O'Hare Summary

With Win95 shifting to an 8/95 retail release date, Microsoft has a tactical opportunity to add basic Internet features to Win95 or the Win95 "Frosting" package. Benefits of shipping O'Hare simultaneous with the release of Windows 95:

1. Matches up against OS/2 Warp 3.0 Internet features
2. Helps sell more units of Win95 Frosting (assuming O'Hare is not in Win95)
3. Caps market penetration of non-MS Windows Internet clients
4. Removes dependency on (provides backup plan to) MSN over IP
5. Permits ISPs to cover markets not planned for MSN over IP

Make it easy to get on the Internet; focused on dial-up users; use existing Internet standards:

1. Install Wizard: simple, immediate account sign-up and client configuration; single, big ISP
2. Capone for e-mail and newsgroups (route 66 SMTP/NNTP mail/news MAPI providers)
3. Modified Spyglass Mosaic web browser for HTML and Gopher viewing/surfing
4. Shell-integrated FTP
5. Web protocol DLLs for "Catapult" proxy server *(not quite in plan, but pretty close)*
6. O'Hare home page -- up-to-date MS news, pointers to hot sites

Important Dates
1/16/95 Coding begins in earnest (feature set already defined)
3/15/95 Code complet[illegible] no more features)
4/15/95 Beta test
6/15/95 RTM
8/??/95 Retail availability

ISP Requirements

1. Must have broad presence (at least US, non-US a plus)
2. Must have an existing Sign-up Protocol implemented (or nearing completion)
3. Must provide SMTP/NNTP mail/news servers, accounting/billing system
4. Must have ability and resources to scale quickly to meet O'Hare sales volumes
5. Should have reasonable, competitive monthly/hourly fee schedule

O'Hare in Frosting Features (in descending priority order)

why	pri	who	area	feature
must do	1	jeremys	instwiz	Client-side auto signup, configure networking, mail, news
must do + cool	2	jcordell	www	Win95-ize the Browser UI
must do	3	chrisfra	www	Localization [No Compile]
NS/Warp	4	chrisfra	www	HTML Progressive rendering
Warp + cool	5	daviddi	www	Web Drag&Drop, Save As..., Internet Shortcuts (MIME & URL associations)
must do	6	chrisfra	www	Integrate Spyglass fixes
Cool	7	daviddi	wsock	Implicit net connections (auto-dial on WinSock API call)
Cool	8	thomasre	ftp	FTP Shell Extension (uses Catapult FTP DLL in pass-through mode)
must do + cool	9	jcordell	www	Update www-integrated Gopher (D&D, if time)
Cool	10	deepaka	www	History + Hotlist Mods (Internet Shortcut integration)
Cool	11	deepaka	www	Persistent cache; remove FTP, News, Mail

OPTIONAL O'Hare in Frosting Features

why	pri	who	area	feature
Cool	a	sdeFTP	ftp	Other FTP Features (do if we have time)
NT	c	sdeCat3	instwiz	Catapult (Detect and configure)
NT	c	sdeCat	www	Catapult HTTP
NT	c	sdeCat2	www	Catapult Gopher

