



Microsoft® Office for Windows® 95 Whitepaper

Microsoft Office and an Intranet

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Overview

You have a simple goal: help employees find and analyze information. Coupled with this is a need to get information out to the public. What can perform this double duty? Microsoft® Office and an intranet give you the ability to share information that uses web-based technology.

Inexpensive, field-tested tools are in place. The Internet, which gives customers a direct window into companies and lets people around the world share information, has spawned *intranets*. An intranet adds the ease of searching and navigating information that you find on the World Wide Web to your internal network, while using much of the rich content that has already been created in Microsoft Office. An intranet is any site using web technology on a private server, such as the Microsoft Windows NT™ operating system on a local area network (LAN).

Microsoft lets companies work in an environment that integrates the best aspects of the Internet and the corporate network. With integrated connectivity in Microsoft FrontPage™, Microsoft Office for Windows® 95, the Microsoft Windows 95 operating system, and the Microsoft BackOffice™ family, information workers can get connected and be productive without leaving their familiar working environment.

The Microsoft FrontPage web authoring tool makes web-site publishing as easy as desktop publishing. It streamlines and automates creating and maintaining a site. No programming is necessary because of its pre-programmed modules.

Viewers in Microsoft Office let anyone open and read all Microsoft Office documents, and no original formatting is lost. Internet Assistants let you turn Office documents into HTML (HyperText Markup Language) for information that is suitable for your web site.

The integration of web connectivity and Microsoft Office applications makes it easy to:

- Publish documents online.
- Find and manipulate relevant data.
- Collaborate with coworkers, customers, and suppliers.
- Leverage existing infrastructure and training.

Why an Intranet?

You need to reuse existing information, and distribute constantly updated strategic information. People need to know what your business is and who its experts are. You need to provide graphical information on multiple platforms. An intranet can help.

Intranets are inexpensive and easy to install. The technology is robust, used worldwide, and scalable. Little or no training is required. Internal web sites contain information maintained and created by the people who normally maintain that information. For example, people who normally create job listings, policy handbooks, and financial statements continue to do so, but the all information is posted on the intranet as opposed to various servers around the company.

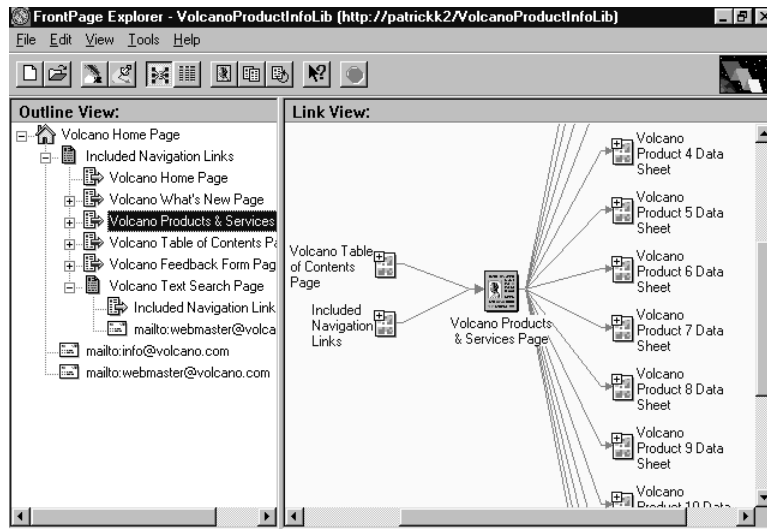
Customers, partners, and investors can access your company's web at LAN, T1, or T3 speeds. Because your web is built on a high-bandwidth corporate network, sound and video are not a performance problem.

The information on the intranet is dynamic, and better meets the intensive reporting and analysis required in today's information-hungry world. Information is collaborated, not duplicated. It's the latest and most accurate information available. Michael J. Miller of *PC Magazine* reports that "sharing information leads to better informed employees, faster response times, and a better relationship with customers."

How Microsoft FrontPage Fits In

Documents created with the Office suite of productivity applications — which are already in daily use in your organization — form the heart of the Office web. The newest member of the Office family of products, Microsoft FrontPage, helps round out the picture by helping you create and maintain the structure that holds the Office web together. It's a visual tool designed for non-programmers who want to publish and manage high-quality web sites.

Microsoft FrontPage has two major integrated components: the FrontPage Explorer and the FrontPage Editor.



With the FrontPage web wizards, you can create the structure for a rich web site in just a few minutes.

