

Microsoft Exchange

MS Exchange Server is the e-mail server with integrated groupware that makes communicating easier. It is a business-messaging product which provides the following functions,

E-Mail

MS Exchange Server provides an easy-to-use, reliable, safe, fast, and scalable e-mail system for businesses of all sizes. Its universal inbox allows users to receive all electronic communications in a single location, and its Internet connector makes it easy to send information to anyone anywhere.

Built-in Groupware

MS Exchange Server has groupware solutions built right in, including a meeting scheduler, bulletin

board, document library, customer tracking application, and task manager. It also includes an easy-to-use development environment that will allow everyone, from the novice end user to the professional developer, to customize solutions on top of MS Exchange Server.

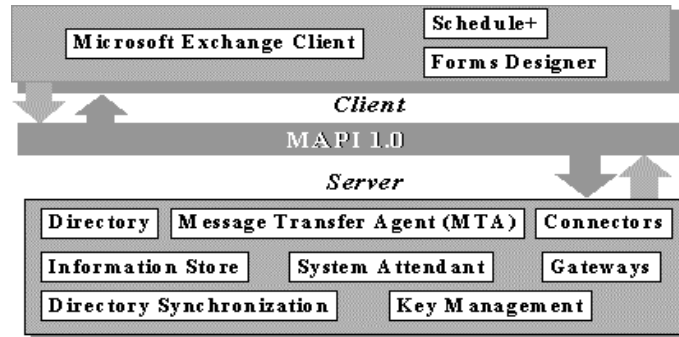
Easy and Powerful Administration

MS Exchange Server is easy to install and manage, especially with its automatic routing and directory synchronization capabilities for multiserver, multisite e-mail systems. It includes a central administration program that allows you to manage your entire e-mail system from a single desktop. It even has integrated monitoring that will notify you of any problems and reset the system if problems arise with servers or connections between servers.

MS Exchange Server consists of both client components (the software that runs on each user's desktop computer) and the server components (the

software that runs on each of the MS Exchange Server computers). These client and server components work together to provide e-mail and groupware functionality across networks. The client makes requests of the server, such as sending an e-mail message or obtaining a mailbox address, and the server carries out those requests or provides the requested information.

MS Exchange Server-Basic Components



Client Components:

With the following three components, users can send and receive e-mail, share information, schedule meetings, design custom forms & communicate across the Internet.

MS Exchange Client integrates e-mail and groupware applications through public folders. Users can:

- ✍ compose messages with rich text formatting, including different fonts and bullet points.
- ✍ send messages with attached files, objects, or other messages.
- ✍ assign a priority to a message, and request automatic delivery or read notification.
- ✍ reply only to the sender or to all recipients of the message.
- ✍ search for messages and information in folders by applying built-in views or creating custom views.
- ✍ share information, files, messages, and documents through public folders applications hosted on a MS Exchange Server.

MS Schedule+ : Provides personal calendar, group scheduling, and personal information management (PIM) tools. These tools allow users to manage their time and tasks, create a list of personal contacts, and automate the process of scheduling meetings.

Forms Designer : Allows the application designer to build custom forms quickly and easily without programming by using a simple set of drawing tools. These forms can be used with public folders applications for posting information or as point-to-point routing forms used in workflow applications. The functionality of the forms built with the Forms Designer can be extended with the MS Visual Basic programming system.

Note : The MS Exchange Inbox is included with MS Windows 95. The MS Exchange Inbox includes all of the functionality of the MS Exchange Client, except for capabilities that are specific to the use of

the client with MS Exchange Server. Windows 95 users will be able to easily update their inbox to the full MS Exchange Client when using MS Exchange Server as their e-mail server.

Server Components:

The MS Exchange Server consists of components that run on a Windows NT Server-based computer. The server components process the instructions that the client components request, such as looking up user names, sending messages, and storing information in private and public folders. These server components provide the main e-mail services, such as message transfer and delivery, message storage, and directory services, as well as connectivity and directory exchange with other systems.

