



AberdeenGroup

Profile

Compaq

**40 Old Bolton Road
Stow, MA 01775-1215
978-496-8557
www.Compaq.com**

Compaq Supports Microsoft By Delivering An Enterprise Collaborative Solution For Exchange — Changing The Market Forever

Executive Introduction

Through the acquisition of Digital's assets, Compaq is now both the worlds' largest professional services organization for the Microsoft platform and a new software power that competes head-on against IBM, HP, and others in several important software categories. The first new software product from the new Compaq is Work Expeditor, an Enterprise Work Management solution that operates in conjunction with Microsoft Exchange, the Outlook client, and the Microsoft Back Office suite. The Work Expeditor product will help Microsoft directly compete against IBM's Lotus Domino offering, and will cause a shake-out in the fragmented Collaborative Solutions market — others simply can't compete against the size, services, and distribution capabilities that Compaq can bring to bear.

It is fitting that the ultimate beneficiary of Work Expeditor's success will be Compaq's major business partner — Microsoft. Once anxious to confront Domino with its concept of shared-folders and desktop application suites, Microsoft finds itself now seriously distracted by the delay of Active Directory and NT 5.0. As a result of this distraction Microsoft has been unable to deliver the products and services that would help ISVs build solutions for Exchange that would at least approximate the capabilities widely available from IBM in the Lotus Domino product. When asked about Work Management today, Microsoft points to a dizzying array of business partners that simply lack the market clout and scale needed to seriously compete in this market — with IBM being the beneficiary. Compaq has now stepped up-to-the-plate to deliver an incredibly rich product offering that fully leverages the Microsoft Back Office products and technologies, while using the easy-to-use Outlook client to integrate the solution to the user's desktop and work objects. And Compaq can also deliver the worldwide Professional Services needed to guarantee a smooth deployment across the enterprise.

Exchange & Outlook For The Group, Work Expeditor For The Business

To understand the role of Outlook, Exchange and Work Expeditor, it is critical to recognize that the goals and capabilities of an individual, a group, and a company are related but different. A productive *individual* will strive to learn and become more efficient. Outlook 98 is a powerful tool that helps individuals associate documents, contacts and calendar items, to specific tasks and projects — enabling the individual to be better organized and informed. However, productivity gains for an individual are intrinsically limited since the individual's tasks are almost always part of a larger *group* effort. As a result, real productivity gains are best accomplished by smarter, more efficient, group collaboration. The Exchange server can extend the benefits of Outlook 98 by providing the communications channel that lets Outlook share content across multiple desktops and groups. As a result, Exchange and Outlook offer a powerful combination that makes end-users more productive by enabling groups to share with, and collaborate on, information and resources across the network.

Missing from this powerful solution however, is the answer to several questions that are critical to operating a *business*. Who generated the task, and for what business purpose? If the task is at risk of not being completed, what is the business exposure and who should be notified? How many tasks are already delegated to other members of the team? What is the priority of this task, relative to all the others? And if the originator of the task changes its parameters, how is the team notified and the effort re-directed? These questions are all critical business process issues that are not capable of being addressed by either Outlook or Exchange alone — and this is where Work Expeditor from Compaq can add value.

As an example, while IS managers are pleased with the capabilities Exchange and Outlook can provide, they recognize that these benefits are accomplished without the ability to provide centralized control and management. As a result, data availability, consistency, and security are difficult to implement or guarantee. When IS does try to implement centralized management and control, it is accomplished only with an expensive effort that also adds significant administrative overhead.