The FrontPage Explorer ties everything together with easy-to-use visual site management and a familiar Office Compatible user interface. Templates and wizards simplify creation of the most common types of web pages and sites. Once created, these building blocks can easily be modified and expanded using the FrontPage Editor.

The FrontPage Editor allows WYSIWYG creation and editing of complex HTML documents without requiring a user to know anything about HTML codes. In addition, sophisticated interactive web elements such as survey forms or search pages can be created with the FrontPage Editor's forms-based templates and drop-in interactive WebBot™ components.

For each web site you create, you can maintain a To Do List. A To Do List is a list of tasks required to complete a web. When multiple authors are creating or editing a web, a To Do List helps them keep track of who is working on the web, and what each author's assignments are.

Wizards let you build personal web pages, corporate sites, and discussion sections. Conversion filters automatically translate standard web graphic formats. Personal Web Servers let you develop a web site locally (16- or 32-bit).

FrontPage breaks new ground by letting you create and manage all aspects of an intranet or Internet site from within a single Office Compatible program. It lets you to build web sites as if they were a single entity — creating, in effect, a new type of Office document.

The Office Web

The Office web, an intranet web using Office, offers a great degree of flexibility and adaptability. For example, documents with multiple authors can be accommodated as easily on the Office web as a document with a single author. An Office web handles static or dynamic information. Office users can share their files with more people than ever while leaving the files in their original format, taking full advantage of the capabilities of the software that created the files. The Office web is appropriate for creating and distributing information with a short life cycle, such as an internal newsletter, as well as information with a long life cycle, such as an employee handbook.

Microsoft Office Internet Assistants

Microsoft Office Internet Assistants let you author your HTML documents quickly and easily.

- Internet Assistant for Microsoft Word for Windows 95
1A full-featured Internet authoring tool that automatically converts Word files to HTML and provides users with an interface for inserting hyperlinks, images, and forms in their documents. It includes full support for the HTML tags people use most, an improved interface for creating hyperlinks and forms, and the ability to insert hyperlinks in compound Word documents. Internet Assistant for Word also allows easy viewing and editing of HTML source code, and lets you author and test hyperlinks using a single interface.

1Note Internet Assistant for Microsoft Word is also available in a 16-bit version for Microsoft Word version 6.0 for Windows 3.x.

- Internet Assistant for Microsoft Excel for Windows 95
2An easy-to-use wizard that lets you convert a spreadsheet into an HTML table by answering a series of simple questions. The resulting HTML page preserves the text formatting and colors of the original spreadsheet. You can also allow for quick updates of the HTML table by including information about where the table should be stored on the Office web.
- Internet Assistant for Microsoft PowerPoint® for Windows 95
3Creates multimedia web pages for viewing with any browser by easily converting design templates, clip art images, digitized photographs, textures, and formatted text from their slides into standard HTML format. Interactive settings saved in a PowerPoint for Windows 95 presentation are preserved as image map information when the PowerPoint slides are saved in HTML format.

Microsoft Office Document Viewers

The no-charge, freely distributable Microsoft Office document viewers allow viewing and printing of Office documents in their native format without requiring the full Office applications to be installed. Microsoft Office viewers are automatically configured as helper applications for most major web browsing tools so that users may view and follow hyperlinks in Office documents on the Internet or in an intranet.

- Microsoft Word Viewer for Windows 95
4View, print, and copy information in Word documents to the clipboard; view in page-layout, outline, or normal format; navigate through hyperlinks to other Word documents or Office web sites; search for specific text or formatting using the Find command.

2Note Microsoft Word Viewer is also available in a 16-bit version for Windows 3.x.

- Microsoft PowerPoint Viewer for Windows 95
5View or print PowerPoint presentations; link to other documents in the Office web; play back sound and animation when the 32-bit version of the PowerPoint Viewer is used with an OLE-compatible browser.

3Note Microsoft PowerPoint Viewer is also available in a 16-bit version for Windows 3.x.

- Microsoft Excel Viewer for Windows 95
View and print Microsoft Excel spreadsheets, and copy spreadsheet information to the Clipboard; view a subset of the spreadsheet data with AutoFilter; adjust the size of rows and columns.

Office Web Case Studies

Let's look at common information management needs in the Volcano Coffee Company to see how the Office web streamlines operations and improves efficiency. Volcano Coffee (a fictional company) is a specialty coffee roaster with corporate headquarters in Hilo, Hawaii. The company has franchises throughout the world.

