Dragon Medical Enterprise Network Edition

Technical Note: Requirements for DMENE Networks with virtual servers

This section includes system requirements for DMENE Network configurations that utilize virtual servers. If you plan to set up a DMENE network that uses many virtual servers, make sure the network meets the system requirements specified in this section.

For information on how to configure a DMENE network using physical servers, see "Chapter 3: Network configuration options for Dragon Medical Enterprise Network Edition" in the DMENE Planning and Deployment guide. The DMENE Planning and Deployment guide and other DMENE documentation is available in Solution #14111 on the Nuance iSupport site:https://isupport.nuance.com/

You can configure your network for *Dragon Medical Enterprise Network Edition* in several ways.

Small Organizations (Up to 100 providers)

- **Single Quad-Core physical or virtual server**
  - **One Quad-Core Server** for NMS Server & NMC Console, NMS SQL and Profile Optimizer Databases & Profile Optimizer Server/Scheduler, and One Speech Node
- **Hardware and Software**
  For this configuration, you need a more robust server machine than you would require for an installation distributed over several machines.
  - **Processor**: Quad-Core 2 GHz CPU
  - **Operating System**:
    - Windows Server 2003 SP2 or R2, 32- or 64-bit version
    - Windows Server 2008 or with SP2 (optional), 32- or 64-bit version
  - **Microsoft .NET**:
    - Microsoft .NET Framework 3.5 SP1 and Microsoft .NET Framework 4.0 Client or full version required for the server.
    - Microsoft .NET Framework 4.0 client or full version for the Nuance Management Console.
  - **Minimum RAM**: 4 GB is recommended

- **Core Application Disk Storage**: 60 GB
  40 GB for the Operating system and the NMS Server and Profile Optimizer Server Services
- **Maximum Number of Speech Nodes**: One Profile Optimizer Speech Node that uses one full core of the CPU. Must be on a Virtual Machine if deployed on a single server.
- **Minimum and Maximum Number of Users**: 10 to 100 dictating providers
- **Master User Profile Storage**: 1.1 GB per provider/dictation device is required for the master user profiles. Storage can be on the server, on another file store, a storage array, or on a storage area network (SAN).

Medium Organizations (Up to 1000 providers)

- **Minimum of two virtual servers**
  - **First Server (Dual vCPU)**: NMS Server & NMC Console, NMS SQL and Profile Optimizer Databases, and Profile Optimizer Scheduler/Server
  - **Additional Servers (1 per 125 Users)** : Speech Node
  - Master User Profiles Directory on first server or on a separate Windows server or Distributed File System (DFS)
- **First server requirements**:
  - **Processor**: 2 vCPU's
  - **Operating System:**
    - Windows Server 2003 SP2 or R2, 32 bit or 64 bit
    - Windows Server 2008 or R2, 32 bit or 64 bit
  - **Microsoft .NET**:
    - Microsoft .NET Framework 3.5 SP1 and Microsoft .NET Framework 4.0 Client or full version required .
    - Microsoft .NET Framework 4.0 client or full version for the Nuance Management Console.
  - **Minimum RAM**: 4 GB RAM 8 GB if SQL installed on the server
  - **Core Application Disk Storage**: 40 GB includes 14 GB for the Operating system
- **Second server (Speech Nodes 1 per 125 Users) requirements**
  - **Processor**: 1 vCPU
  - **Operating System**:
    - Windows XP SP3, 32-bit or 64-bit
    - Windows Vista SP2, 32-bit or 64-bit
    - Windows 7, 32-bit or 64-bit
    - Windows Server 2003 SP2 or R2, 32-bit or 64-bit
    - Windows Server 2008 or R2, 32-bit or 64-bit
  - **Microsoft .NET**: Microsoft .NET Framework 3.5 SP1 and Microsoft .NET Framework 4.0 Client or full version required
  - **Minimum RAM**: 1 GB RAM for Windows XP, 2 GB RAM for Windows Vista SP2, Windows 7, Windows Server 2003, and Windows Server 2008
  - **Hard Disk Space**: 20 GB for Windows XP, 30 GB for Windows Vista SP2, Windows 7, Windows Server 2003, and Windows Server 2008

- **Master User Profile Storage**: 1.1 GB per provider/dictation device is required for the master user profiles. Storage can be on the first server, a storage array, or on a storage area network (SAN). For a SAN configuration, Fiber Channel connectivity to the server running the Profile Optimizer Speech Nodes is preferred to reduce network usage.

Large Organizations (Scalable for well over 1,000 providers)

- **Minimum of three virtual servers**
  - **One *NMS Server*** for every 1,000 providers
  - **One Database Server** for *NMS SQL* and *Profile Optimizer Databases* or a customer SQL cluster
  - **One Speech Node**: one node for every 125 providers
- **First server: NMS Server hardware requirements and limitations**
  - **Processor**: 2 vCPU
  - **Operating System**:
    - Windows Server 2003 SP2 or R2, 32- or 64-bit version
    - Windows Server 2008, R2, or SP2 (optional), 32- or 64-bit version
  - **Microsoft .NET**:
    - Microsoft .NET Framework 3.5 SP1 and Microsoft .NET Framework 4.0 Client or full version required for the server.
    - Microsoft .NET Framework 4.0 client or full version for the Nuance Management Console.
  - **Minimum RAM**: 4 GB RAM
  - **Approximate Disk Storage**: 40 GB
- **Second server: Database server hardware requirements and limitations**
  - **Processor**: 2 vCPU or Existing SQL Cluster
  - **Operating System**:
    - Windows Server 2003 SP2 or R2, 32- or 64-bit version
    - Windows Server 2008, R2, or SP2 (optional), 32- or 64-bit version
  - **Minimum RAM**: 4 GB RAM 8 GB is recommended
  - **Approximate Disk Storage**: 40 GB
  - **Database**: MS SQL Server 2008 Standard or higher
- **Third server: Speech Nodes (Speech Nodes 1 per 125 Users)**
  - **Processor**: 1 vCPU
  - **Operating System**:
    - Windows XP SP3, 32-bit or 64-bit
    - Windows Vista, 32-bit or 64-bit
    - Windows 7, 32-bit or 64-bit
    - Windows Server 2003 SP2 or R2, 32-bit or 64-bit
    - Windows Server 2008 or R2, 32-bit or 64-bit

- **Microsoft .NET**:
    - Microsoft .NET Framework 3.5 SP1
    - Microsoft .NET Framework 4.0 Client or full version required
- **Minimum RAM**: 1 GB RAM for Windows XP, 2 GB RAM for Windows Vista, Windows 7, Windows Server 2003, and Windows Server 2008
- **Hard Disk Space**: 20 GB for Windows XP, 30 GB for Windows Vista, Windows 7, Windows Server 2003, and Windows Server 2008
- **Master User Profile Storage**: 1.1 GB per provider/dictation device is required for the master user profiles. Storage can be on the first server, a storage array, or on a storage area network (SAN). For a SAN configuration, Fiber Channel connectivity to the server running the Profile Optimizer Speech Nodes is preferred to reduce network usage.