

# 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 1,000 MAILBOXES ON R510

### Organizational Profile:

- 1,000 mailboxes
- 1GB average mailbox size limit
- .14 IOPS per user (~160 messages/day)

### Hardware Requirements:

- PowerEdge R510 (2S, 2u storage dense rack-mount server)
- Two servers 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

# SMALL AND BRANCH OFFICE MODEL 1,000 MAILBOXES ON R510

Input	Detail
Number of mailboxes	1,000
I/O Profile	0.14 IOPS
Size of mailbox	1GB
Number of copies	2 copy DAG
Recommended Solution	Detail
Mailbox Server	2 x PowerEdge R510 with 8 HDD
(Processor/Memory)	2 x Dual-Core processors / 24GB memory
CAS/HUB Server	Consolidated on Mailbox Server
Storage Array	2 x Internal 3.5" HDD RAID 1 for Operating System 6 x Internal 3.5" HDD for Database and Log configured as below
Storage Configuration	Detail
Disk Type	SAS 10K - 600GB
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	500 Mailboxes
Additional parameters	Data and Log combined 25% estimated capacity for growth RAID stripe or element size = 256KB NTFS Allocation unit size = 64KB for both DB and Log

## RECOMMENDED HARDWARE CONFIGURATION