There are several areas where the Office web can provide highly effective information management solutions for the company:

- Annual report
- Financial information
- Benefits
- Company news
- Company policies
- Training material
- Customer presentations
- Pricing
- Promotions
- Trade shows
- Competitive market data
- Internal phone books
- Procedures
- Job listings
- Supplies
- Product schedules
- Cafeteria menus
- Newsletters
- Frequently asked questions
- Mission statements
- Maps
- Vendor data
- Informal chat groups
- Employee scheduling
- User pages

What follows are scenarios showing how Volcano Coffee uses Microsoft Office and Microsoft FrontPage to offer real-time access to current, up-to-date information.

The Volcano Coffee Company Policy Manual

The Volcano Coffee Company human resources department uses an Office web to publish its policy manual. Cheryl, a human resource specialist who had no previous knowledge of HTML or web site design, used a Microsoft FrontPage wizard to build a professional-looking basic web structure for the manual, with links to the Microsoft Word documents that make up each chapter. She then put the chapters on the Office web.

This online manual is significantly less costly than the paper version, which had to be expensively reprinted every six months and was immediately out of date in at least one or two key areas. Cheryl can easily update the hyperlinked version, which is instantly available to everyone in the company.

Cheryl added links in the Word document to sites on the Internet that offer employees detailed information on taxes, financial planning, the company's insurance and 401K plans, and a wide assortment of professional development opportunities.

Browsing and searching capabilities available in the manual make it easier to use than the printed version, reducing the number of "frequently asked question" calls to the human resources staff.

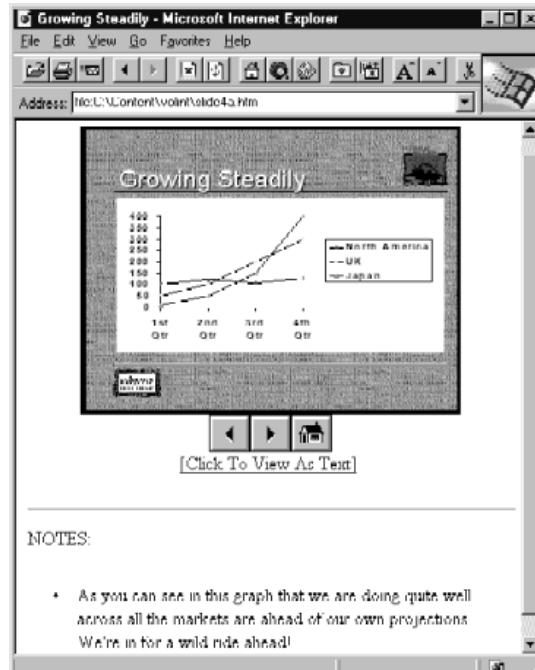
Product Information for the Volcano Coffee Company

The Volcano Coffee company sales and marketing force has a lot of information about Volcano Coffee products and services. Most of this information is in the form of Microsoft Office documents stored at various locations on the corporate network. Keeping track of everything and finding just the right piece of information can be difficult.

To respond to this challenge, Volcano Coffee decided to post product information on its Office web. Jack in computer services used Microsoft FrontPage to construct and maintain the structure of the site. Employees who don't have Office installed on their workstation, or who need to access the information from remote locations, can read all Office documents using free and easily distributable Office viewers.

Jack took advantage of the Internet Assistants to save some files in HTML format. A simple save-as turns a PowerPoint presentation into a browsable sequence of HTML pages that can be viewed with an Internet browser such as Microsoft Internet Explorer.

To make viewing fast and easy for remote users, saving documents in HTML format in PowerPoint translates the slides into embedded GIF files, and automatically places browse buttons below each slide. The notes page is appended as HTML-tagged text.



This HTML document — complete with automatically supplied browse buttons — was created using Internet Assistant for PowerPoint for Windows 95.

In one section of product information, HTML documents created using Microsoft FrontPage contain links from the Office web to the Internet sites of other coffee companies, so the sales and marketing team can stay current on what the competition is doing.

Another section links to a Microsoft Access application that lets Volcano Coffee's employees query the Microsoft SQL Server™ database at company headquarters for up-to-date sales and pricing information.

In terms of navigating the Office web, linking to the product information home page is not the only way sales and marketing representatives can find the product information they need. Because Microsoft Internet Explorer lets you create shortcuts to favorite web sites, each member of the Volcano Coffee sales team can quickly create a folder with shortcuts to the reference material they use most frequently. Opening the folder and double-clicking on the shortcut instantly puts the most current version of the information on their desktop.

Full-text searching provides an additional and very powerful way of finding the information on the Office web. The Volcano Coffee sales force can use the indexing and search engine built in to Microsoft FrontPage for full-text searching of all Office and HTML documents on the web.

