Wildcat! 5 - Project *Annihilator* - Preview Information Sheet
October 1, 1995

This document is composed of two parts. The first provides an overview of Project Annihilator, what it is and how it operates. The second section contains specific installation instructions for installation and use of the Preview CD. The second section is also duplicated in a help file on disk that will be displayed for review and printing after the installation.

Part 1 - The Overview

Interactive Multimedia Reaches the On-line Application Market

Mustang Software is developing a system to empower the corporate, business, small office and hobbyist community to offer full on-line multimedia to customers, staff and prospects. The development name of the project is *Annihilator* and it has entered beta testing at several hundred locations. It will be released as *Wildcat! 5 for Windows 95 and Windows NT*.

Annihilator is a true Windows 95 or Windows NT client/server application designed to provide a BBS-based solution for a broad range of customers. It delivers an exciting interactive multimedia experience for callers by allowing the system operator to make use of familiar multimedia tools, including JPEG and GIF editors, for customization of the caller interface. For backward compatibility all aspects of the system are accessible via standard ANSI connectivity but when accessed using the free remote client, the caller is greeted with an exciting multimedia experience. The support engine for offering remote graphics to the caller is included at no additional cost, and the remote graphical client suite is slated for free distribution.

Annihilator takes full advantage of the new multitasking in Windows 95 and the robust server operations in Windows NT to provide a solution for every online need. The Windows 95 platform has been selected to support small to medium load systems while the Windows NT platform was chosen to provide high performance on-line solutions utilizing its single and multi-processor support.

True Client/Server Technology

The Bulletin Board System arena is the latest market segment to be courted by advertisements touting the benefits of "client/server" technology. However, upon closer inspection, "client/server" is often used to refer to the use of a proprietary remote program (the client) to dial into a BBS application (the server). While the use of a remote graphic client is an exciting aspect of many of the newer BBS technologies including '*Annihilator*', it does not represent *true client/server* functionality at the application program level, the location where its true power can be unleashed.

So What is Client/Server?

Client/server, at its simplest level, is an architecture that involves client processes requesting service from server processes. Client/server computing recognizes that those client modules need not all be executed within the same memory space, that is, the processes that distribute the information need not all be a part of the same single program. Separation of the client and server modules provides improved security and performance. By implementing a BBS with a core information server, and routing that information using a number of application clients *at the sysop's location*, a system can be established that delivers more information at greater speed, *even on a single PC running Windows 95*.

Isn't It Complicated?

Client/server can be as simple as running two or three familiar programs on a single PC or as intricate as a multiple-PC network running several applications on each PC. The beauty of client/server model is that once you understand the relationship between the different executable programs (the clients and the server) you can set it up in any of several ways that best meet your needs.

The client/server model of *Annihilator* can consist of a simple setup with the server and all clients running on a single PC. The computer can operate under Windows 95 or Windows NT Workstation or Server. This configuration offers the most compact system and allows for total management from the single BBS computer.

An alternative to operating all client executables on a single PC is to distribute the processing over a Microsoft Network. The server executable runs on a Windows NT (workstation or server) PC while the client modules can be run on either the server PC or networked PCs running either Windows 95 or Windows NT. The advantage of separating some client operations from the server is increased power through distributed processing. For example, in an extremely active system the sysop may find it advantageous to establish three PCs, one for the Server and TCP/IP connectivity, including WWW access, and two others, each running a rack of 32 modems with its own copy of the Modem Controller Client.

Use of the client/server model provides a number of advantages:

+   32-bit Windows multitasking means no additional multitasking software is needed and 16-32 lines can be run easily without loading multiple copies of the BBS.

+   The entire BBS configuration in our client/server model can be modified even while in full operation, but only by authorized personnel. The system server accepts change requests and implements them as soon as usage permits.

+   The number of inbound sessions on a single computer is significantly increased. Thanks to the enhanced multitasking of both 32-bit Windows platforms, a much larger number of connections is possible on any given PC. As inbound access (via modem, telnet, HTTP, etc.) reaches the processor limits for any given PC, additional client PCs can be added which communicate automatically with the server. Clients for modems, HTTP, telnet and other activities can be operated on a single PC or on a variety of additional systems, depending on load.

+   This new generation BBS can truly isolate the core of the host activities, providing secure, private system access even to local users. The server portion of the system is established in an area on disk with restricted user access. The server controls all access to messages, files and other system information. Requests are submitted to the server by all support programs and third-party utilities through an easily adopted application program interface (API). This methodology has the added advantage of allowing the actual BBS program-flow code to be written in wcCODE and to be fully customizable.

True Client/server technology provides total flexibility. It allows the sysop to offer a BBS on a desktop platform and to expand the system capabilities as desired.

