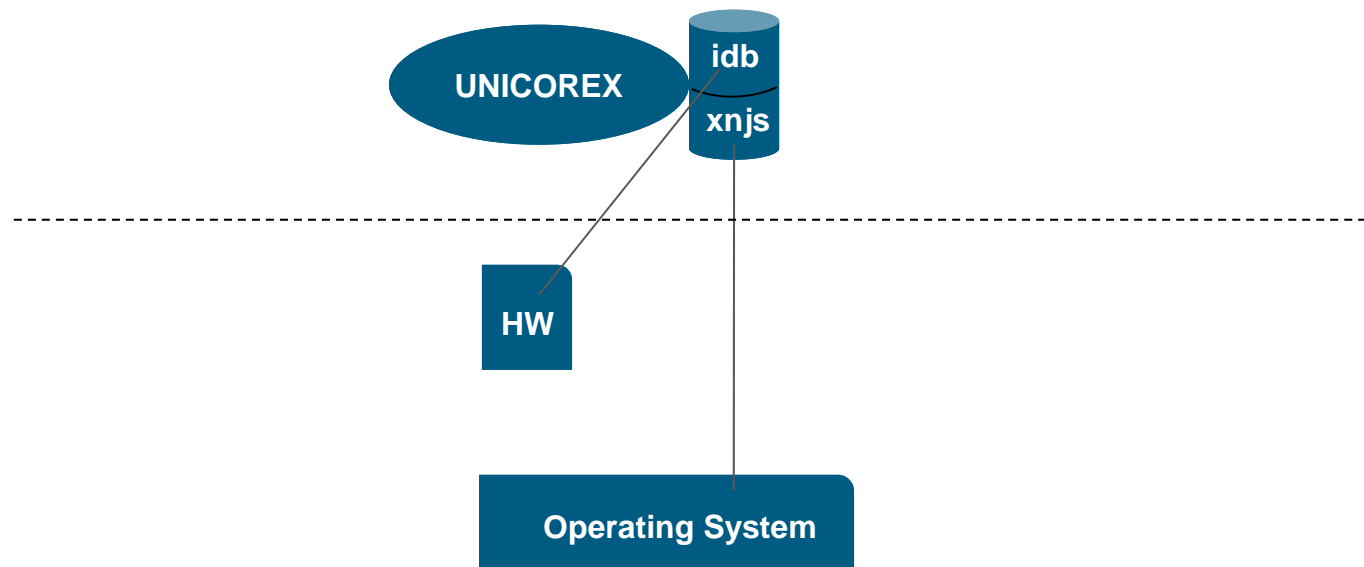
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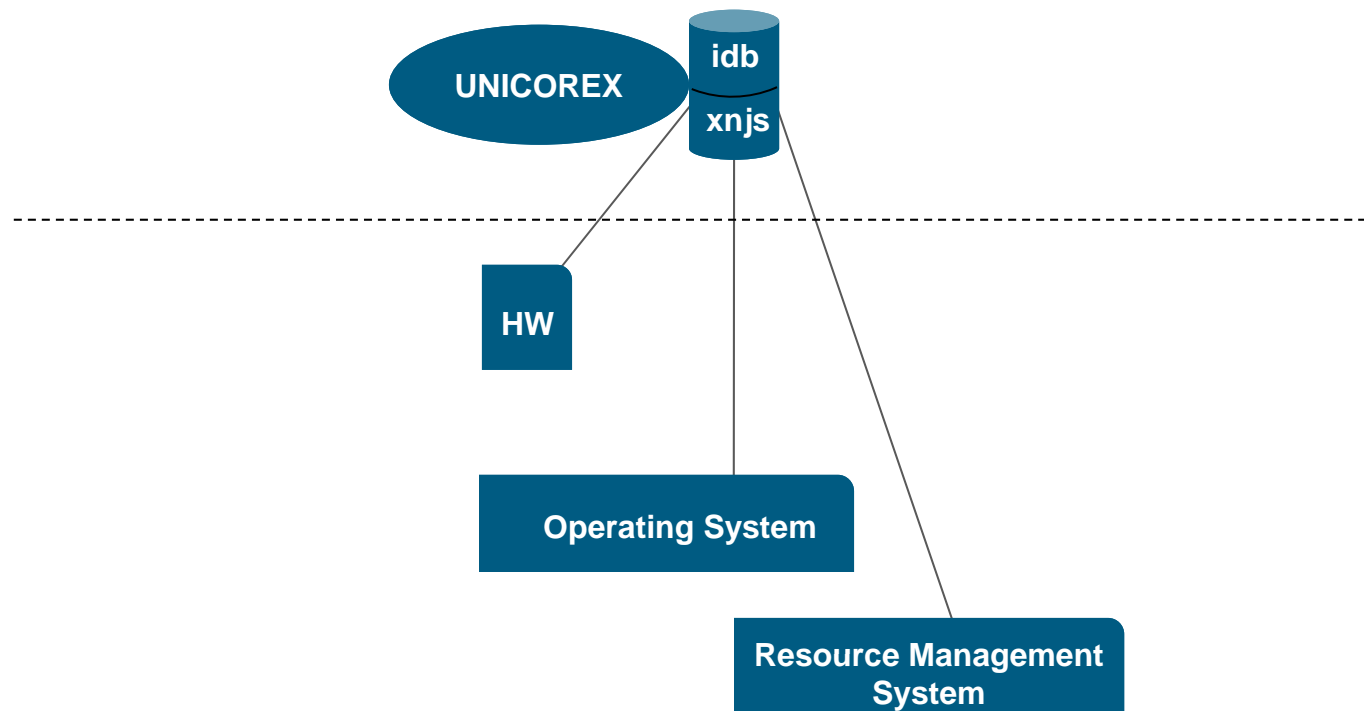
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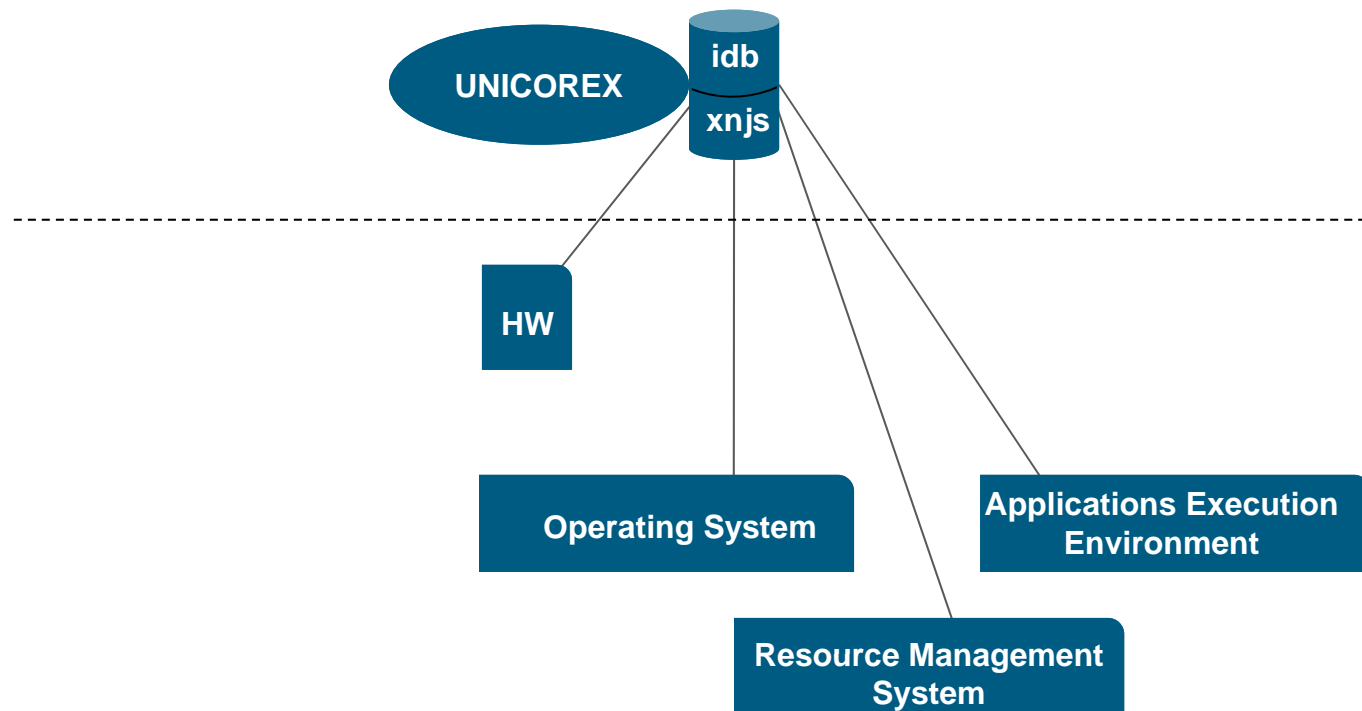
Managing UNICORE Production Environments



