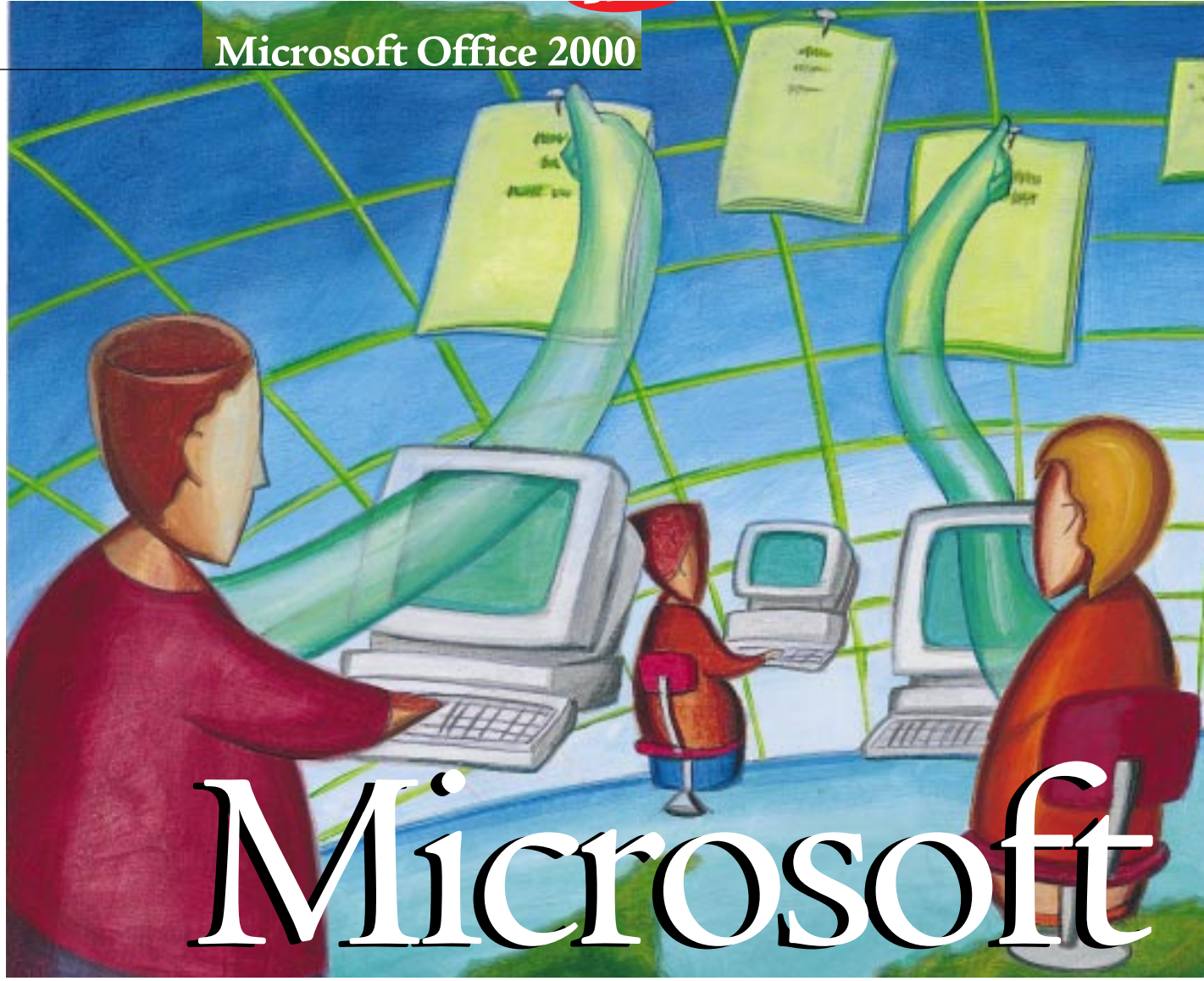
Microsoft Office 2000



Microsoft

NOT ONLY IS OFFICE 2000 SIMPLER FOR THE USER, WITH MORE FUNCTIONAL AND FLEXIBLE SOFTWARE, BUT ITS APPEAL TO COMPANIES HAS BEEN ENHANCED, TOO. TIM NOTT PREVIEWS THE BETA RELEASE.

