



Application Note #159:

Using iNetWizard® with CH2124/60

INTRODUCTION

iModem programming is required to personalize/customize various internet parameters and is typically a one-time event. Although the user may modify the internet parameters as often as needed, most users modify these parameters very infrequently. Cermetek's **iNetWizard®** software package has been specifically designed to streamline the iModem programming activity and is the preferred iModem programming method.

This application note provides detailed step-by-step instructions for accessing and using **iNetWizard®**. Typical iModem programming examples are also included.

iNetWizard® is an MS Windows based application and is offered free of charge to all iModem customers. This application program may be obtained by simply downloading the program from the www.imodem.net web site. Alternatively, copies on 3½ Floppy Disk are available for a nominal fee. Refer to the Cermetek web site or see Attachment II for downloading and installation instructions.

After iModem programming/customization and during embedded system evaluation and debugging, it is desirable to employ a telecommunications software product to facilitate the transmission of information between the iModem and the terminal emulation system/DTE/host system. Communication between the iModem and the DTE system is conducted over the iModem's V.24 (EIA 232-E) serial interface. When system level debugging is required, Cermetek recommends terminal emulation products such as MS HyperTerminal or PROCOMM.

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OPERATIONAL OVERVIEW

iNetWizard® obtains the current Active Configuration Profile from the iNet product and stores a copy in the Local Configuration Profile. All user modifications implemented via **iNetWizard®** are first performed on the Local Configuration Profile. Command directions such as REVIEW EMAIL or UPDATE INET DEVICE cause **iNetWizard®** to transfer the contents of the Local Configuration Profile to the iModem's Active Configuration Profile. Upon completion of the transfer, **iNetWizard®** updates the iModem's Active Configuration Profile and directs the iModem to create a new email message, which includes: TCP/IP packet and header information, CRC Checksums, etc.

This feature is intended to prevent confusing situations where modifications made to the configuration profile are not reflected in transmitted email(s) because the modified configuration profile was not used to update the Active Configuration Profile and, consequently, the desired result did not occur. The user has the option to force **iNetWizard®** to reconfigure the Active Configuration Profile and re-create the email message by clicking on the UPDATE INET DEVICE button.

Dialog Windows. All communication with **iNetWizard®** is through dialog windows and associated pull-down menus. This data entry method utilizes various Graphical User Interface (GUI) appliques resident in MS Windows environments. GUIs allow the user to perform all required activities, including: modifying internet parameters; review, edit and reconfiguring outgoing email messages; send, retrieve and delete emails – all without directly using any of the @T iModem commands. Input data will only be accepted in dialog boxes that contain a white background.

Data Entry Syntax. For the purposes of this document, the following conventions will be observed:

<CR> is used to denote carriage return (equivalent to HEX 0D).

<LF> is used to denote line feed (equivalent to HEX 0A).

Enter: is used to denote the input string entered into an **iNetWizard®** dialog box.

Any information listed in bold is a required portion of the input string. Brackets [] not in bold are intended to serve as delimiters only and are not part of the required input string. All embedded spaces are ignored except when in the data field of the message body or the subject line.

Data Entry. **iNetWizard®** supports character editing. The backspace may be used for this purpose. Additionally, the mouse may be used to position the cursor and/or to highlight character(s) prior to character editing.

A <CR> may be entered at any place in the body of the message (including as the first entry). Note that by convention, a <CR> entered using a standard PC keyboard will actually insert a <CR><LF> into the message.

IMPORTANT NOTE

iNetWizard® will not accept the <CR> as a valid character if entered as part of the response to any of the dialog boxes other than within the message body dialog box. If a <CR> is entered, **iNetWizard®** will assume that the <CR> is intended as a delimiter and will exit the dialog box.

DESCRIPTION OF DIALOG WINDOWS AND ASSOCIATED MENUS

The **iNetWizard®** application program consists of five basic dialog windows. The primary function of each of these windows is summarized below. For a more detailed description, refer to the appropriate section (by the same title) following the summaries.

Opening Dialog Window. This is the initial window displayed when the **iNetWizard®** application launches and it is the window to which all other windows/buttons return.

Compose/Review/Edit Email Dialog Window. This is the primary data input window and is used to compose, review and edit email messages.

Review/Delete Email Dialog Window. This window displays the exact configuration of the outgoing email message (including headers) and is intended to provide the user with a facsimile of the entire message for review. No parameter modification is allowed from within this window.

Configure ISP(s) Data Window. This window is used to modify ISP (Internet Service Provider) related parameters.

Retrieve Email Dialog Window. This window displays the email message (including headers) retrieved. It is also used to select the message delete function. No modification to the retrieved message is allowed from within this window.

OPENING WINDOW

Figure 1 contains an image of the **iNetWizard®** Opening Dialog Window. This is the window displayed after the **iNetWizard®** application launches and it is this window to which all other windows/buttons return.

Dialog Window Buttons.

The Opening Dialog window contains of the following buttons:

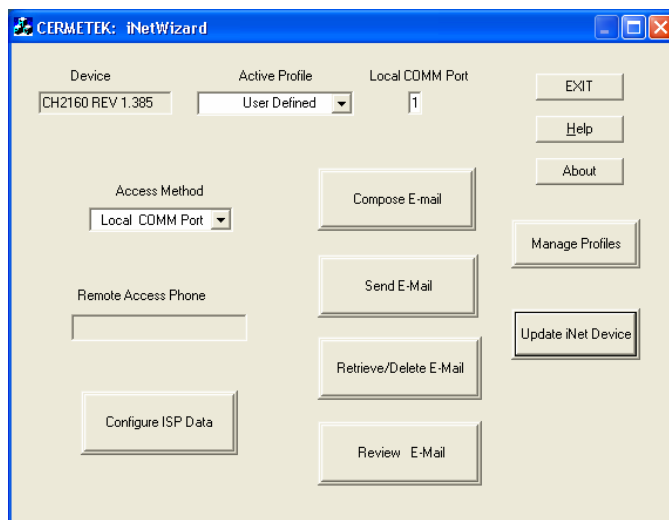


Figure 1. Opening Dialog Window.

Compose Edit Email. This is the work horse user input button. As the title suggests, it is used to compose, review and edit outgoing emails. Selecting this button will cause the COMPOSE/REVIEW/EDIT WINDOW to appear. Using this window, the user may modify various elements of the outgoing email including message type, email content, email subject line, etc. Refer to the COMPOSE/REVIEW/EDIT WINDOW discussion for more details.

Types or Styles of Outgoing Email. Each Send Email iNet enabled product is capable of sending two types or styles of email messages: Input Port Status and User Defined. A Configuration Profile exists for each type of message containing user specific information supplied at the time of order placement. Additionally, a factory default message of each type may be invoked by user at any time to restore the factory default internet parameters. The user may also store customized profiles via the MANAGE PROFILES button.

Port Status: This pre-configured email message transmits the status (i.e., either HIGH or LOW) of the iModem's input ports (Pin # 7, IN 1 and Pin # 9, IN 2) at the time the email message is sent. The ASCII character content of the body of this type of email message is not user modifiable. However, the input port status reported in the email is an accurate reflection of the iModem port status at the time of email transmission. If specified at the time of order placement, this message will contain user supplied parameters.

User Defined: The User Defined email message contains a message body whose content may be changed by the user. The total ASCII character count of the body of the User Definable email message is currently limited to 125 ASCII characters. Blanks or spaces and <CR><LF> combinations are allowed in the message body. Each occurrence of blanks/spaces counts as 1 ASCII character while the <CR><LF> combination counts as two ASCII characters. Messages that exceed 125 ASCII characters are truncated after the first 125 characters. The User Defined message DOES NOT report the input port status. If specified at the time of order placement, this message will contain user supplied parameters.

IMPORTANT NOTE

The Factory profile contains the test message used by the factory to verify performance PRIOR to programming the unit with the user supplied parameters. Selecting the Factory message will invoke the Factory default message parameters and cause the iModem to write over the user specified parameters with the factory default parameters.

Factory Port Status: This pre-configured email message transmits the status (i.e., either HIGH or LOW) of the iModem's input ports (Pin # 7, IN 1 and Pin # 9, IN 2) at the time the email message is sent. The ASCII character content of the body of this type of email message is not user modifiable. However, the input port status reported in the email is an accurate reflection of the iModem port status at the time of email transmission. This message will contain factory default parameters only.

Factory User Defined: The User Defined email message contains a message body whose content may be changed by the user. The total ASCII character count of the body of the User Definable email message is currently limited to 125 ASCII characters. Blanks or spaces and <CR><LF> combinations are allowed in the message body. Each occurrence of blanks/spaces counts as 1 ASCII character while the <CR><LF> combination counts as two ASCII

characters. Messages that exceed 125 ASCII characters are truncated after the first 125 characters. The User Defined message DOES NOT report the input port status. This message will contains factory default parameters only.

Regardless of the type of email message utilized, the user has the ability to define the content of the subject line associated with the email message. The subject line is currently limited to 15 ASCII characters. Blanks or spaces are allowed and each occurrence counts as 1 character. <CR><LF> combinations are NOT allowed in the subject line and any occurrence will be interpreted as an “end of data” delimiter.

For a more detailed discussion of the Send Email topic, refer to Cermetek Application Note #155, [iNet@T®Command Set Description and Usage for CH2124/60 iModem Products](#). Refer to Cermetek Application Note #156, [CH2124/60 iModem Caveats and Definitions](#), for a summary of iModem conditions and requirements.

Send Email. Selecting this button causes the current ACTIVE CONFIGURATION PROFILE - and the associated email message – to be sent. No window is associated with this button.

Retrieve/Delete Email. Selecting this button causes the specified email message number - and using the current email account profile information – to be retrieved and/or deleted. The email RETRIEVE/DELETE dialog window will appear as an overlay to the Opening Dialog window. From the RETRIEVE/DELETE dialog window, the user may specify the message number to be retrieved and whether the message is to be deleted from the POP3 server upon successful retrieval. Further, the delete and retrieval email message numbers are independent of each other and need not be the same. Refer to the EMAIL RETRIEVE/DELETE discussion for more details.

Review Email. Selecting this button will cause the REVIEW AN OUTCOMING EMAIL MESSAGE window to appear. This window displays the exact configuration of the email message to be sent and is intended to provide the user with a facsimile of the entire message for review. No parameter modification is allowed from within this window. Refer to the REVIEW AN OUTCOMING EMAIL MESSAGE discussion for more details.

Configure ISP Data. Selecting this button causes a pop-up menu to appear that allows management of the ISP configuration data including server IP addresses, dial-up phone number and auto-redial function.

EXIT. This button is used to terminate the current iNetWizard® session. A YES/NO verification dialog window will appear as an overlay to the Opening Window.

Help. This button is used to access help topics contained within iNetWizard®. The HELP window will appear displaying a variety of topics.

About. This button is used to display the current software version of iNetWizard®, the unit serial number, the iModem Name and the current MS Windows Operating System. See Figure 2.

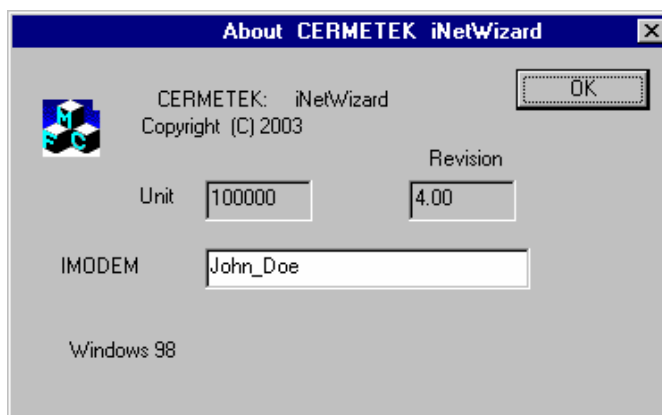


Figure 2. About iNetWizard® Pop-up Window.

Manage Profiles. Selecting this button causes a pop-up menu to appear that allows management of the iModem configuration profiles and includes DELETE, UPDATE, and SAVE functions. The SAVE function contains a window allowing the user to specify a unique name for the profile. See Figure 3. Profiles saved using the SAVE function are independent of the profiles supplied by the factory and will appear in the ACTIVE PROFILE pull-down menu of the iNetWizard Opening Dialog Window.