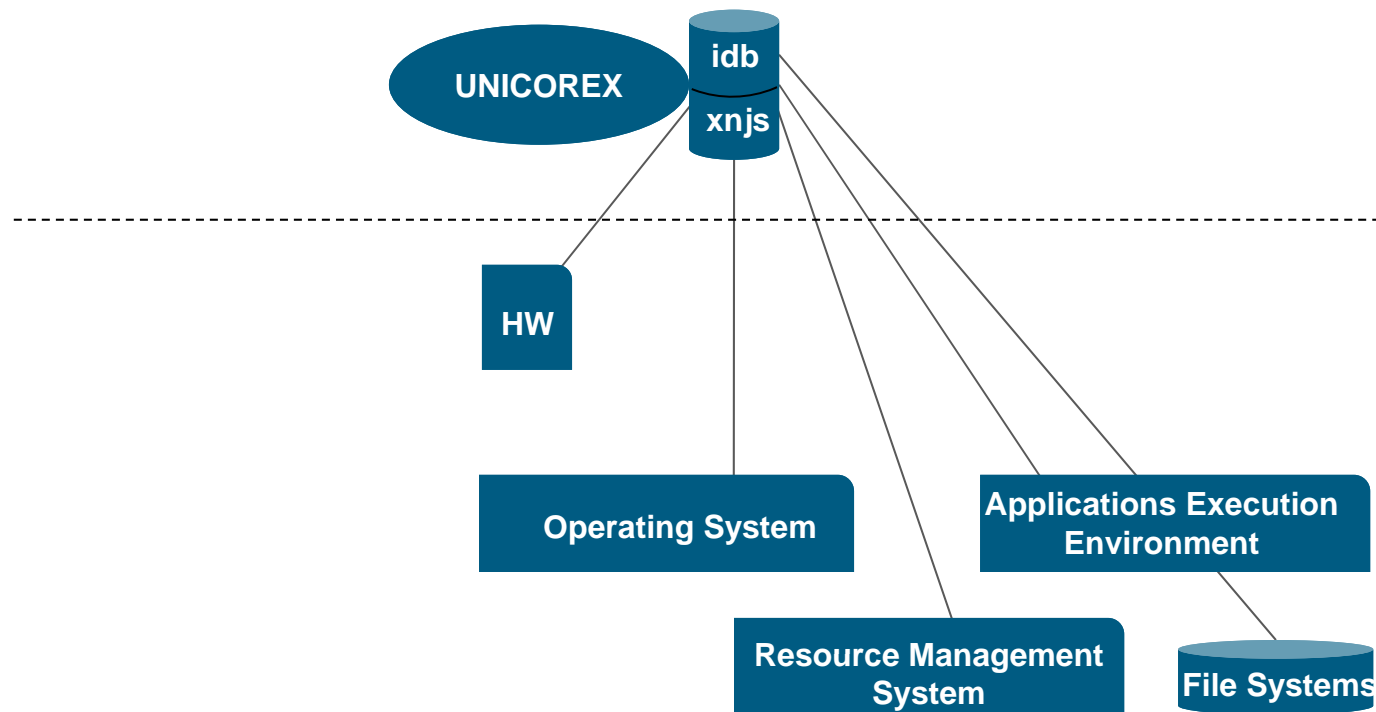
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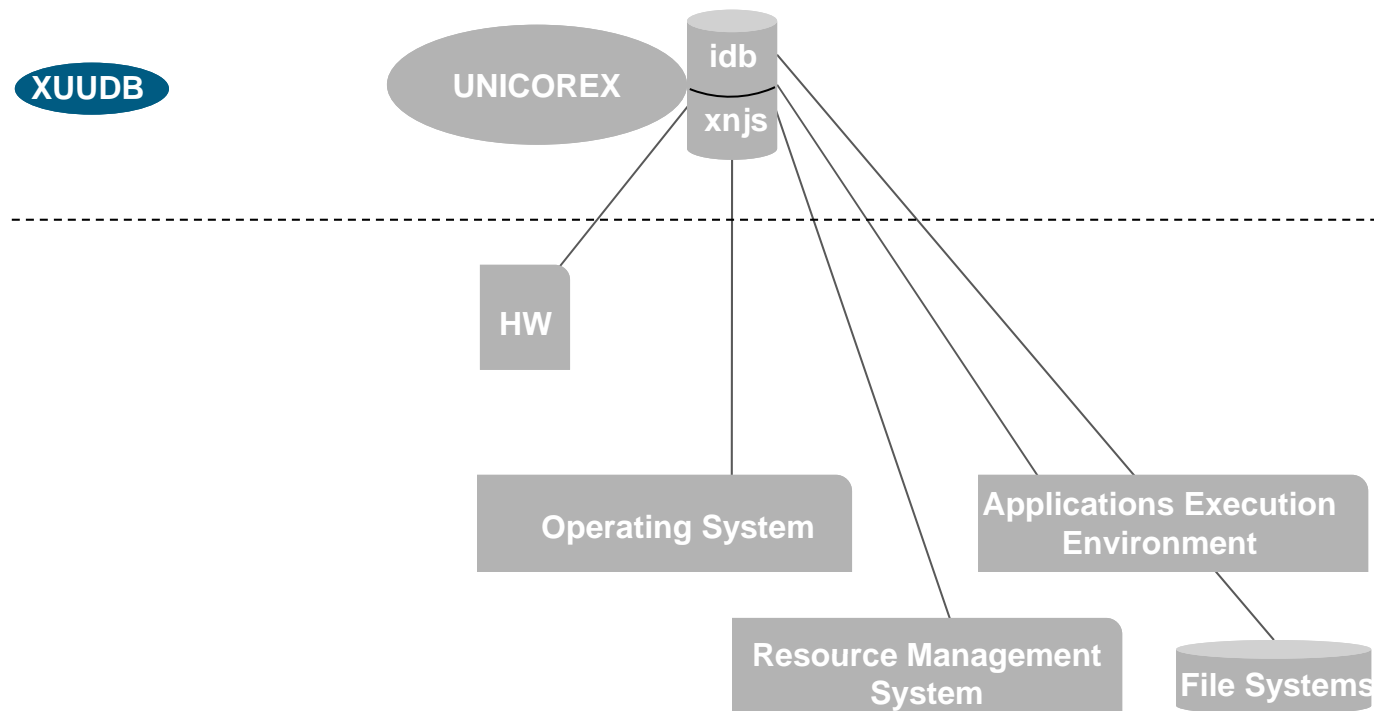
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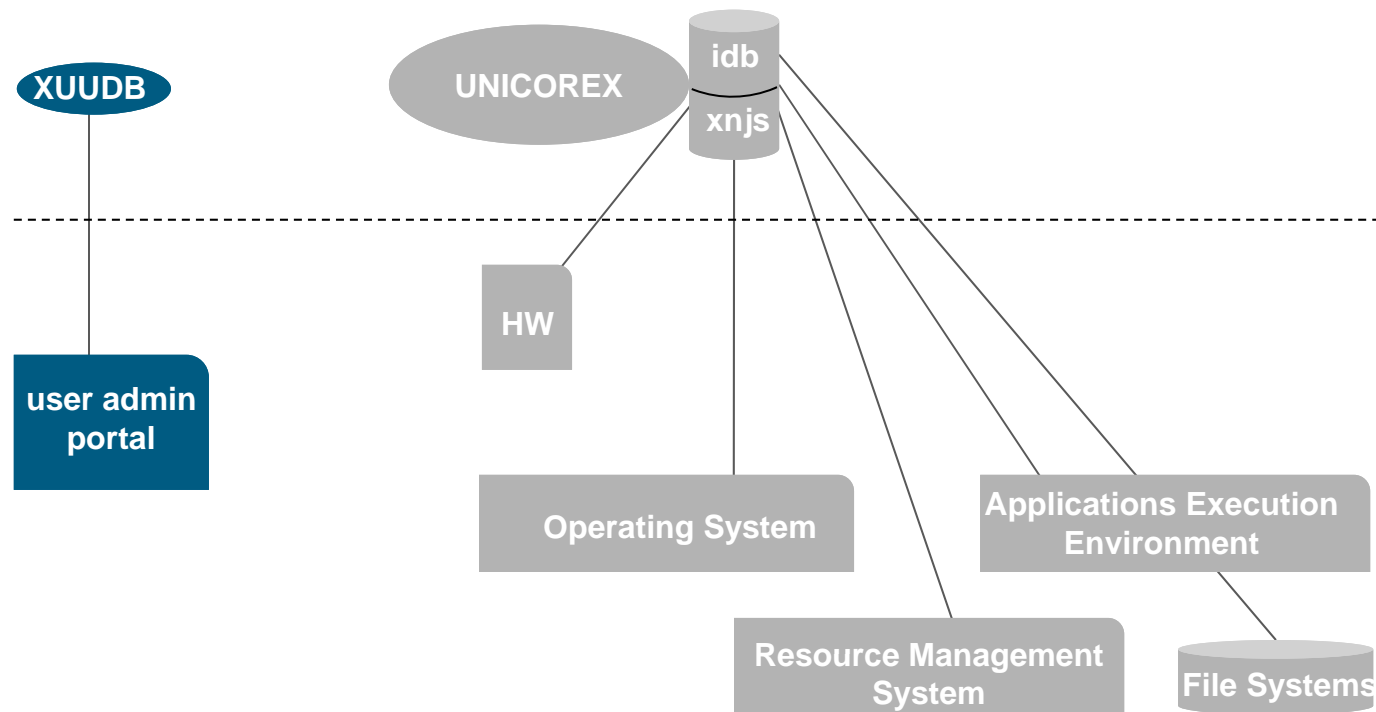
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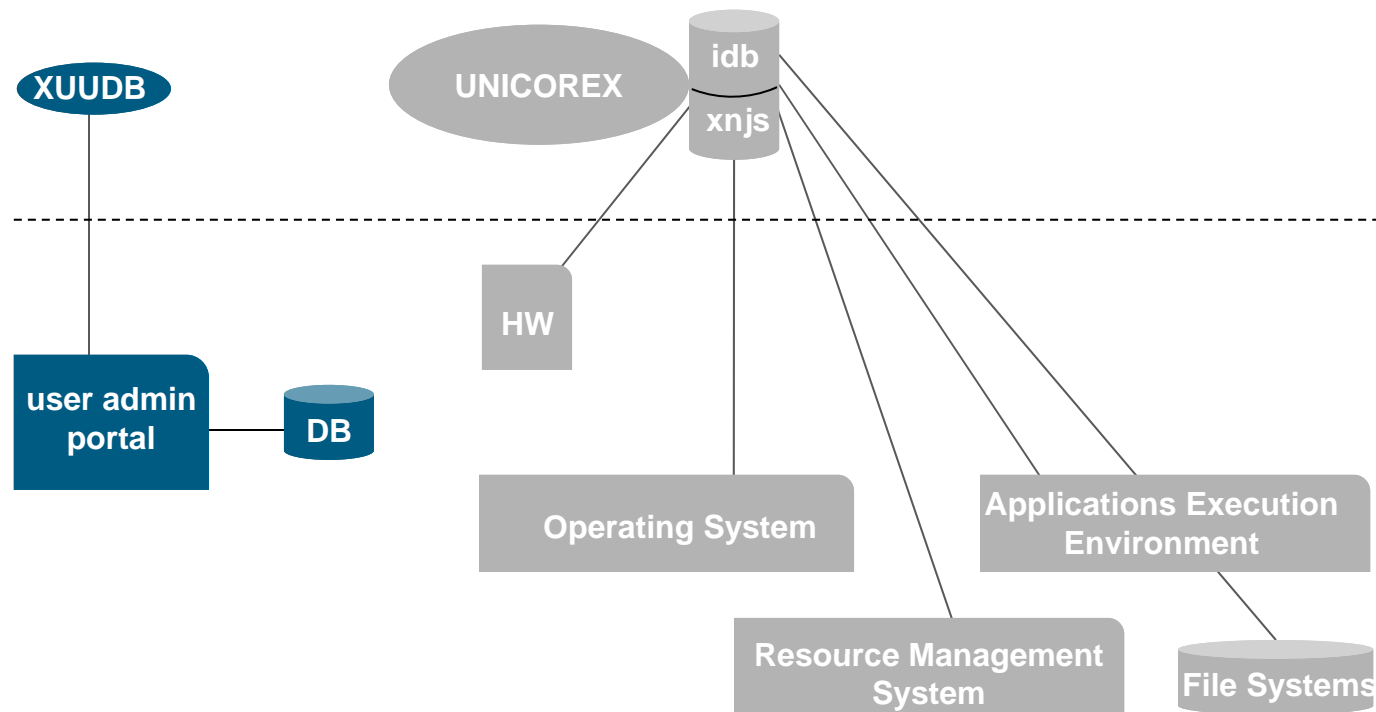
