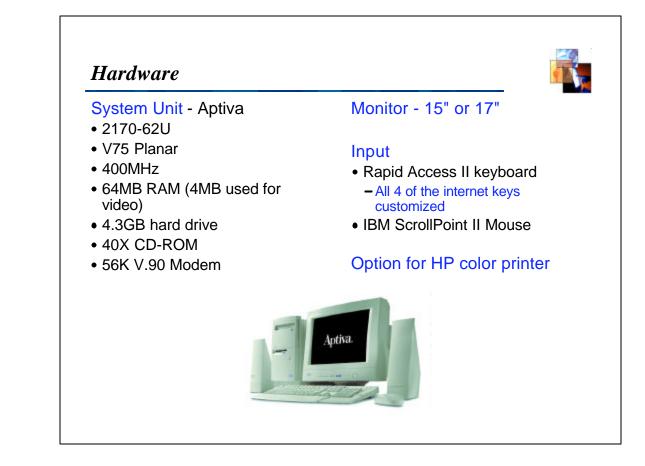




Objectives of the course

By the end of this course, you should be able to:

- 1. Describe the hardware for this special bid
- 2. List the software preload and software options for this package
- 3. Understand and support the basic installation of the DirectWeb software so that it is "up and running"
- 4. Understand and support the configuration of the DirectWeb software
- 5. List instances where calls should be warm-transferred to DirectWeb technicians
- 6. Perform basic problem determination/know when to reinitialize, restore, and recover the software loads
- 7. Understand the maintenance option available for DirectWeb customers



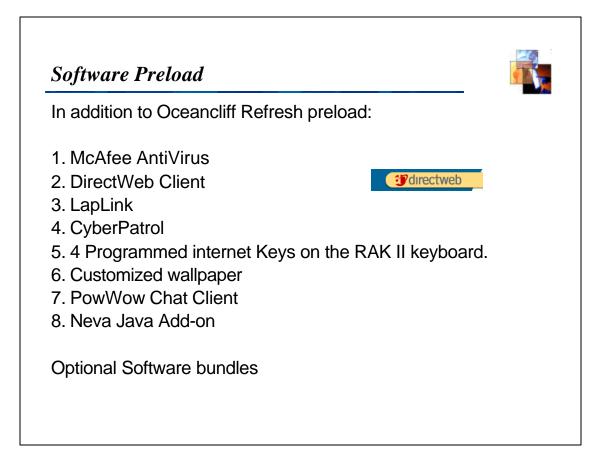
Oceancliff Refresh machine

Model - V75M DirectWeb bid

Preload Version - J81US08

BIOS Version - V75EN1-2C

Processor - K6-2 530



Delete from the Current Oceancliff Refresh V75 preload:

- 1) Demo Installer
- 2) IBM demo
- 3) Desktop Security
- 4) AOL icon from desktop
- 5) IBM internet dialer
- 6) Scroll point 2 mouse

Note: Software Select CD has Norton's Antivirus. Vendor assures us that they can run concurrently without problems.



Software Bundles not Supported

- Home Essentials
- Fun and Educational Bundle for Ages 4-8
- Let's Learn Software Bundle for Ages 9-12
- Student Tools Software Bundle



Home Essentials Software Bundle Titles: Websters New World Dictionary & Thesaurus Rand McNally Tripmaker 2000 Rand McNally New Millenium World Atlas Deluxe World Book Millenium 2000 Perfect Photo Fun & Educational Bundle for Ages 4-8 Titles: Edmark's Millie & Bailey Kindergarten Edmark's Travel the World with Timmy Crayola 3D Magic Reader Rabbit 1st Grade v.2.0 Pajama Sam Let's Learn Software Bundle for Ages 9-12 Titles: Math Blaster Ages 9-12 Reading Blaster Ages 9-12 SuperSolvers: Mission T.H.I.N.K. 3D Castle Creator Logical Journey of the Zoombinis Ultimate Writing & Creativity Center Student Tools Software Bundle Titles: Webster's New World Dictionary & Thesaurus Mavis Beacon Teaches Typing 9 MathSoft Studyworks! Math Princeton Review SAT, ACT, PSAT



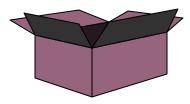
PC Institute

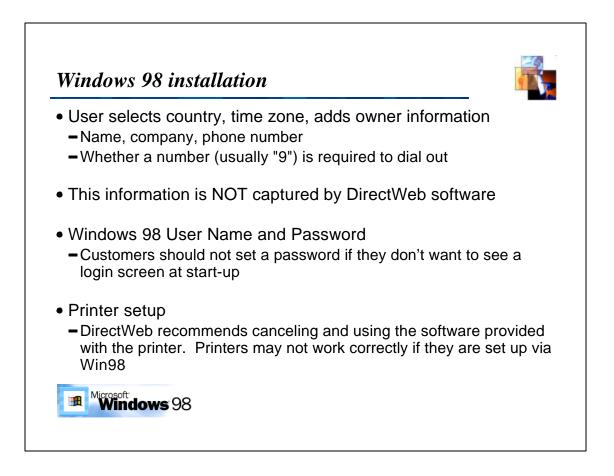
Installation

Customer's OOBE (Out of Box Experience)



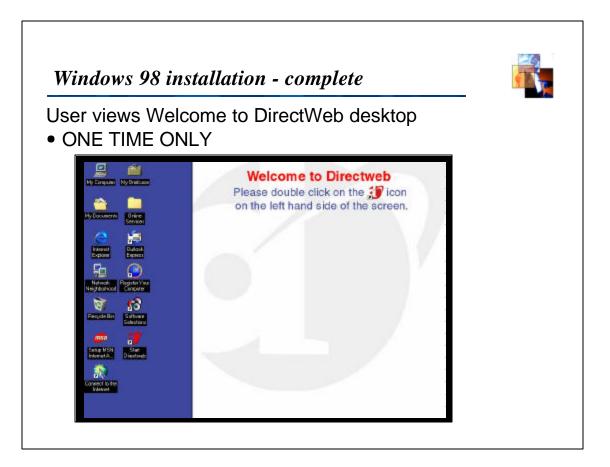
- Regular Windows 98 customization
- DirectWeb user information
- Dial-up DirectWeb
- Outlook Express initialization
- Restart of DirectWeb with user list
- Connect or cancel