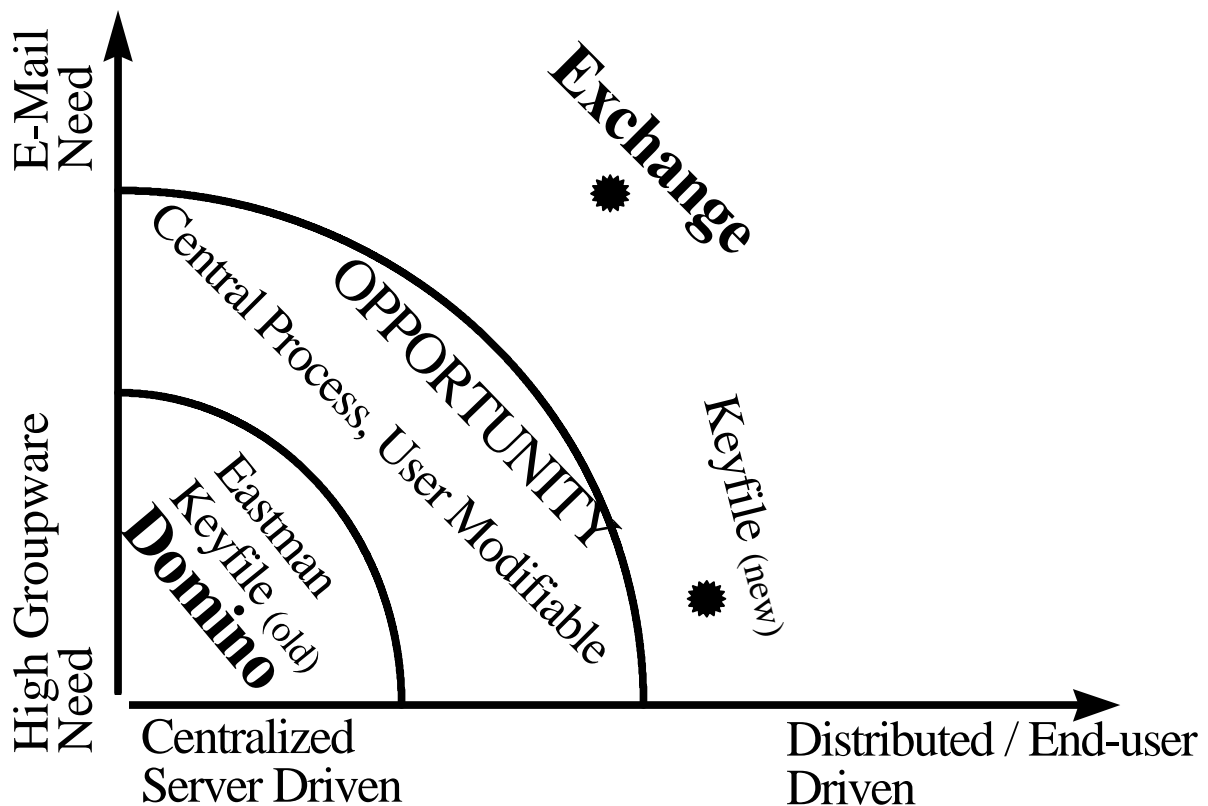
At the same time, Line of Business managers recognize that while Exchange and Outlook are excellent mechanisms for ad hoc cooperation and simple business process automation, they do not provide the facilities required to monitor the status of processes that are in progress. This means that while a process can be automated, there is no means by which management can monitor and/or control the progress of this process through various stages.

Savvy IS professionals recognize this opportunity, and have begun to work with the Line of Business Managers to identify productivity aids that will both empower the individual, and also integrate into the larger collaborative environment when appropriate. For the enterprise that has deployed Exchange, it is clear that Outlook is the tool that will be used for personal productivity — but finding an enterprise-capable work management solution that leverages Exchange is problematic. Small niche

companies, such as Keyfile Corporation, and Eastman Software sell products that deliver varying degrees of integration with Exchange and the Outlook client, but these solutions are typically workflow centric, and delivered by companies that are hard pressed to support a global implementation.

There are several solutions in the market that approach this problem from an opposite perspective. These products start with the recognition that centralized control and management are the core requirements of an enterprise work process solution. Such products, epitomized by Lotus Notes (now termed Domino), provide IS total control over the entire environment — but accomplish this at the expense of the individual. Traditional workflow software vendors, such as Keyfile and Eastman Software have migrated their centralized solutions to Exchange, but in the process, have lost the IS management features most appreciated by the business that needs to tightly manage interactions. The market is thus split, offering products that are centrally controlled and managed but offer little user control, and those that are user oriented but offer little centralized control and management (see figure 1).

Figure 1: Market Bifurcation = Work Expeditor Opportunity



Source: Aberdeen Group, August 1998

Digital Equipment — Number 1 Exchange Integrator & Solutions Provider

As identified in the Aberdeen Profile "*Making Exchange Work for You — Digital Leads the Pack by Two Years*" Digital Equipment has designed and installed Exchange solutions for more users than any other vendor or systems integrator. This leadership position has enabled the company to build up its Exchange expertise on a worldwide basis, and enabled the company to become a primary channel for value added products and services that work with Exchange. Digital has used this engineering talent to integrate and test third party products with common Exchange configurations, so that Digital can offer customers installation guidelines, performance prediction tools, and consulting services for these approved third party products. Customers benefit from these efforts because the resultant solutions are field proven, the server performance predictable, and professional support and service are available on a worldwide basis.

