

1. SALESLOGIX SYSTEM REQUIREMENTS

SalesLogix is a Microsoft 32-bit application. The Remote Client and the Workgroup Client operate on Microsoft Windows 95 and Microsoft Windows NT Workstation 4.0 operating systems. The SalesLogix server products operate on Microsoft Windows NT Server 4.0.

SalesLogix uses a tiered architecture where the Database Server, the Workgroup Server, and the Synchronization Server can operate on physically independent Microsoft Windows NT Server hardware platforms. This architecture provides for higher performance levels. Much of the processing, in addition, is done by each client workstation, further distributing the workload. It is possible to operate one or more of the servers on the same physical hardware platform (e.g., the Database Server and the Workgroup Server share a single hardware platform). *For optimal performance we recommend that the Workgroup Server and the Synchronization Server operate on independent Microsoft Windows NT hardware platforms.*

Remote clients use a local SQL database (Borland Interbase) that links via a network or dial-up connection with the Synchronization Server. The Interbase engine is included in each Remote Client license.

SalesLogix supports the following SQL-compatible database engines for the primary database and for remote office databases:

- Microsoft SQL Server 6.5
- Borland Interbase
- Oracle 7.1/7.2/7.3/8.0

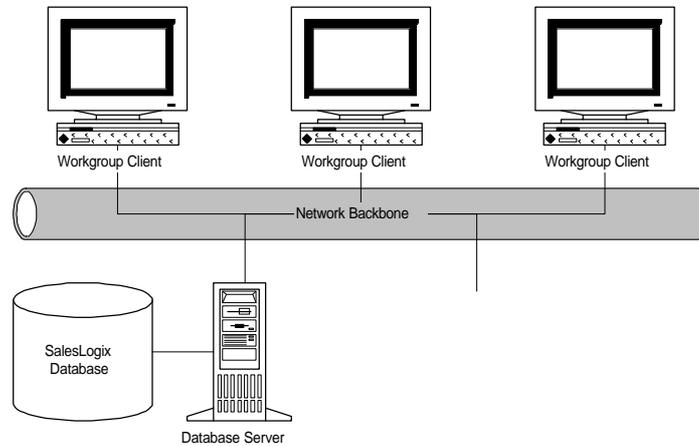
The Borland Database Engine is included with the Workgroup Server license. Microsoft SQL Server and Oracle databases must be licensed separately. Microsoft SQL Server is included in the Microsoft BackOffice suite.

Network Configuration Scenarios

SalesLogix can be configured in various network topologies, depending on your requirements and data/transaction volumes. The next few pages show examples of various configuration types that are possible.

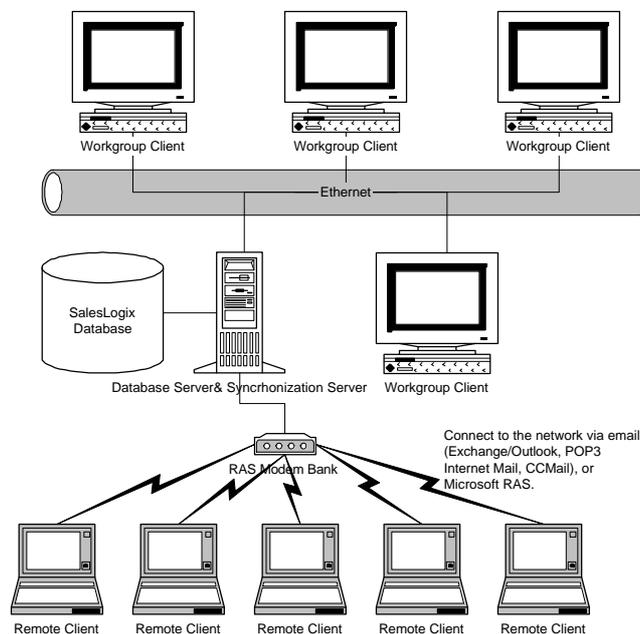
Workgroup LAN

If you have 10 users to connect to a local area network with no remote users, you have the option of placing the Workgroup Server and the SalesLogix database on the same physical Microsoft NT server. Note that this configuration is only available for relatively small networks. If your transaction and data volumes grow, you may consider moving the database to separate server for improved performance.