Update iNet Device. Selecting this button causes the current LOCAL CONFIGURATION PROFILE to be transferred to the iNet Device thereby updating the current ACTIVE CONFIGURATION PROFILE on the iNet Device. No window is associated with this button.

Dialog Boxes.

The Opening Dialog widow contains the following Dialog Boxes:

Device. This dialog box displays the Cermetek marketing part number and firmware revision number of the iNet device currently being queried. The information in this dialog box is for identification only and may not be modified by the user.

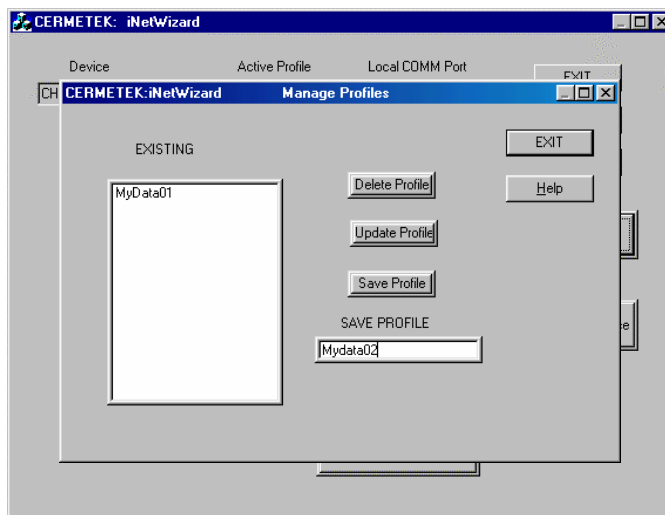


Figure 3. Manage Profiles iNetWizard® Pop-up Window.

Active Profile. This dialog box is used to select the ACTIVE PROFILE to be transferred to the iNetWizard® LOCAL ACTIVE CONFIGURATION PROFILE. The selection is made from a pull-down menu.

Access Method. This dialog box is used to specify the communication method to be employed by iNetWizard®. The options are:

- A. Local COMM Port
- B. Remote ACCESS Phone.

Selection is made from a pull-down menu.

Local COMM Port. This dialog box is used to specify the LOCAL COMM PORT number. The COMM Port is the V.24 Serial Interface used by the PC system operating iNetWizard® to communicate with the iNet device.

Remote Access Phone. This is the communication method employed when the iNet device is located remotely and a hardware serial interface connection is not possible. The phone number specified in the dialog box will be used by iNetWizard® to establish a remote connection over a standard PSTN (Public Switched Telephone Network) line. This option is enabled in iNetWizard® Revision 2.0 (or greater) releases. Refer to Application Note # 152, [CH2124/60 Remote Dial-up Access](#), for details concerning this feature.

CAUTION

Users are reminded to exercise extreme caution when utilizing the iModem's Remote Access Re-configuration feature. Misuse of this feature could lead to accidental disabling of the feature. Once disabled, it can only be re-enabled via the iModem's Serial Interface connection.

COMPOSE/REVIEW/EDIT EMAIL DIALOG WINDOW

This is the primary data entry window. Most data exchanges between the user and iNetWizard® occur within this window. Refer to Figure 3A.

Dialog Window Buttons.

The COMPOSE/REVIEW/EDIT window contains of the following buttons:

OK. This button is used to exit the COMPOSE/REVIEW/EDIT window and to return to the Opening Window.

Help. This button is used to access help topics contained within **iNetWizard®**. The HELP window will appear displaying a variety of topics.

Review Email. Selecting this button will cause the REVIEW AN OUTCOMING EMAIL MESSAGE window to appear. This window displays the exact configuration of the email message to be sent and is intended to provide the user with a facsimile of the entire message for review. No parameter modification is allowed from within this window. Refer to the REVIEW AN OUTCOMING EMAIL MESSAGE discussion for more details.

Cancel. This button is used to terminate the data entry activity and return to the Opening Window. The data entry session is terminated WITHOUT modification to the current LOCAL CONFIGURATION PROFILE.

Dialog Boxes.

The COMPOSE/REVIEW/EDIT widow contains the following Dialog Boxes:

Active Profile. This dialog box is used to select the CONFIGURATION PROFILE to be transferred to the **iNetWizard®** LOCAL ACTIVE CONFIGURATION PROFILE. Refer to the MODEM AND INETWIZARD INTERNAL PARAMETER PROFILE MANAGEMENT section for a more detailed discussion.

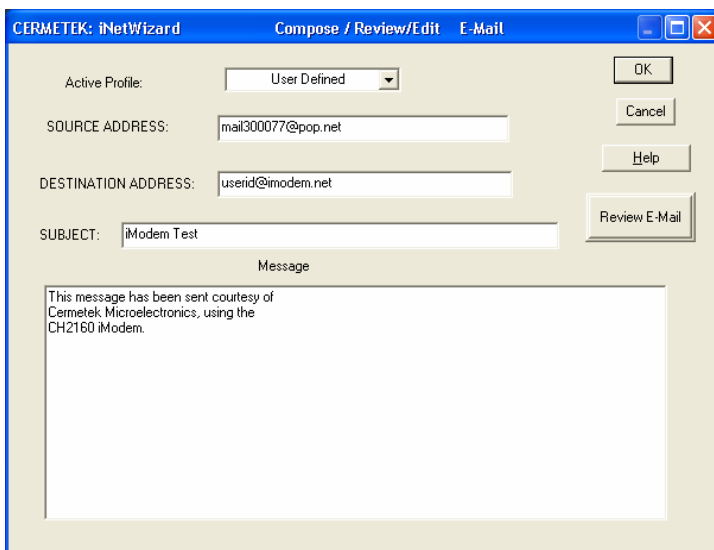


Figure 3A. Compose/Review/Edit Email Dialog Window.

Source Address. This dialog box is used to specify the originator of the email message.

Destination Address. This dialog box is used to specify the intended recipient of the email message.

Subject. This is the subject line of the email message.

Message. This dialog box is used to enter the email message body. **iNetWizard®** will only accept data input in this dialog box for the USER DEFINED email message type.

PREVIEW AN OUTGOING EMAIL MESSAGE DIALOG WINDOW

This window is intended to provide the user with a formatted review of the outgoing email message prior to transmitting the email message. Data entry is not allowed in this window. Refer to Figure 3B.

Dialog Window Buttons.

The PREVIEW AN OUTGOING EMAIL MESSAGE window contains the following button:

OK. This button is to exit the PREVIEW AN OUTGOING EMAIL MESSAGE window and return to the Opening Window.

Dialog Boxes.

The PREVIEW AN OUTGOING EMAIL MESSAGE window contains the following Dialog Boxes:

ISP Phone. This dialog box indicates the specified ISP local access dial-up phone number.

Login. This dialog box indicates the specified ISP user login ID.

Password. This dialog box indicates the specified ISP user Password. Notice that the default Cermetek password is not viewable. However, any user-specified password will be displayed.

IP? Outgoing Mail Server (SMTP). This dialog box indicates the specified SMTP email server address. If the box is checked, the decimal address is displayed. If the box is not checked, the alphanumeric or symbolic address is displayed. Currently, the symbolic address format option is not supported. Note that only the decimal format may be entered in this dialog box. **iNetWizard®** converts the decimal address to hexadecimal.

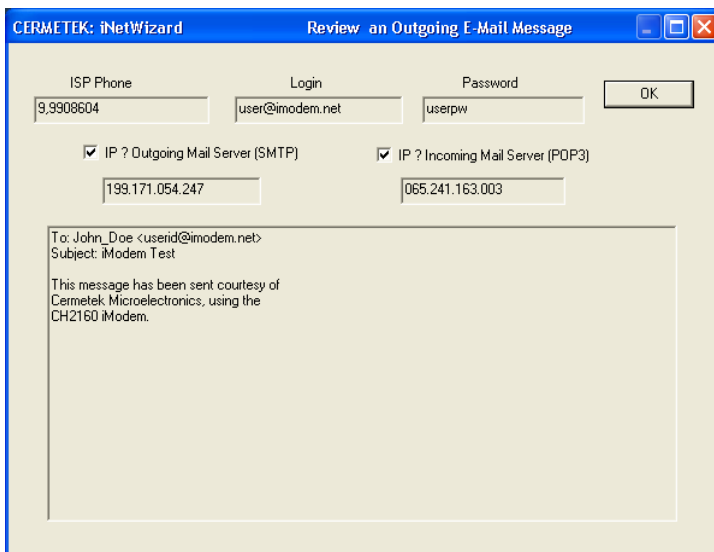


Figure 3B. Preview An Outgoing Email Message Dialog Window.

IP? Incoming Mail Server (POP3). This dialog box indicates the specified the POP3 email server address. If the box is checked, the decimal address is displayed. If not checked, the alphanumeric or symbolic address is displayed. Currently, the symbolic address format option is not supported. Note that only the decimal format may be entered in this dialog box. **iNetWizard®** converts the decimal address to hexadecimal.

Outgoing Message. This dialog box is used to display the entire outgoing email message – including headers.

EMAIL RETRIEVAL/DELETION DATA DIALOG WINDOW

This window is used to specify the email message number to be retrieved and whether the message is to be deleted from the POP3 server upon successful retrieval. Note that this window has two formats:

- A. Initial email RETRIEVE/DELETE dialog window.
- B. Subsequent email RETRIEVE/DELETE dialog window.

The format **iNetWizard®** uses for this window depends on whether an email has been previously retrieved during the current **iNetWizard®** session. This is because **iNetWizard®** does not know how many emails are located on the POP3 server until **iNetWizard®** attempts to retrieve an email. Consequently, prior to the first retrieval (regardless of email number), the window format in Figure 4A is used. For all email retrievals subsequent to the first email, the format in Figure 4B is used.

Dialog Window Buttons.

The RETRIEVE/DELETE window contains of the following buttons:

OK. This button exits the RETRIEVE/DELETE window, initiates the retrieve and delete email activity and returns to the Opening Window.

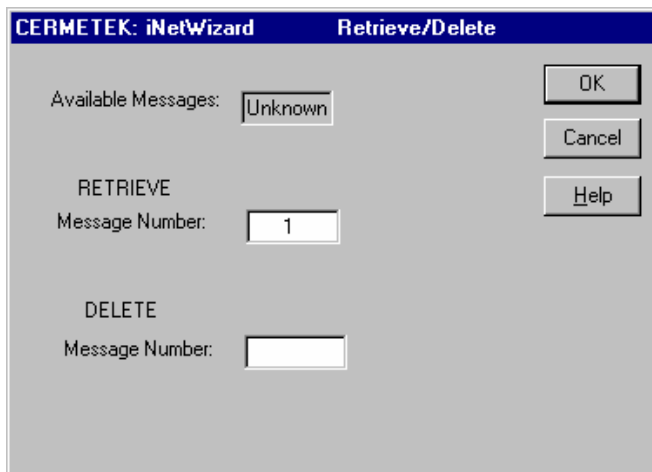


Figure 4A. Initial Email RETRIEVE/DELETE Dialog Window. These selections will cause the iModem to retrieve email message #1 and determine the number of email messages available to the user on the specified POP3 server. No email will be deleted.

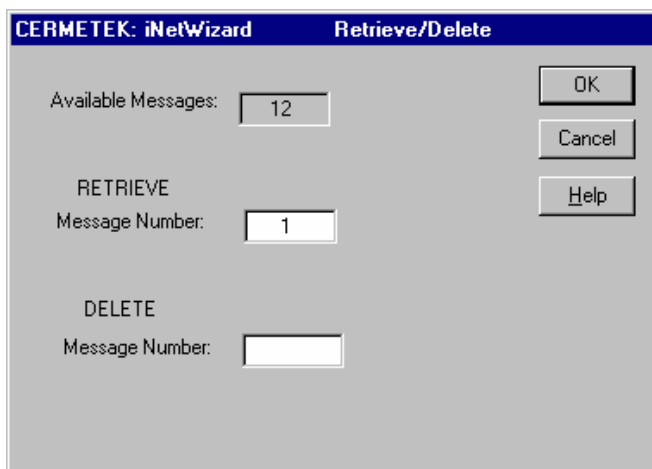


Figure 4B. Subsequent Email RETRIEVE/DELETE Dialog Window. These selections will cause the iModem to retrieve email message #1. Note that the total number available messages is specified. No email will be deleted.