MS98 0107151
CONFIDENTIAL

M 1016006
CONFIDENTIAL

GOVERNMENT EXHIBIT 140

chase

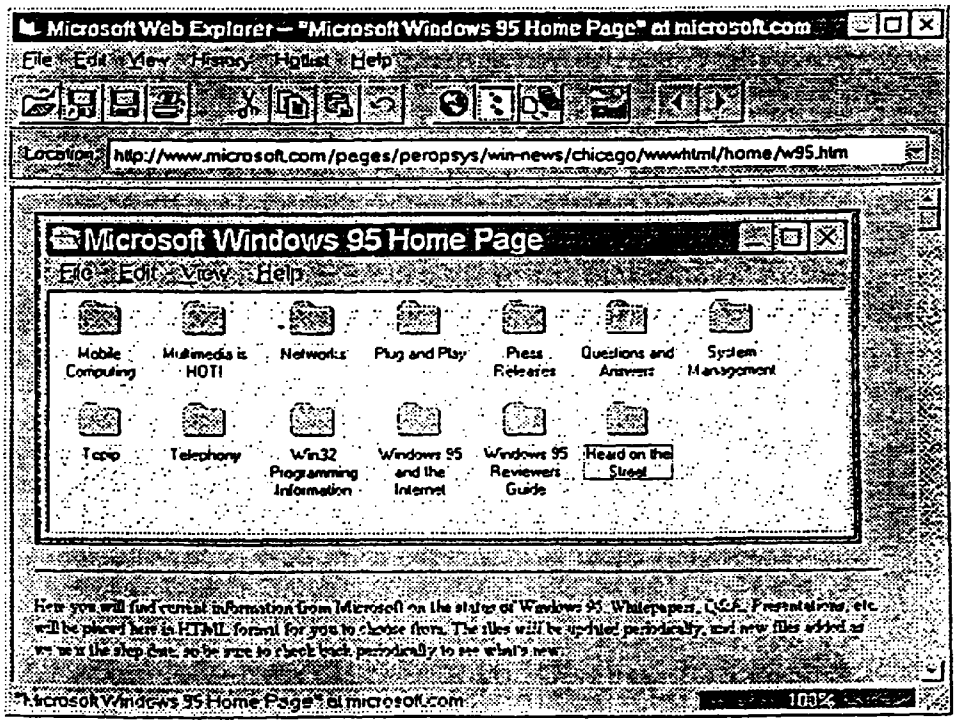
O'Hare Internet connection/service models

These are listed in descending order of importance to O'Hare.

id	Connection Method: Big ISP	Other ISP	Catapult	Direct LAN	Protocols: Mail	News	Comments
1	Yes				SMTP	NNTP	Win95 sim-ship product scenario; Single, Big ISP provides auto-signup, SMTP/NNTP mail/news, and raw IP access.
2		Yes			SMTP	NNTP	Existing ISP – install wizard asks customer techy questions; or, MS publishes sign-up protocol and customer finds an MS-compliant ISP to sign-up with.
3			Yes		?	NNTP	Auto-detect Catapult proxy server; corporate customer probably has existing mail system.
4				Yes	?	NNTP	College case is typical – install wizard asks customer techy questions; Mail is likely SMTP.

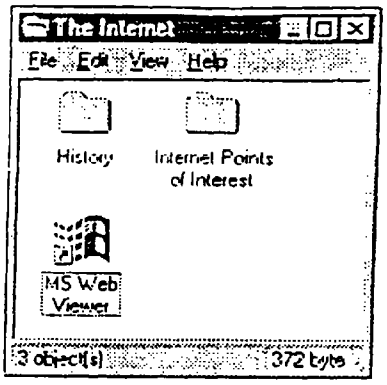
Issues

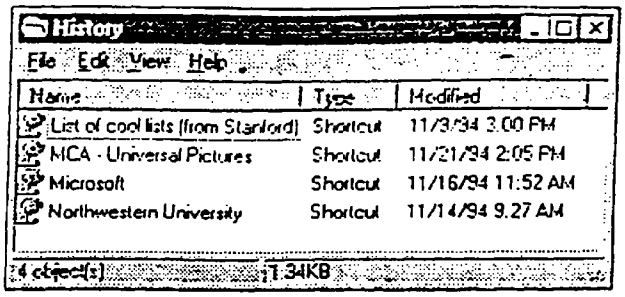
1) Need to quickly pick a big ISP to work with (MCI?)
2) Can we contain Catapult work for Win95-only client in 3/15/95 code complete date?
3) Support eCommerce?
   Pros: Electronic payment will accelerate Internet growth
   Will it be ready?
   Recommend: Help eCommerce group, but don't slip schedule

