

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.

SMALL AND BRANCH OFFICE MODEL 500 MAILBOXES ON T610 VIRTUALIZED

Organizational Profile:

- 500 mailboxes
- 4GB average mailbox size limit
- .14 IOPS per user (~160 messages/day)

Hardware Requirements:

- PowerEdge T610 (2S, 5u tower server)
- Two servers for High Availability/DAG nodes
- Assumes NLB for CAS VM's availability

Not Included:

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

SMALL AND BRANCH OFFICE MODEL 500 MAILBOXES ON T610 VIRTUALIZED

Input	Detail
Number of mailboxes	500
I/O Profile	0.14 IOPS
Size of mailbox	4GB
Number of copies	2 copy DAG
Recommended Solution	Detail
Host Server (Processor/Memory)	2 x PowerEdge T610 2 x Dual-Core processors / 18 GB memory
Hypervisor	VMware vSphere 4.0 or Windows 2008 Hyper-V Server R2
Mailbox Server Virtual Machine (Processor/Memory)	1 x VM on each Host server 2 x vCPU / 8 GB virtual memory
HUB/CAS Server Virtual Machine (Processor/Memory)	1 x VM on each Host server 2 x vCPU / 8 GB virtual memory
Storage Array	Internal Storage
Storage Configuration	Detail
Disk Type	7.2K rpm NL-SAS 1TB disks
RAID Type	2 sets of RAID 5
Database Volumes	1 Active + 1 Passive Database per server
Disks per copy	3 x (DB + Log) disks
Mailbox per Database Volume	250 Mailboxes
Additional parameters	Data and Log combined 15% estimated capacity for growth NTFS Allocation unit size = 64KB for both DB and Log RAID stripe or element size = 256KB

RECOMMENDED HARDWARE CONFIGURATION