One issue the Volcano Coffee web designers had to address with the product information site was internal and external security. Managers wanted to be sure that certain types of information, such as detailed sales figures or future product plans, were available only to those in the company who had the necessary permissions. At the same time, they wanted people outside the company to have access to those portions of the web that could be used in building sales and brand awareness.

Volcano Coffee solved both these problems by designing the product information web as a nested series of smaller webs. With this design, portions of the web that require restricted access reside on a secure internal server. Server-level permissions apply to Office web access as well as other types of access, so no additional administrative overhead is required. In addition, web designers are able to use the Microsoft FrontPage Copy Web command to move entire sections of the internal product information to an external server for use by customers, suppliers, and potential franchisees.

Summary of Advantages

Using the Office web for their product information at Volcano Coffee has resulted in several advantages for the sales and marketing team. To begin with, documents can be included either in native Office format or in HTML, whichever is appropriate for the type of information being presented. More importantly, using Office documents means that the site can be easily built and maintained without extra effort. The sales team doesn't have to worry about learning new applications, procedures, or file formats, and they don't have to give up the familiar and powerful Office applications they use every day. Finally, because of the browsing and searching capabilities of the Office web, employees can quickly find the precise information they need, when they need it.

Finance Department Home Page

A challenging and time-consuming task facing the Volcano Coffee finance department is producing custom reports monthly and quarterly for various departments and company officers. To improve the quality of reporting and to decrease the amount of time spent on this task, the finance department decided to use the Office web together with Microsoft Excel spreadsheets with PivotTables® dynamic views.

The reports are easy to find because links to the finance department's top-level page are featured prominently throughout the Office web. Employees can search for and locate the report they want using Microsoft Internet Explorer. In some cases, users see a static page of tabular data in HTML format that has been created quickly and easily using the Internet Assistant for Microsoft Excel for Windows 95.

Most often, clicking a finance home page hyperlink loads a worksheet that contains a Microsoft Excel PivotTable view. Employees can produce customized views of their data simply by dragging and dropping column titles.

For example, one of the spreadsheets is a global operating budget that is broken down by categories such as region, country, division, and the group that the budget is assigned to. With PivotTable, the head of administration can easily change the report to reflect just the administrative items, broken down by region and then by country. Or the manager of Asian operations can pivot the same report to show all the budget items by each country in the Asian region.

Using web technology, together with the rich and dynamic presentation and analysis capabilities of native Microsoft Office file formats, resulted in significantly increased efficiency for both producers and consumers of finance information within Volcano Coffee. The finance department eliminated tens of thousands of custom reports annually, and the Volcano Coffee employees were able to get better and more timely financial information.

Corporate End-user Web

Volcano Coffee wanted to address with its Office web the need for structured and ad hoc collaboration between groups and individuals. Employees who have shared interests, who are working on a single project, or who are working in different parts of the world need to communicate. Having employee-specific project information and links to supporting material in a predictable place on the Office web makes collaboration easier and increases the efficiency of the entire project team.

Volcano Coffee created an employee area on the Office web, structured like a corporate organizational chart. The computing services department designed a standard format for the employee pages, and set up the basic structure using Microsoft FrontPage.

Each employee's page is initially set up when the employee fills out an online form. The form is an interactive web page created using Microsoft FrontPage. Once the page is set up, employees use it as a central storage location for information about the projects they are working on, with appropriate links to relevant Office documents — for example, a presentation, a marketing plan, or a sales report.

The benefits of this end-user web are numerous.

- A new employee can simply go to the group's section on the web to quickly get up to speed.
- Since documents are still stored on an existing network, with existing permissions already set, the current infrastructure is leveraged instead of having to be recreated.

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Microsoft Office Helps Define the Future of Corporate Connectivity

The products and features discussed in this whitepaper are just the beginning in the evolution of Microsoft Office from a suite of integrated applications into a connected workspace.

In the future, Office web connectivity — supporting both the intranet and the Internet — will be built into every Office and Office Compatible application. Users will be able to find all types of information quickly and easily and collaborate with others as a natural extension of their daily work.

Advances in three key areas in the Office family of products help make this happen:

- Integrated linking and navigation
- Enhancements in indexing and querying
- Internet-enabled collaboration tools

Integrated Linking and Navigation

Earlier in this paper we saw how navigation techniques that have proven themselves on the Internet can help make important business information easier to find on the corporate network as well. In the future these techniques — embedded links in a document that allow instant, in-context movement from one place to another, and built-in navigation aids such as Next, Previous, and History — will become more useful as linking and navigation are built directly into Office applications.