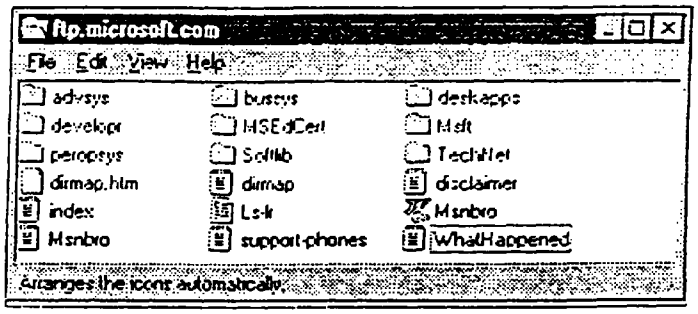


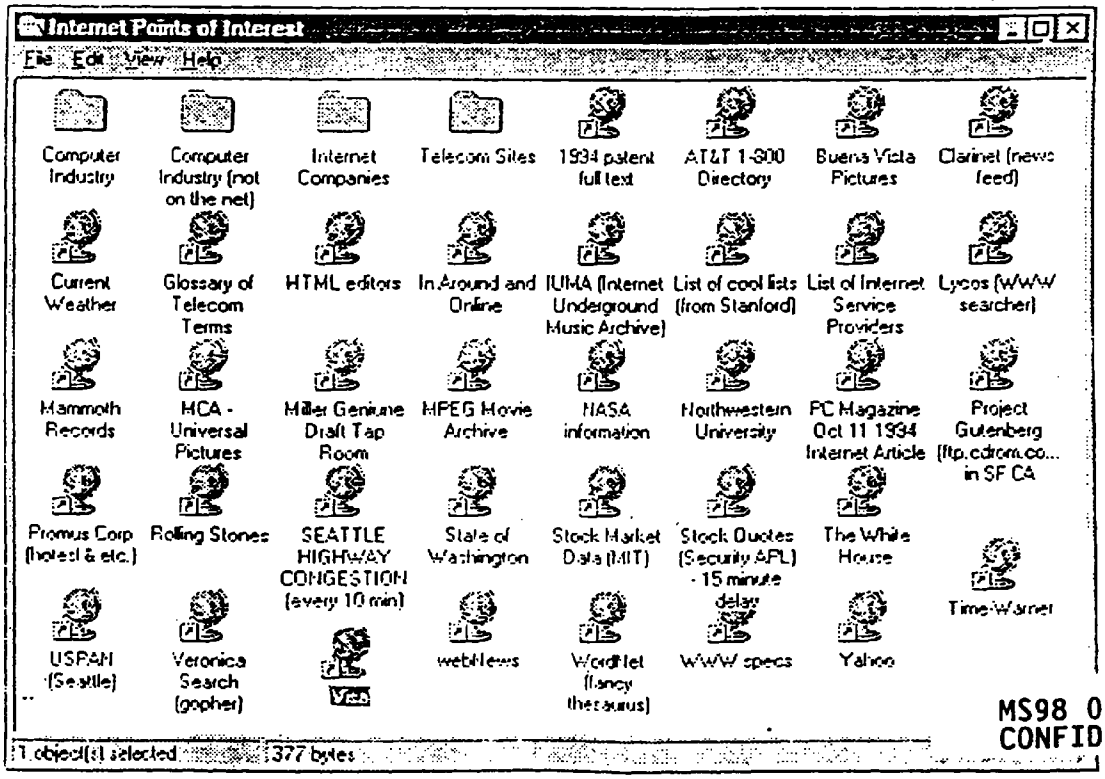
MS98 0107152
CONFIDENTIAL

M 1016007
CONFIDENTIAL









MS98 0107153
CONFIDENTIAL

M 1016008
CONFIDENTIAL

O'Hare Development Worklist

	1/16/95	Start coding
43	3/15/95	Code complete
23	4/15/95	Beta
44	6/15/95	RTM

43 Working days between 1/16/95 and 3/15/95

days	who	cont%	comments	Cont. Days	Code Complete No Cont. Date	Code Complete Contingency Date
41	chrisfra	33%	All estimates include unit testing to alpha quality	12	2/27/95	3/14/95
39	daviddi	70%	Higher contigency to account for consulting help to rest of team	17	2/16/95	3/10/95
41	deepaka	50%		14	2/22/95	3/13/95
43	jcordell	50%		17	2/21/95	3/15/95
48	jeremys	50%	Contingency higher to account for auto-signup & catapult uncertainty	17	3/01/95	3/23/95
44	thomasre	100%	Contingency very high to account for non-coding demands	23	2/15/95	3/17/95
20	sdeFTP		Additional cool shell FTP features			
45	sdeC		Catapult work			
95	sdeGoph		Separate, shell-integrated Gopher			