Standard *Annihilator* Modules Included With Every BBS Create a Foundation

The following modules and clients come with the standard Annihilator Wildcat! 5 package.

Server module
This module provides the base functionality for processing all database and configuration requests through a published API structure.

Local or LAN Client
This module is included with every package and is used by anyone connecting at the host PC. It can also be used by anyone on the network for local login. It is an ANSI text connection. Note that the Graphical Client used for remote connection also can be used locally for a graphical local connection.

Online Client
This module is included with every package and answers the phone for all dial-in lines. It can present the BBS information to a caller in ANSI, ASCII or in full graphics when called with the free remote graphical client.

QWK Echo Client
This module is included with every package and handles QWK mail exchange processing between the host and other BBSs.

TAPI Client
This module is included with every package and provides a link to the Windows Telephony Application Program Interface. It talks to TAPI-aware add-on cards or hardware that offer ISDN, X.25 or other connectivity.

Remote Graphical Client
This module is a set of freely-distributable Windows programs for callers to experience full multimedia when connected. This program suite operates on Windows 3.1, Windows 95, Windows NT and any OS/2 release with Windows support. It can also be run locally, over a LAN or via a telnet connection. The core language of the remote graphical client is HTML, the language of the World Wide Web.

Optional *Annihilator* Modules Increase Client/Server Power
The following modules are optional add-on accessories and are purchased separately.

Internet Connectivity Package
This optional accessory package handles Internet connectivity and includes several individual clients

UUCP Module [wcUUCP]
This module handles dial-up Internet email and newsgroup support. It includes a dial-out program and mail tosser, allowing callers to send and receive Internet email and newsgroup messages. It also supports feeding messages to downline nodes. It can be used to toss internet mail regardless of whether it is obtained via dial-up or direct connection. (WC4's wcGATE)

Telnet Module
This module enables the Online Module to also answer inbound telnet callers. It connects callers to the BBS when they connect from a remote internet site. In this mode it acts as a telnet server. With the telnet module installed the BBS also supports outbound telnet sessions requested by callers, connecting them to other locations on the internet. In this mode the BBS acts as a telnet client for the caller. Inbound telnet connections support ANSI, ASCII and the remote graphical client interface.

FTP Module
This module enables the Online Module to also answer FTP connection requests. It responds to inbound FTP file requests and functions as a FTP server. Requests can be made anonymously for a restricted file set, or using a name and password on the BBS for FTP access to files based on the caller's access profile.

Internet Service Provider Package
This optional accessory package expands Internet connectivity and allows the system operator to operate as an ISP. It provides features beyond those in the Internet Connectivity Package and consists of several additional clients.

PPP Module
This module allows callers to make a connection to the BBS with any Winsock layer to establish a path for true TCP/IP connectivity. With a PPP connection callers can run their choice of applications while connected to the net, including browsers (Netscape), mail apps (Eudora), telnet

clients and much more.

WWW Module
This module provides BBS connectivity to callers connecting using a WWW browser. It functions as an HTTP server that dynamically creates HTML files for file and message data and is fed by a set of display files in HTML format customized by the sysop.

IRC Module
This module provides a link to internet relay chat to expand the live discussion capabilities of the BBS. It functions as an irc client for callers. Note that standard inter-node chat is supported without this module.

SMTP Module
This module provides support for simple mail transfer protocol. It provides full management for sending and receiving internet email.

NNTP Module
This module provides support for network news transfer protocol messaging and processes mail from an Internet NNTP server (many providers offer nntp mail services). It provides the link to allow callers to read and reply to usenet newsgroups.

MAPI Client
This optional module provides a link to the Windows Mail Application Program Interface. It provides a mechanism to exchange messages between any application that supports MAPI such as Microsoft Mail, cc:Mail, Lotus Notes, etc. With MAPI support the sysop can easily establish a single repository for all messages by routing e-mail to Microsoft Exchange or any favorite mail package.

CODE Development Package [wcCODE]
This optional package is a new, enhanced high-speed 32-bit development language so powerful that all standard BBS functions are written in it. The CODE package allows the sysop to create custom BBS operations and programs to be run by the caller.

Source Code
For total customization of all online activity the wcCODE source for all BBS functions is available for purchase. (Requires wcCODE)

Database Client
This optional module provides remote connectivity to database processing using the ODBC standard, accessible via wcCODE applications.

Reports Client [wcPRO]
This optional module provides extensive reporting on BBS usage and activities.

Billing Client [wcBILLING]
This optional module provides a complete billing for pre-pay or post-pay systems.

How Do I Set Up a Client/Server BBS?
The configuration of *Annihilator* is very similar to the DOS Wildcat! BBS except that all configuration programs are 32-bit graphic Windows applications. Once you have run the installation and configuration programs you maintain the BBS using other Windows applications that provide functionality similar to the DOS Wildcat! MAKEMENU, MAKEWILD, MAKEQUES, wcFILE, and other support programs.