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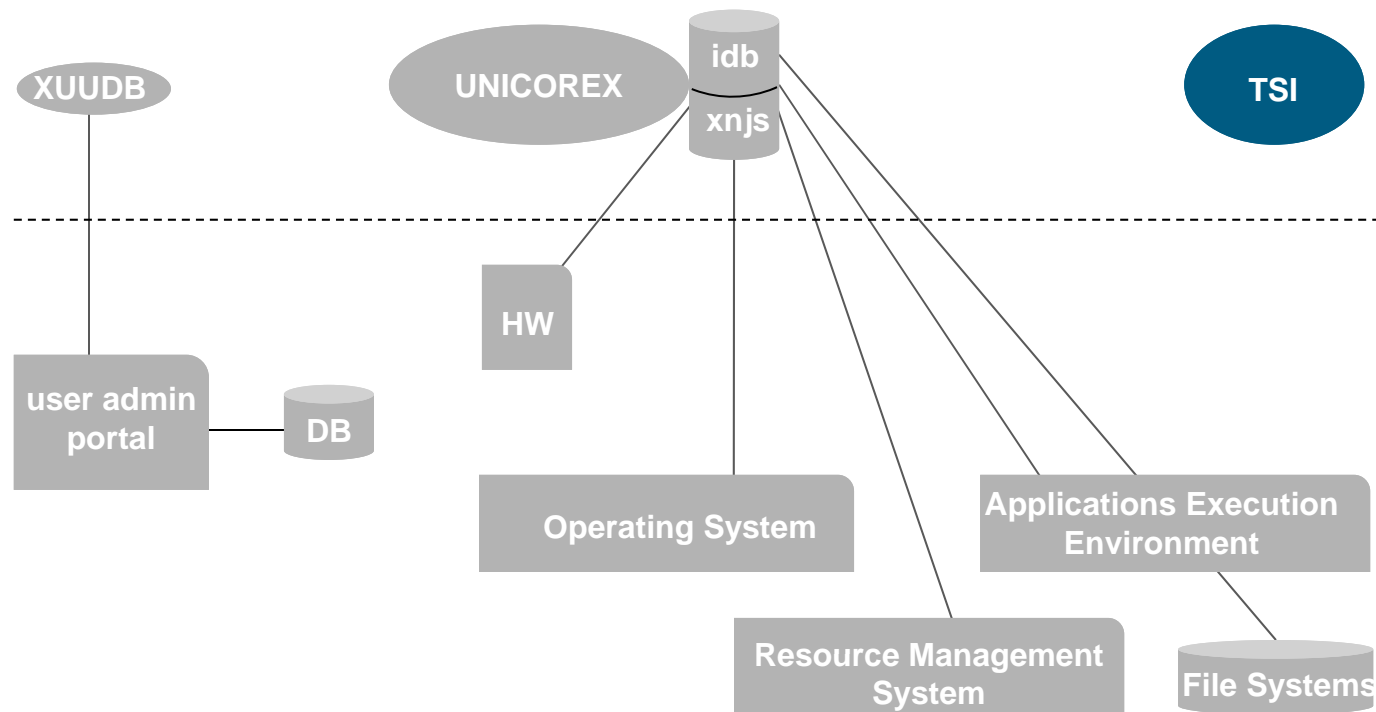
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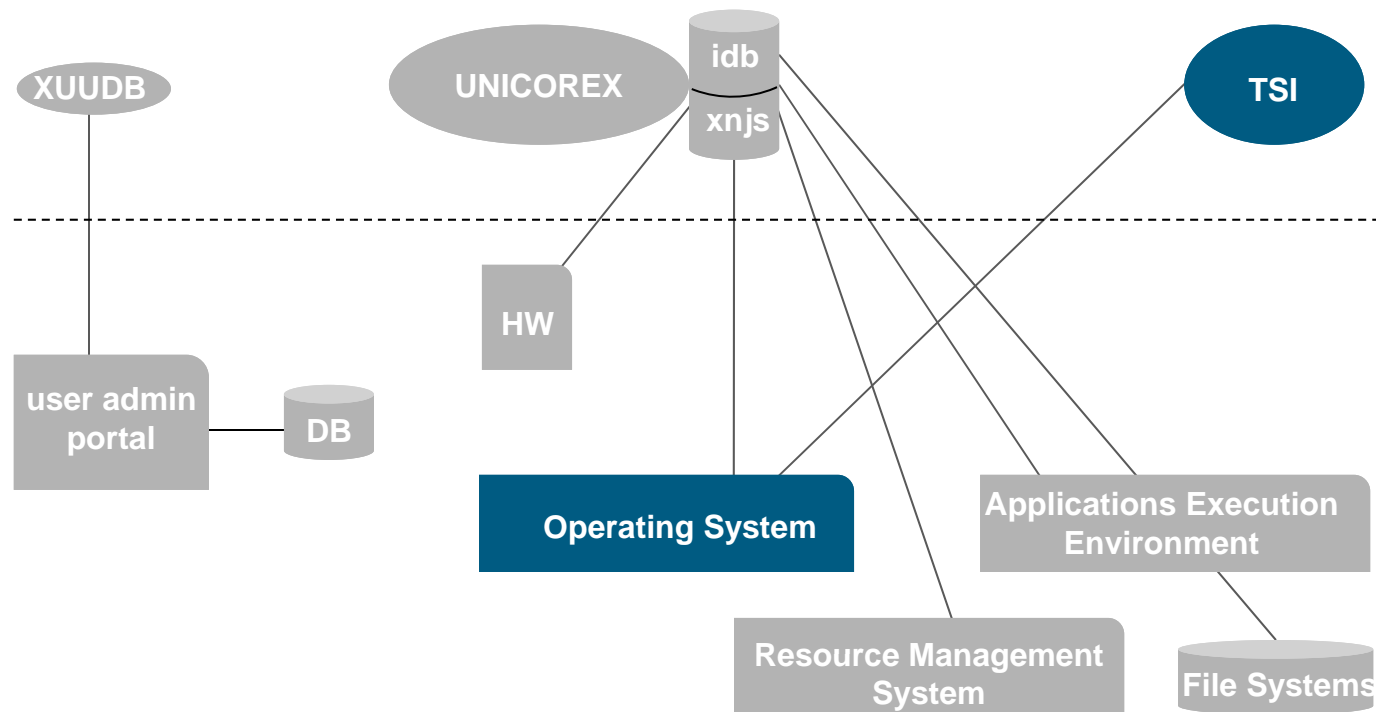
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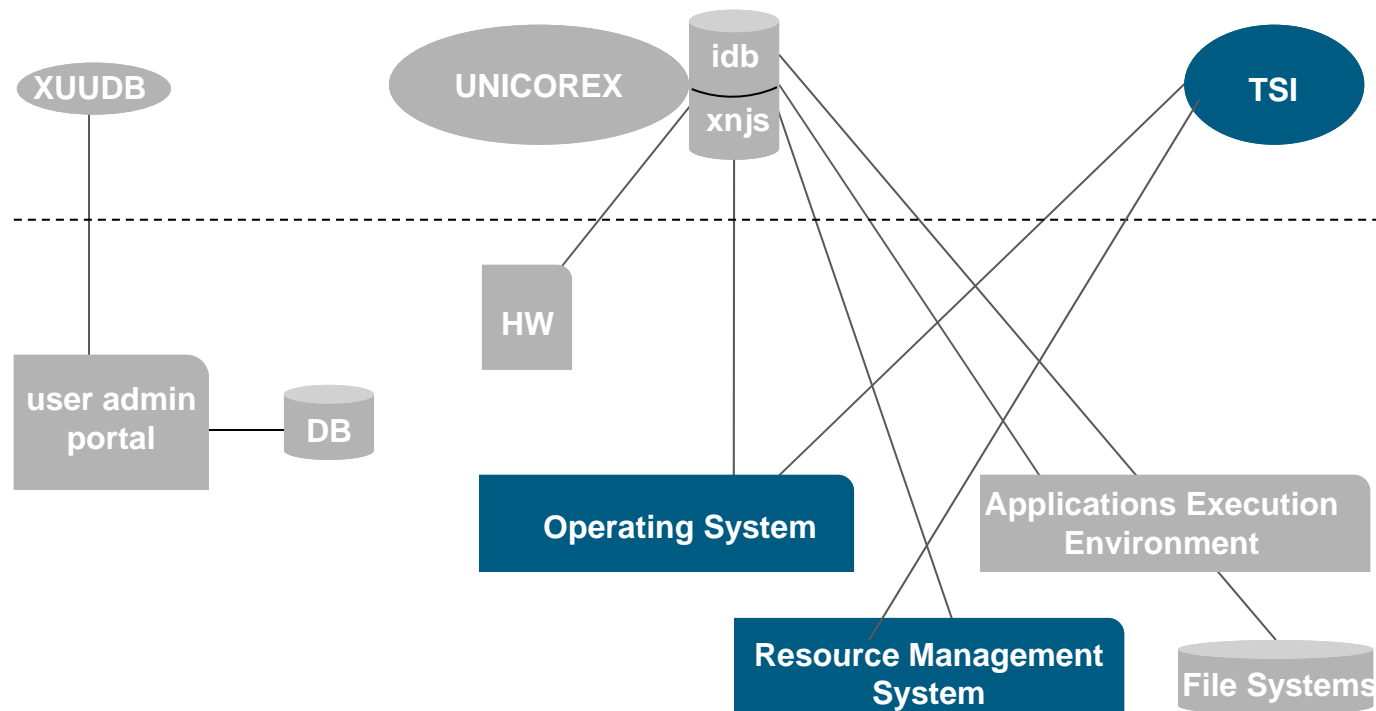
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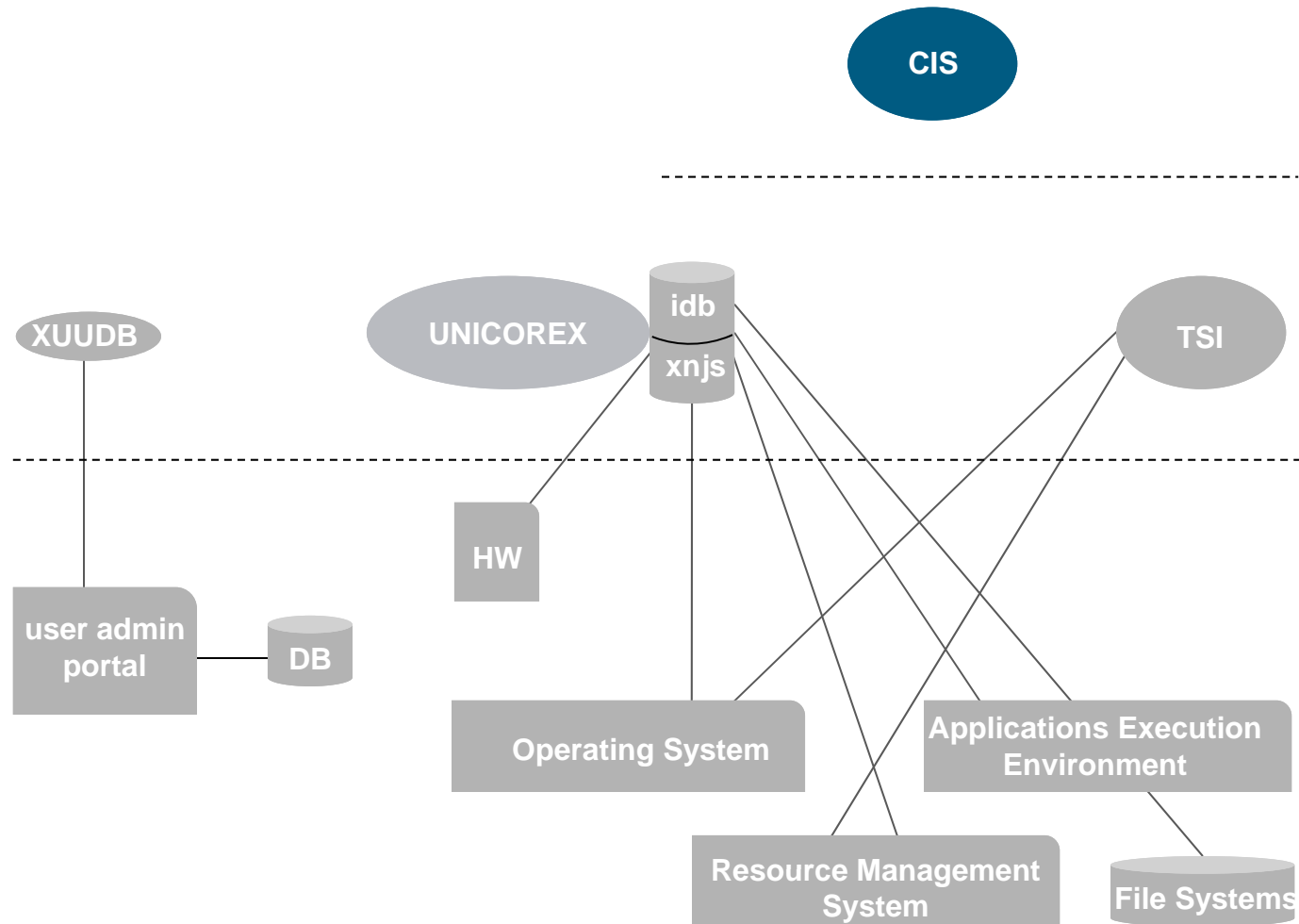