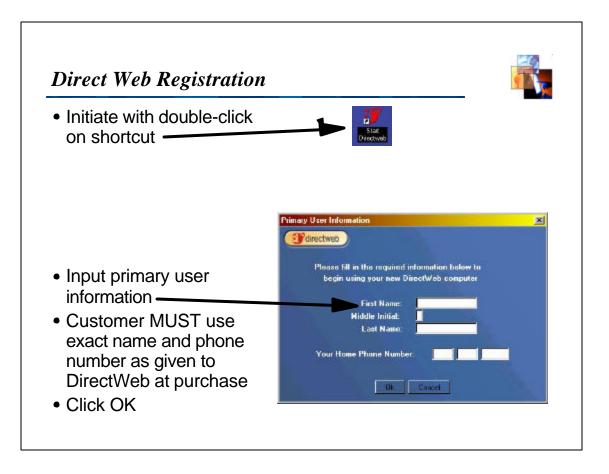


Never 'Cancel' the Windows 98 login screen. If the customer does not want to use the Windows 98 login, then find and delete all files ending *.pwl. Have the customer reboot, and confirm that there is no login screen. The customer will need to enter the name once more, but leave the password fields blank for Windows 98. This will eliminate the need to log into Windows 98. Run oeinit.exe to reset the Microsoft Outlook Express 5 passwords.

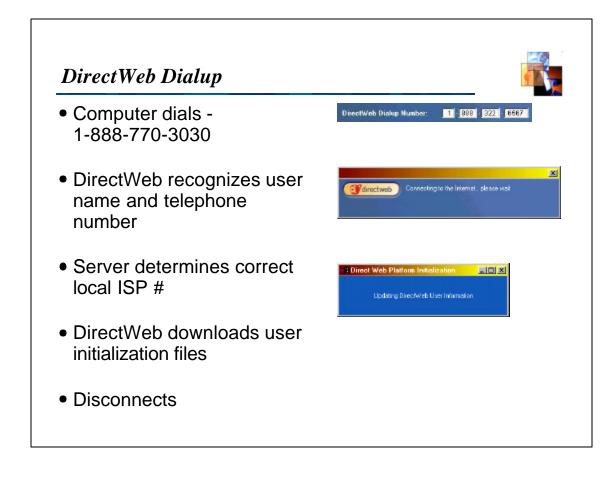
Important Note: Whenever the *.pwl file(s) are deleted, the passwords used in Microsoft Outlook Express 5 will need to be reset. To reset the Microsoft Outlook Express 5 passwords, run c:\dwusers\oeinit.exe following the instructions included in this document.



The Windows 98 Welcome screen (Connect to the Internet option) may lead some users to accidentally install Microsoft Network. This can lead to many problems with the DirectWeb browser program.



This is the 'Primary User Information' screen, which is used to capture and store customer information. It will appear after a re-initialization, possibly after a software update, and when you use DirectWeb for the very first time. Enter your name in the appropriate fields and your home telephone number, including area code, in the field labeled 'Your Phone Number'. If this screen appears continuously, and you are not able to use the DirectWeb Internet Guide, some of the information entered in the screen may be inaccurate. Verify that the number entered in the 'Your Phone Number' field is the same home phone number you provided DirectWeb with when you placed your order. If you still encounter problems, please call DirectWeb Technical Support for assistance.



DirectWeb downloads two files - obj.ser and oeusers.ini.

They are copied to the following locations:

1. C:\dwusers\obj.ser C:\DirectWeb\setup\oeusers.ini

During this process, the c:\dwusers\obj.ser file and c:\directweb\setup\oeusers.ini are being constructed. If the customer's machine locks or hangs at this point, it may indicate that the customer input their Primary User Information incorrectly.

To see a list of ISP numbers go to ZipLink - www.ziplink.com/directweb. You will be asked for a username (directweb) and password (dwzip). Click OK and follow instructions on the web page to determine what ISP number is assigned to the customer's telephone number.

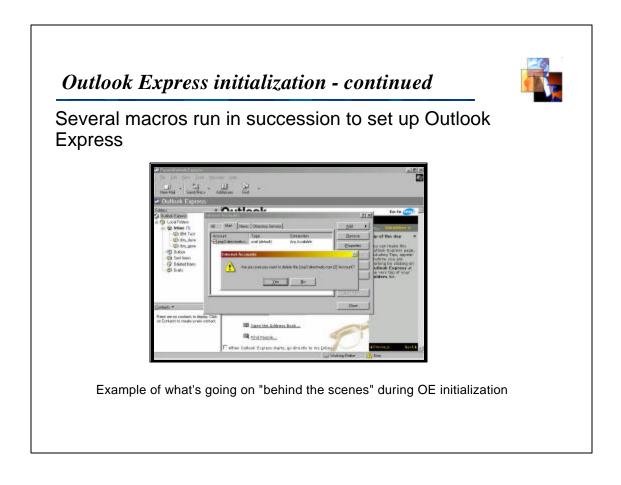
Automatic	ally starts the setup of Outlook Express
This scree	en covers Outlook Express initialization
T Desctwid	a Internet Settings
	DirectWeb is now automatically setting up your E-mail. This may take several minutes
	Fleuse do not touch your keyboard or mouse until the process is complete.
	Updating. Please be patient

Macros for this routine are contained in the C:\DirectWeb\setup\oeinit.exe file.

This screen will appear when the DirectWeb Internet Guide is setting up e-mail. While the screen appears, the DirectWeb Internet Guide is accessing the DirectWeb profile and configuring the computer. User should follow the instructions on the screen and not touch the mouse or keyboard or interfere with the computer in any way until the set-up process is completed and the screen disappears. If it remains visible for more than 10 minutes or appears to be stuck, contact DirectWeb Technical Support for assistance.

Behind this screen, Outlook Express will be open, setting up automatically. One possible problem that may occur at this point - if Outlook Express has been modified from its original configuration, then this automated utility may fail. Outlook Express should be the default mail client, should have no folders created under the In Box, should not be using Identities, should have no existing mail profiles, and the option to "Start in Inbox" should not be selected.

After Outlook Express setup is completed, the customer would see a dialog box notifying them that Outlook setup was completed successfully, then the Platform Initialization message will be displayed while the DirectWeb browser dials the ISP. Note: DirectWeb automatically creates the dial-up connection information using information in the customer's file.