Help. This button is used to access help topics contained within iNetWizard®. The HELP window will appear displaying a variety of topics.

Cancel. This button is used to terminate the data entry activity and return to the Opening Window. The data entry session is terminated WITHOUT modification to the current LOCAL CONFIGURATION PROFILE.

Dialog Boxes.

The RETRIEVE/DELETE window contains the following Dialog Boxes:

Available Messages. This is the number of email messages available for retrieval or deletion on the specified POP3 server. Prior to retrieval of the first email message, iNetWizard® displays UNKNOWN (see Figure 4A) in this box. Subsequent to the first retrieval or deletion, iNetWizard® displays the number of emails available (see Figure 4B). The AVAILABLE MESSAGES dialog box is an information only dialog box. The user is not allowed to modify the content of this dialog box.

RETRIEVE Message Number. This dialog box is used to specify the email message number to be retrieved.

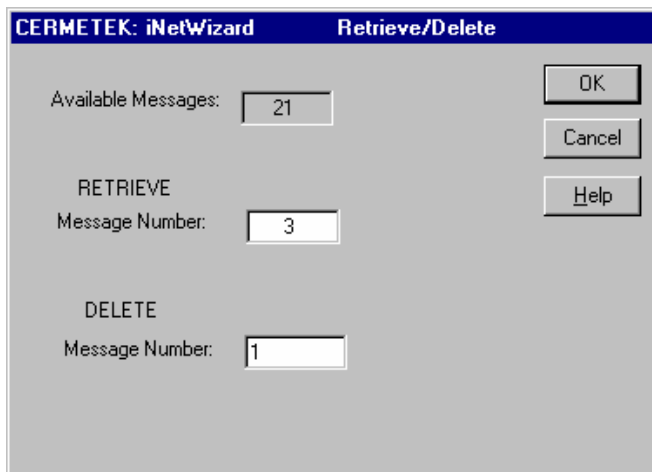


Figure 4C. Email RETRIEVE/DELETE Dialog Window. These selections will cause the iModem to retrieve email message # 3 then delete email message # 1.

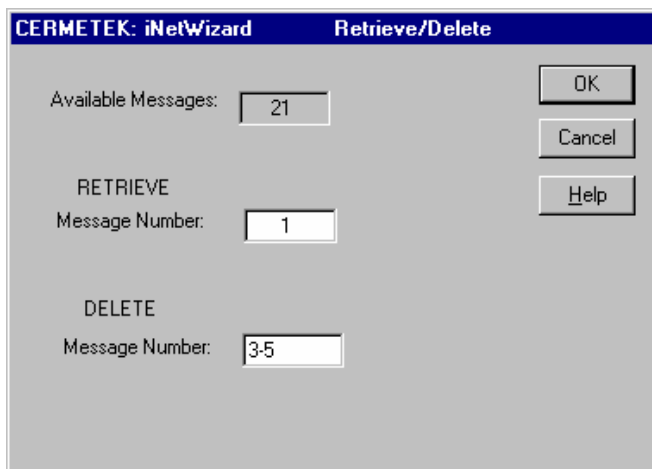


Figure 4D. Email RETRIEVE/DELETE Dialog Window. These selections will cause the iModem to retrieve email message # 1 then delete email message # 3-5 (inclusive).

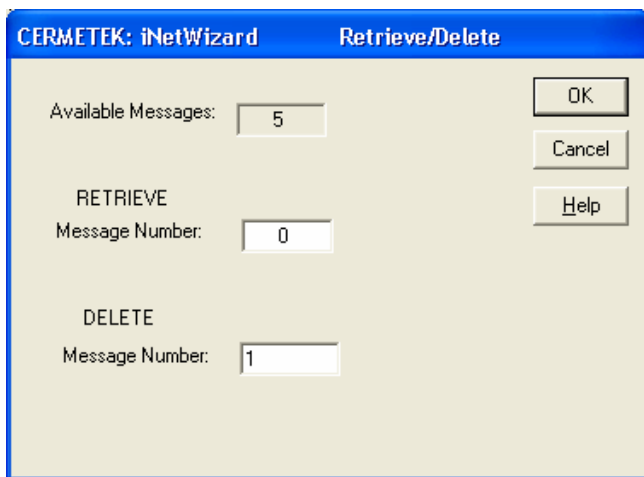


Figure 4E. Subsequent Email RETRIEVE/DELETE Dialog Window. These selections will cause the iModem to delete email message #1. Note that the total number of available messages is specified. No email will be retrieved.

DELETE Message. This dialog box is used to specify the message number(s) to be deleted from the POP3 server. Due to the POP3 query requirements imposed by the internet governing RFCs, the delete email activity is queued by

iNetWizard® and initiated when the POP3 server is ready. The email delete activity remains pending until the VIEW INCOMING EMAIL MESSAGE window is closed.

In order of priority, the iModem will first RETRIEVE the specified email message, then DELETE the specified email message(s). Only one message may be retrieved at a time. However, multiple messages may be specified for deletion. It is acceptable to leave the DELETE window blank or specify email message # 0. The RETRIEVE window message number must be specified but may include message # 0. For the case of retrieve email message # 0, the iNet Product will delete the message(s) specified without retrieving any email messages. See the examples in Figures 4C–4E.

CONFIGURE ISP DIALOG WINDOW

This is the primary data entry window for ISP parameter review and modification. Refer to Figure 5A.

Dialog Window Buttons.

The CONFIGURE ISP INFORMATION window contains of the following buttons:

OK. This button is used to exit the COMPOSE/REVIEW/EDIT window and to return to the Opening Window.

Help. This button is used to access help topics contained within **iNetWizard®**. The HELP window will appear displaying a variety of topics.

Figure 5A. Configure ISP Information Dialog Window.

Cancel. This button is used to terminate the data entry activity and return to the Opening Window. The data entry session is terminated WITHOUT modification to the current LOCAL CONFIGURATION PROFILE.

Dialing Options. This button is used to specify the parameters associated with the auto-redial function. See Figure 6. This button is only available with **iNetWizard®** Revision 3.20 or later. The auto-redial function is only available with iModem firmware revision 1.262 or later.

Dialog Boxes.

The CONFIGURE ISP INFORMATION widow contains the following Dialog Boxes:

ISP Phone. This dialog box is used to specify the ISP local access dial-up phone number. speed.

iNet Device. This dialog box is used to specify the PSTN carrier connect (DCE) speed. Do NOT attempt to set a DCE speed that exceeds the capability of the modem contained within the iNet Device. If attempted, the error messages in Figures 5B–5D will result (in the order indicated). Further, any activity to reconfigure the current ACTIVE CONFIGURATION PROFILE will be aborted. The DCE speed will default back to the speed set prior to the selection of an incompatible DCE speed. Re-configuration of the profile must be re-attempted after selection of a correct DCE

IP? Outgoing Mail Server (SMTP). This dialog box is used to specify the SMTP email server address. If the box is checked, the decimal address is displayed. If the box is not checked, the alphanumeric or symbolic address is displayed. Currently, the symbolic address format option is not supported but is a planned upgrade feature. Note that only the decimal format may be entered in this dialog box. **iNetWizard®** converts the decimal address to hexadecimal.



Figure 5B. WARNING indicating an incorrect command has been sent from iNetWizard® to the iNet device.

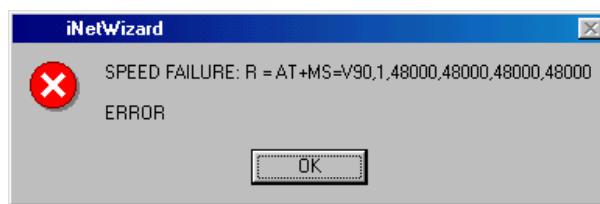


Figure 5C. Dialog Window specifying the offending command.

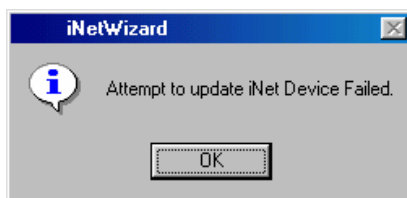


Figure 5D. Dialog Window indicating that the attempt to re-configure the iNet device has failed.

Network Login ID. This dialog box is used to specify the ISP user login ID.

Network Password. This dialog box is used to specify the ISP user login password.

Server Login ID. This dialog box is used to specify the POP3 email server (i.e., Retrieve email) login ID.

Server Password. This dialog box is used to specify the POP3 email server (i.e., Retrieve email) login password.

IP? Incoming Mail Server (POP3). This dialog box is used to specify the POP3 email server address. If the box is checked, the decimal address is displayed. If the box is not checked, the alphanumeric or symbolic address is displayed. Currently, the symbolic address format option is not supported. Note that only the decimal format may be entered in this dialog box. **iNetWizard®** converts the decimal address to hexadecimal.

DIALING OPTIONS DIALOG WINDOW

This window allows the user to set the auto-redial function parameters. Refer to Figure 6. Auto-redial applies to send and retrieve email activities only. Currently, auto-redial does NOT support multiple email deletions. While in auto-redial, DO NOT attempt to adjust/change/modify any of the iModem parameters. Auto-redial is complete and has terminated when the Email Activity Counter (see Figure 9) is displayed.

Dialing Options Dialog Window Buttons.

The DIALING OPTIONS DIALOG WINDOW contains the following buttons:

OK. This button is used to exit the COMPOSE/REVIEW/EDIT window and to return to the Opening Window.

Cancel. This button is used to terminate the data entry activity and return to the Opening Window. The data entry session is terminated WITHOUT modification to the current LOCAL CONFIGURATION PROFILE.

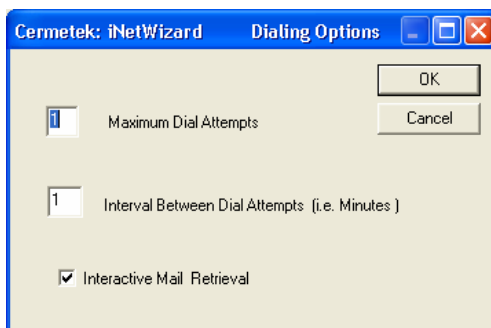


Figure 6. Dialing Options Dialog Window.

Dialing Options Dialog Window Dialog Boxes.

The DIALING OPTIONS window contains of the following dialog boxes:

Maximum Dial Attempts. This dialog box specifies the maximum number of dial attempts. **iNetWizard®** will NOT allow the user to specify more than 14 attempts. This is an FCC requirement.

Interval Between Dial Attempts. This dialog box specifies the duration (in minutes) between dial attempts. The minimum is 1 minute and the maximum is 255 minutes.

Interactive Mail Retrieval. This dialog box indicates whether **iNetWizard®** will display the retrieved email when email retrieval/deletion is specified. When testing connectivity rate (and using the multiple email retrieval/deletion feature of **iNetWizard®**), the user is interested primarily in success rate and may not want to review each email retrieved PRIOR to the next retrieval. This option allows the user to specify if review of the email retrieved is desired. If the box is NOT checked, the email retrieved will NOT be displayed and **iNetWizard®** will automatically progress to the next email retrieval.

STATUS MESSAGES

Various status messages will appear superimposed onto the Opening Dialog Window (See Figure 7) to indicate email progress. Representative status messages with their associated explanations are provided in Figures 8A-M.

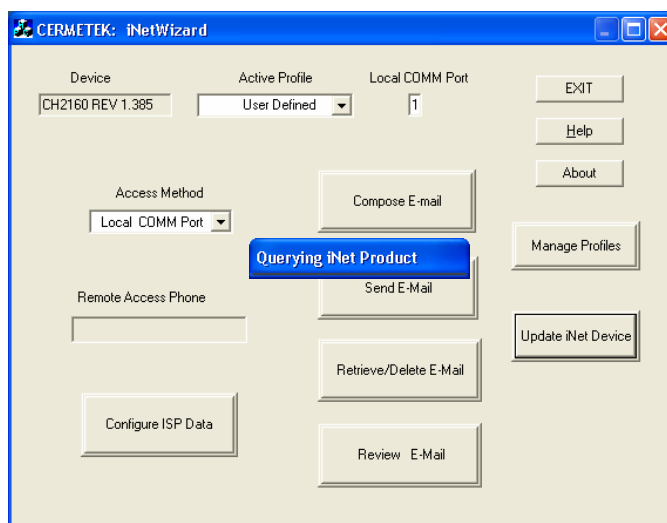



Figure 7. Example illustrating a Status Message as it appears superimposed onto the Opening Dialog Window.