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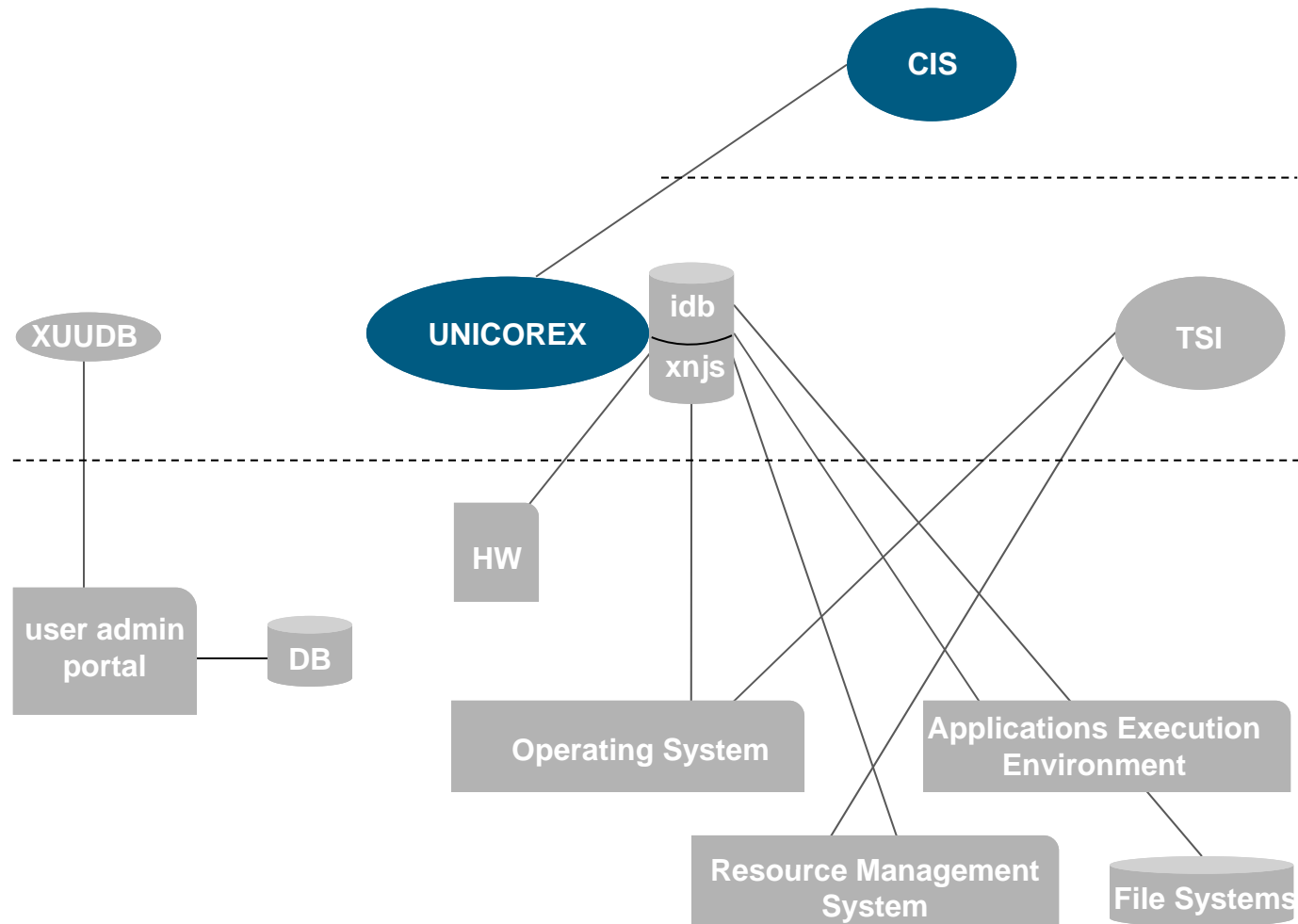
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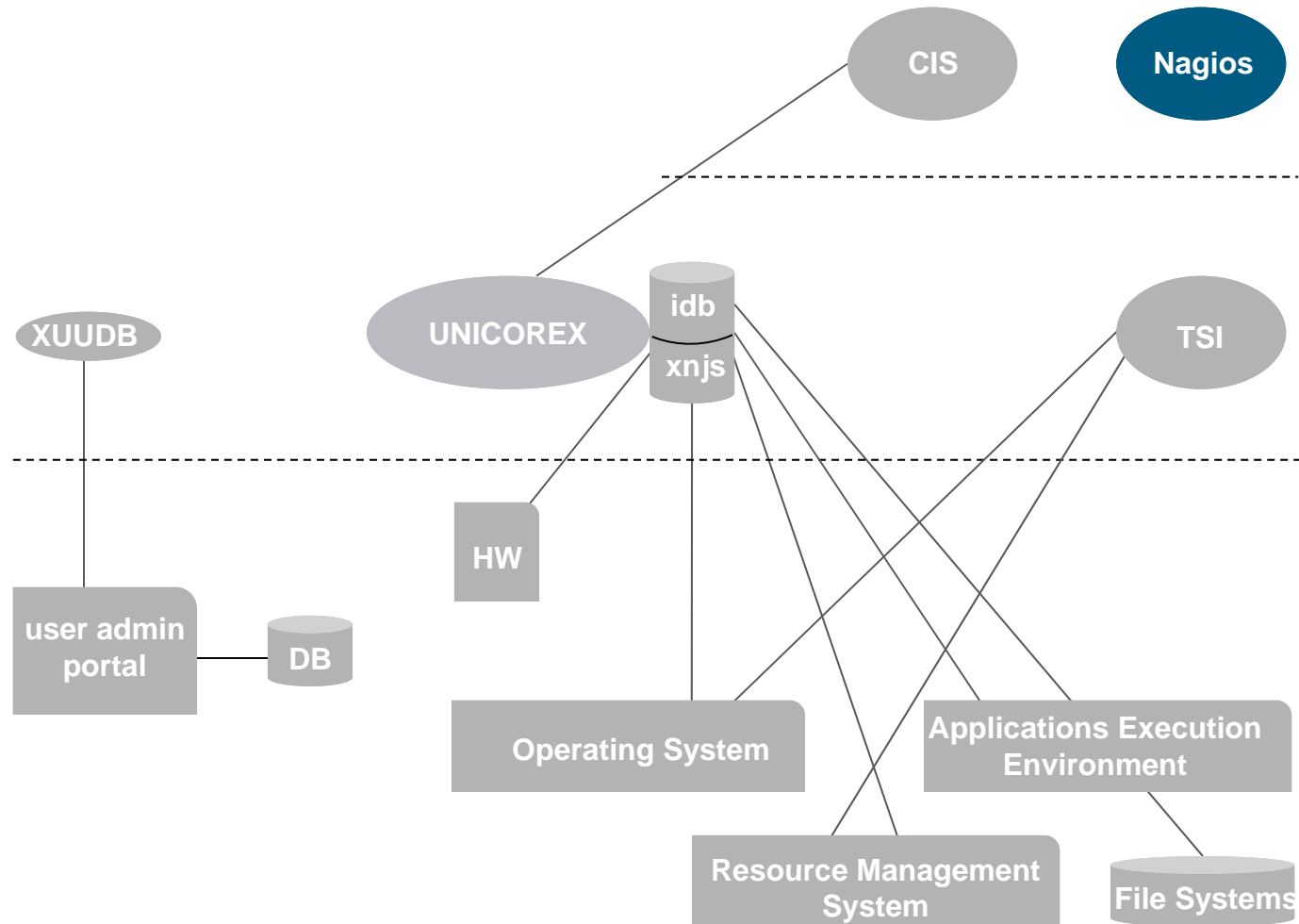
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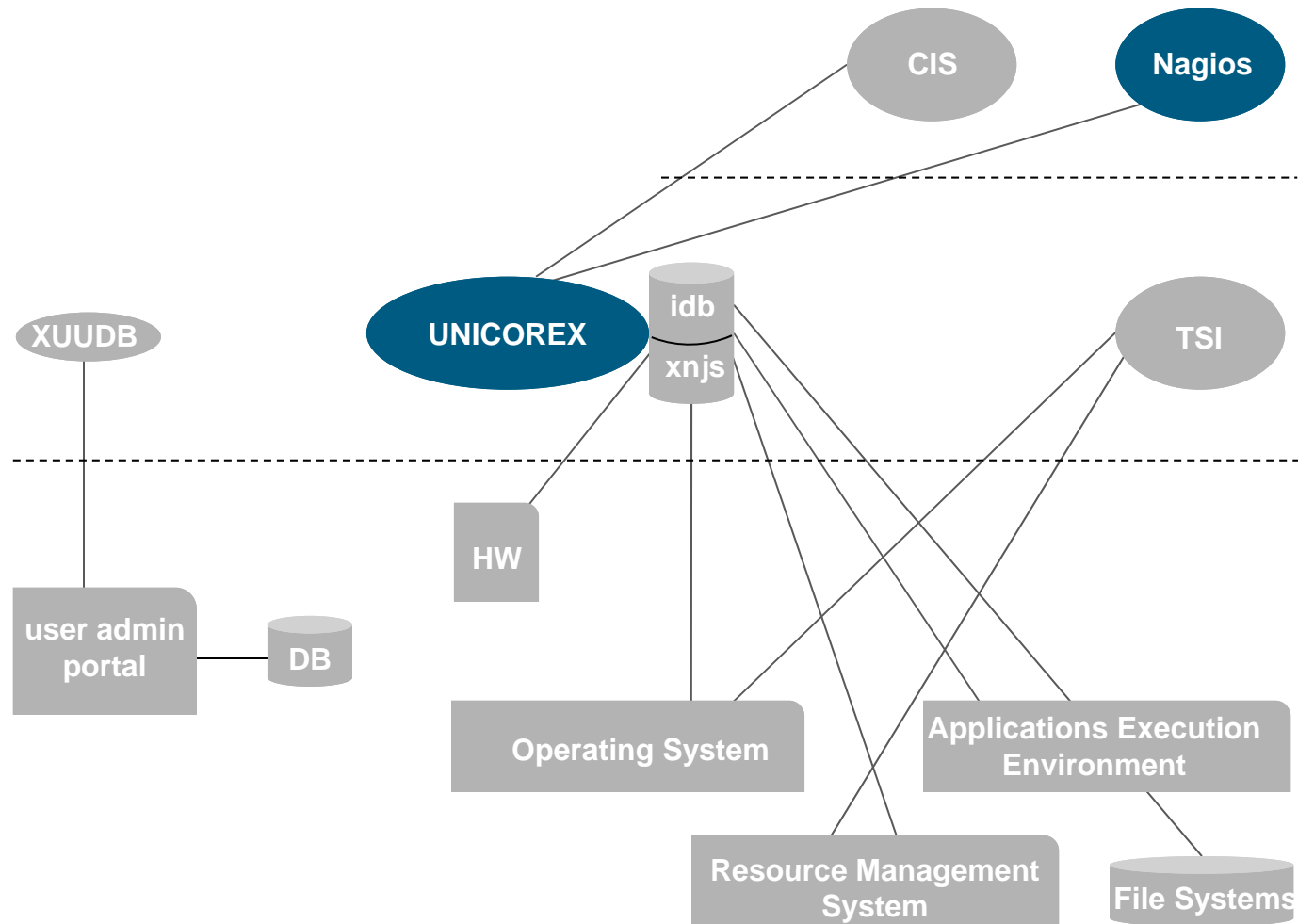
Managing UNICORE Production Environments