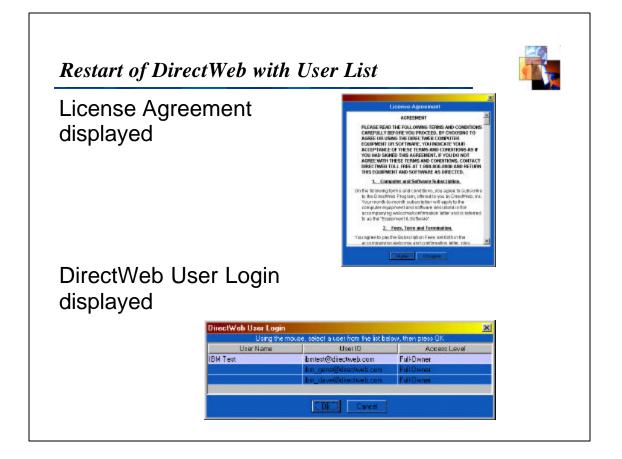
- The script may fail if the customer interrupts by clicking the mouse or using the keyboard.
- The script may fail if Microsoft Outlook Express 5 takes too long to respond to a script command.
- The script will fail if Microsoft Outlook Express 5 has been altered from its DirectWeb defaults.

User may receive error message	Error: Make sure Outlook Express closed
Information message at Outlook Express initialization completion	Thank you for your patience E-mail setup is complete.

If user receives error message, they can either

- Click OK
- Close Outlook Express

OE initialization makes two attempts to complete. If both are unsuccessful, "E-mail setup is complete" message is still displayed, but Outlook Express may not function correctly.



If user entered name and/or telephone number different from name & number registered with DirectWeb, no names will appear in the list. (See Reinitialization Utility.)

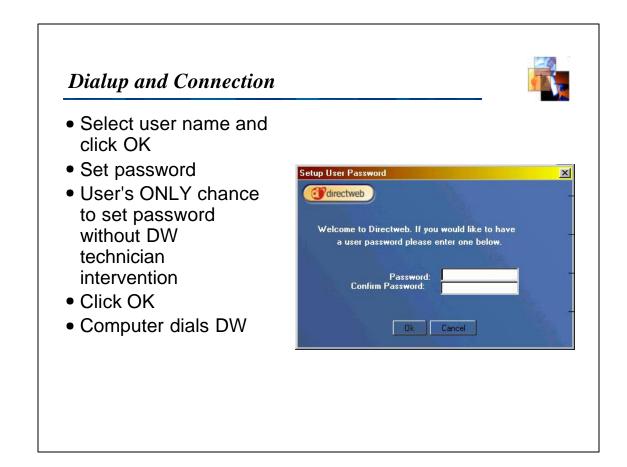
If user elects to cancel out of the DirectWeb User Login screen, they can initiate it again by clicking on any of the DirectWeb shortcuts.

The customer will be asked to select their User Name from a list. This was instituted to accommodate running multiple users on one machine. The User Login dialog box may have more than one User Name listed. A DirectWeb account may have up to five e-mail addresses, and multiple sign-on's will be automatically set in the User Login via the Primary User. This information is downloaded to c:\directweb\setup\oeusers.ini . If there is more than one user associated with this account, they will automatically be available in the User Login screen.

If user elects to connect to DirectWeb by clicking OK, actions are described in the dialup and connection section of the course.

Restart of Dire continued		n User List	-	
Basic installation	on complet	е		
New desktop o	-			
Ny Conputer My Bietcare			(directive	
My Documents Directiveb				
iterent Batak				
Explorer Express Explorer Express Connect to the Register Your				
Internet Computer	DirectWeb User Login		×	1
V 53		ouse, select a user from the list be		
Recycle Bin Software Selections	User Name IBM Test	UserID bntest@directweb.com	Access Level Full/Diviner	
	IDH TOK	bin gene@dractweb.con	FullOwner	
		bn_dave@diectweb.com	FullDinner	
Setup MSN Internet A.,				
5		CDk Cancel		
Network	Contraction Contraction (1999)	a set of the set of the set of the set		

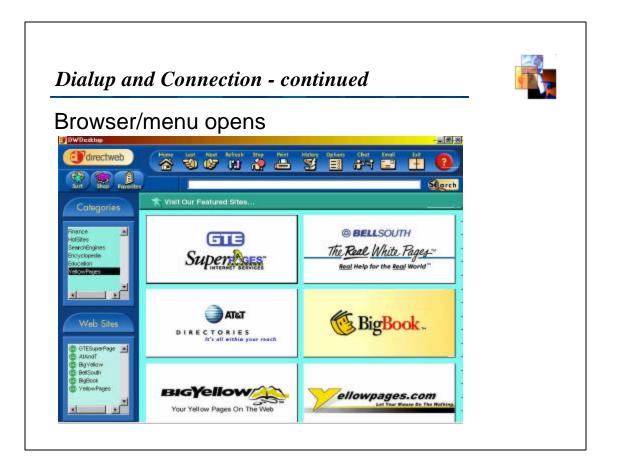
If the 'User Login' screen does not contain any names, it means the information entered at the Primary User Setup screen did not match DirectWeb records. User will be unable to use the DirectWeb Internet Guide until Technical Support contacted for assistance. Attempts to correct the problem without assistance from Technical Support may result in computer not functioning. Please call DirectWeb Technical Support for assistance if your DirectWeb User Login screen does not list any names.



This is the 'Primary User Information' screen, which is used to capture and store customer information. It will appear after a re-initialization, possibly after a software update, and when DirectWeb is used for the very first time. Enter name in the appropriate fields and home telephone number, including area code, in the field labeled 'Your Phone Number'. If this screen appears continuously, and user is not able to use the DirectWeb Internet Guide, some of the information entered in the screen may be inaccurate. Verify that the number entered in the 'Your Phone Number' field is the same home phone number provided DirectWeb with when order was placed. If problems still encountered, call DirectWeb Technical Support for assistance.

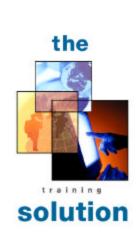
Users are given one chance to create a DirectWeb connection password - at initial connection. Each of the three users can have a separate password, or some may have passwords and others may elect not to have one.

If a users decides in the future that he/she would like to have a logon password, theDrectWeb Technical support must be contacted (email or telephone).



