E-Mail: Is It Infrastructure or Groupware?

E-mail can be treated as messaging infrastructure, to which other facilities are added as needed, or as an element within the collaborative support provided by a workgroup systems framework. Numerous options emerge from these choices.

The choice of E-mail system is often seen as a technical decision. This is a mistake. A significant relationship exists between the character of a business and the best way to meet its messaging requirements. E-mail may be treated as messaging infrastructure — independent of other groupware requirements — or as an element within the collaborative support provided by a workgroup systems framework.

Enterprises have varied needs for computerized support for collaboration. Some require only basic message-based communication between their workers. This can be satisfied by an E-mail system, often in combination with other messaging technologies such as pagers and fax. For others, E-mail is just one element in a more complex mix of facilities supporting collaboration, which at its most sophisticated can be considered the basis for knowledge management in the enterprise. Some enterprises have a mix of both characters.

From a technical perspective, E-mail can be delivered in two ways: as part of an integrated groupware package, or as an independent solution. In the traditional Internet environment, E-mail has been a free-standing application (with limited support for discussion via list servers and newsgroups). In the corporate environment, early E-mail systems were often combined with other “office automation” tools in a single packaged system, typically running on a minicomputer. LAN-based E-mail subsequently evolved into wider workgroup systems (see Note 1). We now see the re-emergence of stand-alone E-mail as a viable product category (see Note 2). However, both of these product types can be used to satisfy either type of business need. Four options should be considered (see Figure 1).

The simple cases are A, where an E-mail system is sufficient for an enterprise with basic communication needs, and D, where the
facilities of a groupware system that includes E-mail are made available to all workers. However, the other combinations are also viable, e.g., an enterprise using Lotus Notes/Domino could also use Microsoft Exchange as a messaging platform, providing access to the Exchange server via POP and SMTP from the Notes client, or use Microsoft Outlook and Exchange with the Netscape Messaging Server.

### Figure 1

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Stand-Alone E-Mail</th>
<th>Workgroup Systems Framework</th>
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<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
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<tr>
<td></td>
<td>C</td>
<td>D</td>
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**Business Need**

- Basic Communication
- Rich Collaboration

Source: GartnerGroup

In case B, a stand-alone E-mail system can be integrated within a workgroup system using IPs, perhaps providing some workers with E-mail only and others with the full groupware system. Alternatively an enterprise could adopt any SMTP/IMAP product to provide its messaging service, but allow end users to access this from a browser, Outlook or Notes, providing an integrated environment at a user's desktop without requiring application homogeneity across the enterprise. Another option would be a stand-alone E-mail product used with an intranet semi-suite product (see Note 3) to provide enhanced collaboration support where required.

Case C may seem like a contradiction, but a number of enterprises implement a groupware product (notably Exchange, but also Domino) just to provide E-mail (see Note 4). This can be appropriate based on issues such as skills availability, or allowing for future growth or changing requirements.

A further category of E-mail products should also be considered (see Note 5). These products may include “anti-spam” and other filtering technology, as well as encryption gateways. They are not performing the traditional role of E-mail gateways, i.e., protocol translation; rather they provide enhanced boundary protection for security and load management.

**Bottom Line:** An increasing range of E-mail solutions is available to enterprises, and these may be deployed in a variety of configurations. All enterprises should consider the full range of alternatives in combining E-mail and groupware requirements.