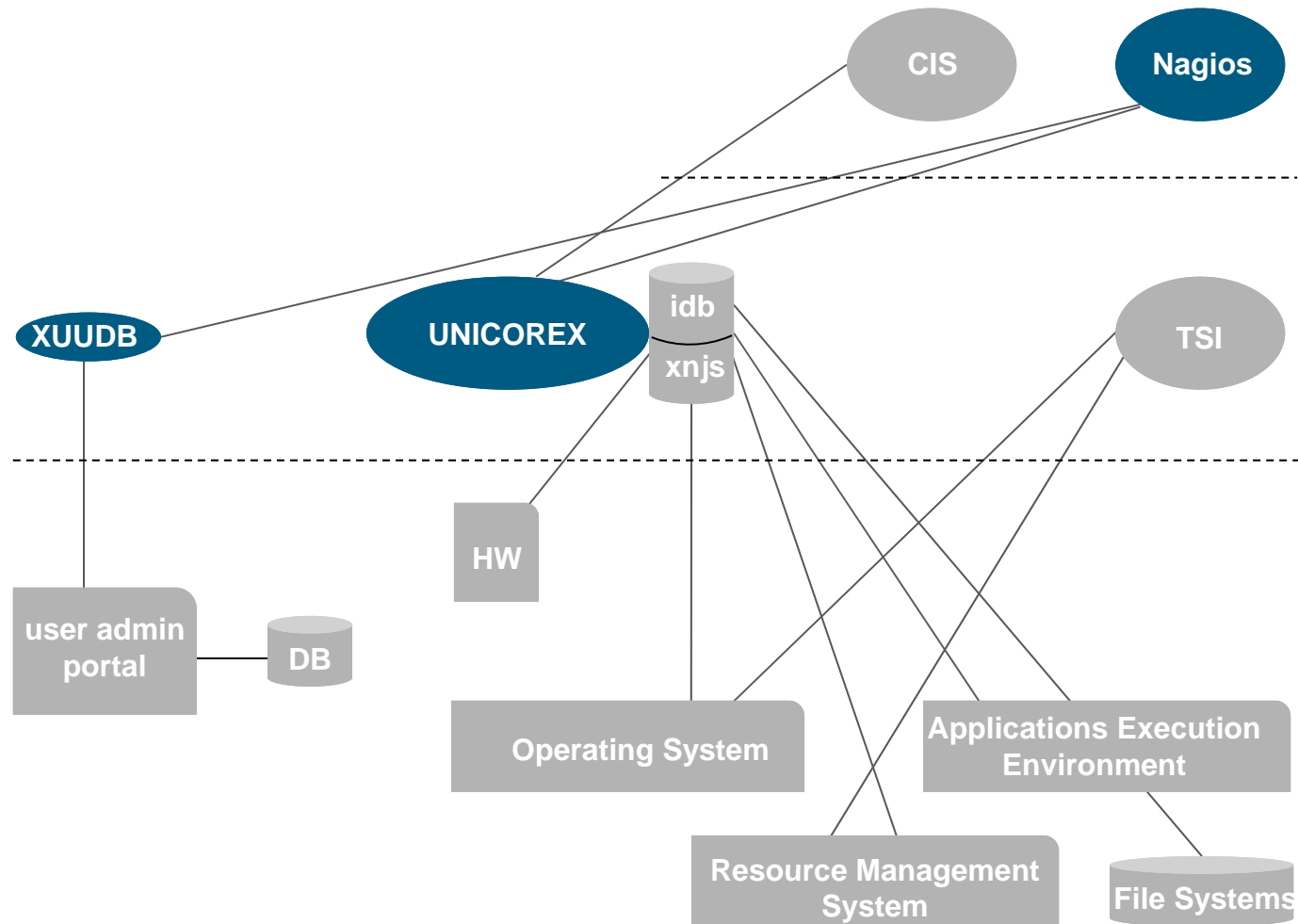
Managing UNICORE Production Environments