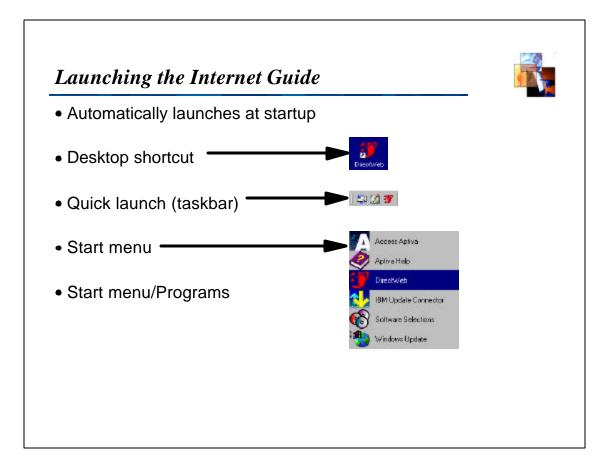
Browser/menu is displayed while dialer is making connection.

Caution user that clicking on a button/link will not load a web page until the dialup connection has been established.



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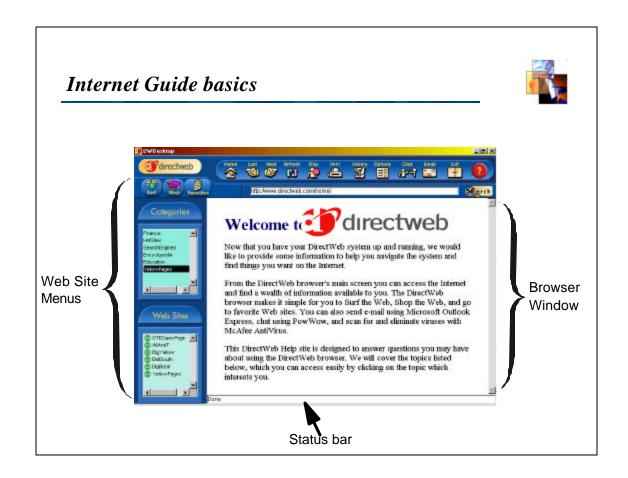
Supporting the Internet Guide (Browser)



The gosym.bat file is started. User will see (briefly) a DOS window on the screen. This file sets the broad parameters used by the DirectWeb browser. Gosym.bat should run minimized, and exit on close. If it doesn't, it is recommended to adjust the customer's settings. Adjust the following pif files to run minimized, and to close on exit:

C:\DirectWeb\DWLauncher\gosym

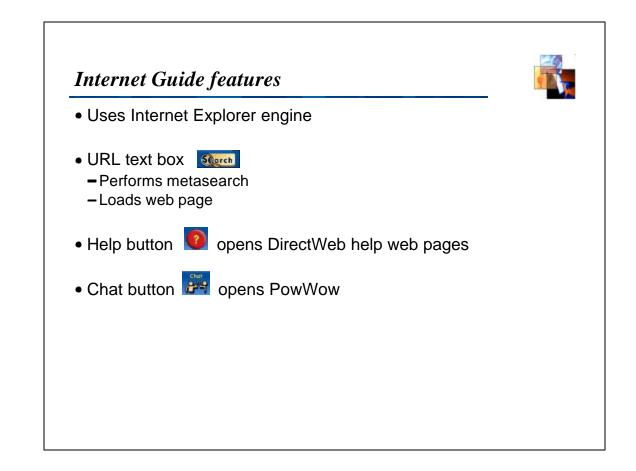
 $C:\label{eq:c:decomposition} C:\label{eq:c:decomposition} C:\label{eq:c:$



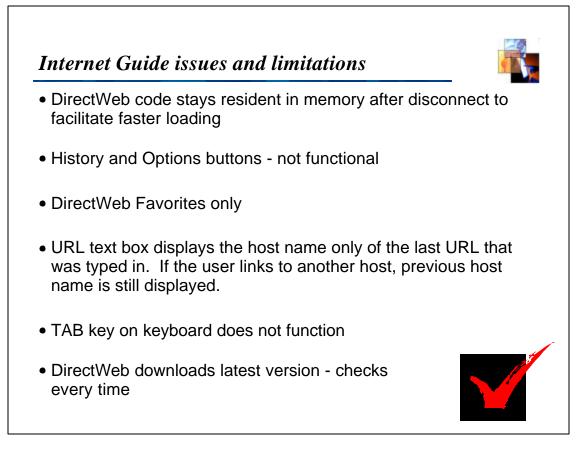
Starts with large window, NOT maximized. It covers the Windows taskbar. Maximizing the window allows the taskbar and the browser to be visible. Status bar section is not visible when menus are displayed.

Left-hand side of the window is fixed. Clicking on one of the menu categories loads 4-6 commercial buttons in the browser portion of the window. Users may access the web page of one of the commercial sponsors by clicking on the button or on the Web Site name (under Categories).

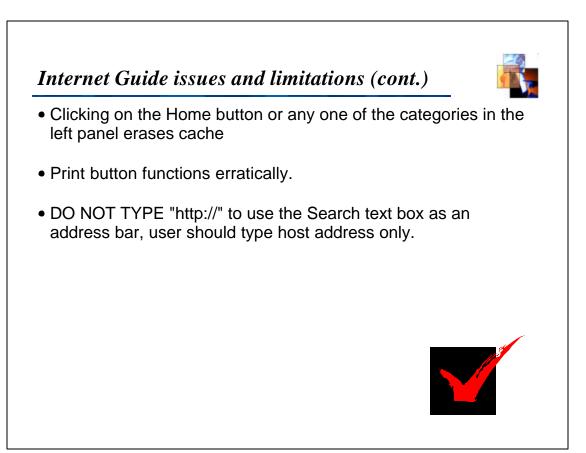
Default resolution for DirectWeb machine is 800X600. If user changes the resolution while using the browser, he/she may need to refresh the screen for it to look right.



- ► Uses Internet Explorer engine expect to see IE error and information messages
- ► URL text box can be used as a metasearch engine
 - Type keywords, click on Search button
 - ► Web page(s) displayed with links to pages using keywords (lists search engines used)
- URL text box can be used to load web page
 - ► Type URL DO NOT TYPE "http://" in front of URL
- ► Clicking on Help button opens DirectWeb help web pages
- ► Chat button opens PowWow in a separate window



- History and Options buttons on the toolbar are not functional (as of 2/4/00)
- ► Users cannot add their own Favorites (as of 2/4/00)
- When a web page is displayed, URL text box displays only the host name, not the complete web address
 Example: http://cnn.com/WEATHER/html/LahainaHI.html
- ► TAB key on keyboard does not function to move cursor. User MUST use mouse to select.
- The DirectWeb browser tracks its version number in the following file:
 C:\directweb\releasenotes.txt
- If a user is experiencing difficulties with the DirectWeb browser, check the version number in the release notes. If the customer is running an older version, they may have had a problem updating files. Also, if that older version has a set of known problems, and the customer is experiencing those same problems, the next step will be to concentrate on getting them updated to a cleaner version of the DirectWeb browser.