Figure 8A. Non-Email related Status Message. This message indicates that iNetWizard® is Querying the iModem.



Configuring iNet Product

Figure 8B. Non-Email related Status Message. This message indicates that iNetWizard® is Configuring the iModem.




RETRIEVING E-MAIL

Figure 8C. Retrieving Email Status Message. This message indicates that the email Retrieval activity has been selected and that the iModem is preparing to begin the retrieval activity.



RETRIEVE ATTEMPT # 1

Figure 8D. Email Retrieval Status Message. This message indicates that the email Retrieval activity has begun. Note that the count indicator automatically tracks the email retrieval message attempt number.




SENDING E-MAIL

Figure 8E. Sending Email Status Message. This message indicates that the email Send activity has been selected and that the iModem is preparing to begin the send activity.




SEND ATTEMPT # 1

Figure 8F. Email Send Status Message. This message indicates that the email Send activity has begun. Note that the count indicator automatically tracks the email send message attempt number.



Deleting E-Mail

Figure 8G. Deleting Email Status Message. This message indicates that the email Delete activity has begun.



DIALING

Figure 8H. Dialing POP Status Message. This indicates that the iModem is dialing the POP (i.e., the Point Of Presence analog access modem) using the phone number supplied.



CONNECTING

Figure 8I. ISP Connecting Status Message. This indicates that the iModem is connecting to the ISP via the POP analog modem.



AUTHENTICATING

Figure 8J. ISP Authenticating Status Message. This indicates that the ISP is verifying the ISP Login and Password supplied by the iModem.



TRANSMISSION SUCCEEDED

Figure 8K. Email Transmission Succeeded Status Message. This indicates that the email message sent by the iModem has been accepted by the SMTP server.



EXITING POP3

Figure 8L. Exiting POP3 Status Message. This indicates that the iModem is exiting the POP3 server. The POP3 server is used for both email retrieval and email deletion activities.



Figure 8M. ISP Disconnecting Status Message. This indicates that the iModem is terminating the ISP session and is disconnecting from the POP.

EMAIL ACTIVITY/SUCCESS COUNTER

This window (see Figure 9) appears upon completion of the number of email Dial Attempts specified in Dial Options window. The window shows the total number of ATTEMPTS and the total number of attempts that SUCCEEDED.



Figure 9. Email Activity Attempts/Success Summary Counter.

VIEWING AN INCOMING EMAIL MESSAGE DIALOG WINDOW

This window (see Figure 10) is intended to provide the user with a formatted review of the incoming or retrieved email message. Data entry is not allowed in this window.

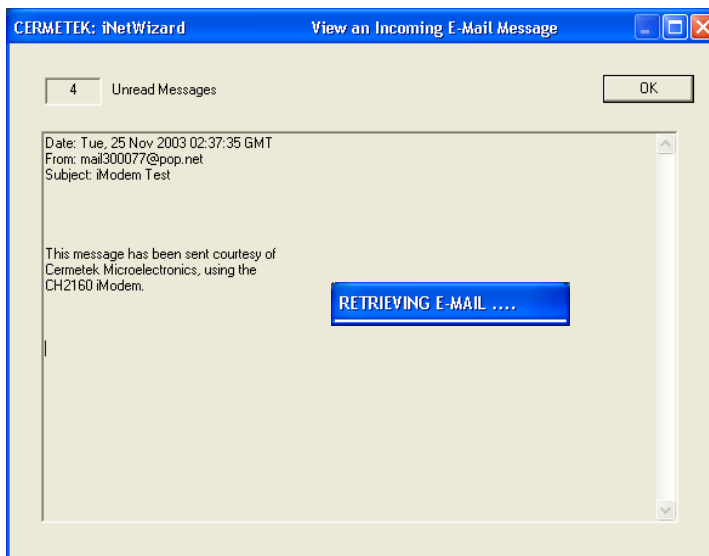


Figure 10. Viewing An Incoming Email Message Dialog Window.

Viewing An Incoming Email Message Window Buttons.

The VIEWING AN INCOMING EMAIL MESSAGE window contains the following button:

OK. This button is used to exit the VIEWING AN INCOMING EMAIL MESSAGE window and to return to the Opening Window.

Dialog Boxes.

The VIEWING AN INCOMING EMAIL MESSAGE widow contains the following Dialog Boxes:

Unread Messages. This is the number of unread messages on the POP3 (i.e., Retrieval or Incoming) email server.

Outgoing Email Message. The remaining dialog box is used to display the entire outgoing email message – including headers.

The RETRIEVING EMAIL status message appears superimposed onto of the VIEWING AN INCOMING EMAIL MESSAGE window. This status message will disappear after the OK button is selected.

iModem PARAMETER PROFILE MANAGEMENT

iModem Configuration Profiles. The iModem maintains the required internet parameters (including messages) in internal memory locations collectively referred to as the Active Configuration Profile. The iModem Active Configuration Profile contains a common set of ISP parameters that is shared by both the User Defined and Input Port Status email messages. The iModem also contains a Factory Default Configuration Profile.

Active Configuration Profile. The Active Configuration Profile contains the email messages (both User Defined and Input Port Status) and associated internet parameters that are currently in use by the iModem. The iModem uses the Active Configuration Profile to perform email send, retrieve and delete functions. There is only one Active Configuration Profile on the iModem at any one time.

Factory Default Configuration Profile. The Factory Default Configuration Profile contains factory default internet parameters. These are the parameters that are used by the factory to verify functionality of the iModem device prior to customization. The Factory Default Configuration Profile are loaded into the iModem product by the factory prior to shipment. The user does not have editing authority over the FACTORY USER DEFINED Configuration Profile.

iNetWizard® PARAMETER PROFILE MANAGEMENT

Local Configuration Profiles. iNetWizard® maintains all stored configuration profiles on the PC running the iNetWizard® application in the profiles directory. These configuration profiles may be accessed at any time using the ACTIVE PROFILE pull-down menu on the iNetWizard® Opening Dialog Window (see Figure 1). Once accessed, user modifiable parameters may be changed and the resulting profile stored under the current name (or under a new name) via the MANAGE PROFILES button on the iNetWizard® Opening Dialog Window.

All modifications made by iNetWizard® are only made to the configuration profiles contained in the profiles directory on the PC running the iNetWizard® application. To cause the iModem device to use a modified configuration profile, the user must update the current Active Configuration Profile contained on the iModem device by using the UPDATE INET DEVICE button on the iNetWizard® Opening Dialog Window. As a convenience to the iNetWizard® user, iNetWizard® will prompt the user to update the iModem device prior to initiating an email Send, Retrieve and Delete activity.

iNetWizard® Local Configuration Profiles Setup. Upon initial launch of the iNetWizard® application, iNetWizard® queries the iModem device and creates four separate Configuration Profiles. These are created for the convenience of the iNetWizard® user and are stored in the profiles directory on the PC running the iNetWizard® application. When the user creates and saves additional configuration profiles, iNetWizard® will store these configuration profiles in the profiles directory. See Attachment II for more details concerning the profiles directory.

IMPORTANT NOTE

For the iModem to utilize any of the modifications made to a Local Configuration Profile, iNetWizard® must reconfigure the iModem's Active Configuration Profile using the modified Local Configuration Profile.

Querying iNet Products. Querying is the process by which iNetWizard® retrieves either the iModem's current Active Configuration Profile or the Factory Default Configuration Profile, creates (or updates) the appropriate local configuration profile and stores the configuration profile in the profiles directory. It is necessary to query the iModem device to obtain the current Active Configuration Profile. The QUERYING INET PRODUCT status message (see Figure 8A) is displayed any time iNetWizard® is retrieving information *from* the iNet product.

Configuring iNet Products. The iNet Product's current Active Configuration Profile must be updated with the modified local configuration profile before the iModem can use the modified parameters. This process of replacing or updating the iModem's Active Configuration Profile is referred to as Configuring (or Configuration). During configuration, iNetWizard® sends the modified parameters back to the iNet product for permanent storage in the

appropriate parameter locations within the iNet product and then instructs the iModem to re-create the entire email message. The CONFIGURING INET PRODUCT (see Figure 8B) message is displayed any time **iNetWizard®** is sending information to the iNet product.

iNetWizard® Active Profile Options. For convenience and ease of use, **iNetWizard®** initially presents the user with four Active Configuration Profile options. These profiles are available via the ACTIVE PROFILE pull-down menu and are briefly described below. See Figure 11. Additional configuration profiles, when created by the user, are also available via this pull-down menu.

User Defined Configuration Profile: The User Defined Configuration Profile is the current Active User Defined Configuration Profile located on the iModem product. When the USER DEFINED profile is selected via the ACTIVE PROFILE pull-down menu, **iNetWizard®** will query the iModem product and load the current User Defined Configuration Profile *from* the iModem product *to* **iNetWizard®**. See Figure 11. The User Defined Configuration Profile is now ready for editing as a local configuration profile using **iNetWizard®**.

Factory Default User Defined Configuration Profile: The parameters used by Cermetek to verify the iModem's performance prior to customization of the User Defined Message per the user specified parameters is retained in the iModem device as a back-up profile. When the FACTORY USER DEFINED Configuration Profile is selected via the ACTIVE PROFILE pull-down menu, **iNetWizard®** will query the iModem product and load the Factory Default User Defined Configuration Profile *from* the iModem product *to* **iNetWizard®**. See Figure 11.

Note that the FACTORY USER DEFINED profile contains ISP parameters only. The email subject line, message, source and destination email addresses currently contained in the USER DEFINED profile are loaded into **iNetWizard®**. The FACTORY USER DEFINED Profile is now ready for editing as a local configuration profile. Although the user does not have authority to update the FACTORY USER DEFINED parameters on the iModem device, modified versions of the FACTORY USER DEFINED Profile may be stored as a local configuration profiles on the PC and loaded onto the iModem as the User Defined Configuration Profile.

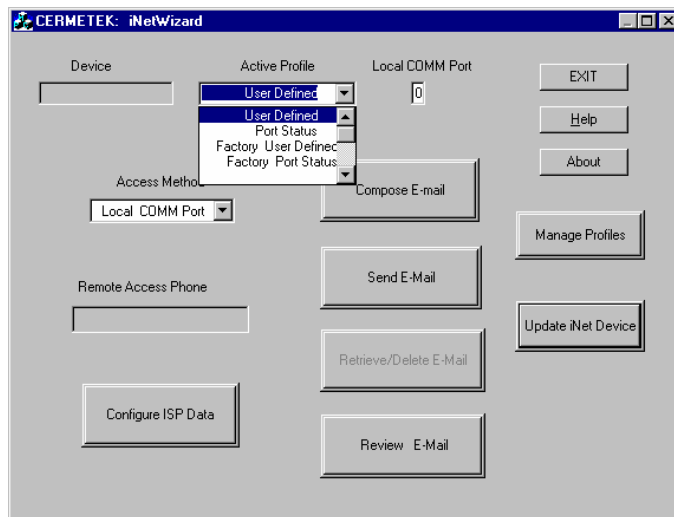


Figure 11. Active Profile Pull-Down Dialog Box with Selection Options.

Port Status Configuration Profile: The Port Status Configuration Profile is the current Port Status configuration profile located on the iModem device. When the PORT STATUS profile is selected via the ACTIVE PROFILE pull-down menu, **iNetWizard®** will query the iModem product and load the current Port Status Configuration Profile *from* the iModem product *to* **iNetWizard®**. See Figure 11. The Port Status Configuration Profile is now ready for editing as a local configuration profile using **iNetWizard®**.

Factory Default Port Status Configuration Profile: The parameters used by Cermetek to verify the iModem's performance prior to customization of the Port Status email message per the user specified parameters is retained in the iModem device as a back-up profile. When the FACTORY PORT STATUS Configuration Profile is selected via the ACTIVE PROFILE pull-down menu, **iNetWizard®** will query the iModem product and load the Factory Default Port Status Configuration Profile *from* the iModem product *to* **iNetWizard®**. See Figure 11.