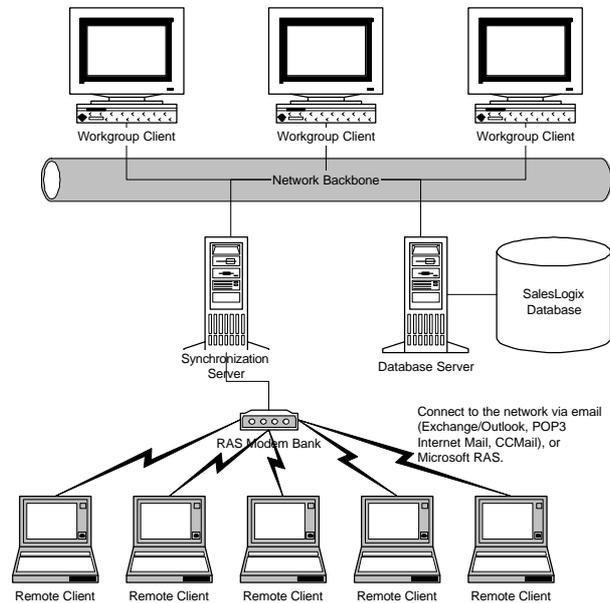
Workgroup LAN and Few Remote Clients

You may have 10 or fewer Workgroup Clients and fewer than 5 Remote Clients. In this configuration, you can connect Remote Clients and Workgroup Clients to the Synchronization Server and Workgroup Server located on a single physical Microsoft Windows NT Server. It is strongly recommended, however, to place the Synchronization Server on a separate physical server.



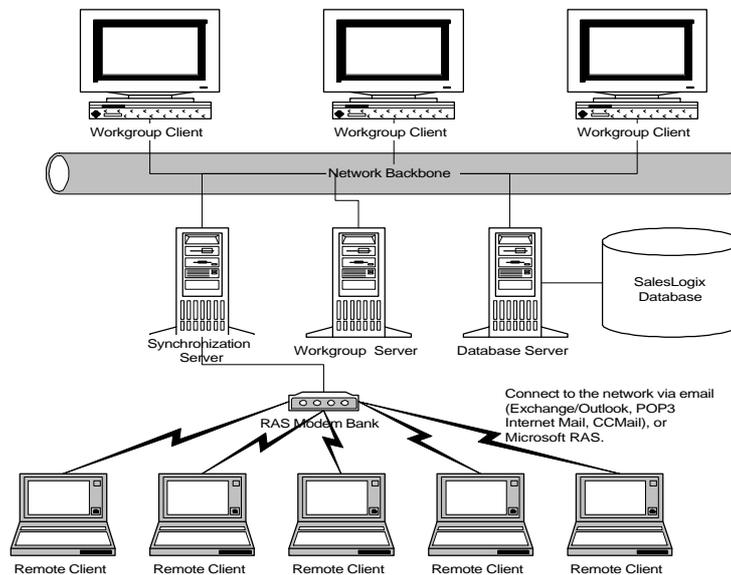
Typical Workgroup LAN and Remote Users

For companies with 10 or more Workgroup Clients and more than 5 Remote Clients, better performance can be obtained by having the Synchronization Server placed onto a separate Microsoft NT Server.