Contents

IT HASN'T YET BEEN GIVEN AN OFFICIAL LAUNCH DATE, BUT MICROSOFT OFFICE 2000 SHOULD APPEAR IN EARLY 1999. In August, 20,000 copies of Beta One went out to testers. So what has Microsoft been hoping to achieve with this release? The company is aware that 75 percent of all Office sales go to large organisations, and its first priority has been to reduce the total cost of ownership (TCO) by making installation, maintenance and user support easier. The second goal has to do with enhancing what Microsoft terms the "digital nervous system" of a company. In other words, the way in which information is distributed and accessed.

Although this approach might seem very "top-down" there is considerable end-user benefit in both directions. Taking the logical first step of installing the product, there are some welcome changes. Language has been a global issue for this release. There are now single language-independent executables for the main components instead of the previous 36 versions, with DLLs providing specific needs such as menu and dialog languages. This in itself should contribute to minimising TCO for multinational organisations. It also means that different users can log-in to the same machine and work in different languages. And, with "Roaming User Profiles", visitors to other departments or branches of a networked organisation can download custom settings from a central server.

Complementing this is a Profile Wizard that allows a user's settings to be backed up and transferred to a new machine or location. Instead of buying extra proofing tools on a per-language basis, there will be just one language pack to buy, which will incorporate them all.

Another interesting innovation is "Install on Demand". If you've ever struggled through the custom install options of any major software package, you'll be familiar with that sinking "do I need this or not?" feeling. Most components now have four options: install to the local hard disk, run from the CD or server, don't install, or install on demand. Choose the last and the component will be visible on menus or shortcuts but the actual installation will be deferred until the first use, when the component will be installed from a server or CD-ROM.

A further, related feature is that of "Self-Repairing" applications. If Office 2000 detects a critical problem with a corrupted file, say, it will reinstall the files or entries rather than just display the traditional error message. Complementing

Office 2000

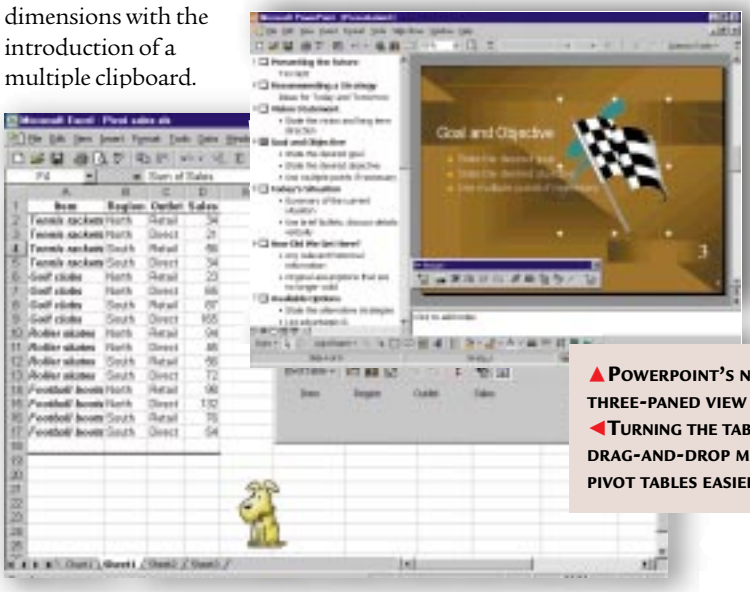
Martin Jones

this is the "Detect and Repair" tool in the Help menu which provides a similar service for non-critical files such as templates or fonts.

Throughout the suite, Microsoft has tried to "simplify the user experience" and the first evidence of this is the new "Smart" menus and toolbars. Drop a menu and instead of the full, complex, command list a shortened form appears offering the most commonly-used commands. Linger over the menu (or if you can't wait, click the arrow at the base) and the full set appears. If you select one of the hidden commands, this will be promoted to the shortened menu. Unused commands will be demoted, in time, to the also-rans. The toolbars work in a similar way if there is insufficient room to show the full set of buttons, and customising the latter (at least at a basic level) is now a lot easier as each toolbar has a pop-up checklist of the most useful buttons.