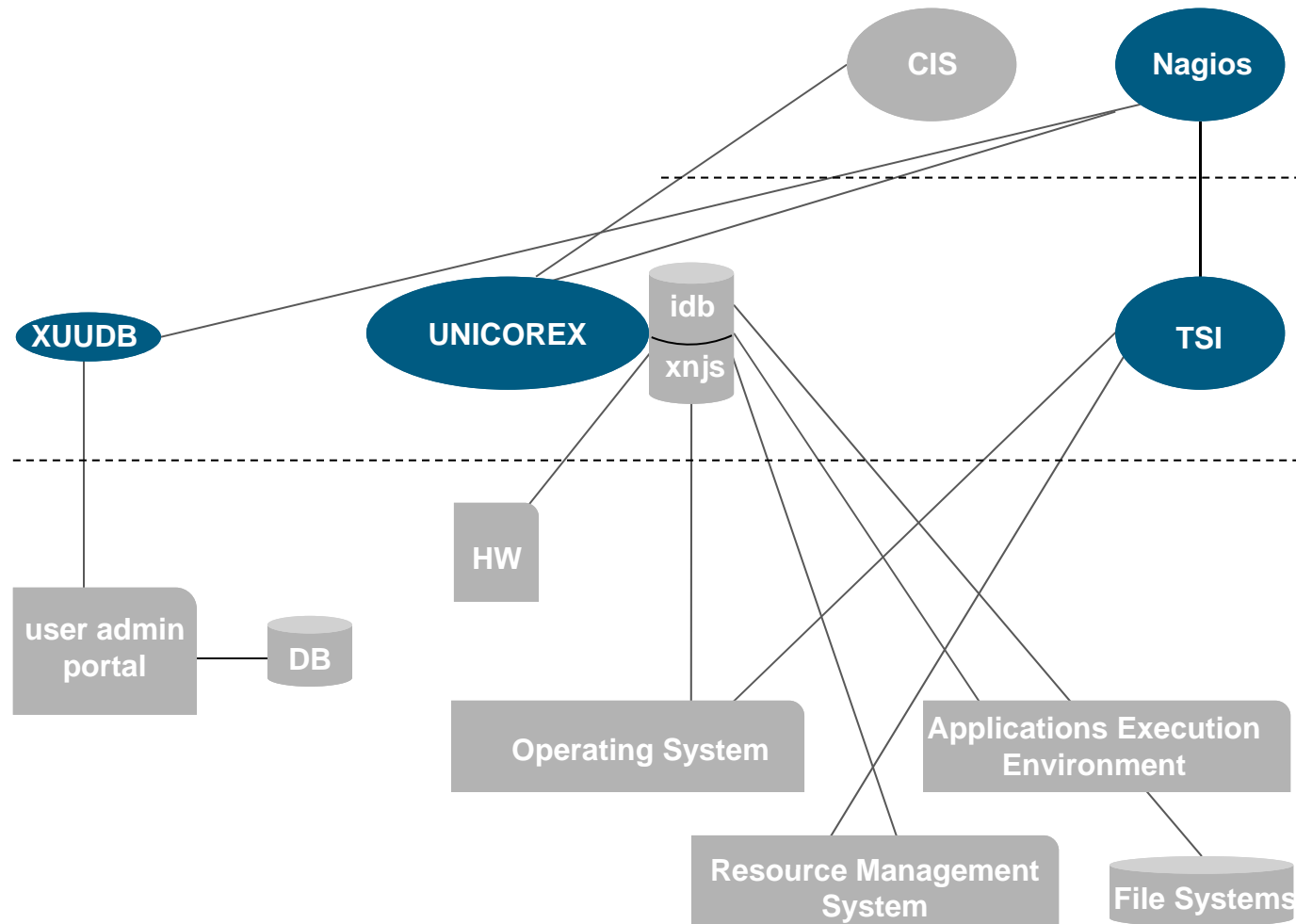
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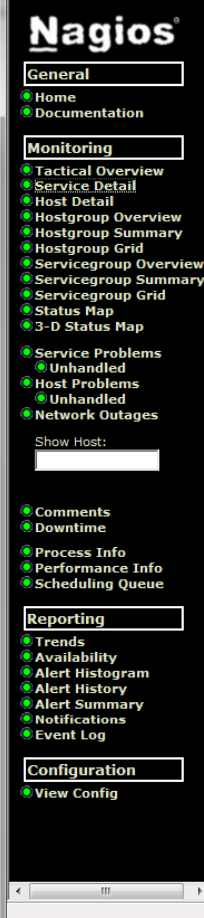
Managing UNICORE Production Environments



