A good email system architecture quickly delivers email with embedded sound, graphics, video files, HTML forms, Java applets, and desktop applications, while providing for future upgrade and scalability. At a simplistic level, the Messaging Server architecture should:

* Accept mail from external sites
* Determine the user mailbox to deliver that message to and route it accordingly
* Accept mail from internal hosts
* Determine the destination system to deliver that message to and route it accordingly

Central to an email system architecture is the Messaging Server, a collection of components used to send and deliver messages. In addition to components provided in Messaging Server, the email system also requires an LDAP server and a DNS server. Many enterprises have an existing LDAP server and database that can be used with Messaging Server. If not, Java Enterprise System provides an LDAP server (Sun Java System Directory Server). The DNS server must be in place before deploying your email system.

The remainder of this chapter describes the components of the Messaging Server used to design an efficient scalable messaging system, as well as the Messaging Server software architecture.

Several factors other than efficiency and scalability influence the Messaging Server architecture. Specifically these are:

* Load balancing
* Firewalls
* High availability