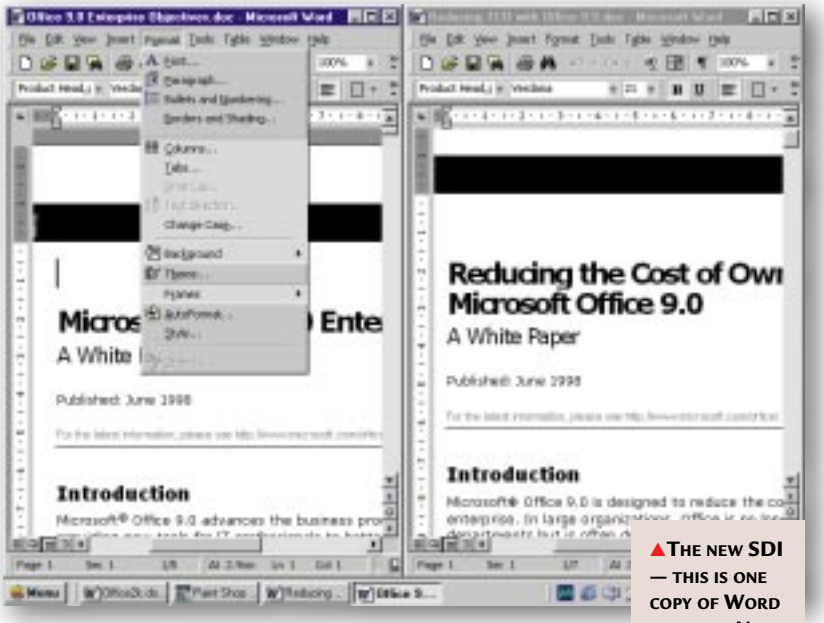
The Open and Save dialogs have been revamped, with Outlook-style icons providing shortcuts to the default document folder, Desktop, Web Folders Favourites, which is the same as in Internet Explorer, and History which isn't, but instead is a supercharged version of the Most Recently Used list.

Nestling in the Tools menu is the Advanced Find command which remains as cumbersome as ever. Microsoft's developers assert that this was not improved because "only two percent of people use it". You can see why — and speaking as one of the two percent marginals it's a shame they didn't see fit to "leverage the web paradigm" and "simplify the user experience" to make multiple keyword searches as easy as using a web search engine. But Microsoft does claim to have improved the natural language query feature but admits that it is advanced users who express the most frustration at this. Anyway, it is now possible to get rid of the Office Assistant completely. Cutting and p
dimensions with the introduction of a multiple clipboard.



▲ POWERPOINT'S NEW THREE-PANED VIEW
◀ TURNING THE TABLES — DRAG-AND-DROP MAKES PIVOT TABLES EASIER

Hence the "cyber hunter-gatherer" can choose from up to 12 clips which can be sourced from outside Office, but only pasted into Office documents. One niggling complaint which Microsoft has at last addressed, is in following its own Windows 95 convention of having the document title precede the application on the Windows Taskbar button. So utilities such as WordPad display the document name first on the Taskbar button, while previous versions of Office still obstinately put the application name first, giving you a Taskbar full of buttons which unhelpfully just read "Micr...". In the beta version, though, this has a way to go. If you open multiple spreadsheets in Excel, the Taskbar shows a button for each, just displaying the Excel icon and the document name. Clicking on a button will make that document active within the Excel windows.



▲THE NEW SDI — THIS IS ONE COPY OF WORD RUNNING. NOTE THE MENU; THE SUNKEN ITEMS DON'T APPEAR INITIALLY

However, in Word, things work differently. The Word team has abandoned the multiple document interface (MDI), instead making each document appear as if it were loaded in a separate instance of Word complete with menus and toolbars. In fact, only one instance of Word is in memory. This is not only confusing for those who have grown up with Word's MDI, but also a waste of screen space. If you try to economise by hiding the toolbars in one of the windows, beware: close this document last, and that environment (or lack of it) will have "stuck" the next time you open Word.

