Debra Vogt

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Bradsi thought it'd be good to send you a description of the new function coming up with Chicago, so here's a partial list of the new stuff people will see in Chicago beta 1. The features end users will see is listed first, followed by the things developers will see. Beta 1 (aka M6) will be released broadly on May 2nd, but we'll start ramping up the 2 weeks before that. There is an amazing amount of very cool function coming up with this release, this doesn't even count the stuff we've already shipped. The list of new features after beta 1 is pretty small, which is good. The team (including the extended team around the company) is excited about getting the product done and out the door.

User Interface

- New organization of the top level name space; my computer, network neighborhood, printers, control panel. (we are still working on how the Chicago directory itself is organized) Desktop is the root of everything.

- Network Neighborhood. The 'Hood that shows you just what is interesting to you. No more browsing of thousands of servers to find resources on the network, the shell is smart enough to guess what is interesting to you and show you the 20% of the network that is interesting to you 80% of the time. Additionally, this release features a "find computer" command that quickly lets users jump to a computer with a known name

- Task switching based toolbar with quick access to starting programs. Users can easily see that they have more than one task running, even if the apps are full screen, and switch between them with the click of the mouse.

- The fonts directory which shows you what fonts actually look like, drag/drop install of fonts.

- Common Dialogs. M6 has new commdlgs for Chicago apps that are finally "usable." An all new interface that allows users to define the scope of location, a toolbar to do common tasks, and a single contents pane to show results.

- Revamped Find features, let's you find files and network servers. save search criteria so you don't have to recreate common searches from scratch. use of tab dialog makes it much easier to set criteria.

- Links are completely redone and implemented as separate files instead of desktop.ini files. End users won't notice obvious change until they rename or move the orginial (on same volume) and the link automagically reconnects itself. New visual for links too.

- User can view files for popular applications from the shell without launching the app using new viewing technologys in M6.

- Users no longer have to look at ugly 3 letter file extensions. The shell completely hides these from the user (unless they really want to see them) Make friendly names really friendly now.

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- In Help, there's a single entry screen for Contents and Index for help across the system. Task oriented procedures, with short cuts to the actual code in the shell to get the work done. (ie not just adice on how to do something, but actually do it for them). There's context sensitive help everywhere, including tool tips and "what is this" info for items in dialogs.

- Plug and play really matures in this release. Users get qutomated install of PNP devices on PCMCIA, ISA, and PCI buses, plus nibble mode printers. This worked in previous releases. The system will utilize pnp bioses in new machines to make sure no add on components conflict with motherboard devices.

- Techno types now have a user interface to view advanced properties for Devices resource allocation view/edit Enable/Disable devices in any configuration profile. This is a techy tool that computer hobbiest will love and spend hours tinkering with even if they don't need to.

Printing

- Point and Shoot printing. No need for end users to know what kind of printer they are using on the net anymore. Just browse the net with the explorer, find the printer, and print to it. M6 will support Chicago to Chicago and Chicago to Novell. Chicago to NT comes next.

- Deferred printing. Users can print while using a laptop or while at home and have the print jobs automatically print when they dock their system.

- MS-DOS print jobs will spool to the system spooler for quick return to app time (doesn't have to wait to send all the bits out the port) and easy print job management along with windows app print jobs. No more lpt contention problems.

- autoinstall of nibble mode printers. you can plug in an HP LJ 4MP, 4P, 4L, or 4ML, turn the machine on, and Chicago will automantically detect the new printer and install the correct drivers for it. no fuss.

- remote administration of print queue

- NetWare compatible PServer (allows any Chicago Novell client to despool from a Novell print queue)

- brand new PostScript driver which we are working joinly with Adobe on, key feature is Postscript level 2 support.

Networking

- Even better Netware support. NW 4 browsing in the shell. NW4 file and print access. Netware peer server. More Netware API support.

- Complete TCP/IP support. A fast, protmode stack with no low memory requirements. A full set of TCP utilities. Windows Sockets support for16 and 32-bit apps. DHCP support for "plug and play" TCP/IP networking

- Manageability platform. M6 provides the infrastructure for creating and managing user-specific profiles (ie each user gets their own assignments and settings at login as determined by an adminstrator), for building remote inventory and management applications (using the PNP infrastructure and remoted APIs for the registry).

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- Docking. Chicago will detect IBM, Toshiba, NEC, Compaq or TI docking stations with portable and automatically set up configurations mapping to specific blocks in config.sys (if they have a multi-config style config.sys), and have Chicago automatically detect when they are docked/undocked.

- Briefcase. Improvements across the board in this component -- better performance, remote briefcases now work, better visuals

- Power management subsystem for APM 1.1 enabled machines. Includes cool control panel applet to set preferences and a battery indicator in the system toolbar.

- Built In Remote Access via Dial-Link. Finally remote workers can be part of your network. An integrated remote access client provides remote access to NetBEUI, TCP/IP and IPX networks using the industry standard Point to Point Protocol (PPP). The client will interoperate with all major PPP implmentations. The client features easy setup and supports user initiated connections, as well as seamless automatic connections based on usage of network resources. Chicago machines can also be set up as PPP dial-in server
for casual single port usage.

- Easy local connections for companion PCs: Companion PC's running chicago can connect to a chicago desktop using serial, or high speed parallel connections. The companion gets full access to the network via the chicago desktop.

- Central modem support: A modem needs only to be installed once in the system and it becomes usable by all applications. The user can configure the modem easily using a standard system user interface. The modem installation process is easy, installed modems are available to DOS, Win16, and Win32 apps.