How Do Callers Connect?
There are several methods for callers to connect to your *Annihilator* (Wildcat! 5) BBS and several types of

presentation:

+ Dial-in modem callers using a standard comm package receive standard ANSI screens, just like WC4.
+ Dial-in modem callers using the Graphical Remote Client package receive a full graphical HTML presentation. The BBS main "page" and all other informational pages such as bulletins, etc. are created by the sysop as HTML (www) documents using any HTML editor. We expect to bundle an editor with the package.
+ Telnet inbound connections using a standard telnet or comm package receive ANSI screens, just like WC4. (requires the Internet Connectivity Package)
+ Telnet inbound connections using the Graphical Remote Client package receive a full graphical HTML presentation. (requires the Internet Connectivity Package)
+ FTP inbound connection requests can log in as "guest" or "anonymous" for limited file access as set by the sysop, or can log in as a BBS user with the correct password for full file lists based on BBS access profiles. (requires the Internet Connectivity Package)
+ HTTP inbound can be made using any browser (Netscape, Mosaic, etc.) and will receive dynamically generated HTML pages for files and messages, with other information and other "pages" prepared by the sysop as HTML documents. (requires the Internet Service Provider Package)

What Internet Services Can I Offer?

If you add the **Internet Connectivity Package** your callers can make use of a number of Internet services by dialing in using the Remote Graphical Client or by using any ANSI terminal. By connecting to you over a standard phone line they are able to establish an internet email address, telnet to any other internet location, access files via ftp at any other location, and they can participate in internet newsgroup discussions.

If you also add the **Internet Service Provider Package** your callers can expand their Internet connectivity to allow them full use of any applications they desire since you will be able to provide them with a PPP connection.

What Hardware Will I Need?

Annihilator was designed to provide a platform for everything from a single line BBS to a 1,000 line corporate connectivity server. The same set of client/server modules are used in all installations.

For a simple one or two line BBS the easiest installation platform would be a 486/66 PC with 8 MB of memory running Windows 95. The standard communications ports in the PC can be used and the sysop just needs to run the Server Module and the Online Client. Minimize these two programs on the desktop and your BBS is operational. To login locally you run the Graphical Client for a full graphical BBS session.

As the BBS expands the sysop might add a multiport card from Digi, Comtrol, Stallion, Equinox or any other manufacturer that offers Windows 95 or NT support. A 4 or 16 port card can be installed in the same 486 PC to increase line count and the only additional hardware changes might be to add additional memory to 16 MB. The same Modem Client will handle the additional lines with the installation of a line count increase module.

Further expansion of the BBS can be accomplished in many ways. As line count increases the power of the PC can be increased to handle the added load by moving to a Pentium 90-120 MHz CPU. With the technology available today it is entirely possible to operate a single-box PC that can address hundreds of incoming lines and other connections by taking advantage of the multi-processor capabilities of the Windows NT platform. Multiport cards from 16 to 128 ports are readily available for the NT platform.

For those that would rather make use of a LAN environment for BBS connectivity the *Annihilator* project also has a solution. By using Windows NT (Server or Workstation) the sysop can establish a server PC that handles the core server duties and allows separate PCs to handle different aspects of the remote connection. Each Client module can be operated on a networked PC running Windows 95 or NT, and will communicate

with the server PC automatically. No messy drive mappings and no specific Networking components are required, other than those that come with Windows NT (workstation or server) and Windows 95. This type of distributed processing system really make sense for large systems with several different types of access, including local, TCP/IP, modem, X.25 and ISDN. Different client processes can be run on less-powerful PCs depending on their load.

What about Novell and LANtastic Networks?

Annihilator is totally compatible with NetWare or LANtastic. A workstation PC on a LAN can run Windows 95 or Windows NT and operate the complete BBS. Other LAN PCs can access the BBS using the Local/LAN client.

Although the BBS PC can access files located on the NetWare or LANtastic server drives, all BBS server and client files must be located on PCs running NT or 95 with the exception of the downloadable files, which can be located anywhere on the LAN. The same cabling for NetWare or LANtastic connectivity (ethernet is assumed) is automatically used by the Windows networking to share BBS client/server data using TCP/IP.

Can it Run Doors?

Annihilator supports DOS-based doors on all port connections, and includes a program for DOS program redirection. However, operation of 16-bit DOS doors does limit the number of lines that can be supported on any given PC. Programs specifically written in the new 32-bit wcCODE are an exception, and do not cause this system degradation. Testing is the only method to determine the actual impact of a specific DOS door on your Annihilator system. Each DOS door affects system performance differently depending on the language it was developed in and what resources it uses.