pri	who	area	Task/Item	Day	Dates Orig	Dates Last	Dates Current
			MISCELANEOUS				
5	daviddi	inetSC	MIME association editing				
5	daviddi	inetSC	URL protoc ssociation editing				
?			MPEG external viewer				
?			SLIP scripting, per connectoid				
?			DNS setting per connectoid				
must do			**Congure system**				
1	jeremys	instwiz	Wizard UI (underway; approx 70% complete)	3	1/19/95		
1	jeremys	instwiz	Install TCP/IP – net setup bug current prevents bindings from sticking	1	1/20/95		
1	jeremys	instwiz	*...contingency buffer*	2			
			Subtotal	6			
must do			**Mail & News (Capone + Route 66)**				
1	jeremys	instwiz	Install Capone/Route 66 – their .INFs have some bugs	1	1/23/95		
1	jeremys	instwiz	Create profile, or determine default profile; populate profile with services	2	1/25/95		
1	jeremys	instwiz	Configure profile for mail/news	2	1/27/95		
1	jeremys	instwiz	*...contingency buffer*	3			
			Subtotal	8			
must do			**Client-side auto signup with existing server-side ISP**				
1	jeremys	instwiz	Protocol design (review existing ISP protocol)	5	2/3/95		
1	jeremys	instwiz	Client-side protocol implementation	15	2/24/95		
1	jeremys	instwiz	Integration with Wizard	3	3/1/95		
1	jeremys	instwiz	*...contingency buffer*	12			
			Subtotal	35			
must do + cool			**Win95-ize the Browser UI**				
2	jcordell	www	Frame look	1	1/27/95		
2	jcordell	www	Context Help (just resource work, not help file itself)	2	1/31/95		
2	jcordell	www	Menu modifications	5	2/7/95		
2	jcordell	www	Toolbar modifications, make toolbar optional	2	2/9/95		
2	jcordell	www	Colors (?)	1	2/10/95		
2	jcordell	www	Settings UI (menus & dialogs)	5	2/17/95		
2	jcordell	www	Make URL bar optional	2	2/21/95		
2	jcordell	www	*...contingency buffer*	13			
			Subtotal	31			
must do			**Localization [No Compile]**				
3	chrisfra	www	...guiterrs.c to string table[incl param subs]	2	2/22/95		
3	chrisfra	www	...misc strings [~100-200] to string table	3	2/27/95		
3	chrisfra	www	*...contingency buffer*	2			
			Subtotal	7			