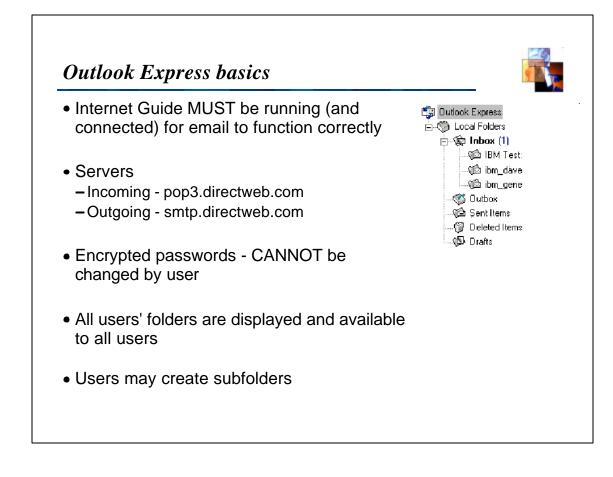
Home button - Back and Forward buttons will no longer return to previous pages

Print - User can try clicking the right mouse button on the web page and choosing "Print."



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Supporting Email



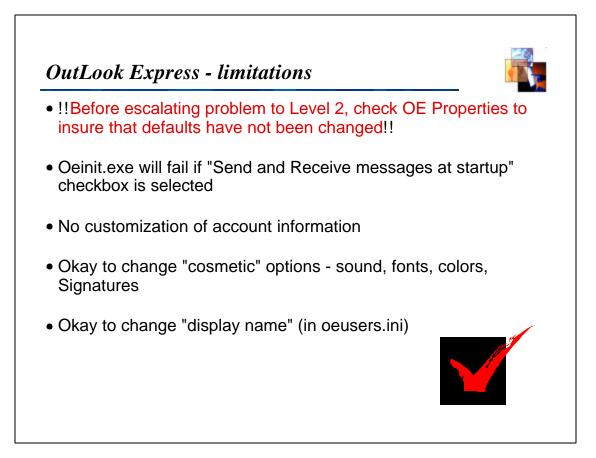
► See Chapter 5 (DirectWeb Technical Guide) - MS Outlook Express 5

► Outlook Express application - ALL options controlled by DirectWeb

- ► Servers
 - Incoming pop3.directweb.com
 - Outgoing smtp.directweb.com
- Encrypted passwords/ cannot be changed within the program users MUST contact DW technicians to change password.
- To add or change any existing e-mail account, send an e-mail to techsupport@directweb.com. Include full name and home phone number, the e-mail address to add or change, and what you wish the e-mail changed to. Provide a 2nd and 3rd alternative in case 1st choice is unavailable.

DirectWeb will make the requested change. Depending on the nature of the change, DirectWeb technical support will respond with either a phone call, and e-mail, or both. After the change or addition has been processed, a Full Re-Initialization needs to be run on the home computer, before those changes will be visible.

► All user's folders are displayed. Email for all users is accessible to all users.

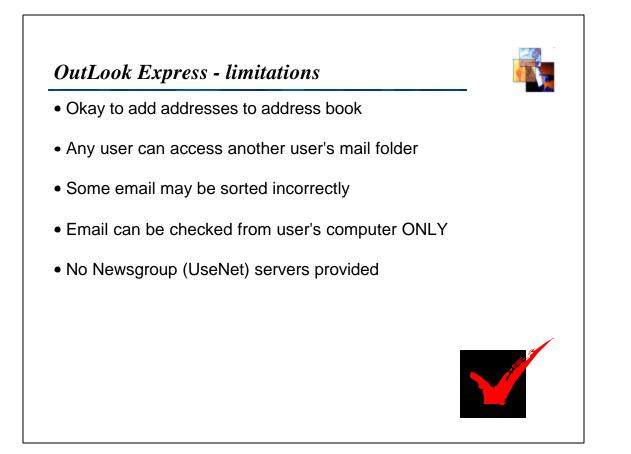


Chapter 5 - DW Technical Guide lists every correct default menu for Properties and Options.

Preload for 1/13/00 has "Send and Receive messages at startup" checked. CORRECT THIS FIRST!

No customization of account information (Tools, Accounts) servers, passwords, "identities," Setting up identities may corrupt email accounts

Okay to change "display name" (in oeusers.ini) so that users 2-5 can have full name (rather than email ID) displayed. (Requires that users edit the file using Notepad)

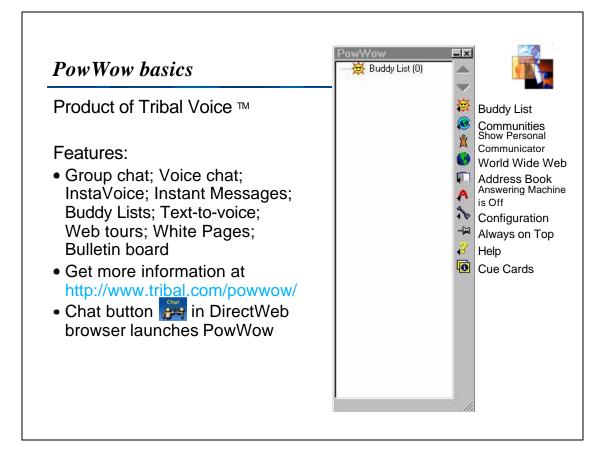


Outlook Express stores the sort information at Tools/Message Rules/Mail, and this information is setup automatically by DirectWeb. In cases where the e-mail addresses are similar, Outlook Express may make errors when sorting the messages. E-mail may be sent to the wrong folder, or to the Inbox. The sort works by checking the e-mail address in the 'To' field of the incoming e-mail message. That message is then routed to a matching folder. When Outlook Express does not recognize the name in the 'To' field of the incoming e-mail message, that message is routed to the Inbox. If you have e-mail addresses that are similar, for example ajones@directweb.com and jones@directweb.com, then mail for both of these addresses will be incorrectly sorted into the jones file folder.



