



QSERIES SYSTEM REQUIREMENTS

PC SERVER HARDWARE

CONFIDENTIAL DOCUMENT

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1 INTRODUCTION

This document lists the current system requirements for typical QSeries and QMedia systems. Specifications are based on the requirements for a typical mid-range system. Very small or very large systems will require that specifications are adjusted accordingly.

Note that these are intended as guideline minimum specifications. Exceeding the specifications in aspects such as CPU performance and installed system memory is entirely acceptable.

2 STANDARD SYSTEM SERVERS

These specifications are for normal clustered-pair systems, up to about 50 users or so.

Where systems exceed 50 users or are expected to be particularly heavily loaded, system requirements should be increased.

2.1 DATABASE SERVER (EITHER QSERIES OR QMEDIA)

- Intel Xeon E5-series quad core or better at 2.4 GHz or faster. E5-2600-V3 series recommended.
- 8GB RAM minimum, more is OK
- Windows Server 2008 or 2012 Standard Edition, 64-bit.
- Hardware RAID controller – NOTE: Software-backed “fake RAID” controllers (including those found in some HP servers) are not supported.
- Disks as below. For all disks, 10K or 15K SAS is strongly recommended. 7.2K SATA is acceptable. Anything slower is ABSOLUTELY NOT PERMITTED.
 - o Pair of system disks in RAID-1 mirror, at least 72 GB.
 - o Two or more database disks in RAID-1 mirror (for two disks) or RAID-10 span (for more than two). Disk size at least 72 GB.
- Two Gigabit network interfaces, Intel or Broadcom chipset preferred (also see networking notes)
- All storage must be Direct Attach. Linkage to SAN storage (iSCSI etc) is not supported.

2.2 DATABASE SERVER FOR COMBINED QSERIES AND QMEDIA INSTALLATION:

- Intel Xeon E5-series quad core or better at 2.4 GHz or faster as minimum. Six-core or better recommended. E5-2600-V3 series recommended.
- 8GB RAM minimum, more is better
- Windows Server 2008 or 2012 Standard Edition, 64-bit.
- Hardware RAID controller – NOTE: Software-backed “fake RAID” controllers (including those found in some HP servers) are not supported.
- Disks as below. For all disks, 10K or 15K SAS is strongly recommended. 7.2K SATA is acceptable. Anything slower is not supported.
 - o Pair of system disks in RAID-1 mirror, at least 72 GB.
 - o Database disks, can be either:
 - Two separate RAID-1 mirrors, each at least 72 GB, or
 - One RAID-10 span of at least four hard drives, usable space at least 140 GB.
- Two Gigabit network interfaces, Intel or Broadcom chipset preferred (also see networking notes)
- All storage must be Direct Attach. Linkage to SAN storage (iSCSI etc) is not supported.

2.3 ARCHIVE SERVER

- Intel Xeon E5-series quad core or better at 2.4 GHz or faster. E5-2600-V3 series recommended.
- 8GB RAM minimum, more is OK
- Windows Server 2008 or 2012 Standard Edition, 64-bit.
- Hardware RAID controller – NOTE: Software-backed “fake RAID” controllers (including those found in some HP servers) are not supported.
- Disks as below. For all disks, 10K or 15K SAS is strongly recommended. 7.2K SATA is acceptable. Anything slower is ABSOLUTELY NOT PERMITTED.
 - o Pair of system disks in RAID-1 mirror, at least 72 GB.
 - o Two or more disks for data volume, each disk not less than 72 GB:
 - RAID-1 mirror for two disks
 - RAID-10 span for 3 or more disks
 - RAID-5 volume for 5 or more disks
 - RAID-6 volume for 6 or more disks.
 - o NOTE: RAID controllers driving RAID levels 5 or 6 must have battery backed write cache installed.
- Single Gigabit network interface, Intel or Broadcom chipset preferred (also see networking notes)
- All storage should be Direct Attach. Linkage to SAN storage (iSCSI etc) is not recommended and has a considerable performance penalty.
- Specification of CPU and memory should be increased if other services are being run on the same hardware.

2.4 OTHER SERVICES (MOS, DCI, WIRE, ETC)

- Intel Xeon E5 recommended, but Xeon E3 and Core i5/i7 are acceptable. Minimum 2.0 GHz, recommended at least 2.4 GHz
- Minimum dual core for one service. Minimum quad core for more than one service.
- Minimum 8GB RAM. If hosting several services, more may be required.
- Windows Server 2008 or 2012 Standard Edition 64-bit recommended
 - o Windows 7 Professional 64-bit is acceptable
- Single or dual OS drives, 72GB minimum. 10K or 15K SAS recommended, 7.2K SATA acceptable. Anything slower is ABSOLUTELY NOT PERMITTED.
- Single Gigabit network interface, Intel or Broadcom chipset preferred (also see networking notes)
- Any required multi-port PCIe serial cards etc. to suit specific customer requirements (for wire, DCI)

3 NETWORKING BETWEEN DATABASE SERVERS (CLUSTERED PAIR):

- There must be a dedicated private network between the servers.
- With standard 1-Gigabit copper, there MUST be a dedicated physical switch.
 - o Crossover cables are not supported.
 - o We strongly recommend against use of VLAN configurations.
- The total bandwidth of all “public” network connections must be less than or equal to the bandwidth of the private network. This means that if there are multiple public Gigabit links, a 10Gig private network is required.

4 VIRTUALISATION

Virtualisation of clustered database servers is not permitted and is specifically not supported.

Customers wishing to investigate virtualisation for other services may do so but we cannot provide any guarantees of performance or stability at this time.

END OF DOCUMENT