Note that the FACTORY PORT STATUS profile contains ISP parameters only. The email subject line, message, source and destination email addresses currently contained in the USER DEFINED profile are loaded into iNetWizard®. The FACTORY PORT STATUS profile is now ready for editing as a local configuration profile. Although the user does not have authority to update the FACTORY PORT STATUS parameters on the iModem device, modified versions of the FACTORY PORT STATUS profile may be stored as a local configuration profiles on the PC and loaded onto the iModem as the Port Status Configuration Profile.

IMPORTANT NOTE

The FACTORY USER DEFINED and FACTORY PORT STATUS Configuration Profiles are not user modifiable. When these profiles are used to restore the original "as shipped from the factory" ISP parameters, only the ISP parameters are restored. The current email subject line, message content, source and destination email addresses remain unchanged.

Managing The Configuration Profiles. The user has the option to retain all subsequent modifications made to the User Defined Configuration Profile as the new User Defined Configuration Profile or as a unique user generated configuration profile. User generated profiles also appear in the ACTIVE PROFILE pull-down window. Single click on the MANAGE PROFILE button in the Opening Dialog Window to access the DELETE, UPDATE and SAVE PROFILE functions. See Figure 3.

GETTING STARTED

The step-by-step instructions presented below assume that iNetWizard® resides on the user's computer system in the location specified in Attachment II. This is typically the case when installing the iNetWizard® application per the setup directions provided by Cermetek. See Attachment II for installation details.

IMPORTANT NOTE

Apply power to the iModem application/evaluation board and verify proper operation of the hardware system and the PSTN connection PRIOR to initiating an iNetWizard® session. The system/evaluation board should remain powered during initiation of the iNetWizard® session. This is to ensure that the COMM Port connection between the application/evaluation board and the PC will be correctly configured when iNetWizard® auto connects.

INITIATING AN iNetWizard® SESSION

iNetWizard® may be initiated in either one of two ways. These are described as Method 1 and Method 2 below.

Method 1. This method of assumes that an MS Windows shortcut was created for the iNetWizard® application. In this case, iNetWizard® is initiated as follows:

- Step 1. Double click on the iNetWizard® desktop icon.
- Step 2. The iNetWizard® window will open displaying various button and pull down menus. Although computer monitors vary in size and overall resolution, the Opening Window should look similar to the image in Figure 9. Refer to the INETWIZARD OPENING WINDOW section for a detailed discussion of the iNetWizard® Opening Window and it's associated buttons and pull down menus.

Method 2. This method of assumes that an MS Windows shortcut was NOT created for the iNetWizard® application. In this case, iNetWizard® is initiated as follows:

- Step 1. When in MS Windows, proceed to the START button in the lower left corner of the monitor screen.
- Step 2. Single click on START.
- Step 3. Move the cursor to highlight PROGRAMS, then highlight CERMETEK, and finally single click on iNetWizard.exe.

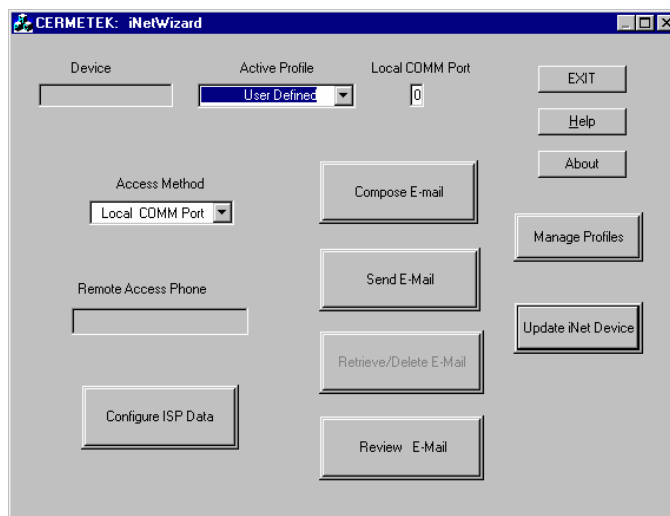


Figure 12. iNetWizard® Opening Window.

Step 4. The **iNetWizard®** window will open displaying various buttons and pull down menus. Although computer monitors vary in size and overall resolution, the Opening Window should look similar to the image in Figure 12.

Refer to the **iNetWizard®** Opening Window section for a detailed discussion of the opening window and associated menus.

SET COMMUNICATION ACCESS METHOD

iNetWizard® supports two methods of communication for programming, configuration or reconfiguration of Cermetek iNet products. These methods are:

- A. Standard serial communication via the PC's COMM PORT.
- B. Communication via the PSTN (i.e., Public Switched Telephone Network) or sometimes called POTS (i.e., Plain Old Telephone System).

The serial COMM Port communication method is the least complicated of the two communication methods and is the method set by default. It is also the method typically employed during manufacturing configuration when the system containing the iNet product is still located within the OEM's facility.

The PSTN communication method is intended primarily for reconfiguring systems containing iModems that have been deployed to the field. Typically, in field environments, access to the serial port is severely restricted due to the embedded nature of the iNet product application. The PSTN communication method overcomes this restriction. However, for security reasons, remote reconfiguration via a PSTN link requires the use of a unique access password. This password is user definable. Refer to Cermetek Application Note # 152, [CH2124/60 Remote Dial-Up Access](#), for a more detailed discussion of PSTN communication.

Referring to the **iNetWizard®** window image contained in Figure 12, note that the DEVICE dialog box of the window is blank. The iNet product information will only be displayed when **iNetWizard®** has established communication with - and has successfully queried - the iNet product. For **iNetWizard®** to accomplish both of these tasks, the user must specify the method of communication access desired and **iNetWizard®** must successfully create the connection.

Serial Interface COMM Port Method. The following procedure establishes communication access via the V.24 Serial Interface COMM Port.

- Step 1. Highlight the value displayed in the LOCAL COMM PORT window.
- Step 2. Type in the current COMM PORT number. Do not press<CR>.

Step 3. **iNetWizard®** will immediately attempt to auto connect to the iNet product using the COMM PORT specified.

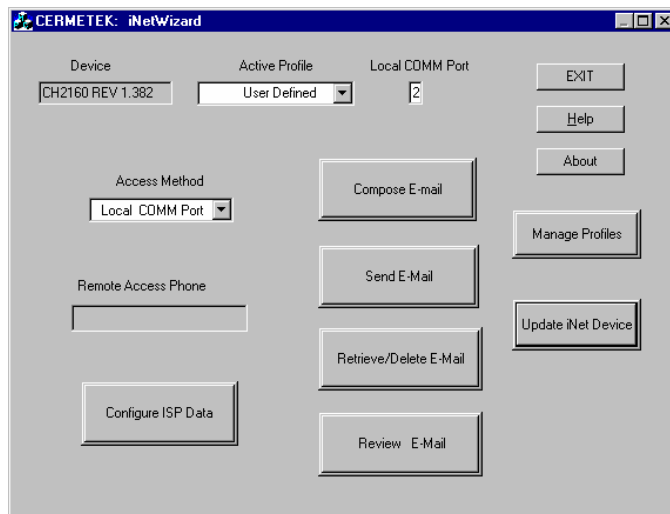


Figure 13. **iNetWizard®** Opening Window after successful Querying activity.

The QUERYING INET PRODUCT message will appear superimposed over the existing menu screen. This message will alternately highlight and fade to gray indicating communication activity with the iNet product. The querying message will disappear when the querying activity is completed. The Opening Window will look similar to the screen image in Figure 13 when this process is completed. At this point, if the communication link has been successfully created, **iNetWizard®** will have automatically performed the following tasks in the order listed:

- A. Reviewed the retrieved Configuration Profile data for completeness.
- B. Updated the **iNetWizard®** Local Configuration Profile and reset all local parameters.
- C. Refreshed the DEVICE dialog box with the iNet product’s identification information.
- D. Turned off the QUERYING INET PRODUCT message.

Step 4. The user should review the current (i.e., updated) **iNetWizard®** opening window. If the DEVICE information is correct, then it can be concluded that the communication link is working correctly. Proceed to the next section of this application note. Otherwise, proceed to Step 5 below for debug suggestions.

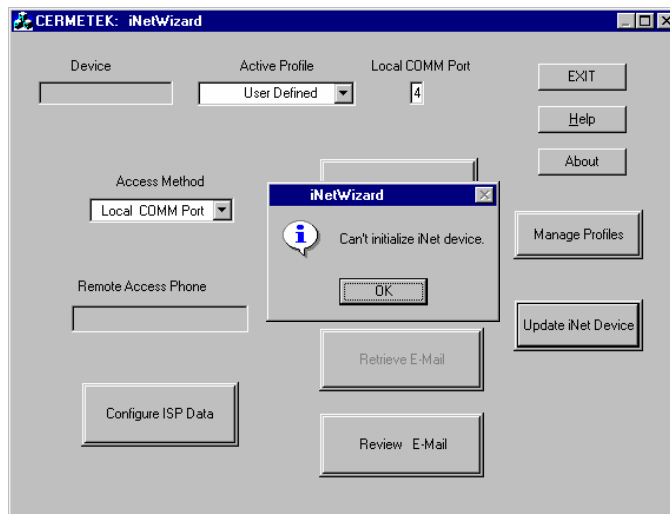


Figure 14. **iNetWizard®** Communication Failure “Can’t initialize iNet device” Error Message.

Step 5. Receipt of the communication failure message “Can’t Initialize iNet Device” as depicted in Figure 14 means one (or more) failure conditions exist. Although incorrect specification of the COMM PORT number is the most common failure mode, Attachment I contains a summary of typical failure modes encountered and suggested remedies.

Step 6. To clear the “Can’t initialize iNet device” error message, single click on the OK button in the message.

PSTN Method. Cermetek iNet products contain a unique feature enabling the user to establish communication access to the iNet product via the PSTN. The primary purpose for this feature is to allow the user to modify/update various ISP parameters after field installation of the iNet device. For this feature to be utilized, a PSTN line connection to the remote system must exist and the user’s system must provide for direct access to the iNet product via this PSTN connection. Refer to Cermetek Application Note # 152, CH2124/60 Remote Dial-Up Access, for step-by-step instructions and examples.

VERIFYING PROPER OPERATION

Proper operation of **iNetWizard®** can be readily verified by performing the procedures described in the **ACCESSING iNetWizard®** section of this application note. If the DEVICE information dialog box of the **iNetWizard®** opening window is correct once communication with the evaluation board/system has been established, then it can be concluded that both the communication link and **iNetWizard®** application are operating correctly. Proceed to the next section of this application note. Otherwise, refer to Attachment I for error diagnosis and recovery suggestions.

TERMINATING AN iNetWizard® SESSION

Upon completion of the iModem programming activity, the following steps are required to exit **iNetWizard®** and return to the MS Windows desktop screen. Two methods are provided. Either method is acceptable.

Termination Method 1.

Step 1. Single click on the EXIT button.

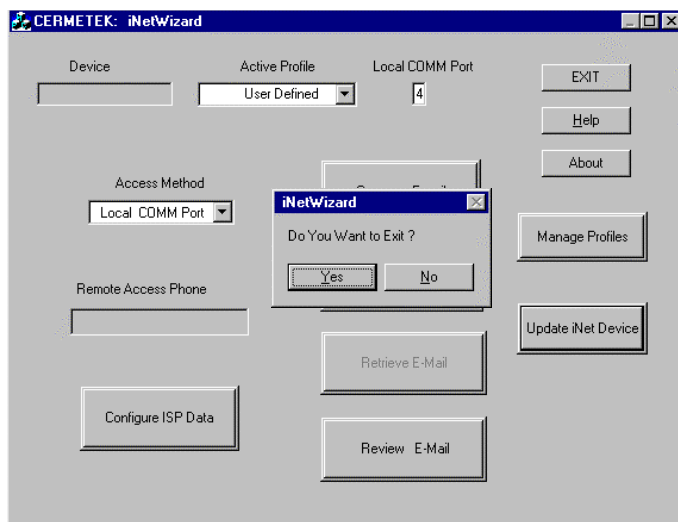


Figure 15. iNetWizard® Termination Window.