Doors under Windows NT

Doors do not require any modification and operate in their own memory session for each node. Door operation is virtualized, a process that isolates the door itself from the port, and prevents it from knowing whether it is talking to a standard com port, a DigiBoard or a telnet connection. All doors all think they are talking to a standard COM 1. For specifics on how to run doors, see Part 2 of this document.

Doors Under Windows 95

Doors must be able to talk to the actual port in use for each node via DOS. Unless the door is written in wcCODE it will not be able to access multiport boards that use a Windows 95 driver. For specifics on how to run doors, see Part 2 of this document.

Release Information and Pricing

No specific release date has been set for project *Annihilator,* but the target date is year end. The majority of the program modules are expected to be available in fourth quarter '95 but some optional modules will not become available until early 1996.

The remote Graphical Client will be posted for download and wide-area testing in November. A patch upgrade to the wcSERVER component of the Preview CD ROM will also be made available at that time to enable CD owners to make use of the Remote Graphical Client for their callers.

Product	MSRP[*]	75% off[*]	66.6% off[*]	Availability
Wildcat! 5 M2 (two node + local)	$149	$37	$49	4th qtr. '95
Wildcat! 5 M16 (16 node)	$349	$87	$115	4th qtr. '95
Wildcat! 5 M32 (32 node)	$699	$174	$230	4th qtr. '95
8 Pack Node Increase	$199	$49	$65	4th qtr. '95
32 Pack Node Increase	$699	$174	$233	4th qtr. '95

Internet Connectivity Package	$249	$62	$83	4th qtr. '95
Internet Service Provider Package	$599	$149	$199	early '96
MAPI Client	$799	$199	$265	early '96
CODE Development Lang & IDE	$149	$37	$49	4th qtr. '95
BBS Source Code	$799	$199	$265	4th qtr. '95
ODBC Database Client	$799	$199	$265	early '96
Reports Client [wcPRO]	$149	$37	$49	early '96
Billing Client [wcBILLING]	$149	$37	$49	early '96

* - Manufacturers Suggested Retail Price; *75% off* to participants in the special Pre-Release *Annihilator* CD program; *66.6% off* to any Wildcat! sysop with a valid registration number

What are the Plans for the DOS Version of Wildcat!?

The current DOS version of Wildcat! will continue to be supported and updated by its own separate team of engineers. We have no current plans for a native OS/2 BBS system and do not anticipate such development in the foreseeable future.

Part 2 - The CD Instructions

What is on the Preview CD?

The CD contains three main items:

+   *The Annihilator Slide-Show Presentation (don't miss it!)*
+   *The Annihilator Preview Information Sheet and Instructions (this document)*
+   *The Annihilator Installation and Program Files*

The CD is configured to auto-start when inserted into a drive in Windows 95, however you will need to start it manually under Windows NT. The first program to run is SETUP.EXE which is located in the root directory. It presents the three items above as menu choices and performs the actual installation of files after you have viewed the Slide-Show and Information & Instructions.

Getting the Files From the CD To your Hard Disk

The Preview CD version of Wildcat! 5 (Annihilator) includes an installation program that extracts the compressed files from the CD and copies them to the correct location on your local drive. WC5 cannot be operated directly from the CD. This task must be done from the main SETUP.EXE program. The third button on screen performs the installation from CD to your hard disk.

Once the files have been installed to your hard drive you are ready to begin setup of your Annihilator system. Please follow the instructions so that you won't be lost later on ¤ Wildcat! 5 is quite different from what you may be used to!

Should I Convert My WC4 System or Start New?

We strongly suggest that you first set up and explore WC5 (Annihilator) before you convert your current system, even as a test BBS. You can perform the conversion of users, file and messages at any time later on using the WCSETUP.EXE program in the WC5 directory.

About the programs

All Wildcat! 5 (Annihilator) programs are placed in a Program Group (if running NT 3.51) or in a Folder (Windows 95). In this folder you will find icons for running the various programs needed. If you are familiar with the naming convention of Wildcat! 4 you will notice a lot of similarity, but some changes are noteworthy.

WCSETUP.EXE - This is an initial setup program that can be used to either create a fresh new configuration, or upgrade an existing configuration. Note that creating a new configuration or upgrading an existing configuration will overwrite all data files that exists in the directory where the creation or upgrade is being made (the new directory).

WCCONFIG.EXE - This is a single program that is very much like the old MAKEWILD, but it now includes all configuration activities. It is a full GUI application which works much like a "control panel" for Wildcat!. It now includes functionality that was previously in wcDRAW for ANSI file maintenance, MAKEMENU for menu creation, MAKEGATE for QWK configuration, MAKEQUES for creating questionnaires, and much more.