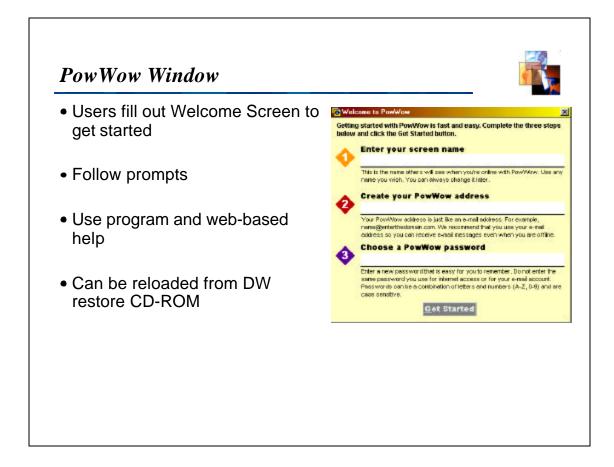
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Supporting PowWow



From Tribal Voice web page

"PowWow® is a fully integrated instant messaging, interactive communications and online community solution that features the only instant voice messaging and integrated voice chat capabilities available, as well as group chat, instant messaging, buddy lists, and real-time peer-to-peer communication. PowWow users can utilize a collaborative white board and bulletin board system, conduct Web tours, and share files, URLs and sounds. In addition, PowWow's highly scalable distributed community server (DCS) architecture enables users to quickly and easily create, host, and moderate their own private, personalized online communities. "



From PowWow Help files:

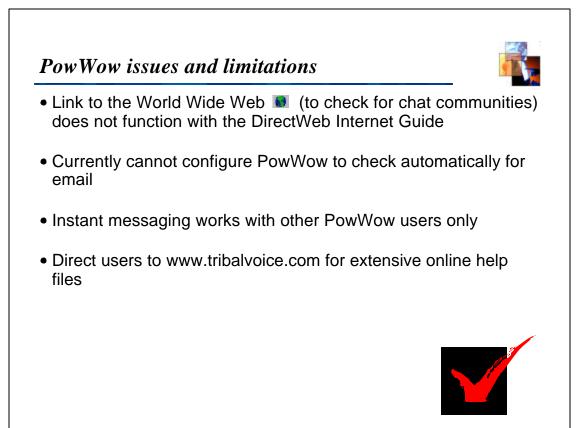
"The PowWow Navigator is the main PowWow window and handles all tasks except those which are available only from the Personal Communicator window. Visually, the PowWow Navigator displays the Communities you have joined and lets you interact with other Community participants in a general manner. (One-on-one communications require the Personal Communicator.)

Important: For help about a dialog, click its Help button. For help about a menu item, highlight (don't click) the item and press function key F1.

Important: Many PowWow menus and options are accessed by right-clicking a displayed entry, such as a Community name or a user's name.

PowWow User's Guide

The new PowWow User's Guide is an executable file named PWMANUAL.EXE. The presentation resembles a Web browser. If you have a license to host a Community, you will want to refer to the Community Administration Supplement, which is in PWHOST.EXE."



Instruct users to use www.tribalvoice.com (in DW search bar) to browse for communities



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Problem Determination and Utilities

Problem Determination Browser does not launch



All files must be present

See notes for files and locations

Use Restore Utility (make sure DW files are not currently running)

Use Restore CD-ROM (this may replace with an older version of the software, but it will be updated at first connection)

The DirectWeb Browser can not launch if the program files are not in place. As part of the troubleshooting, check for the presence of the following files:

c:\directweb\bin

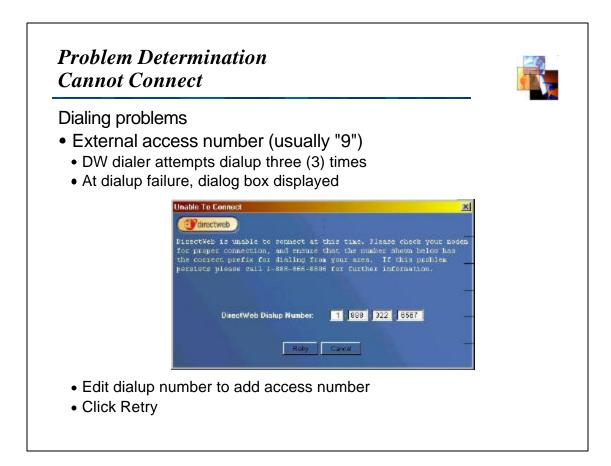
c:\directweb\bin\com c:\directweb\bin\dwchanneldata c:\directweb\bin\dwlauncher c:\directweb\bin\neva c:\directweb\bin\shdocvw c:\directweb\bin\swing c:\directweb\images

c:\directweb\license

c:\directweb\setup

If these files are not in place, they can be replaced by two methods.

Method 1: Use the DirectWeb Restore Utility. This utility will only function correctly if no DirectWeb related files are open. Close the "DirectWeb User Login" if it is present. Then perform a single ctrl-alt-del and verify there are no DirectWeb files loaded. Check specifically for gosym.bat, wjview, and any programs marked 'not responding'. After verifying there is nothing present to interfere with the restore, run the DirectWeb Restore Utility. This utility is located at Start/Programs/DirectWeb/Support. After running the restore utility, try launching DirectWeb again. If it still does not work, reboot the computer. If after a reboot problems are still experienced, use Method 2, Restore CD-ROM.

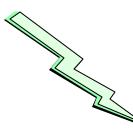


Problem Determination Cannot Connect



Dialing problems

- Call Waiting feature on user phone need to disable
 - Login from normal DW login screen
 - When password dialog box is displayed, pickup phone handset and dial *70
 - Enter password and continue logging in as usual



This does not always work.

DirectWeb is working on a fix, but it is not ready yet.

Typical issues and problems



Questions to ask:

- Has the customer installed a 3rd party browser, for example, MSN, AOL, or Netscape?
- Has the customer ever successfully launched the browser?
- Does the customer receive an error message when DirectWeb tries to launch?
- Have either the DirectWeb Re-Initialization Utility or the DirectWeb Restore Utility been run on the machine?
- What folders are in the c:\directweb directory?
- Does the customer see the gosym.bat window?
- Does the customer see the DirectWeb User Login screen?
- Does the customer receive an "Unable to Connect" error?
- Has the DirectWeb connectoid (under Dial-up Networking) become "null"?
- Has the customer seen either the "Connect To" or "Dial-up Connection" screen?