Applications

One neat touch in Word is automatic language detection. Type a paragraph in French or German, and Word will recognise this and apply the correct proof-as-you-go tools.

Word also has a new Click 'n' Type feature which lets you set alignment and tabs by double-clicking straight on to the page. Table creation has been improved to include floating and nested tables and at last you can display 24-bit colour images in documents.

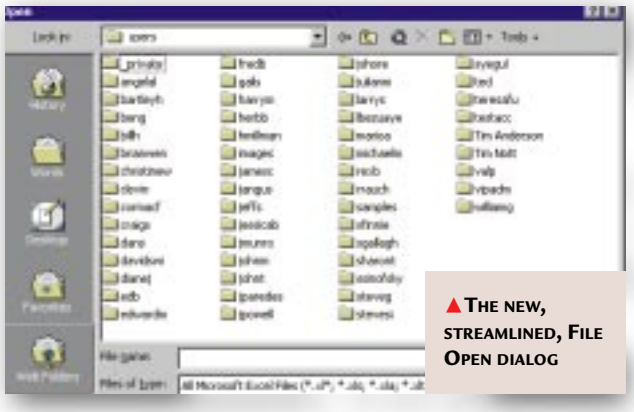
The main thrust of improvements in Excel has been in the pivot tables and the new pivot charts. A simple sales spreadsheet might consist of regions by column and product line by row. However, most real-world data will include other categories which could range from month or salesperson to categorising sales by outlet. Pivot tables let you manipulate this data quickly, to compare, say, sales of golf clubs in department stores in Manchester during the past month with those sold by mail order. A new Wizard simplifies the procedure of setting up pivot tables, with drag-and-drop placement of categories and data. Pivot tables can also be used to mine data from external sources such as OLAP (online analytical processing) providers or SQL servers.

Although it was rumoured that HTML WOULD BECOME THE DEFAULT FILE FORMAT, THIS IS NOT THE CASE. The existing binary file formats remain unchanged

▼HUNTING DOWN DATA FROM MULTIPLE SOURCES WITH THE TWELVE-BARREL CLIPBOARD

Access (*see p135*) now supports Unicode fonts o allow multilingual versions of applications. **owerPoint** sports in-place tables, multiple onitor support and animated GIFs. There's a ew three-pane view of outline, slide and notes, as ell as a general enhancement of "smartness" ith text that auto-resizes, multilingual utocorrect, autonumbered bullets and the use of ny graphic as a bullet. PowerPoint also ties-in he NetShow and NetMeeting technologies to roadcast presentations over an intranet with reaming sound and video.

Web stuff



▲ THE NEW, STREAMLINED, FILE OPEN DIALOG

The most interesting new feature, suite-wide, is the new HTML and we support. Although it was rumoured that HTML would become the defa file format, this is not the case. The existing binary file formats remain unchanged and compatible with Off 97. The Access file format has chang to support Unicode fonts. In fact, HTML has become a companion format. Though there have been HT export/import filters in previous ver Office applications, this version improves things beyond recognition.

The goal here has been "Intranet Democracy". Whereas it has hitherto been easy for users to access documents on a company web site, this has been very much one-way. Converting and uploading documents has been far more difficult and often filtered through official or semi-official webmasters, resulting in information bottlenecks and "dead webs".

The first key feature is "round tripping", and this is where the companion format comes in. Office 2000 uses HTML, Cascading Style Sheets (CSS) and Extended Markup Language (XML) when you save as HTML, and it's the last of these that provides the magic touch. Attributes such as Document Properties or Page Setup, though not visible or supported in standard HTML are preserved as hidden XML objects. drawings, are converted to .GIF or .JPG bitmaps for HTML display but the originals are also preserved. So, a .DOC file, say, can be saved to HTML then reloaded with no loss of data or formatting. This "round tripping" is transparent to the user. Second comes the concept of Web Folders. Once a user has the requisite permissions, they can save and open documents directly to or from a site (either on an intranet or the world wide web). Again, this is transparent: the Web Folders appear in the new Open/Save dialogs and the process is no different from saving to a local hard disk or a file server.