WCSERVER.EXE - This is the program that is the 'heart' of Wildcat! 5. The server controls access to all the databases and configuration files, but does no direct communication with users or modems.

WCONLINE.EXE - This is the program that handles incoming calls, either via modem, telnet, or ftp. You can configure which kinds of calls are accepted on which lines in the node configuration section of wcCONFIG.

WCLOCAL.EXE - This is what you run when you want to log on to your BBS locally. The other alternative is to use a telnet connection using QmodemPro for Windows 95, or other telnet application (assuming you have a tcp/ip network established)

WCVIEW.EXE - This program allows you to view the caller's screen for a node. The only command line parameter accepted is a node number. Exit this program with Alt+X. The same view can be called up by double-clicking on a node in the wcONLINE window. Note that use of either view method slows down the processing for all nodes.

WCFILE.EXE - This utility is used for file database maintenance. It is a Wizard that can add files to your database from CDs and much more.

WCUUCP.EXE - This provides the functionality of what used to be called wcGATE, and is used to import/export UUCP mail. It is configured using wcCONFIG in the same way you would set it up for Wildcat! 4, but the operation is a little different. Just run wcUUCP and it will automatically check for new incoming and outgoing messages. The idea is to just leave it running. When new files appear in the spool directory or new messages appear on the board, it will automatically toss them right away. It has some logging that is written to wcUUCP.LOG (check this file often, as it can quickly get large). One thing you need to do is make sure that your newsgroup names are *exactly* what the newsgroup name is on the net, no truncations or prefixes or anything like that. This way you don't need to set up a conference-to- newsgroup mapping because wcGATE can just look it up directly. You will want to turn on the newsgroups that you want sent back up to your provider, which is done in wcCONFIG. If you change any of the wcGATE configuration in wcCONFIG, you will need to shut down and restart wcUUCP, which is safe to do at any time, even while it's tossing mail.

WCIDE.EXE - Integrated editor/compiler for wcCODE.

WCC.EXE - Command-line compiler for wcCODE

WCQWK.EXE - This is a QWK/REP tosser for echomail. Type WCQWK by itself to see its command line syntax (basically just Import, Export, or Reset followed by the host name). You need to set up the hosts in wcCONFIG, under QWK Networking. It does not handle translations or attachments at this time. There is also no logging, we'll be adding this before release. It also only supports ZIPped packets right now.

QUIKGATE.EXE - This is a simple utility that will import a list of newsgroups in a plain text file into Wildcat!. You tell it where to start and it goes. For help run QUIKGATE with no parameters.

UTI*.EXE - UTI programs for use with Postlink. You will find it convenient to know that these programs

do not need to be run from the Wildcat! home directory, but you will have to have the WCSRV.DLL available in the path or in the directory from which these programs are run. Not needed unless you are a Postlink system.

WCREPAIR.EXE - This program repairs damaged database indexes. You cannot run this while the server is running.

KICKUART.EXE - This is a small program that is automatically run before doors under Windows 95 to forcibly raise DTR back up. This is needed for some modems so they will accept input from the caller.

First Look & Some Comments

This program is based on a client-server architecture. This means that **_all_** access to the Wildcat! data files is controlled through WCSERVER.EXE. This even includes support programs like wcCONFIG. If you try to start one of these programs without the server running, you'll get a message saying that no Wildcat! server was found. If you shut down the server while something is still using it, any programs using the server will terminate abnormally with Windows exception errors. Start the wcSERVER program now:

Run WCSERVER (if you're running NT, type START WCSERVER).
Run WCCONFIG.

WCCONFIG is the equivalent to MAKEWILD in Wildcat! 4. Take a look around and make use of the HELP system when you need more information. The security system has changed a little bit and extends the Wildcat! 4 idea of secondary security profiles. Security is divided into two sections, security profiles and access profiles. *Security profiles* contain all the options like time online, file ratios, and so on. *Access profiles* contain flags which control whether or not the person gets access to any particular part of the system (conference, file area, doors, etc.). They also contain information on what kind of access people have (read-only, write, etc.). For each security profile, there is always an access profile of the same name. This means that a user with the security profile "Registered" will also have all the access given by the access profile "Registered". You will be able to assign only one security profile to a user, but up to 9 additional access profiles. This gives you a very flexible security system.

To actually start answering the phone and telnet/ftp connections run WCONLINE.

There are only two ways to upgrade your security level at this time (the release will be different). If you log on with WCLOCAL you can use the Security button to change your security level. Once you're sysop, you can go to the sysop menu and edit the user database to change other users' security levels.