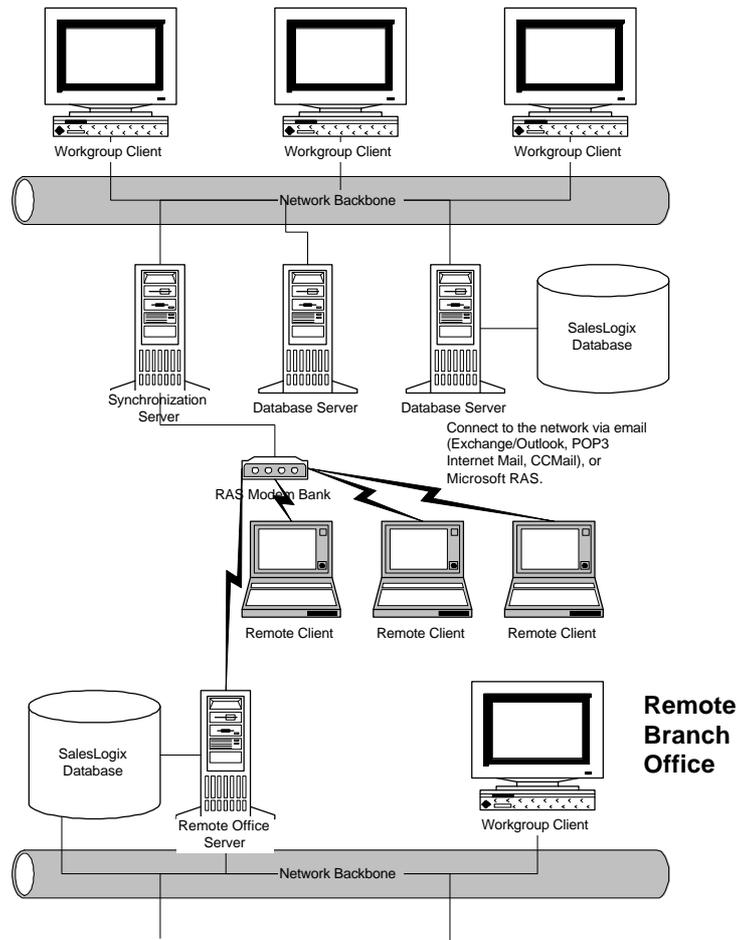
Large LAN and Remote Users

If your company has 40 or more Workgroup Clients, several Remote Clients, and more than 100,000 Customer records with significant activity, you should consider the option of placing the database on a separate Microsoft NT Server as well. *This option can be implemented later as well should performance require it.*



Hub and Spoke Network

Some companies have one or more remote or branch sales offices, each with multiple Workgroup users. These companies can have a central, “master” database at the headquarters and synchronize subsets of this database at remote offices. Typically the remote office keeps a database of only Customers in their sales territory. Local Workgroup users connect to the local server and database. The local server/database then synchronizes with the central server on a scheduled basis. Remote users who travel from the office must synchronize with the central database, but still can connect as a Workgroup user to the local database when in the office.



System hardware requirements

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The Borland Database Engine is included with the Workgroup Server license. Microsoft SQL Server and Oracle databases must be licensed separately. Microsoft SQL Server is included in the Microsoft BackOffice suite.

Database Server

Houses the database platform and the main database.

It is possible to operate one or more of the servers on the same physical hardware platform (e.g., the Database Server and the Workgroup Server share a single hardware platform).

Description	Minimum	Recommended
Operating System	Microsoft Windows NT Server 4.0 or Interbase Windows95 for 5users	Microsoft Windows NT Server 4.0
Fixed Disk	TBD	TBD (App.1MB per 50 Accounts)
Other Media	CD ROM Drive	CD ROM Drive
Network	10BaseT Ethernet Card	SCSI Ethernet Cards
Memory	64 MB	+128MB- 1GB
Processor	Pentium 133+	Duel/Quad Pentium Pro

For Workgroup servers supporting over 20 users, you should seriously consider 256 MB or RAM or more for more effective SQL database performance, especially when using a Microsoft SQL Server or Oracle database that can be tuned to better utilize this additional memory.

The Workgroup Server disk configuration should follow the Database Server recommendations should the Database Server and the Workgroup Server be on the same physical server.

Workgroup Server

Houses the SalesLogix Workgroup Administrator and SalesLogix Architect.
The Workgroup Server can serve as a single user's Workstation

Note: It is possible to operate one or more of the servers on the same physical hardware platform (e.g., the Database Server and the Workgroup Server share a single hardware platform).

Description	Minimum	Recommended
Operating System	Microsoft Windows NT 4.0 (Server or workstation) or Windows95	Microsoft Windows NT Server 4.0
Fixed Disk	32MB for software	
Other Media	CD ROM Drive	CD ROM Drive
Network	10BaseT Ethernet Card	SCSI Ethernet Cards
Memory	32 MB	+64MB
Processor	Pentium 133+ MHz	Pentium 266 MHz or faster

Synchronisation/Agent Server

Supports and runs synchronisation and agents on one or more servers.

Note the Synchronisation Server can be on the same machine as the Database server if a small group of users require synchronisation.

Description	Minimum	Recommended
Operating System	Microsoft Windows NT 4.0 (Server or workstation) or Windows95	Monitor performance and increase the number of servers
Fixed Disk	2 GB	
Other Media	CD ROM Drive	
Network	10BaseT Ethernet Card	
RAS Modem	28.8K BPS or 56 BPS	
Memory	32 - 48 MB	
Processor	Pentium 133+ MHz or better	

Remote clients

SalesLogix supports remote connections via the Internet using email, but this approach is only beneficial if most of your field sales representatives require expensive long distance telephone calls for connecting with your LAN.