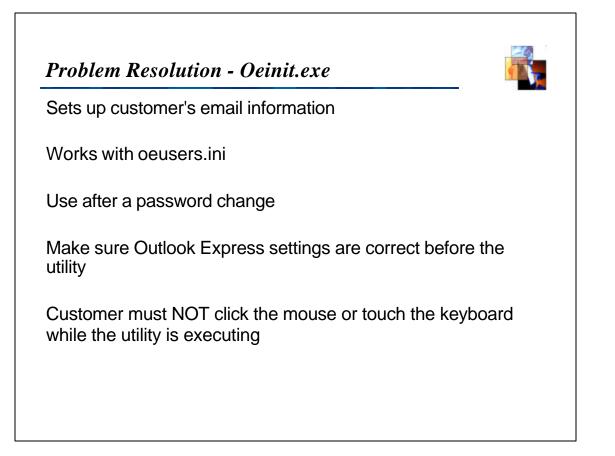
Problem Determination PC Doctor shortcut launches DirectWeb



Using Start, Programs, PC Doctor to display the Aptiva system information launches the DirectWeb gosym.bat file

To remedy, install the full version of PC Doctor from the Software Select CD-ROM





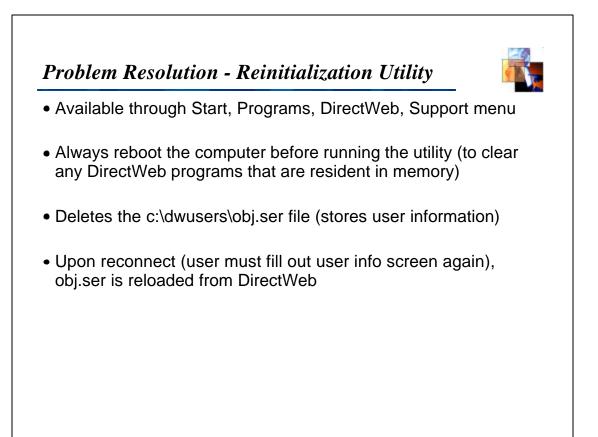
See Chapter 10 - DW Utilities and Configuration Tools/DirectWeb Internet Settings Utility

Oeinit.exe is located at c:\directweb\setup\oeinit.exe and is used in conjunction with c:\directweb\setup\oeusers.ini.

The oeusers.ini contains the information used by oeinit.exe to set up customers e-mail information. After oeinit.exe has been run, oeusers.ini is renamed to oeusers.old, or oeusers.ol# (where # is a sequential digit) if oeusers.old already exists and copied to the folder c:\dwtools.

Oeusers.ini is created when the customer re-initializes their machine. If a customer is experiencing a problem with e-mail passwords, and the existing oeusers.ini contains the correct and most recent e-mail information (look at the date/time stamp on the file and make a judgment call), then it is possible to fix the customers e-mail problem by running oeinit.exe.

Oeinit.exe will only execute properly if Microsoft Outlook Express 5 is set to the correct defaults. Before running oeinit.exe, the technician must walk the customer through verifying that Microsoft Outlook Express 5 is set up correctly.

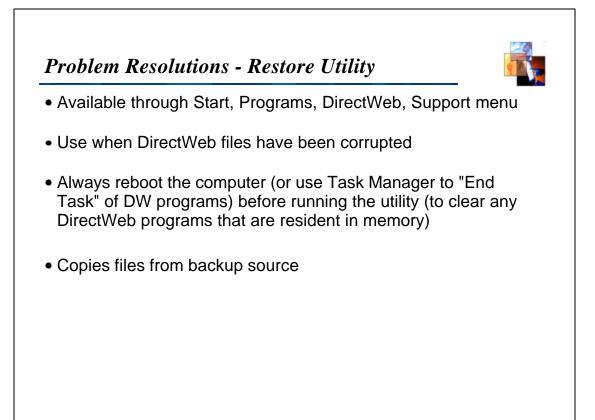


See Chapter 10 - DW Utilities and Configuration Tools/Re-Initialization Utility

The DirectWeb browser stores user information, etc, in a file called obj.ser. This file is created when the customer logs on for the first time, whenever the DirectWeb browser finds the file missing, and is read each time the DirectWeb browser is launched. It is possible for the obj.ser file to become corrupted. There are circumstances under which it may be helpful to delete this file.

Use the DirectWeb Re-Initialization Utility to delete the obj.ser file. Do not have the customer delete this file manually. Use the DirectWeb Re-Initialization Utility if:

- The customer's DirectWeb User Login screen contains no names
- The customer has forgotten their DirectWeb Internet Guide password
- The customer wishes to set a DirectWeb Internet Guide password
- The customer has had any changes made to e-mail
- The customer has had any changes made to their name
- The customer has had any changes made to their ISP phone number
- The customer has had any changes made to their home phone number

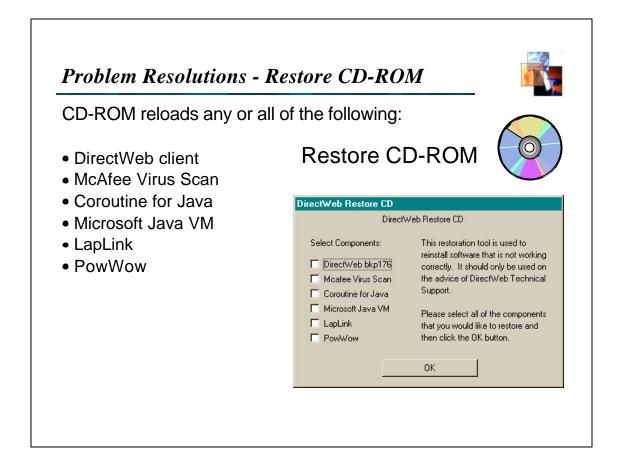


See Chapter 10 - DW Utilities and Configuration Tools/Restore Utility

If you have reason to believe the actual DirectWeb browser software is corrupt, use the DirectWeb Restore Utility. The DirectWeb Restore Utility copies files from the backup source at c:\program files\dw_support\directweb to c:\directweb. If restore is unsuccessful, recommend escalating this situation to Support tier 2, where the Laplink program can be used to help the customer.