You'll notice there are a large number of .WCC and .WCX files in your directory. The whole BBS system is based on wcCODE, from the moment you log on to the moment you log off. Only a few things like the protocols, full screen editor, and the low level QWK routines are not in wcCODE. This means that if you're so inclined, you can have an endless amount of fun tweaking the system. We haven't prepared much documentation on the functions available to wcCODE except for that available in the help files in wcIDE, the Integrated Development Environment (Editor and Compiler). If you are a competent Basic programmer you may be able to figure out how they operate through context. In the final product, the source code will be provided as an add-on option.

This should go without saying, but we'll mention it anyway - don't try to run any Wildcat! 4 utilities or programs with this system! The file formats have changed, and they will NOT work. Chances are that nothing bad will happen if WCSERVER is running (since it doesn't let anybody else access its files while it is running) but you could potentially cause all kinds of problems if you were to shut the server down first.

Unlike previous versions of Wildcat!, one running copy of WCONLINE.EXE can handle all your dial-up lines. If you set up a node in WCCONFIG with a communications port, it will be initialized and used by WCONLINE.EXE when it starts. If you only want to bring up a specific node, WCONLINE.EXE accepts command line parameters to tell it which nodes to bring up.

If you are going to set up QWK you must install a 32-bit ZIP/UNZIP program that avoids running under DOS. We have included UNZ512XN.EXE and ZIP201XN.ZIP in your Wildcat! directory, but you must extract them and read the distribution notices before use.

Supporting FTP

If you set up one or more nodes in WCCONFIG/Node settings as FTP nodes, then you will be able to FTP into your BBS. To allow anonymous FTP, set up a user account in your database (do this from the sysop menu) called ANONYMOUS FTP with a password of just FTP (there is code to prevent this user from logging on interactively). For this user, turn on the "Allow multiple logins" flag so you can have more than one anonymous FTP user at one time. The access that anonymous FTP users get is controlled by the access profile(s) of the ANONYMOUS FTP user.

Supporting Telnet

The CD release includes the Internet Connectivity Package and therefore supports inbound and outbound telnet. All you need to do is set up specific nodes for telnet access and wcONLINE will dynamically assign connections as they are needed. Note that FTP access can also be set for the same nodes as telnet access if desired. Usually the dial-in nodes are separately configured and reserved from internet connections.

Message Packing (removing deleted mail)

The server automatically packs message databases based on the configuration set in wcCONFIG. This requires no effort from the sysop. Packed conferences are logged in WILDCAT.LOG as they are processed.

wcCODE Programs & Running the BBS

Almost all the BBS operation is controled by wcCODE programs. The source for the programs is contained in a large number of .WCC files in your home directory. The .WCX files are packed up into a WILDCAT.WCL file (a library). If a .WCX file is found on disk it is executed rather than the version in the .WCL library, assuming that the sysop has modified the .WCC source code and changed the .WCX version.

Door Setup & Operation - Windows 95 (only)

Most Doors are operational under Windows 95. Follow these steps:

+ Make sure your batch file directory in wcCONFIG is pointing to the correct location
+ In wcCONFIG, set up the door batch file name, no path, just XXXXX.BAT
+ Create a Door Menu and give access to the desired security profiles to your door menu.
+ Make sure your doors are configured to look in the node work directory for their drop files and such. The only drop file created at this time is DOOR.SYS so you need to configure your doors to look for that file. The path would be the same kind of thing as Wildcat 4, for example C:\WILDCAT\ WCWORK\NODE1.
+ Unlike the NT door setup, the doors must be set to access the actual comm port for their node (DOOR.SYS will reflect this)
+ You MUST configure your modem so that S-register S2=43 (ie. the modem escape sequence is the default +++). This is because Wildcat must program your modem to ignore DTR, so that Wildcat can close the port and run the door without the modem hanging up. If you don't do this, Wildcat will hang up as it tries to run the door. An alternative to this is in development

Under Windows 95 doors can only be operated on standard ports, not on 95-specific port cards..

Door Setup & Operation - Windows NT (only)

Doors are easily run under NT. Here's what you need to do:

- **+** Make sure your batch file directory in wcCONFIG is pointing tot he correct location
- **+** In wcCONFIG, set up the door batch file name, no path, just XXXXX.BAT
- **+** Create a Door Menu and give access to the desired security profiles to your door menu.
- **+** Make sure your doors are configured to look in the node work directory for their drop files and such. The only drop file created at this time is DOOR.SYS so you need to configure your doors to look for that file. The path would be the same kind of thing as Wildcat 4, for example C:\WILDCAT\WCWORK\NODE1.
- **+** If your doors need to set up the comm port stuff for each node, have **ALL** the nodes look for COM1 at the standard address BASE=3F8, IRQ=4. This is necessary because all door access is virtualized. Do this even if you're not running any nodes on COM1. This is put in the DOOR.SYS too so your doors will probably automatically read it.