Step 2. A pop-up “Do You Want to Exit?” dialog box will appear (see Figure 15). Single Click on YES to terminate the current **iNetWizard®** session and return to the MS Windows desktop screen.

Termination Method 2.

Step 1. Move the cursor to the upper right hand corner of the **iNetWizard®** window and single click on the X.

Step 2. A pop-up “Do You Want to Exit?” dialog box will appear (see Figure 15). Single Click on YES to terminate the current **iNetWizard®** session and return to the MS Windows desktop screen.

EXAMPLES

The following examples are intended to assist the user with typical iModem programming activities using **iNetWizard®**. These examples were created with the CH2160 iModem socketed into the CH21XX Evaluation Board. Communication with the evaluation board was via the RS232 Serial COMM Port. MS Windows 95, 98 and XP environments were used interchangeably to create the examples.

The evaluation board was connected and configured per the instructions supplied with the board. For a complete description of the CH21XX Evaluation Board connection procedure, refer to Cermetek publication iModem Evaluation Board Instructions. Refer to Application Note #158, Cermetek iModem Caveats and Definitions, for a summary of iModem operational considerations and requirements.

IMPORTANT NOTE

The examples herein contain window images indicating various configuration parameters, such as: ISP address, dial-up access phone number, etc. These parameters are illustrative and may not reflect the current default configuration parameters. Refer to Application Note #156, CH2124/60 iModem Default Configuration Profile, for a summary of current iModem default ISP parameters and factory set default Configuration Profiles.

iNetWizard® Auto Connect/Auto Identification Example. The following example illustrates the **iNetWizard®** auto connect function and the auto identification function.

Example 1: Using the RS232 COMM Port connection, demonstrate the auto connect and auto identification function.

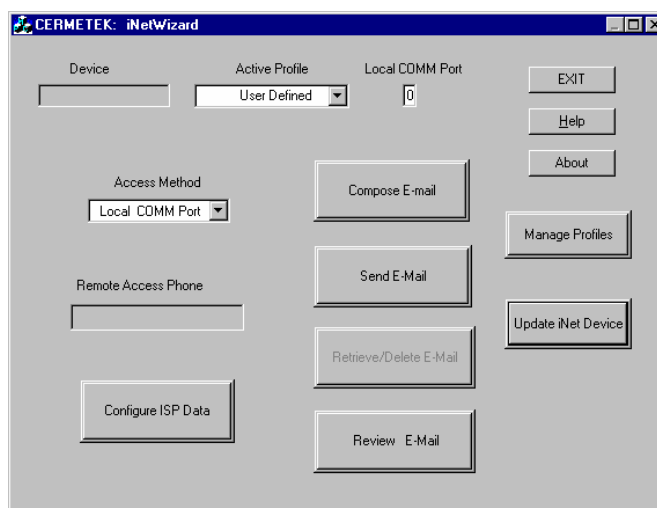


Figure 16. iNetWizard® Opening Window.

- Step 1. Access **iNetWizard®** using either Access Method 1 or Access Method 2 as described above. The Opening Window looks similar to the image in Figure 16. Note that the DEVICE Information dialog box does not contain any identification data and the RETRIEVE EMAIL button is grayed out.
- Step 2. Highlight the value displayed in the LOCAL COMM PORT window.
- Step 3. Type in the current COMM PORT number. Do not press<CR>.
- Step 4. **iNetWizard®** will immediately attempt to auto connect to the iNet product using the COMM PORT number specified. The QUERYING INET PRODUCT message will appear superimposed over the existing menu screen. This message will alternately highlight and fade to gray indicating communication activity with the iNet product. The querying message will disappear when the querying activity is completed. Note that the DEVICE Information dialog box now contains the iModem Product name and firmware revision; and the RETRIEVE EMAIL button is active. See Figure 17.

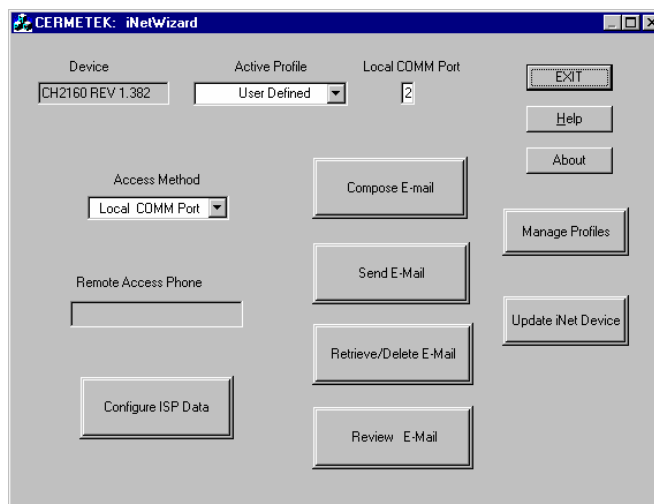


Figure 17. iNetWizard® Opening Window After Auto Connect and Query Activity.

Setup/Send Email Examples.

The following examples demonstrate various iNetWizard® iModem setup and send email techniques.

Example 2: Send an email using the factory default User Defined Configuration Profile. This includes the factory default ISP parameters and the factory supplied USER DEFINED email message. Note that the default parameters incorporate the following assumptions:

- A. The local access dial-up phone number (including area code) will be used. When possible, an access number in the users city as specified at the time of order placement will be programmed.
- B. The email will be sent to <user.services@imodem.net> on the Cermetek iModem Network ISP. The iModem Network ISP will re-route the email to the users email address specified at the time of order placement. Additionally, a voice translation of the email will be sent to the voice phone number specified by the user and a FAX translation of the email will be sent to the FAX number specified by the user.

For a detailed discussion of the factory default ISP parameter set, refer to Cermetek Application Note # 156, [CH2124/60 iModem Default Configuration Profile](#).

Step 1. Referring to the Opening Window in Figure 14, single click on the COMPOSE/REVIEW/EDIT EMAIL button. This will cause the COMPOSE/REVIEW/EDIT EMAIL window to open. See Figure 18.

Step 2. Single click on the REVIEW EMAIL button to review the entire outgoing message (including headers). Note that when the IP boxes are checked, the decimal addresses are displayed. See Figure 19.

The Review Outgoing Email Window displays the ISP information and the complete outgoing message – including email headers. This window allows the user to review the complete email image. See the REVIEW AN OUTGOING EMAIL section for a more detailed discussion.

Step 3. Single click on the OK button to return to the COMPOSE/REVIEW/EDIT EMAIL Window.

Step 4. Single click on the OK button to return to the Opening Window.

Step 5. Single click on the SEND EMAIL button to send the email message. This will initiate the email send process. The following status messages will appear superimposed over the Opening Window in the order indicated. Each message will alternately highlight and fade to gray indicating activity in progress.

- A. **Sending E-Mail.....** This message indicates that the iModem is preparing to dial the local access phone number.
- B. **SENDING EMAIL # n.** This message indicates that the iModem is dialing the POP and is beginning Send Email message attempt n.

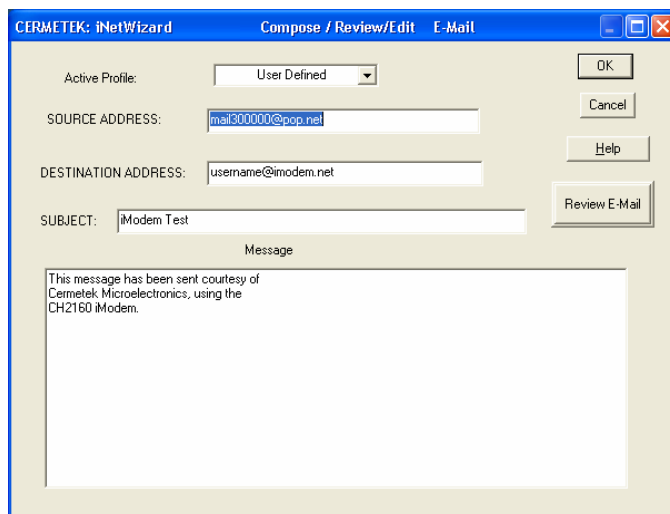


Figure 18. iNetWizard® Compose/Review/Edit Email window.

- C. **AUTHENTICATING.....** This message indicates that the iModem is authenticating the ISP password.
- D. **CONNECTING.....** This message indicates that the iModem is connecting to the ISP via the POP.
- E. **SENDING EMAIL.....** This message indicates that the iModem is sending the email message.
- F. **TRANSMISSION SUCCEEDED.** This message indicates that the email message was accepted by the SMTP email server.
- G. **DISCONNECTING.....** This message indicates that the iModem is terminating the ISP connection.

Example 3: Change the factory default EMAIL TO destination address, the email message and the subject line as indicated below. **iNetWizard®** character editing (i.e., use the backspace to edit character entry) and case sensitivity is maintained. When finished with the modifications, send the modified email message to the new email destination address.

Destination: **sendmemail@customer.com**
 Subject: **Test Email # 1**
 Message: **This is email test message.**

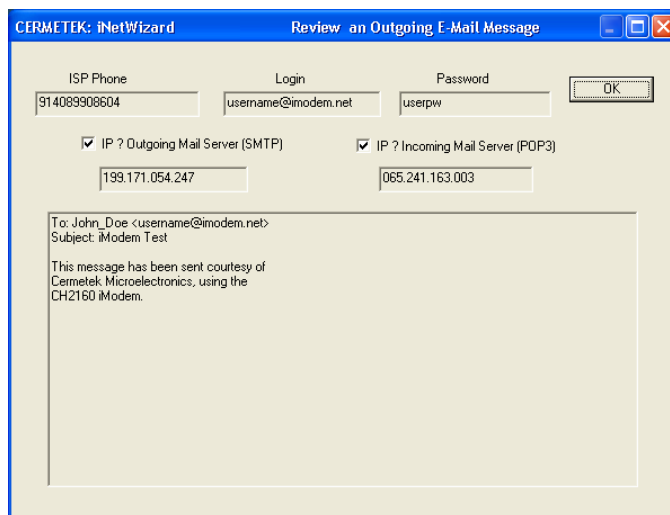


Figure 19. iNetWizard® Review Outgoing Email window per Example 2.

Step 1. Single click on the COMPOSE/REVIEW/EDIT button.

Step 2A. Prepare to edit the DESTINATION address by highlighting the address as indicated in Figure 20.

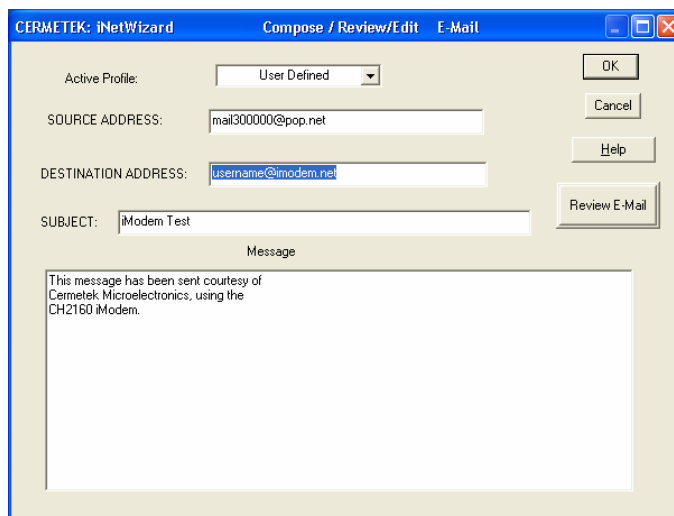


Figure 20. iNetWizard® Compose/Review/Edit Email window with DESTINATION address highlighted prior to modifications per Example 3.

Step 2B. Edit the DESTINATION address. Do not enter <CR> after the required character edits as this will cause iNetWizard® to exit the COMPOSE/REVIEW/EDIT window after executing the specified DESTINATION address change(s). See the changes in Figure 21.

Enter: **sendmemail@customer.com**

Step 2C. Edit the SUBJECT line. As in Step 2B, highlight the SUBJECT line data and make the character edits. Do not enter <CR> after the required edits as this will cause iNetWizard® to exit the COMPOSE/REVIEW/EDIT window after executing the specified SUBJECT line change(s).