MS98 0107154
CONFIDENTIAL

M 1016009
CONFIDENTIAL

Summary of O'Hare Features

pri	who	area	Task/Item	Day	Dates Orig	Last	Current
NS/Warp competition			Progressive rendering				
4	chrisfra	www	...work w/ spyglass to id reentrancy issues	1	1/17/95		
4	chrisfra	www	...modify GIF.c for reentrancy	2	1/19/95		
4	chrisfra	www	...basic img thread fu:launch,exit,abort,debug tech (0 if I do catapult)	4	1/25/95		
4	chrisfra	www	...simple shared access to raw input [jpeg&gif common]	2	1/27/95		
4	chrisfra	www	...output streaming [jpeg&gif common]	1	1/30/95		
4	chrisfra	www	...update w&h from img thread to element [main thread]	2	2/1/95		
4	chrisfra	www	...mods to defer draw until w&h is known for all visible img's	2	2/3/95		
4	chrisfra	www	...mods to queue&launch image fetches while parsing	3	2/8/95		
4	chrisfra	www	...test&debug existing multiple connection support	2	2/10/95		
4	chrisfra	www	...abort all threads for current doc fetch	1	2/10/95		
4	chrisfra	www	...setting for max concurrent threads	1	2/10/95		
4	chrisfra	www	...mod JPEG & GIF to use common i/o scheme	1	2/13/95		
4	chrisfra	www	*...contingency buffer*	7			
			Subtotal	28			
			Web Drag&Drop, Save As..., Internet Shortcuts				
5	daviddi	www	Drag & Drop URL; Drag out RTF/Graphics/Selection	10	2/6/95		
5	daviddi	www	Export data in multiple formats	2	2/8/95		
5	daviddi	www			2/8/95		
5	daviddi	www	Finish Internet Shortcuts	6	2/16/95		
5	daviddi	www	*...contingency buffer*	13			
			Subtotal	31			
			Integrate Spyglass fixes				
6	chrisfra	www	...start with beta drop	0	2/13/95		
6	chrisfra	www	...final release	5	2/20/95		
6	chrisfra	www	*...contingency buffer*	2			
			Subtotal	7			
Cool			Implicit net connections (auto-dial on WinSock API call)				
7	daviddi	wsock	Implicit Connections (dial on WinSock call, if needed)	5	1/23/95		
7	daviddi	wsock	*...contingency buffer*	4			
			Subtotal	9			
Cool			FTP Shell Extension (uses Catapult FTP API pass-through)				
8	thomasre	ftp	Cleanup of existing FTP code from Vlads	4	1/20/95		
8	thomasre	ftp	Resync Get and use NT/Catapult FTP API	3	1/25/95		
8	thomasre	ftp	Misc. debugging of NT/Catapult FTP API	2	1/27/95		
8	thomasre	ftp	Misc. learning how to extend shell	3	2/1/95		
8	thomasre	ftp	Supply IShellIcon interface for item icns	1	2/2/95		
8	thomasre	ftp	Support drag & drop copy	5	2/9/95		
8	thomasre	ftp	Copy animation	1	2/10/95		
8	thomasre	ftp	Error handling	3	2/15/95		
8	thomasre	ftp	*...contingency buffer*	22			
			Subtotal	44			
must do + cool			Update www-integrated Gopher				
9	jcordell	www	*Come up with task list*	2	1/18/95		
9	jcordell	www	*Do it*	6	1/26/95		
9	jcordell	www	*...contingency buffer*	4			
			Subtotal	12			
Cool			History + Hotlist Mods (re: ArthurBl e-mail)				
10	deepaka	www	*Finalize plan w/ArthurBl*	2	1/18/95		
10	deepaka	www	*Do it*	3	1/23/95		
10	deepaka	www	*Do the rest*	5	1/30/95		
9	deepaka	www	*...contingency buffer*	5			
			Subtotal	13			
Cool			Optional WWW Features				
11	deepaka	www	Persistent cache	15	2/20/95		
11	deepaka	www	Remove FTP/News/Mail	2	2/22/95		
11	deepaka	www	*...contingency buffer*	9			
			Subtotal	26			