On a NT system your doors should work from any node, locally, and even via telnet!

Doors as Menu Items

You can also run doors directly off the menu tree without having to go through the door menu. In the menu program (in wcCONFIG), just run the wcCODE program "RUN A DOOR" with the parameters as either the name of the door as configured in wcCONFIG, or the name of the batch file. Don't forget to set the appropriate security for the "RUN A DOOR" program in wcCONFIG, as well as setting the security in wcCONFIG for the door itself.

@ Codes for use in display files

@CLS@
@CONF.NAME@
@CONF.NUMBER@
@DATE@
@DAYOFWEEK@
@FILE.AREA@
@FILE.COPYBEFOREDOWNLOAD@
@FILE.COST@
@FILE.DATE@
@FILE.DESCRIPTION@
@FILE.DLTIME@
@FILE.DOWNLOADS@
@FILE.FAILEDSCAN@
@FILE.FILETIME@
@FILE.FREEFILE@
@FILE.LASTACCESSED@
@FILE.NAME@
@FILE.NEVERDELETE@
@FILE.NEVEROVERWRITE@
@FILE.OFFLINE@
@FILE.PASSWORD@
@FILE.SIZE@
@FILE.STOREDPATH@
@FILE.TIME@
@FILE.UPLOADER@
@MSG.DATE@
@MSG.FROM.NAME@
@MSG.NUMBER@
@MSG.PRIVATE@
@MSG.REFERENCE@
@MSG.SUBJECT@
@MSG.TO.NAME@
@OTHERUSER.ADDRESS1@
@OTHERUSER.ADDRESS2@
@OTHERUSER.ALIAS@
@OTHERUSER.BIRTHDATE@
@OTHERUSER.CHATAVAILABLE@
@OTHERUSER.CITY@

@OTHERUSER.COMPANY@
@OTHERUSER.CONFERENCE@
@OTHERUSER.COUNTRY@ @OTHERUSER.DOWNLOADCOUNTTODAY@
@OTHERUSER.DOWNLOADKBYTESTODAY@
@OTHERUSER.DOWNLOADS@
@OTHERUSER.EDITOR@
@OTHERUSER.ERASEMOREPROMPT@
@OTHERUSER.EXPIREDATE@
@OTHERUSER.FILEDISPLAY@
@OTHERUSER.FIRSTCALL@
@OTHERUSER.FIRSTNAME@
@OTHERUSER.FROM@
@OTHERUSER.HELPLEVEL@
@OTHERUSER.HOTKEYS@
@OTHERUSER.ID@
@OTHERUSER.LANGUAGE@
@OTHERUSER.LASTCALL@
@OTHERUSER.LASTCALLDATE@
@OTHERUSER.LASTNEWFILES@
@OTHERUSER.LINESPERPAGE@
@OTHERUSER.MENUCLEARSCREEN@
@OTHERUSER.MINUTESLOGGED@
@OTHERUSER.MSGDISPLAY@
@OTHERUSER.MSGSWRITTEN@
@OTHERUSER.NAME@
@OTHERUSER.NETMAILBALANCE@
@OTHERUSER.PACKETTYPE@
@OTHERUSER.PHONENUMBER@
@OTHERUSER.PROTOCOL@
@OTHERUSER.QUOTEONREPLY@
@OTHERUSER.SECURITY@
@OTHERUSER.SEX@
@OTHERUSER.SORTEDLISTINGS@
@OTHERUSER.STATE@
@OTHERUSER.SUBSCRIPTIONBALANCE@
@OTHERUSER.TERMINALTYPE@
@OTHERUSER.TIMELEFTTODAY@
@OTHERUSER.TIMESON@
@OTHERUSER.TITLE@
@OTHERUSER.TOTALDOWNLOADKBYTES@
@OTHERUSER.TOTALUPLOADKBYTES@
@OTHERUSER.UPLOADS@
@OTHERUSER.ZIP@
@PAUSE@
@SUB1@
@SUB2@
@SUB3@
@SUB4@
@SUB5@
@SUB6@
@SUB7@
@SUB8@
@SUB9@
@SYSTEM.BBSNAME@
@SYSTEM.FIRSTCALL@
@SYSTEM.SYSOPNAME@
@TIME@
@USER.ADDRESS1@
@USER.ADDRESS2@
@USER.ALIAS@
@USER.BIRTHDATE@
@USER.CHATAVAILABLE@
@USER.CITY@
@USER.COMPANY@
@USER.CONFERENCE@
@USER.COUNTRY@
@USER.DOWNLOADCOUNTTODAY@
@USER.DOWNLOADKBYTESTODAY@
@USER.DOWNLOADS@
@USER.EDITOR@

