

EXCHANGE 2010



MICROSOFT® EXCHANGE SERVER 2010

This Exchange 2010 solution architecture is sized and architected according to the requirements detailed here. It is intended to serve as a blueprint or example for organizations whose requirements are similar. Each organization's requirements will differ and include other considerations not listed here. For a configuration sized to your specific requirements please contact your Dell representative.

SIMPLE DISTRIBUTED MODEL 5000 MAILBOXES ON R710/MD1000

Organizational Profile:

- 5000 mailboxes
- 2GB avg mailbox size limit
- .1 IOPS per user (~100 messages/day)

Hardware Requirements:

- Dell PowerVault MD1000 storage array
- PowerEdge R710 (2S, 2u rack mount server)
- Three servers and storage array sets for High Availability/DAG nodes
- Assumes hardware based network load balancer for CAS server roles

Not Included:

- Backup and recovery infrastructure
- Disaster recovery or site resiliency
- UM and Edge roles

SIMPLE DISTRIBUTED MODEL 5000 MAILBOXES ON R710/MD1000

Input	Detail
Number of mailboxes	5,000
I/O Profile	0.1 IOPS
Size of mailbox	2GB
Number of copies	3 copy DAG
Recommended Solution	Detail
Mailbox Server	3 x PowerEdge R710
(Processor/Memory)	2 x Quad-Core processors / 72 GB memory
CAS/HUB Server	Consolidated on Mailbox Server
Storage Array	6 x PowerVault MD1000 SAS enclosures
Storage Configuration	Detail
Disk Type	7.2K rpm NL-SAS 3.5" 1TB
RAID Type	RAID 0
Database Volumes	2 Active + 4 Passive Database per server
Disks per copy	3 x DB Disks and 1 x Log disks
Mailbox per Database Volume	835 Mailboxes
Additional parameters	Data and Log separate 18% estimated capacity for growth NTFS Allocation unit size = 64KB for both DB and Log RAID stripe or element size = 256KB

RECOMMENDED HARDWARE CONFIGURATION