Both features are designed to empower the end-user, making intranets a truly two-way experience. But there's more to it than just circulating static documents. Documents saved to a Web Folder can host a discussion and comments can be added and viewed either within the application or a web browser. Users can also subscribe to a document and then be notified of changes, by email.

Another interactive trick is Web Components which provide live and working, spreadsheets, charts and pivot tables which can be edited and formatted in Internet Explorer. For those with more ambitious web publishing needs, a copy of FrontPage will be shipped with the high-end version of Office.

Despite the lack of voice input, which in any case faces the twin obstacles of needing powerful PCs and acceptance in crowded offices, Microsoft has done well in addressing its own goals. Both the reduced TCO and the intranet empowerment of end-users are vast improvements that should have everyone rushing to upgrade when the time comes.

Office 2000 vs the opposition

Microsoft is not the only company to realise the importance and growth of corporate intranets. **Lotus** has recently brought out its Millennium edition of SmartSuite, but although the new FastSite component makes it easy to assemble and publish documents to a web site, it doesn't provide the same lossless "round tripping".

Corel's WordPerfect Suite 8 comes with its WEB.SiteBuilder for creating and organising sites but it doesn't have the seamless HTML companion format of Microsoft.

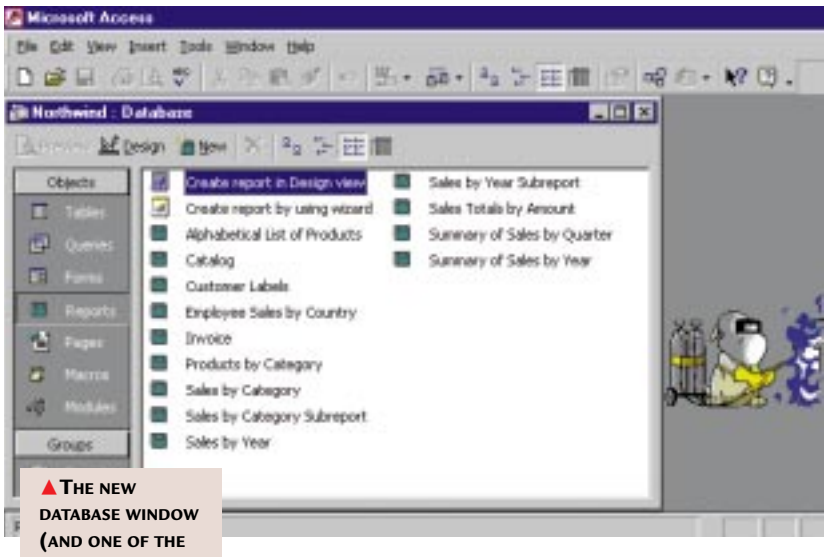
Speech recognition is conspicuous by its absence in Office 2000. Both major-league suite competitors are already offering this: Corel has partnered with Dragon to bundle its NaturallySpeaking package with WordPerfect Suite 8, and Lotus has parent company IBM's ViaVoice in the box with its SmartSuite Millennium. Both of these offer continuous recognition, so you don't have to pause... between... each... word as with most previous dictation technology. Although there are third-party add-on speech packages for Microsoft products, the company has made no bundling deals. Instead, it is pursuing the grail of speech recognition in-house and at operating system level. So far, this has only seen the light as a part of the Windows CE OS for issuing commands (not dictating text) to hand-held devices and the in-car "hands off" Auto-PC.

PCW DETAILS

Price and availability *to be announced*
Contact *Microsoft Connection 0345 002000*
www.microsoft.com/office/
Good Points *Excellent intranet integration. Round-tripping of HTML and binary files. Lower TCO.*
Bad Points *No voice recognition.*
Conclusion *Microsoft has made a great effort to empower intranet end-users which is bound to pay off.*
Overall Rating ★★★★

Access 2000 & SQL Server 7

The improved Access 2000 comes with many benefits. Mark Whitehorn explains.