✍ **Directory**

Stores all the available information about an

organization's resources and users, including mailboxes, public folders, distribution lists, and

servers. The directory is automatically replicated to all servers in a site, and it can be configured to be replicated automatically to servers in other sites. Users access the directory for the same purposes as they would do with a telephone book to obtain information about other users and services.

Information Store

Provides a server-based, structured repository for storing information. It has 2 databases, one for storing personal folders for users' mailboxes & another for storing public folders. This also replicates public folders, enforces storage limits, & delivers messages to users on the same server.

Message Transfer Agent (MTA)

Like a postman, the MTA delivers and routes messages to other MS Exchange Server MTAs or gateways and other X.400 MTAs in foreign

systems. It also maps addresses, routes messages, and converts message formats.

System Attendant

Monitors e-mail connections between servers, helps run monitoring tools, generates e-mail addresses for new message recipients, and logs information for message tracking purposes.

Directory Synchronization

Exchanges directory information between MS Exchange Server, MS Mail 3.x, and other e-mail systems using the Mail 3.x directory synchronization protocol.

Key Management

Manages security information that is used for digitally signing and sealing messages with MS Exchange Server.

Connectors

Allow MS Exchange Server to connect to other e-mail systems. Connectors include:

MS Mail connector for providing seamless connectivity to MS Mail for PC Networks, MS Mail

for AppleTalk Networks, and MS Mail for PC Networks gateways.

MS Schedule+ Free/Busy connector that enables MS Exchange Server to exchange MS Schedule+ free/busy information with MS Mail for PC Networks. This connector is an extension to the MS Mail connector.

MS Exchange Internet Mail connector that enables MS Exchange Server to seamlessly exchange messages with the Internet and SMTP-based systems.

MS Exchange X.400 connector that enables MS Exchange Server to seamlessly exchange messages with X.400-based systems.

Gateways *

Translate, transfer, and deliver messages from MS Exchange Server to foreign mail systems such as PROFS and SNADS. (* These must be purchased separately).

How the Components Fit Together

MS Exchange Server provides a modular client-server architecture. It is modular because its components can be plugged in to achieve different levels of functionality; it is client-server because the processing of tasks is distributed between the client and server. The client and server components communicate through the messaging application programming interface (MAPI). The client components use the MAPI to access the server components.

How the Components Communicate

Figure 2 shows how the client and server components interact with each other. The client components access the server components through the MAPI in the same way they would access other MAPI service providers. The client sends requests to the server, and the server carries out the instructions or obtains the information that the client requested using remote procedure calls (RPCs).

RPCs are an industry standard interprocess communication (IPC) mechanism for client-server communication that allow communication between server applications and client applications as if they were

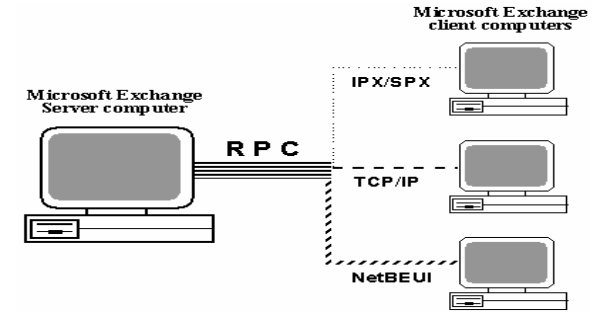


Figure 2 - How MS Exchange Server components communicate

on the same computer. Because RPCs are network-independent IPCs, they can work over a variety of network protocols. NetBEUI, IPX/SPX, and TCP/IP are all supported by RPCs. RPCs allow

MS Exchange Server to work in all common network environments, regardless of protocol.

System Requirements: Standard Server

- ✍ Pentium 133 or later / 32 MB or more / 500MB HD Space or more / CDROM / WIN NT Server 4.0 with Service Pack 3 or later.

Enterprise Server

- ✍ Same Configuration as needed for Standard Server but with 64 MB RAM.