Enter: **Test Email # 1**

Step 2D. Edit the body of the message. As in Step 2C, highlight the body of the message and make the character edits. The <CR> may be used as often as required. By convention, each occurrence of <CR> inserts the <CR><LF> combination. The complete changes are displayed in Figure 22.

Enter: **This is a test message.**

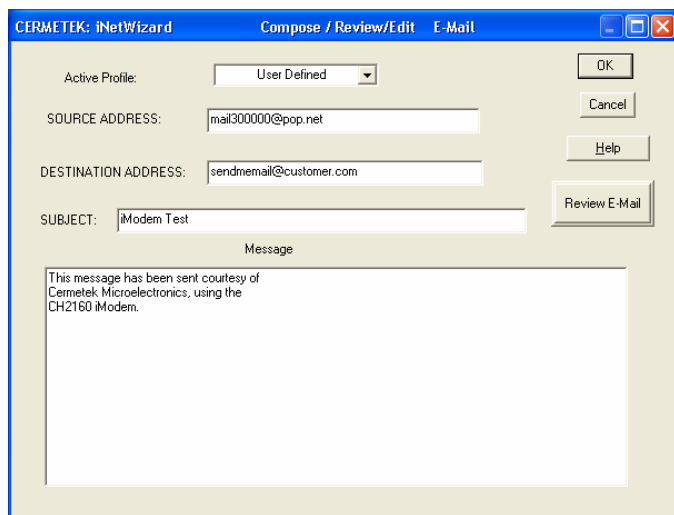


Figure 21. iNetWizard® Compose/Review/Edit Email window after DESTINATION address modifications per Example 3.

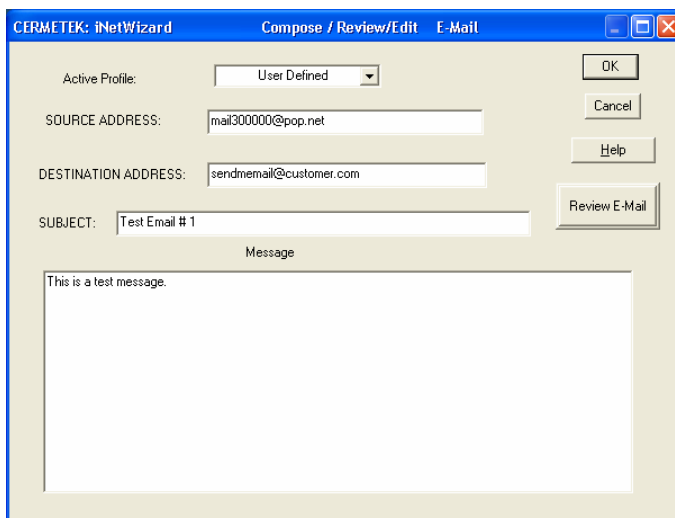


Figure 22. iNetWizard® Compose/Review/Edit Email window after all specified modifications per Example 3.

- Step 3. Single click on the REVIEW EMAIL button to review the email message. This will cause iNetWizard® to transfer the Local Configuration Profile to the iNet device’s Active Configuration Profile. During this transfer process, both the CONFIGURING INET PRODUCT and the QUERYING INET PRODUCT messages will be displayed. See the REVIEWING AN OUTGOING E-MAIL MESSAGE window in Figure 23.
- Step 4. Single click on the OK button to return to the COMPOSE/REVIEW/EDIT EMAIL Window.
- Step 5. Single click on the OK button to return to the Opening Window.
- Step 6. Single click on the SEND EMAIL button to send the email message. This will initiate the email send activity.

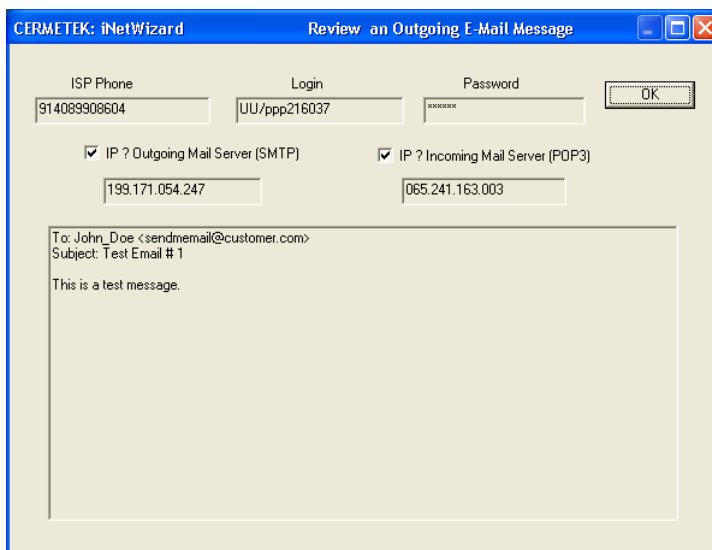


Figure 23. iNetWizard® Reviewing An Outgoing E-Mail Message window after all specified modifications per Example 3.

Example 4: Picking up from the completion of Step 6 in Example 3, select the Port Status message from the Active Profile dialog box. Modify the email message and subject line as indicated below. Note that character editing is supported (i.e., use the backspace to edit character entry) and case sensitivity is maintained. Send the modified email message to the new email destination address.

Destination: **newmail@customer.com**
Subject: **Test Email # 2**

Step 1. Referring to Figure 17 (Opening Window), click on the down arrow on the Active Profile dialog box. Highlight, then single click on the Port Status item. See Figure 24.

This will cause **iNetWizard®** to transfer to the Local Configuration Profile the Port Status Configuration. **iNetWizard®** will display the Port Status email message (and all associated parameters) in the COMPOSE/REVIEW/EDIT E-Mail window. See Figure 25. Note that the SOURCE email address, the DESTINATION email address and the SUBJECT line did not change from the data in Example 3. When **iNetWizard®** reconfigures the Local Configuration Profile, it does not modify these parameters.

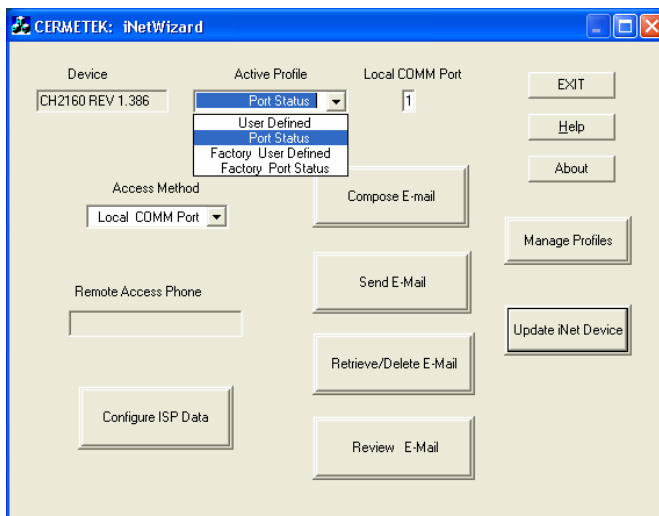


Figure 24. Opening Window with Port Status highlighted per Example 4.

Step 2. During the transfer process, both the CONFIGURING INET PRODUCT and the QUERYING INET PRODUCT messages will be displayed.

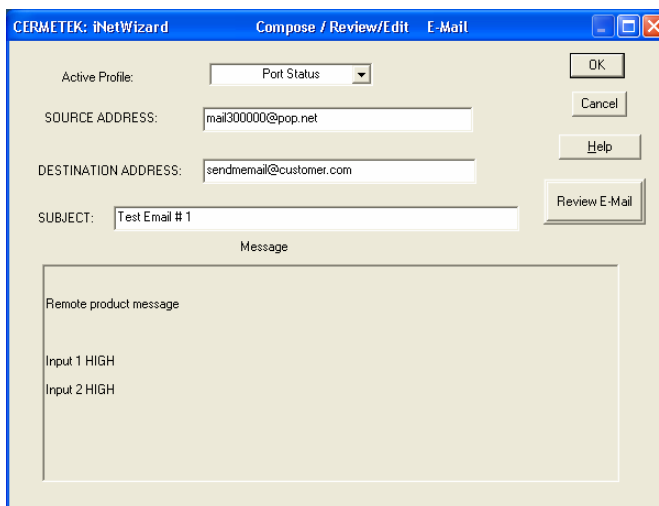


Figure 25. Compose/Review/Edit E-Mail window with Port Status email message per Example 4.

Step 3A. Prepare to edit the DESTINATION address by highlighting the address as done previously in Example 3. Do not enter <CR> after the required character edits as this will cause **iNetWizard®** to exit the COMPOSE/REVIEW/EDIT window after executing the specified DESTINATION address change(s).

Enter: **newmail@customer.com**

Step 3B. Edit the SUBJECT line. As in Step 2B, highlight the SUBJECT line data and make the character edits. Do not enter <CR> after the required edits as this will cause iNetWizard® to exit the COMPOSE/REVIEW/EDIT window after executing the specified SUBJECT line change(s). See Figure 26.

Enter: **Test Email # 2**

Step 4. Single click on the REVIEW EMAIL button to review the email message. This will cause iNetWizard® to transfer the Local Configuration Profile to the iNet device's Active Configuration Profile. During this transfer process, both the CONFIGURING INET PRODUCT and the QUERYING INET PRODUCT messages will be displayed. See the REVIEWING AN OUTGOING E-MAIL MESSAGE window in Figure 27.

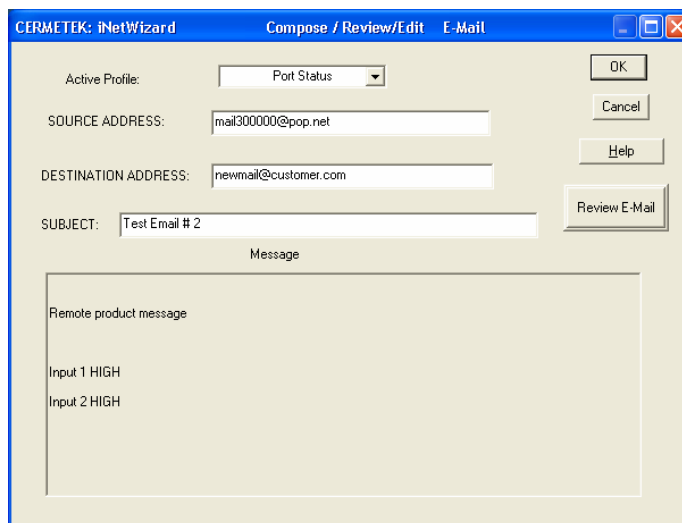


Figure 26. Port Status Compose/Review/Edit Email message after editing per Example 4.

The Port Status is displayed reflecting the current electrical configuration of the iModem product's input ports. The message body may not be modified by the user.

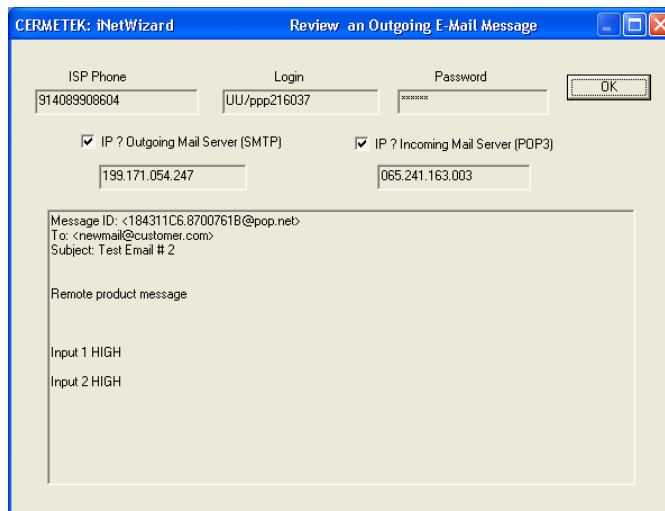


Figure 27. iNetWizard® Review An Outgoing Email window per Example 4.

Step 5. Single click on the OK button to return to the COMPOSE/REVIEW/EDIT EMAIL Window.

Step 6. Single click on the OK button to return to the Opening Window.

Step 7. Single click on the SEND EMAIL button to send the email message. This will initiate the email send activity.