For using standard Microsoft dial-up connections via Microsoft RAS (Remote Access Service). Remote users can simply dial-up your RAS server by pressing the Synchronize icon on their SalesLogix toolbar. In addition, SalesLogix can be configured to log off the network and disconnect when the update is completed. The application of received changes to the database are then applied while the remote user is offline. While connected, however, the remote user can access other records on the database server, such as email, provided they have the proper permissions. Internet FTP synchronization is also available.

The typical remote user has a laptop computer, although some remote users might work from their home using a desktop computer. Following are some recommendations for laptop users:

Description	Minimum	Recommended
Operating System	Microsoft Windows 95 or Microsoft Windows NT 4.0 Workstation	Microsoft Windows 95 or Microsoft Windows NT 4.0 Workstation
Fixed Disk	500 MB Free	1 GB Free
Other Media	Floppy Disk Drive	Floppy Disk Drive
Screen	640 x 480	800 x 600
Modem	28.8K BPS	56K BPS
Memory	16-32 MB	64 MB
Processor	Pentium 120+ MHz	Pentium 166 MHz

If the remote user also works within a workgroup, then the laptop or desktop computer should also have an Ethernet PC card.

The fixed disk requirement indicated is for the required SalesLogix programs, Help files, and base parameters plus a minimum Borland Interbase SQL database. Depending on the number of records stored on the laptop, the required disk space could grow. It is not expected, however, that a laptop user would require more than the 1.6 GB+ fixed disk storage commonly available with laptop computers sold today.

Microsoft 32-bit applications such as SalesLogix perform much better with more than 16 MB of memory. We require 32 MB or more for each laptop.

Workgroup clients

Workgroup clients need to be connected to the network via a local area network. This network typically uses Ethernet, requiring an Ethernet card to be included in each connected Workgroup Client workstation.

Description	Minimum	Recommended
Operating System	Microsoft Windows 95 or Microsoft Windows NT Workstation	Microsoft Windows 95 or Microsoft Windows NT 4.0 Workstation
Fixed Disk	500 MB Free	500 MB Free
Other Media	Floppy Disk Drive	Floppy Disk Drive
Screen	640 x 480	800 x 600
Network Connection	10BaseT Ethernet Card	10BaseT Ethernet Card
Memory	16-32 MB	64 MB
Processor	Pentium 133 MHz	Pentium MMX 200 MHz or faster

Remote Office Server

Houses the remote office database server and remote synchronisation server.

The remote office and workgroup users are configured and maintained at the main office.

The remote office database is a subset of the main database. It contains all the accounts that can be accessed by the workgroup users assigned to the remote office.

Description	Minimum	Recommended
Operating System	Microsoft Windows NT 4.0 (Server or workstation) or Windows95	Microsoft Windows NT Server 4.0
Fixed Disk	32MB for software	
Other Media	CD ROM Drive	CD ROM Drive
Network	10BaseT Ethernet Card	SCSI Ethernet Cards
Memory	32 MB	+64MB
Processor	Pentium 133+ MHz	Pentium 266 MHz or faster

Fax Server

SalesLogix can integrate with a client or NT server based fax server. Currently SalesLogix supports the Windows 95 and Windows NT 4.0 versions of Microsoft Fax and Delrina WinFax Pro (version 8.01). Additional fax servers may be supported in the future.

Microsoft Fax, whether operating on the client or the server, requires the use of the Microsoft Exchange version 5 client. This version can be obtained only if the Microsoft Exchange 5.0 version has been licensed. If you do not use Exchange version 5, then we recommend that you use WinFax Pro version 8 on the client or server. We can discuss fax options in more detail if necessary.

E-mail Integration

SalesLogix can automatically bring up an email message window from within SalesLogix. In order to populate the "To:" field with the email address of the currently selected contact record, however, the email system must be properly configured. The email systems that are currently supported include:

- ❑ Microsoft Exchange / Microsoft Mail
- ❑ Microsoft Outlook (requires Exchange 5.0 client)
- ❑ Lotus Notes/ccMail
- ❑ Internet Mail (POP3)

The POP3 Internet Mail option uses the SalesLogix Mail client. It must be properly configured and requires an Exchange messenger client to be installed as well. SalesLogix does support other POP3 email clients, such as Eudora. SalesLogix currently does one way integration with the Microsoft Outlook scheduling features. Bi-directional synchronization with Outlook, Notes Calendar, Groupwise calendar, Palm Pilot and Windows CE devices is currently in testing with Puma Technologies with their IntelliSynch software product, and will be available in 1998.