Managing UNICORE Production Environments



Managing UNICORE Production Environments



Current Network Status
 Last Updated: Tue May 18 10:27:24 CEST 2010
 Updated every 90 seconds
 Nagios® 3.0.6 - www.nagios.org
 Logged in as [nagiosadmin](#)

[View History For all hosts](#)
[View Notifications For All Hosts](#)
[View Host Status Detail For All Hosts](#)

Up	Down	Unreachable	Pending
5	0	0	0
All Problems		All Types	
0		5	

Ok	Warning	Unknown	Critical	Pending
31	1	0	1	0
All Problems		All Types		
2		33		

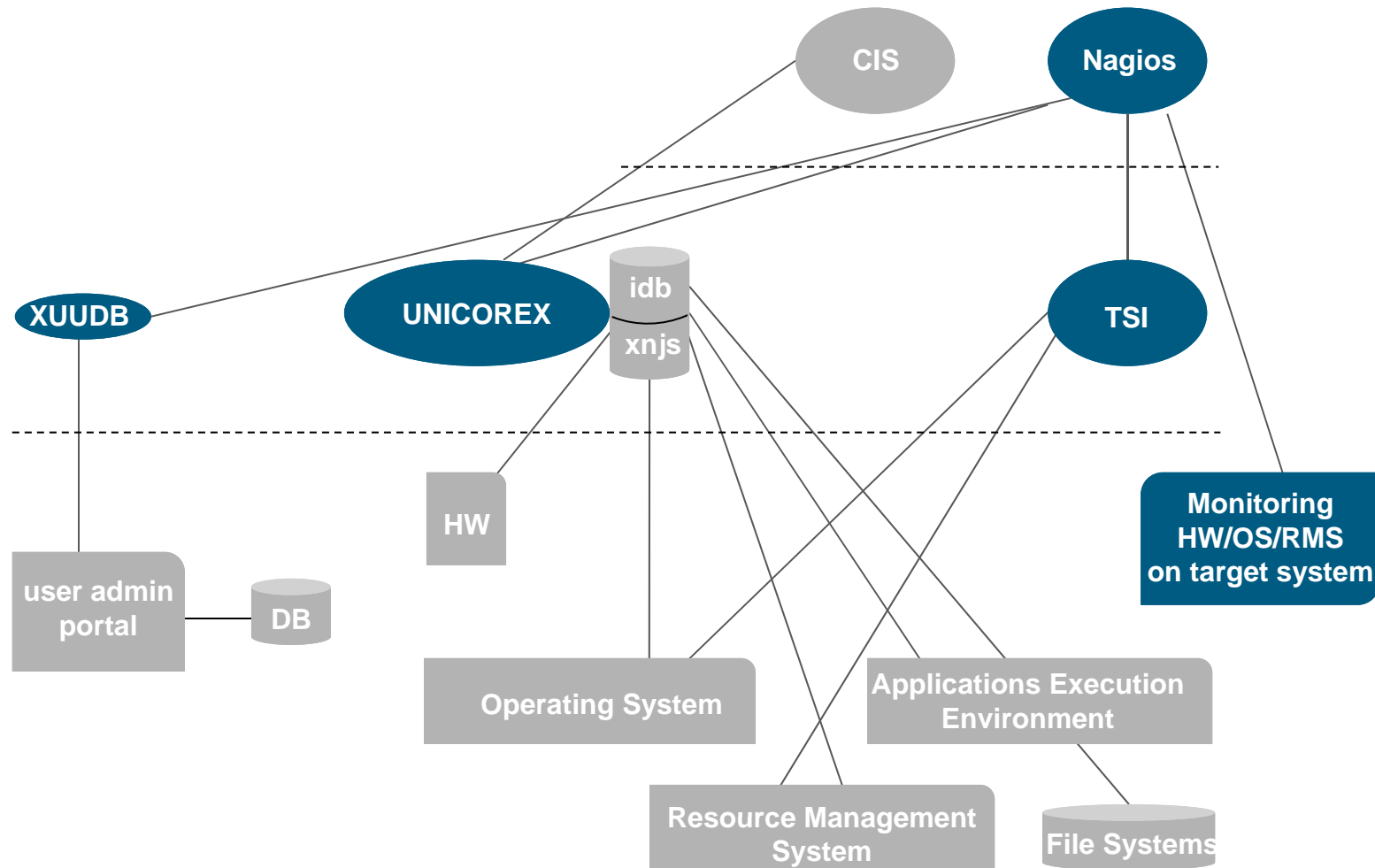
Service Status Details For All Hosts

Host	Service	Status	Last Check	Duration	Attempt	Status Information
Nagios-Server@zam178	Current Load	OK	05-18-2010 10:24:09	27d 1h 2m 11s	1/4	OK - load average: 0.05, 0.06, 0.09
	Current Users	OK	05-18-2010 10:24:43	27d 0h 59m 32s	1/4	USERS OK - 0 users currently logged in
	PING	OK	05-18-2010 10:26:40	27d 0h 57m 52s	1/4	PING OK - Packet loss = 0%, RTA = 0.04 ms
	Root Partition	OK	05-18-2010 10:24:45	27d 0h 56m 12s	1/4	DISK OK - free space: / 6653 MB (64% inode=-):
	SSH	OK	05-18-2010 10:26:29	27d 0h 54m 32s	1/4	SSH OK - OpenSSH_4.6 (protocol 2.0)
	Swap Usage	OK	05-18-2010 10:25:18	27d 0h 52m 52s	1/4	SWAP OK - 99% free (2025 MB out of 2055 MB)
UnicoreStatus	Total Processes	OK	05-18-2010 10:26:34	27d 0h 51m 12s	1/4	PROCS OK: 43 processes with STATE = RSZDT
	UNICORE JUGENE overall status	OK	05-18-2010 09:44:36	12d 21h 42m 48s	1/2	OK - 2 plugins checked, 2 ok
	UNICORE JUROPA overall status	CRITICAL	05-18-2010 09:54:04	0d 7h 33m 20s	2/2	CRITICAL - 2 plugins checked, 1 critical (JuropaUNICOREstatus), 1 warning (JuropaUnicorex_VirtualMemory)
	check UNICORE-JUGENE virtual memory usage	OK	05-18-2010 10:01:28	25d 20h 35m 3s	1/4	Virtual memory usage is OK (81.25 %).
	check UNICORE JUROPA virtual memory usage	WARNING	05-18-2010 10:09:04	0d 17h 21m 20s	4/4	WARNING: Virtual memory usage is high (115.625 %)
zam1077	check UNICORE-Juqgle status D-Grid	OK	05-18-2010 10:07:14	4d 10h 20m 10s	1/2	UNICORE 6 status OK
	Current Load	OK	05-18-2010 10:27:00	27d 19h 22m 30s	1/4	OK - load average: 0.29, 0.30, 0.28
	Current Users	OK	05-18-2010 10:26:51	27d 19h 19m 5s	1/4	USERS OK - 0 users currently logged in
	PING	OK	05-18-2010 10:26:51	27d 19h 17m 49s	1/4	PING OK - Packet loss = 0%, RTA = 0.05 ms
	Root Partition	OK	05-18-2010 10:24:28	27d 19h 21m 33s	1/4	DISK OK - free space: / 54108 MB (94% inode=98%):
	SSH	OK	05-18-2010 10:23:59	27d 19h 20m 16s	1/4	SSH OK - OpenSSH_4.2 (protocol 1.99)
zam1078	Swap Usage	OK	05-18-2010 10:24:48	27d 19h 19m 0s	1/4	SWAP OK - 100% free (2047 MB out of 2047 MB)
	Total Processes	OK	05-18-2010 10:26:32	27d 19h 17m 44s	1/4	PROCS OK: 25 processes with STATE = RSZDT
	Current Load	OK	05-18-2010 10:24:15	28d 18h 45m 18s	1/4	OK - load average: 0.21, 0.35, 0.37
	Current Users	OK	05-18-2010 10:24:56	28d 18h 42m 28s	1/4	USERS OK - 0 users currently logged in
	PING	OK	05-18-2010 10:26:01	28d 18h 44m 55s	1/4	PING OK - Packet loss = 0%, RTA = 0.05 ms
	Root Partition	OK	05-18-2010 10:24:08	28d 18h 43m 31s	1/4	DISK OK - free space: / 54070 MB (94% inode=98%):
zam1079	SSH	OK	05-18-2010 10:24:16	28d 18h 42m 8s	1/4	SSH OK - OpenSSH_4.2 (protocol 1.99)
	Swap Usage	OK	05-18-2010 10:22:24	28d 18h 45m 44s	1/4	SWAP OK - 100% free (2047 MB out of 2047 MB)
	Total Processes	OK	05-18-2010 10:23:36	28d 18h 44m 21s	1/4	PROCS OK: 21 processes with STATE = RSZDT
	Current Load	OK	05-18-2010 10:26:35	11d 0h 35m 49s	1/4	OK - load average: 0.59, 0.57, 0.60