As a first step toward this goal, Microsoft Internet Explorer version 3.0 will support an enhanced OLE technology known as ActiveDocuments. When you link to an Office document using Internet Explorer 3.0, instead of launching the appropriate Office application in a separate window, you'll be able to work with the document directly in Internet Explorer.

For example, if you link to a Microsoft Excel document, the Internet Explorer user interface transforms into a hybrid interface, incorporating menu and toolbar items that let you navigate around on the intranet and work with Microsoft Excel data at the same time. The analysis and display functions of Microsoft Excel are merged with the browsing and linking functions of Internet Explorer such as Next, Previous, and History.

Eventually navigation and linking capabilities will be built directly into Office applications themselves (as they are in Word for Windows 95 today). The Office Binder will evolve into a kind of "super-document," a rich, multipurpose container for all types of related information: text, graphs, maps, photos, animation, movies, or sound clips. With embedded links you'll be able to move quickly from one section of the super-document to another, or to other documents on the Office web. And you'll be able to link to an Internet document anywhere in the world as easily as if it was on your local workstation.

Enhanced Indexing and Querying

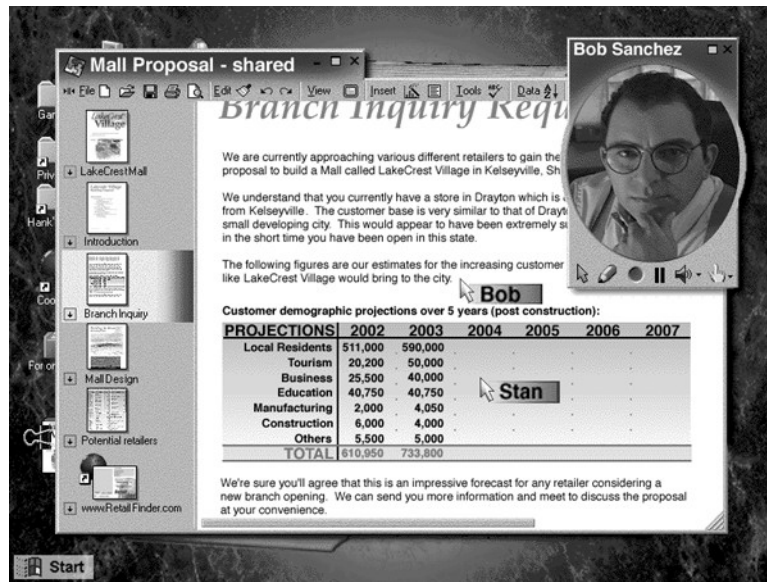
In the future, the many indexing and searching technologies available on the intranet and Internet will evolve into a single set of powerful integrated tools on the Office web. And natural language querying and enhanced IntelliSense™ features will make asking for the information you need almost effortless.

Assume, for example, that you're working on a report that will contain financial data from your accounting department, market research from your sales department, and demographic data from several public sources. To find the information within your company, you'll be able to search annotations, document properties, or the document text itself to locate the information quickly.

Using the same tools you used for your intranet search, you'll be able to query Internet data sources for the demographic data you need. The results of your query will be displayed in a window that will allow filtering and multiple views. You'll be able to include a shortcut to the data, or the data itself, in the report you're preparing.

Internet-Enabled Collaboration Tools

Communicating with colleagues will become more natural, whether they're in the next office or on the other side of the world.



Collaborate in real time on the same document with a colleague in another city.

For example, you and a coworker could make simultaneous changes to the same document without having to learn a new user interface or process, without the inconvenience of having to work in a separate application, and without having to work on separate documents and then merge the changes by hand.

In addition, posting information to a corporate or global network will become as straightforward as saving a file is today. You'll be able to publish your document in HTML format on the Office web without leaving your project binder, and without having to learn new procedures or worry about special formatting.

The Gateway to the Office Web

In this paper we looked at several ways Microsoft Office is helping to usher in a new era of corporate connectivity. With the tools and features available today — the Internet Assistants, Office viewers, enhanced FindFast, and Microsoft FrontPage — Microsoft Office is just beginning to show its potential as the gateway to the Office web.

In the future, people using Microsoft Office will be able to perform these tasks:

- Navigate, search, and publish documents without leaving their familiar work environment.
- Work with complex, flexible documents that contain internal and external links and many different types of data.
- Collaborate with distant coworkers as if they were in the next office.

As Microsoft Office continues to evolve into an integrated set of personalized, adaptable productivity software tools with built-in connectivity, the Office family of products become even more indispensable in helping today's organizations be productive and stay competitive in this increasingly connected world.

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