

DETA-12-05



UNECE DETA DEPLOYMENT PROJECT

Project Objectives

- To evaluate the various possibilities
- Cost estimation
- To select the best option
- To provide 24/7 support.
- To assess the extent of financial extra-budgetary (XB) resources
- To assess ISU's ability to support the application



Project Scope



- The pros and cons of outsourcing versus in-house
- Deployment cost of the application
- Development and bug fixing costs are not included

Requirements

- The DETA application should run on an internet WEB centre
- UNECE IT to oversee/manage database and middleware.
- DETA should be available on a 24/7 basis.
- The service provider (UN or external) shall establish a User Help Desk

Requirements

- Minimum down-time
- User access via public internet using market standard internet browsers.
- Network security should be assured by HTTPS protocol.
- User identification/authentication by user-id/password.

Deployment Options

- ICTS, UNOG
- UNECE/ICTS, UNOG

Option 1: ICTS, UNOG

- Vmware instances for Oracle and Middleware
- Oracle Enterprise Edition
- High availability secured by replica copies of servers and high speed mirrored storage (SAN)
- OS Linux Suse 11
- Bandwidth 20 and 32 Mbps

UNOG ICTS Cost

Initial Cost (First Year)

Licence Type	Processor	Quantity	Licence Price	Support	Total
Oracle Database Enterprise Edition Share Acquisition	Xeon	2	\$ 22'750	\$ 5'005	\$ 47'500
Oracle DB Set up					\$ 2'795
Suse 11 OS install					\$ 1'500
Application Server JBoss 4.2	Xeon	2	\$ 0	\$ 0	\$ 3,046
Database Server vm instance					\$ 5,072
Hardware		1			\$ 11'660
Replica Copy (Mirror)		200 GB			\$ 8'777
Backup on SAN					\$ 9'188
20 % contingency budget					\$ 23'441
Staff salary P2 Level 50%					\$ 75'000
				Grand Total	\$ 215'647

Recurring Cost

Licence Type	Processor	Quantity	Licence Price	Support	Total
Oracle Database Enterprise Edition Share	Xeon	2	\$ 22'750	\$ 5'005	\$ 27'182
Application Server JBoss 4.2	Xeon	2	\$ 0	\$ 0	\$ 3,046
Database Server vm instance		1			\$ 5'072
Hardware					\$ 11'660
Replica Copy (Mirror)		200 GB			\$ 8'777
Backup on SAN					\$ 9'188
20 % contingency budget					\$ 13'033
Staff salary P2 Level 50%					\$ 75'000
				Grand Total	\$ 153'195

UNECE Proposal

- Private VMware server
- Confidentiality
- High speed connection to SAN (Storage Area Network)
- Taking advantage of the infrastructure and services
- A new virtual machine to host DETA database server
- Server: HP DL380 ProLiant