While working with customers to deploy Exchange, Digital found itself helping Central IS and end-user departments leverage the Exchange infrastructure to deploy business applications. While these needs may be addressed directly by the capabilities already in the Exchange product, sometimes Exchange just can't address the customer's unique needs — especially when these needs are for centralized control and management of remote processes and user activity. For this reason, Digital established partnerships with several of the leading workflow vendors, including Eastman Software and Keyfile. These relationships have helped Digital deliver a broad range of solutions to its customers. However, Digital found that these solutions failed to address the demands of both Central IS and the Line of Business/end-users. As a result, Digital decided to bring a solution to market that leverages the Microsoft BackOffice environment, and leverages the Microsoft desktop environment, even as it continues to evolve — the result is Work Expeditor for Microsoft Exchange and the Outlook Client.

Microsoft Outlook — End-user Driven Benefits

The Microsoft Outlook client is revolutionary — it coordinates all of a professional's most frequently used items, including documents, faxes, email, contact management, calendar, and scheduling. Because Outlook sits above these processes, it can add significant value, such as maintaining a work log, and linking email activity to a particular contact. The enhancements made by Microsoft in the second release of Outlook clearly indicate the direction the company is going, making Outlook easier to operate, more integrated between applications, wider adherence to standards, and as expected more bells and whistles for the end-user. Missing from Outlook is the ability for end-users to create processes that span multiple users, track the status of processes begun, and centrally manage the processes and objects as a corporate asset.

Work Expeditor Overview

Work Expeditor is a product that enables users to create and manage business processes using Microsoft Exchange and Outlook. The Expeditor client is tightly coupled to Microsoft Outlook, so that users work from their familiar desktop. The client communicates to Expeditor server software which is tightly coupled to the Microsoft BackOffice environment — indeed, Expeditor makes significant use of SQL Server for much of its functionality. By using BackOffice and SQL Server, Compaq has leveraged Microsoft's own platform technology, while also providing a centralized point of control and management, attributes not available in Exchange or Outlook.

Expeditor — Turning Desktop Applications and Data Into Enterprise Assets

Using Expeditor, current desktop applications and data can be incorporated into business processes that span the enterprise. Out-of-the-box, Expeditor offers users document management, information sharing and enterprise collaboration capabilities. These functions are made easy to access and use because everything is manipulated as a graphical object; including processes, data, users, and groups of users. When a user moves information from Outlook or the desktop to Expeditor, that information becomes a centrally managed asset — stored in SQL Server. The end-user benefits because this enables automatic backup and recovery, automatic status tracking, and because Expeditor lets the end-user know what specific changes were made by whom, and when, for all data objects. Because Expeditor stores everything centrally in SQL Server, users can access Expeditor from any PC, regardless of where they log in from, or whose desktop they sit at — and see all their data and processes. When a PC fails, the user only needs to move to another Expeditor capable desktop to have immediate access to their personal work environment maintained in Expeditor.

Department and End-User Benefits

Out of the box, Expeditor provides Outlook users with the ability to share information, receive notification of changes to shared objects, and access to a full range of document management and workflow capabilities — all through a Work Folder metaphor. Using the Expeditor Work Folder that appears in Outlook, current end-user desktop applications are easily integrated into the Expeditor framework and become part of an overall groupware environment.

Perhaps the very first benefit end users will appreciate is that the Expeditor Work Folder stores the status of all objects and processes it contains. When the end-user logs in, Expeditor remembers the previous state of the Work Folder, and re-creates it — regardless of where the user logs in from, or what desktop the user is on. A traveling user can visit a branch office in the Netherlands, and after logging in from a fellow worker's desktop, can still see everything as it was left in his own Work Folder — assuming this is allowed by the administrator.

Outlook users will find the Expeditor collaborative tools extremely helpful in organizing group efforts. For example, a word processing document can be made available to anyone in the Expeditor environment for editing, and Expeditor will deliver a copy to everyone, while automatically synchronizing all edits. At any moment, users can ascertain the exact status of the document, and the originator of every edit can be identified. These benefits require no additional effort by the end-user.

A more proactive user can use Expeditor's graphical interface to specify a route the document should take. The user selects the path the object should follow from an organizational chart, and each recipient is simply "dragged and dropped" onto the screen in the appropriate order. Branches can be assigned based on many different conditions, also easily and graphically identified. When completed, Expeditor automatically moves the document through the process and displays the status. The graphical approach allows all of this to be accomplished in an amazingly easy and non-threatening fashion. Another feature favored by users is the ability to stay informed on specific projects. The Expeditor user can identify any object they care to stay informed about, such as a project status Word document or project cost spread sheet, and is notified if that object is modified.