▲ THE NEW DATABASE WINDOW (AND ONE OF THE NEW ASSISTANTS TORCHING SOMETHING, POSSIBLY A BUG)

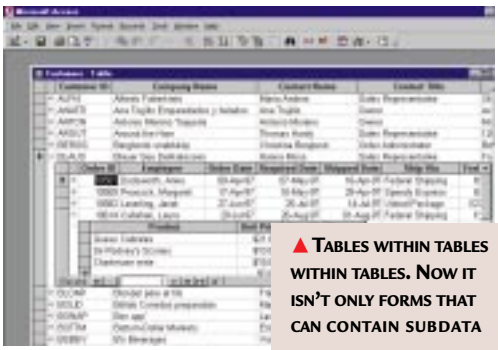
ACCESS 2000 COMES WITH SOME REAL BENEFITS, MAINLY FOR LARGE corporations interested in publishing/sharing data across an intranet. But there are some excellent improvements for the developer and home user, too.

Access 2000 is a highly web-aware application. But although HTML is now on an equal footing with the other binary formats, this is not the case in Access. Its approach is to retain the .MDB file as the repository for complete Access applications; all the usual components are still stored there. However, forms and reports can also be published as separate entities called Data Access Pages. These are stored as HTML files outside the .MDB and can be posted as emails or placed on a web site. Data Access Pages maintain a live link to the database, allowing web clients (using IE 5.0) to view, edit and report on data within the database.

As well as making live data easier to share, Microsoft has opened up an excellent upgrade path, from PC-based to client-server-based operation. When creating a new database, users can choose not to use the internal Access database engine, but elect for SQL Server (6.5 or 7) or an internal store available in Office. In either case, a Microsoft Access Project file (.ADP) is created instead of an .MDB file.

Now, when a database object is renamed, THE CHANGE IS REFLECTED AUTOMATICALLY in dependent objects such as forms and queries

Developers then proceed as usual, using Access as a front-end, so there is no overhead in learning new skills (Wizards have been updated to cope with the changes). The only apparent difference is that the available data types are those supported by SQL Server and field names must follow the conventions (for example, spaces are not supported in field names). But under the covers, the tables, stored procedures, views and database diagrams will be stored in the back-end DBMS. The result is that developing/upgrading to SQL server is almost transparent. In addition, for developers of client-server applications, Access 2000 includes Client/Server Design Tools for creating and managing objects stored on the server, and also SQL Server-based Administration Tools for carrying out admin tasks including backing up and restoring a database, and database replication.



▲ TABLES WITHIN TABLES WITHIN TABLES. NOW IT ISN'T ONLY FORMS THAT CAN CONTAIN SUBDATA

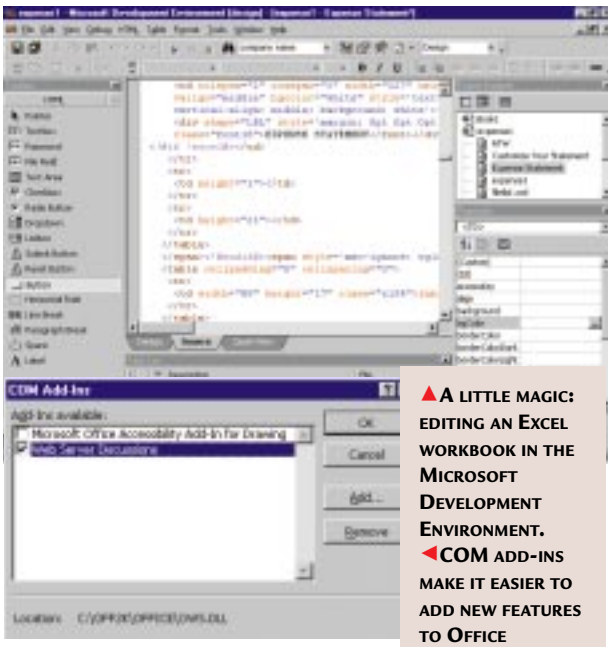
Another little something for the developer is the new Name AutoCorrect feature. Now, when a database object is renamed, the change is reflected automatically in dependent objects such as forms and queries. Other features include the ability to print the relationships diagram and the capacity to save Access databases in the format of earlier Access versions. All previous versions appear to be supported: 1.x, 2.0, 7.0/95 and 8.0/97. I couldn't confirm this in the beta but that's what the help system says. This will be useful in organisations with departments and individuals running a mixed bag of versions.