HD : 1TB

RAM: 24 GB

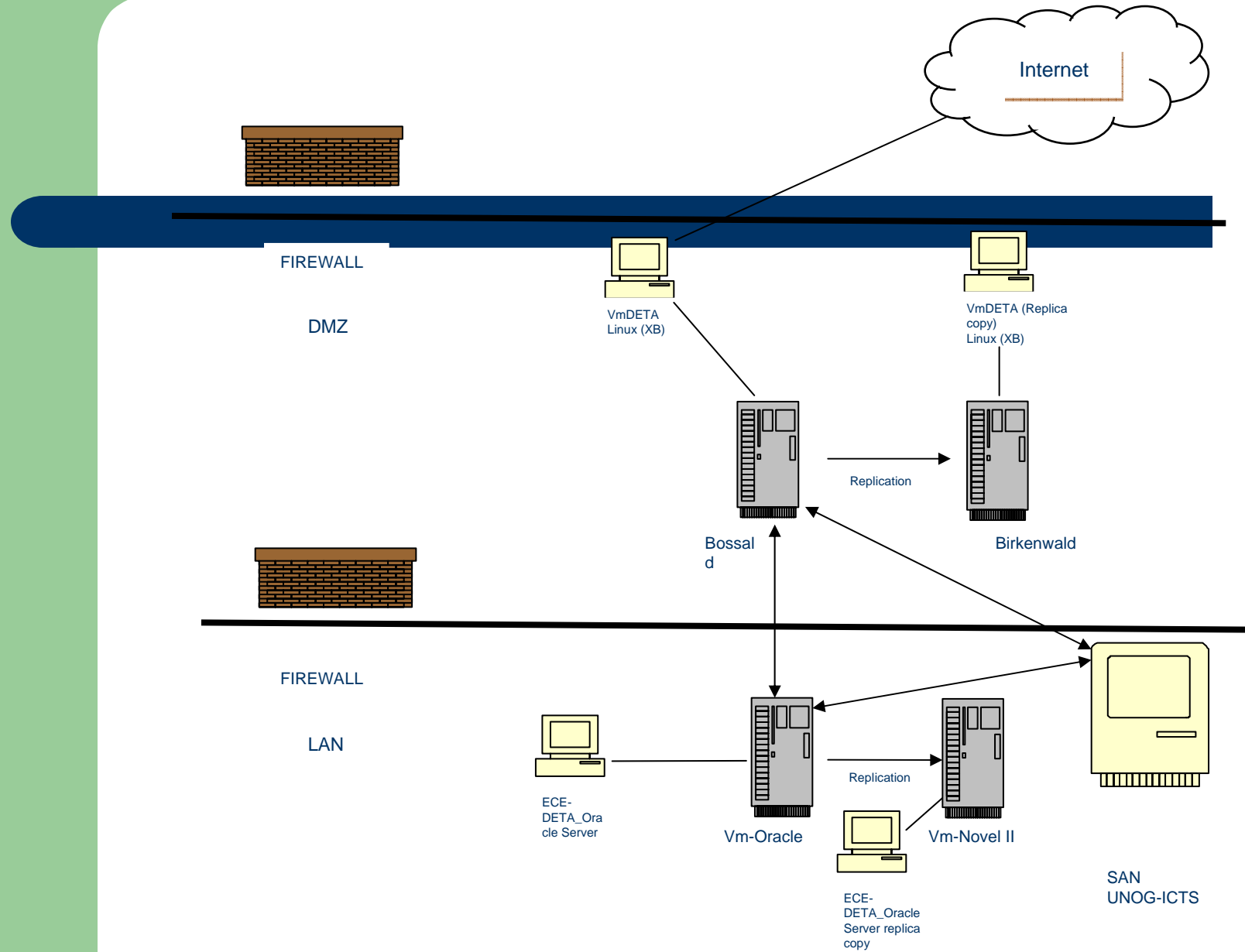
RAID . 1

Cost: USD 30'578

UNECE Proposal

- Oracle Standard Version
- JBoss 4.2
 - Compatible with the DETA application.
 - Infrastructure already in place.
 - Acquired know-how by UNECE staff. UNECE implemented JBoss server for more than 5 years.
 - Cost: Jboss is Open source no license required to install it and it is easy to maintain and administer.
 - It is widely used java EE, Enterprise Edition, application server on the market supported by a large user community
- XB Staff: 50% P2

Unece DETA Application Architecture



UNECE Proposal

Database and Application Servers Specifications

Server Type	OS	Processor	Quantity	RAM	Hard Disk
Application Server JBoss 4.2	Linux Suse 11	Xeon	2	4	100 GB
Database Server	Linux Suse 11	Xeon	2	6	500 GB

Initial investment

Licence Type	Processor	Quantity	Licence Price	Support	Total
Oracle Database Standard Edition	Xeon	2	\$ 22'750	\$ 5'005	\$ 27'755
Oracle DB Set up					\$ 0
Suse 11 OS install					\$ 0
Application Server JBoss 4.2	Xeon	2	\$ 0	\$ 0	\$ 0
Database Server vm instance					\$ 0
Hard Ware (HP DL380)		1			\$ 30'578
Replica Copy		200 GB			\$ 0
Backup on SAN					\$ 2'800
20 % contingency budget					\$12'227
Staff salary P2 Level 50%					\$ 75'000
				Grand Total	\$ 148'360

UNECE Proposal

Annual recurring costs

Licence Type	Processor	Quantity	Licence Price	Support	Total
Oracle Database Standard Edition	Xeon	2	\$ 22'750	\$ 5'005	\$ 27'755
Application Server JBoss 4.2	Xeon	2	\$ 0	\$ 0	\$ 0
Database Server vm instance					\$ 0
Replica Copy		100 GB			\$ 0
Backup on SAN					\$ 2'800
20 % contingency budget					\$ 6'111
Staff Salary P2 level					\$ 75'000
				Grand Total	\$ 111'666