- plug and play now enables users to ho swap a number of devices; supported modem cards, ATA/IDE cards, and SCSI cards. (PCMCIA devices)

Setup

- Batch Install which lets admins create custom install scripts for hands off setup for doing mass installs.

- Extended Logging of the setup and boot process to help track down potential problems by determining exactly what step was being done when the failure occured.

- Fail safe install where setup detects previous failed install and try to pick up where it left off.

- Create Emergency Boot Disk which contains scandisk, and a text editor to help repair problems. (In M7 uninstall may be included)

- MS-DOS 6 multiconfig support

- Completely reworked setup and network drivers -- all new user interface, easier to use and consistent with chicago standards. net card drivers and transports all plug and play compatible.

Complete, protect mode OS

- can boot and run the system with no config.sys or autoexec.bat. greatly

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simplifies configuring and managing the system. (we autoload the files we need like himem.sys)

- clean boot of the system with F5 at startup. this uses very safe default setting to get the system up and running in case of problems. the system can actually boot with no config.sys, autoexec.bat, or INI files or registry provided the hardware follows minimal guidelines like having a VGA compatible display mode, INT 13 harddisk etc.

- Vastly improved local reboot for both Win16 and Win32 apps. If a Win16 app hangs while the system is in file system or networking code, the user can safely kill the app.

- Users can feel safe with M6 as the registry is backup every time they boot, so they can always get back to a workable system and there's UI for restoring the registry after a problem.

Multimedia

- lot of cool nifty tools including new media player apple with OLE 2 support, volume control and in line mixer applet.

- improved drivers for Media Vision Sound and Creative Labs Sound Cards

- most of the improvements to multimedia have been under the hood with full 32-bit support, compression manager, 32 bit video for windows, etc.

Compatibility

- Lots and lots of general bug fixing and tweaks to make all popular Windows apps and MS-DOS apps work great. Big effort on getting games to run in VMs well.

- Adobe Type Manager supported so users can continue to use their Type 1 fonts the way they always have.

- Users can turn off creation date/Last access date /long names for thei file system if for some reason they do not want these new features.

- M6 will repair LFN for existing apps that save files by saving a temp file, deleting the original, and renaming the temp to the name of the original. This means users can use long names in the shell even if they have apps that don't, and the long names won't be lost.

- Setup installs on more devices, Bernoulli drives, driver managed by3rd party disk compression

- Support for Windows Sound System

Performance

- Big performance improvements throughout the system. In the core components, kernel, GDI and User. In the file system and vmm. In the shell and printing systems. In networking. Console support is also much faster. Chicago meets it's 4 meg goal. (we are pretty damn close as of this mail) This item should probably be at the top of the list since we have spent a big effort here. People that are using our M5 release will be blown away with M6.

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Mail

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- Rich mail client (Capone) integrated into the shell, full work group post office connectivity, local message store and personal address book. A whole piece of email could be written on just this, I'll let the WGA guys do that.

Online registration

- If all goes according to plan, a Chicago beta tester will be able to "register" for the Marvel beta test program using the online registration program. This is the same online registration app which will register users for Chicago in the final product.

Utilities/Applets

- full protect mode DoubleSpace support. fully graphical ui, runs (including Compress-in-place) without leaving Windows, integrated into shell and accessible via command line.

- Windows disk defragger, full graphics UI with 2 views, concise (gas guage only) and detailed (lots of cool disk drive looking graphics to stare at). This is all integrated niced into the shell, the same took defrags doublespace drivers and of course works in the background.

- new applets Writepad and Paint. Both are OLE 2.0 enabled and demonstrate good Chicago UI. (writepad may also have greyscale font support too for M6!)

- new terminal applet. Complete Win32 app using high performance 32-bit comm subsystem in Chicago. not a done deal for M6, but should make it.

- much improved Winpad will be in M6. improved UI, it prints, imports cardfile and calendar files. (Full address book integration with mail happens after M6.)

- Backup, including tape support. don't know if we'll have this or not for M6, probably not.

- performance monitor applet which can remote data to admins.

For Developers

Shell extensions: IShellFolder
Independent color matching and matcher DLL
Enhanced Metafile to Win16 metafile conversion (and vice versa)
Rich Text control
OLE 2.01 (32-bit)
TAPI (32-bit)

Plug&Play notifications of arriving/disappearing devices
Plug&Play notifications of power management (suspend/resume) events
Win32 APIs for requesting power status or system suspend.
Multi-user support in the registry

Client-side named pipe support
Extensible thunking mechanism via the thunk compiler
Static thread local storage support
DebugActiveProcess API support
Anonymous pipe support
Named synchronization objects support (OpenEvent, CloseEvent)
Win32 parameter validation support
UTC time support (no control panel UI though)

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Full Windows Sockets support over NetBIOS, IPX and TCP/IP
RPC client and server

MIDI Polymessage Support
Full 32 bit support for all Multimedia APIs
32 bit Video for Windows
32 bit Audio Compression Manager
Comprehensive set of 32 bit Multimedia sample code

Support for language- and script-independent text layout
Coordination between language, layout and character set switching
Full implementation of Chicago NLS APIs.

16 and 32 bit simple MAPI and CMC
32 bit extended MAPI

Help complier is Windows app!!!!
Multiple and enhanced secondary windows in help
Cross-file help indexing

PDK/Tools
Updated documentation for new controls and updated UI style guide
New samples showing how to use new controls
Thunk Compiler and samples to enable 16/32 and 32/16 interoperability
MAPI SDK
32bit OLE 2.01 SDK
Mini VDD support and samples (DDK)
Sample VxDs in C (DDK)

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