Remember that the DirectWeb Internet Settings Utility (c:\directweb\settings\oeinit.exe) will also run. Use the DirectWeb Restore Utility if:

- The DirectWeb Internet Guide will not launch, even after re-booting the computer
- The DirectWeb Internet Guide launches, but returns to the desktop instead of connecting to the Internet
- The DirectWeb Internet Guide locks on launch, even after re-booting the computer

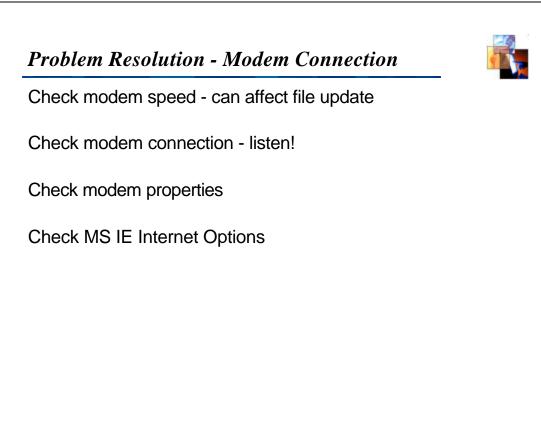


See Chapter 10 - DW Utilities and Configuration Tools/DirectWeb Restore CD

The DirectWeb Restore CD can be used to restore one or all of the components included on the cd. The DirectWeb Restore CD would typically be used if the customer intentionally or inadvertently deleted some or all of the components. The DirectWeb Restore CD could also be if the customer had installed a browser on their computer. Installing other browsers on a DirectWeb computer can cause the DirectWeb Internet Guide to cease functioning.

The DirectWeb Internet Guide will need to be restored under these circumstances:

- The DirectWeb Internet Guide will not launch, even after re-booting the computer
- The DirectWeb Internet Guide launches, but returns to the desktop instead of connecting to the Internet
- The DirectWeb Internet Guide locks on launch, even after re-booting the computer



- The DirectWeb browser can experience file update problems when the modem connection falls below 28,800 baud. The customer may not be aware this is the issue, because the DirectWeb browser is designed to update unobtrusively in the background while the customer is surfing the net. If a customer is experiencing problems, check the connection speed. If the speed is below 28,800 baud, try having the customer reboot and reconnect. They may be able to attain a higher speed.
- Double click on the Connection Icon in the Systray to display the connection speed of the modem. This will also allow you to view the bytes sent and received, verifying a live connection.
- Listen to how the modem is connecting you can usually tell if it is not handshaking correctly. If the modem has to renegotiate its connection more than once, this can return the error message "null, null"
- ► It is recommended to try to dial in again. If this doesn't work you need to verify there is an updated modem .inf file.
- To check what properties your modem has, check the modem properties under Control Panel. Verify the modem is set to 57,600. The volume of the modem speaker can be changed in the same location. To check for connectivity, enter the Diagnostics tab, highlight the COM port of the modem. Click 'Test'. If it comes back with a line full of information that means the modem is accepted and working with the computer.
- Also check Internet Explorer, under Properties/Connection. Verify that "Cancel the call if not connected in 30 seconds" is not checked. You will rarely connect if it is.



Problem Resolution - MSN Installed

At first startup, customers see Windows 98 Welcome Screen

- They click on "Connect to the Internet"
- This leads them to install Microsoft Network
- DirectWeb software will NOT work correctly if MSN installed

Check the Control Panel, Add/Remove Programs to determine if installed.

Follow steps in notes to remedy problem

Registry setting: HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\Run "C:\WINDOWS\Welcome.exe /R" This Windows 98 Welcome screen has a high potential for causing problems, and has already led several customers to inadvertently load MSN 2.5 on their machines.

If MSN 2.5 is found: Remove MSN 2.5 Run DirectWeb Re-Initialization Utility Run DirectWeb Restore Utility Verify the presence of c:\directweb on the hard drive, verify that these folders are present under c:\directweb: c:\directweb\bin c:\directweb\bin\com c:\directweb\bin\dwlauncher c:\directweb\bin\dwlauncher c:\directweb\bin\shdocvw c:\directweb\bin\shdocvw c:\directweb\bin\swing c:\directweb\bin\swing c:\directweb\bin\swing c:\directweb\license c:\directweb\license c:\directweb\license c:\directweb\license

Other Software Support



- McAfee ViruScan up and running only. No known issues. Available from Restore CD-ROM.
- LapLink Used only by Level 2. Determine that it is installed. Available from Restore CD-ROM.
- Java applications Determine that it is installed. Available from Restore CD-ROM.
- CyberPatrol not responsible for support. Available from Software Select CD for reinstall.
- Software bundles some applications (encyclopedia) may experience trouble accessing the Web from within the DW browser. Refer to application vendor or Level 2.

DirectWeb Support Levels

Level I

- Reinstalling the DW browser
- Use of DW Reinitialization Utility
- Use of DW Restore Utility
- Use of DW Application CD (Restore CD)
- Use of DW browsing environment (general usage)
- MS Outlook Express 5.0
 - -Email settings
 - -Receiving email
 - -Sending email
- Use of PowWow software (general usage)

Level II - 888-866-8806

- Special dialer scripts
- Changes to ISP Dial-in numbers ("9" or *70)
- Additions/changes to email accounts, users, addrsses or passwords
- MS Outlook Express password issues and problems that cannot be solved with DW Reinitialization Utility
- Connectivity issues/net access
- ISP Service outages
- Questions submitted via email
- Customer training in use of browser/email/pc
- Incorrect customer data in DW records
- Support for 2400 legacy systems (white boxes)





Depot service

Upon a system failure, the customer is responsible for problem determination using the documented problem determination procedures in the User's Guide. The customer is responsible for providing failure information to the Servicer.

Once the failure code or failing FRU has been identified, the customer places a call for service. This call may go to the IBM PC Helpcenter. If the customer engages the IBM PC Helpcenter or IBM Service, they will be taken through problem determination to verify the hardware failure. Once a hardware failure is verified, the customer can initiate the service delivery method available to their location.

The exception to this process may occur if the failing FRU has been identified as a Customer Replaceable Unit (CRU), and the customer wishes to perform the repair themselves. In which case, the Helpcenter will have the FRU/CRU shipped to the customer and the customer will return the used part. This service option is often used by customers who retain spares to ensure high availability.