@USER.ERASEMOREPROMPT@
@USER.EXPIREDATE@
@USER.FILEDISPLAY@
@USER.FIRSTCALL@
@USER.FIRSTNAME@
@USER.FROM@
@USER.HELPLEVEL@
@USER.HOTKEYS@
@USER.ID@
@USER.LANGUAGE@
@USER.LASTCALL@
@USER.LASTCALLDATE@
@USER.LASTNEWFILES@
@USER.LINESPERPAGE@
@USER.MENUCLEARSCREEN@
@USER.MINUTESLOGGED@
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@USER.NAME@
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@USER.SUBSCRIPTIONBALANCE@
@USER.TERMINALTYPE@
@USER.TIMELEFTTODAY@
@USER.TIMESON@
@USER.TITLE@
@USER.TOTALDOWNLOADKBYTES@
@USER.TOTALUPLOADKBYTES@
@USER.UPLOADS@
@USER.ZIP@

Color codes

Note the use of Single-Digit color codes as defined in wcCONFIG. See the explanation of the advantages of these types of codes in the ANSI DRAW (wcDRAW) section of wcCONFIG

Code Description	Default	
@N@ Normal color Yellow	@0E@	
@H@ Highlight letter	White	@0F@
@T@ Title color	Cyan	@0B@
@A@ Alternate title Green	@0A@	
@F@ Field color	White	@0F@
@U@ User input color	White	@0F@
@L@ Lowlight colorGray	@07@	
@E@ Error color	Red	@0C@
@R@ Reverse color Reverse	@70@	

How to Make the Bulletin Menu Work

The bulletin menu doesn't automatically know how to display bulletins. What you need to do is edit your BULLETIN.BBS file and place special "link" codes in it that tell Wildcat! which files to load for which selections. Suppose you want to make your bulletin menu look like this:

> * This is a bulletin menu *
>
> [1] BBS Phone Numbers
> [2] Last ten callers
> [3] Newsletter

This is how you might construct the BULLETIN.BBS file (leaving out color codes so they don't confuse the issue):

       * This is a bulletin menu *

       [1] @LINK SEL=1 TITLE="BBS Phone Numbers" GOTO=BULL1@
       [2] @LINK SEL=2 TITLE="Last ten callers" GOTO=LASTTEN@
       [3] @LINK SEL=3 TITLE="Newsletter" GOTO=WC:\DISP\NEWSLTR@

The first selection will load BULL1.BBS from the bulletin directory. Actually, it will be loaded from the same directory that BULLETIN.BBS is in, which would be the bulletin directory.

The second selection will load LASTTEN.BBS from the bulletin directory. Note that it's not necessary to name your bulletins BULLxx.BBS. However, Wildcat will only scan for new bulletins if they have names of the form BULLxx.BBS where xx is a number.

The third selection will load the NEWSLTR.BBS file out of the display directory. Note that this is not necessarily a directory called "DISP", but is whatever is actually defined in Makewild as the display directory path. The name "WC:\DISP\..." is a special path that translates to the current display directory. If you get into poking around in the *.WCC code, you'll see a lot more of that kind of path.

Things that don't work in the Preview CD Release

This Preview CD does not represent a completed product, nor is it designed to provide you with a fully operational BBS system. It is designed to allow you to explore just how a client/server BBS operates in the Windows environment. As a Preview, some things are not yet completed. Here is an incomplete list of things that aren't done:

Wildcat!

+   Sysop chat
+   Return receipt messages
+   Lock out user flag (change user's password instead)
+   FILE_ID.DIZ processing on uploads
+   Handling of duplicate uploaded files
+   The line-mode message editor is not yet complete
+   @IFSEC=...@ codes not supported yet
+   REP packets do not support offline configuration messages are not yet complete

wcCONFIG

+   Some of the options in wcCONFIG aren't actually hooked up to anything yet
+   Off-line mail is not operational at this time
+   Languages are not operational

Uninstalling the Annihilator Preview

For Windows 95 users, there are no special steps necessary to uninstall the Annihilator preview. Simply remove the directory containing the Annihilator files, and remove the program group.
For Windows NT, there is a system registry entry set up that installs a "virtual device driver" used by the 16-bit door support. To remove this entry, do the following:
1.   Start the REGEDT32 program. Note that you must be logged on as an administrator for this procedure to work.
2.   Go to the HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\ VirtualDeviceDrivers registry key. This key will have a value in the right hand pane called "VDD" of type REG_MULTI_SZ. Edit this value by double clicking on it, and remove the entire line of text containing the file name "wcdoornt.dll". Be careful not to remove any other entries

that may be present.
3. Restart your computer to be sure that this virtual device driver is unloaded from memory.
4. You may now delete the Annihilator directory and program group.