MIS and Support Benefits

Expeditor has several major benefits for MIS. First, Expeditor enables centralized control, management, and deployment of workflow solutions, and data. Since all Expeditor data is maintained in SQL Server, this information is easily backed-up, and has an extremely granular and rigorous security model. In addition, the application development environment is easy to master, and enables rapid development and deployment. Perhaps most importantly, Expeditor enables changes to be deployed instantly, and makes the incremental modifications required for specific departments extremely easy — so easy that the department can often perform the change themselves.

Second, any object or process entered into Expeditor is immediately available to anyone in the enterprise, assuming proper security permissions are in place. MIS no longer has to become involved in accessing, moving, and recovering data — these are self-service operations with Expeditor.

However, probably the greatest advantage Expeditor offers an MIS operation is the freedom from NT, Exchange, and Active Directory's limitations, with a promise of full integration and support of all future Microsoft technologies — from Compaq, a strong Microsoft partner. Since Expeditor was developed by Compaq to address customer problems, it should come as little surprise that some of these problems were inherent in the platform itself. For example, NT's domain security model is problematic in large enterprises. And while NT user information is passable, it does not address the needs of a groupware solution, and won't until Active

Directory is available. Expeditor addresses all of these issues for MIS, so that solutions can be deployed and managed on an enterprise scale — securely. All critical aspects of this solution are maintained in SQL Server, and will be migrated into the Microsoft platform as it becomes capable. Compaq is currently in the process of certifying Expeditor as BackOffice compatible, which will further provide another proof-point that Compaq is fully committed to staying in total synchronization with the Microsoft standards. One example where Expeditor must maintain information outside of the Microsoft platform is specific user information, such as the user's "role" in the organization. Until Active Directory is available from Microsoft, Expeditor keeps this information in SQL Server, and will provide utilities to populate Active Directory when it becomes available. As NT 5.0 and Active Directory become widely deployed, Expeditor will migrate to full use of Active Directory and remove that information from SQL Server. This approach not only meets a short-term need for MIS, it will also help MIS migrate to Active Directory and NT 5.0. Expeditor helps MIS solve several apparently intractable problems, including:

- Implementing security across workgroup environments, on an enterprise scale;
- a central repository of all enterprise data for easy and reliable backup and recovery;
- the ability to perform a centralized search on enterprise business objects stored in Expeditor;
- the ability to manage server performance characteristics to meet the needs of the enterprise;
- an environment that makes Microsoft's Component Object Model work in an enterprise-wide distributed environment;
- an end-user interface and integration point based on Microsoft Outlook;
- ability to treat users and groups of users as objects, lowering administration and management efforts at the enterprise level;
- the ability to deploy Expeditor solutions as objects across the enterprise.

Conclusion

Compaq has entered a fragmented market with a powerful offering, which will make life very difficult for the smaller competitors. Perhaps more importantly, the Expeditor product enables companies to deploy powerful business solutions on the NT and Exchange systems deployed today, with confidence the environment will remain compatible with Microsoft's future products — indeed Expeditor could almost be described as a migration tool. When Microsoft releases NT 5.0 and Active Directory, Expeditor users can be sure that Compaq will help them deploy and migrate to these platforms.

In the meantime, Expeditor customers gain the advantages of deploying enterprise-wide groupware solutions today, with lowered administration and management costs, while also providing Outlook end-users additional new services and tools. It is rare that Aberdeen finds a solution that benefits MIS and end-users, but Expeditor does this effortlessly, while also providing Compaq and Microsoft tools that help deploy NT 4.0 and Exchange today, while preparing for the migration to NT 5.0 and Active Directory tomorrow. Microsoft should be Expeditor's greatest proponent.

*Aberdeen Group, Inc.
One Boston Place
Boston, Massachusetts
02108
USA*

*Telephone: 617 723 7890
Fax: 617 723 7897
www.aberdeen.com*

*© 1998 Aberdeen Group, Inc.
All rights reserved
August 1998*

Aberdeen Group is a computer and communications research and consulting organization closely monitoring enterprise-user needs, technological changes and market developments.

Based on a comprehensive analytical framework, Aberdeen provides fresh insights into the future of computing and networking and the implications for users and the industry.

Aberdeen Group performs specific projects for a select group of domestic and international clients requiring strategic and tactical advice and hard answers on how to manage computer and communications technology.