The user interface has undergone changes too, with the central Database Window looking very different. Instead of tabbed pages across the top, the tabs are back where they were in version 1.0 (on the left).

Access 2000 boasts, for the first time in several versions, some real improvements for developers. In addition, the web enablement will make it a boon for large corporations.

Office 2000: The Developer's Perspective

There are now two distinct ways to program Office. Tim Anderson explains.



▲ A LITTLE MAGIC: EDITING AN EXCEL WORKBOOK IN THE MICROSOFT DEVELOPMENT ENVIRONMENT.
◀ COM ADD-INS MAKE IT EASIER TO ADD NEW FEATURES TO OFFICE

THE VISUAL BASIC EDITOR IN OFFICE 2000 IS DISAPPOINTINGLY similar to the one in Office 97, until you try a little magic. The functionality is hidden from end-users, but Tools/Customize in an application like Excel lets you add an Insert Script command. Select it, and instead of the Visual Basic environment, the new Microsoft Development Environment appears, as seen in Visual InterDev and Visual J++ 6.0. Your spreadsheet is there but in the form of XML and HTML code. The toolbox has standard and ActiveX HTML controls, and you can use scripts and dynamic HTML to enliven your Office web document.

Scripts can run on the client or the server. The snag is that the new scripts don't run in old Excel, so developers must take a decision. Is your new custom Office 2000 solution going to be primarily intranet-based, using the features of the Office Server Extensions along with standard web techniques? Alternatively, old-style VBA development still works, and better than before thanks to VBA 6 which uses the same runtime as the full Visual Basic 6. In this case, the problem is reversed, since normal VBA macros do not run when Office documents are viewed as web pages. It is not going to be easy, the consolation being that if the document is edited using Office tools, both kinds of scripting will be preserved.

Looking at the web model, there are a host of development possibilities. Anything you can do with Active Server Pages or Dynamic HTML can be done in an Office document, too. Data Access Pages are a feature of Access 2000 that provide the easiest way yet to create fully scriptable web pages with dynamic data links. Data access is via ActiveX Data Objects, a COM-based technology which works well with remote data, unlike Data Access Objects used in previous versions.

Old-style VBA in Office

Office 97 was a breakthrough for developers, providing Visual Basic for Applications, complete with forms and class modules, into all the Office applications except Outlook. Outlook 2000 still lacks VBA, making do with cut-down VB Script.

Conversely, FrontPage 2000, part of the high-end version of Office, does now get VBA. A key change concerns add-ins; code libraries that add new functionality to Office applications. In previous versions these have little consistency, being disguised Excel workbooks, Word templates, or special dynamic link libraries created with a C++ compiler. Outlook 97 was the worst, requiring developers to delve into the depths of the Exchange API to create an Exchange Client Extension. Office 2000 still supports these methods, but in addition there are COM add-ins, essentially COM servers which are hooked seamlessly into the host application. You will be able to create these with Visual Basic, using the same techniques for all the Office applications including Outlook. Another improvement is that code modules can be digitally signed to prevent the spread of macro viruses.

Using a little magic

Microsoft Office has an indirect effect on Windows developers, by introducing new standards which users then expect in other applications. Two examples in Office 2000 are HTML help and the Windows installer. The old Windows help compiler converted Rich Text Format documents into help files read by various versions of Winhelp, the familiar help viewer. New HTML help compiles HTML source code into .CHM (compiled HTML). Developers can now use the same skills in building online help when creating web pages, and users get better readability with the web. Office developers can also customise the install scripts to create versions that both limit and extend what gets installed, for smooth deployment of an Office solution.

Full developer features are likely to be only in the Office Developer Edition, which will also include a runtime version of Access 2000 for deployment.