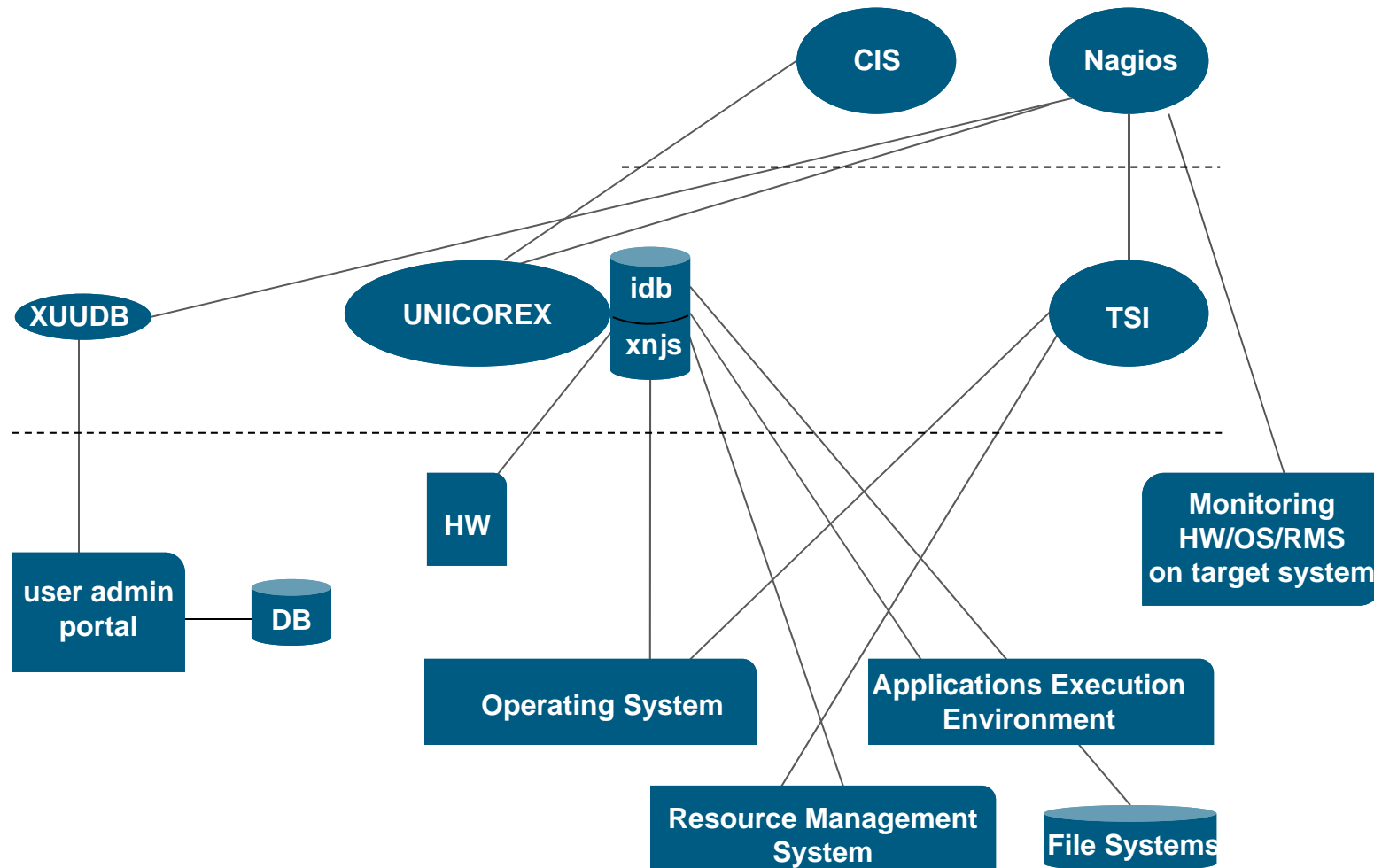
19. Mai 2010

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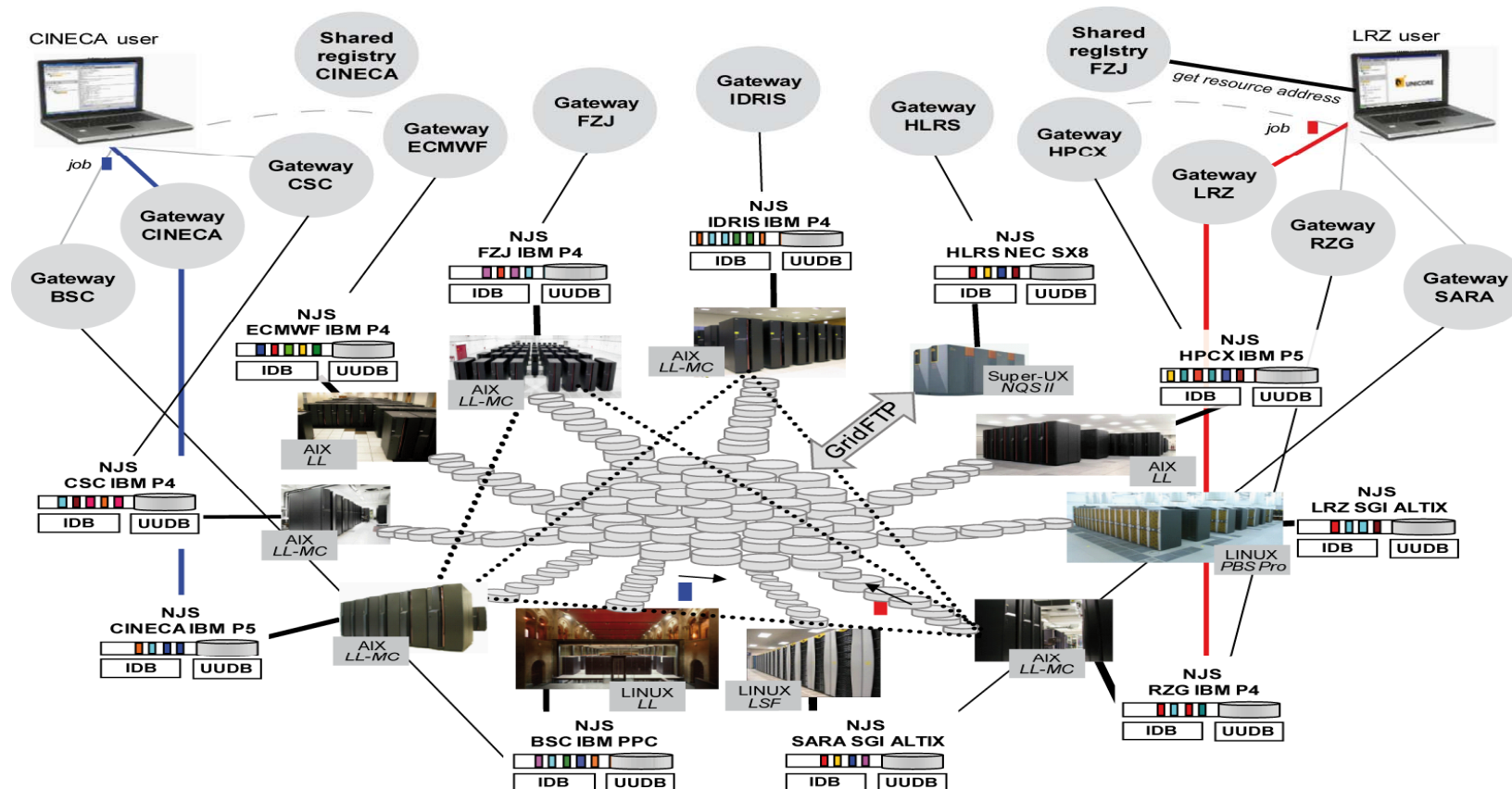
Managing UNICORE Production Environments



Managing UNICORE Production Environments



Managing UNICORE Production Environments



Conclusion

- Operation of production environments is costly
 - Service configuration, service monitoring, administrative tools, integration into site management, application installation, automatic / manual interaction,...
- There is (almost) no standard UNICORE installation
 - Consideration of user / site requirements
- Flexibility is the strength of UNICORE 6

Questions?