MS98 0107155
CONFIDENTIAL

M 1016010
CONFIDENTIAL

Summary of O'Hare Features

pri	who	area	Task/Item	Day	Dates Orig	Last	Current
			Other FTP Features (do if we have time)				
a	sdeFTP	ftp	Support auto Ascii/Binary File type	1			
a	sdeFTP	ftp	Determine Item Icon Based on File Extension	1			
a	sdeFTP	ftp	Create URL Shortcuts for FTP Items	1			
a	sdeFTP	ftp	Support the Copy Command for Text and Binary Files	2			
a	sdeFTP	ftp	Print Text Files (Quickview?)	1			
a	sdeFTP	ftp	Support Telnet (invoke DOS telnet component)	1			
a	sdeFTP	ftp	Maintain History (what this means is TBD	3			
a	sdeFTP	ftp	*...contingency buffer*	*10*			
			Subtotal	20			
			Catapult (Detect and configure)				
c	sdeCat3	instwiz	Detect catapult server	2			
c	sdeCat3	instwiz	Additional UI, installation of catapult DLLs	4			
c	sdeCat3	instwiz	Registry, inf edits; file copying	1			
c	sdeCat3	instwiz	*...contingency buffer*	*4*			
			Subtotal	11			
			Catapult HTTP				
c	sdeCat	www	...basic thread fu:launch,exit,abort,debug tech	4			
c	sdeCat	www	...modify http.c to xmit request to thread	2			
c	sdeCat	www	...modify http.c to pipe output from thread	3			
c	sdeCat	www	...modify http.c for abort of request	3			
c	sdeCat	www	...support test and debug of catapult	5			
c	sdeCat	www	*...contingency buffer*	*6*			
			Subtotal	23			
			Catapult Gopher				
c	sdeCat	www	Figure out what to do	2			
c	sdeCat	www	Do it	6			
c	sdeCat	www	*...contingency buffer*	*4*			
			Subtotal	12			
			Features we are definitely not doing				
			Basic Shell Extension to Represent Gopherspace as Folders and Files				
no	sdeGoph	gopher	Figure out hierarchical browsing	2			
no	sdeGoph	gopher	Create skeleton in dev tree	1			
no	sdeGoph	gopher	Create .REG file for registering/rooting the gopher namespace extension	1			
no	sdeGoph	gopher	Provide IPersistFolder	1			
no	sdeGoph	gopher	Provide IShellView interface (implemented using shell default view)	1			
no	sdeGoph	gopher	Item enumerator (wrapper for Gopher API)	1			
no	sdeGoph	gopher	Get and use NT/Catapult Gopher API	3			
no	sdeGoph	gopher	Misc. debugging of NT/Catapult Gopher API	2			
no	sdeGoph	gopher	Misc. learning how to extend shell	3			
no	sdeGoph	gopher	Supply IShellIcon interface for item icns	1			
no	sdeGoph	gopher	Figure out URL shortcut invocation technique	2			
no	sdeGoph	gopher	Error handling	2			
no	sdeGoph	gopher	*...contingency buffer*	*10*			
			Subtotal	30			
			Other Required Features				
no	sdeGoph	gopher	Message Box for Error Items (type 3)	1			
no	sdeGoph	gopher	Support Binary File type (type 9)	1			
no	sdeGoph	gopher	Invoke Viewers for Different File Types	2			
no	sdeGoph	gopher	Determine Item Icon Based on File Extension	1			
no	sdeGoph	gopher	Create URL Shortcuts for Gopher Items	1			
no	sdeGoph	gopher	Support drag & drop copy	5			
no	sdeGoph	gopher	Support the Copy Command for Text and Binary Files	2			
no	sdeGoph	gopher	Support Index Search (without mimicking the Shell Find UI)	3			
no	sdeGoph	gopher	Show File Size and Last Modified Time and Date	2			
no	sdeGoph	gopher	Print Text Files	1			

MS98 0107156
CONFIDENTIAL

M 1016011
CONFIDENTIAL

Summary of O'Hare Features

pri	who	area	Task/Item	Day	Dates Orig	Last	Current
no	sdeGoph	gopher	Support Telnet (invoke DOS telnet component)	1			
no	sdeGoph	gopher	Maintain History (what this means is TBD	3		-	
no	sdeGoph	gopher	Simple CSO support (Phone Book) Search Query (not using Shell Find UI)	2			
no	sdeGoph	gopher	*...contingency buffer*	*13*			
			Subtotal	38			
			Optional Features				
no	sdeGoph	gopher	Support Duplicated Server Item Type	2			
no	sdeGoph	gopher	Handle Indirection Error Message	1			
no	sdeGoph	gopher	Full Support for File and Directory Attributes (Gopher+ info)	5			
no	sdeGoph	gopher	Support Interactive Query	10			
no	sdeGoph	gopher	*...contingency buffer*	*9*			
			Subtotal	27			

MS98 0107157
CONFIDENTIAL

M 1016012
CONFIDENTIAL