Example 5: Restore the original factory ISP parameters and then modify per the following test parameters.

ISP Phone: **5551212**
 Network Login: **MyLoginID**
 Network Password: **Mypassword**

Step 1. Restore factory ISP parameters. Referring to Figure 28 (Opening Window), click on the down arrow on the Active Profile dialog box. Highlight, then single click on FACTORY USER DEFINED. This will cause iNetWizard® to transfer to the Local Configuration Profile the factory default parameters.

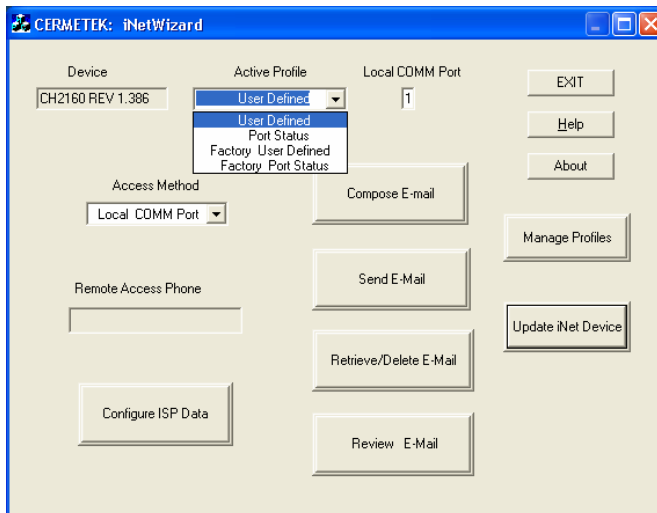


Figure 28. Restore the factory default parameters by selecting the User Defined message per Example 5.

Step 2. Display ISP parameters. Click on the CONFIGURE ISP button. This will display the CONFIGURE ISP INFORMATION window. See Figure 29.

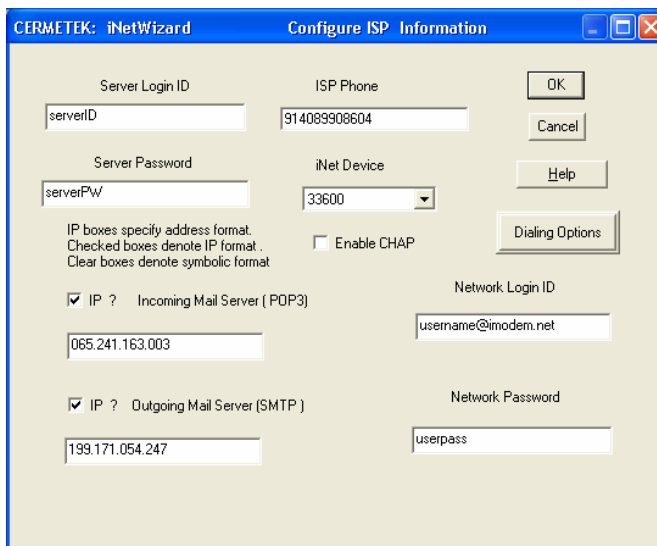


Figure 29. Configure ISP Information Data window per Example 5.

CAUTIONARY NOTE

The DNS (Domain Name Server) changes the IP decimal address from time to time. To ensure that the current SMTP and POP3 addresses are referenced in all email transactions, the user is encouraged to check the www.imodem.net web site.

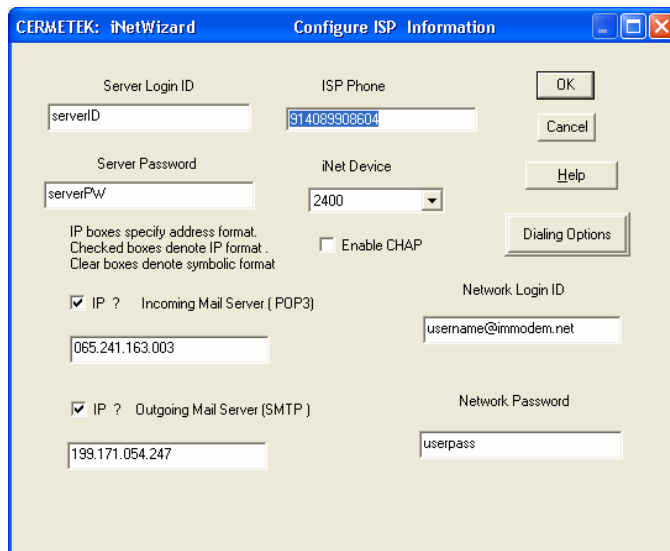


Figure 30. Configure ISP Information Data window per Example 5. ISP Phone number highlighted in preparation for character editing.

Step 3A. Prepare to edit the ISP PHONE number by highlighting the ISP PHONE number. See Figure 30. Do not enter <CR> after the required character edits as this will cause iNetWizard® to exit the CONFIGURE ISP (1) INFORMATION window after executing the specified change(s).

Enter: **5551212**

Step 3B. Edit the NETWORK LOGIN ID. As in Step 3A, highlight the NETWORK LOGIN ID data and make the character edits. Do not enter <CR> after the required edits as this will cause iNetWizard® to exit the CONFIGURE ISP INFORMATION window after executing the specified change(s).

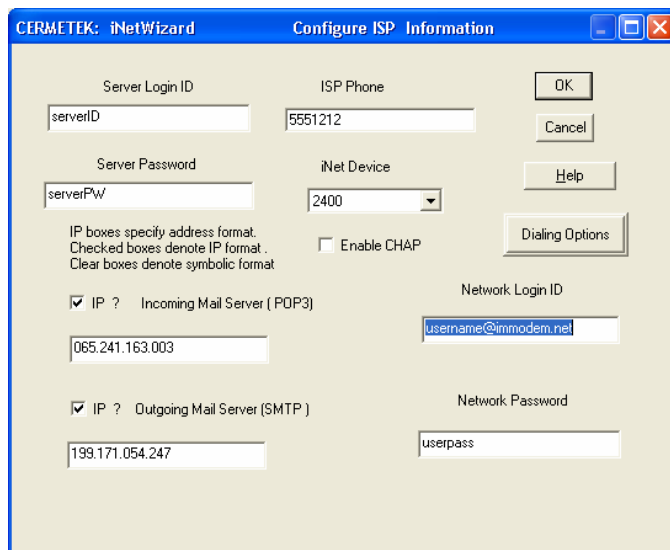


Figure 31. Configure ISP Information Data window after modifications per Example 5, Step 3A and in preparation for the modifications in Example 5, Step 3B.

Enter: **MyLogin**

Step 3C. Edit the NETWORK PASSWORD. As in Step 3A, highlight the NETWORK PASSWORD data and make the character edits. Do not enter <CR> after the required edits as this will cause iNetWizard® to exit the CONFIGURE ISP INFORMATION window after executing the specified change(s). See Figure 32.

Enter: **My password**

- Step 4. Single click on OK. This will return to the Opening Window.
- Step 5. Referring to Figure 17 (Opening Window), click on the down arrow on the Active Profile dialog box. Highlight, then single click on the User Defined Factory. This will cause **iNetWizard®** to transfer to the Local Configuration Profile the factory default parameters for the User Defined email message. During the transfer process, both the CONFIGURING INET PRODUCT and the QUERYING INET PRODUCT messages will be displayed.
- Step 6. Display the default ISP internet parameters. Referring to Figure 28, click on the CONFIGURE ISP button. See Figure 32.

IMPORTANT NOTE

The ACTIVE PROFILE selections FACTORY PORT STATUS and FACTORY USER DEFINED restore the factory default ISP parameters only. DESTINATION email address, SOURCE email address, SUBJECT line and MESSAGE BODY are unaffected.

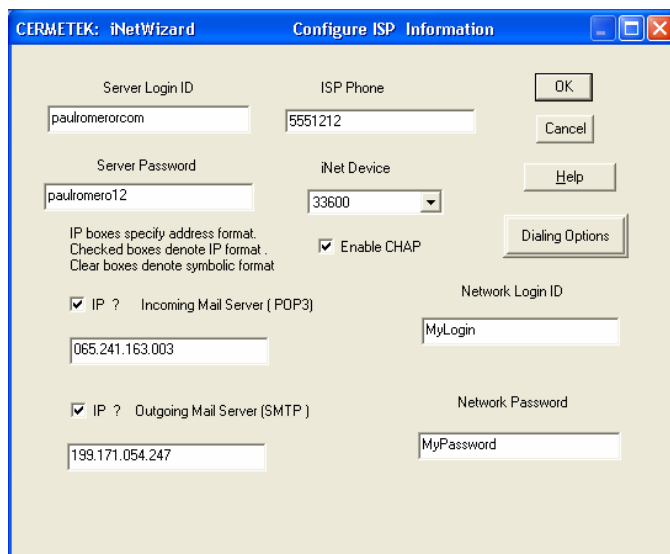


Figure 32. Configure ISP Information Data window after all modifications per Example 5.

Example 6: Use the SEND PUSH button on the CH21XX Evaluation Board to SEND the User Defined email message.

- Step 1. Review content of current User Defined email message. Referring to Figure 17 (Opening Window), single click on the REVIEW EMAIL button to review the email message.
- Step 2. Single click on the OK button to return to the Opening Window.
- Step 3. Momentarily Depress the SEND EMAIL push button on the evaluation board. This will initiate the email send process. DTMF dialing tones will become audible and the iModem will begin negotiation with the ISP modem. Observe that the DCD (i.e., Carrier Detect) LED will illuminate when the negotiation concludes successfully. The audible monitoring will then be disabled by the evaluation board.

Although no email progress status messages will appear on the monitor screen, the message transmission activity will proceed normally and is completed when the DCD LED turns off.

In the event that the iModem email transmission is interrupted prior to proper disconnection from the internet, it is recommended that the user wait a minimum of 2 minutes before attempting to send another

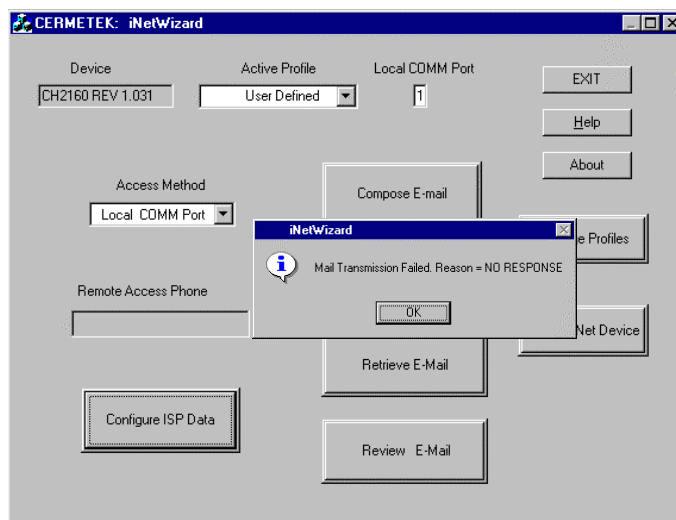


Figure 33. Example of typical Error Message received when SEND EMAIL attempted before SMTP Mail server has released server connection used during previous email transmission.

email. This forces compliance to the governing internet RFCs and allows the SMTP server sufficient time to release the socket connection. Figure 33 contains an example of the typical error message received when SEND EMAIL is attempted before the SMTP server has released the connection.

Retrieve Email Examples. Unlike the send email SMTP server, the retrieve email POP3 server needs to know the number of the message the user wishes to retrieve. Unless otherwise specified, **iNetWizard®** will retrieve email message $n=1$. Refer to section **EMAIL RETRIEVAL/DELETION DIALOG WINDOW** for a detailed discussion of this topic.

The following example illustrates the retrieve email feature of the iModem.

Example 7: Use the CH2160 to retrieve a test email message.

- Step 1. Referring to Figure 17 (Opening Window), click on the down arrow on the Active Profile dialog box and highlight User Defined. This will cause **iNetWizard®** to transfer to the Local Configuration
- Step 2. Single click on RETRIEVE EMAIL button. The pop-up RETRIEVE/DELETE window will appear. See Figure 34. Note that this window is used to specify both the Retrieve and/or the Delete message #.
- Step 3. Specify the message number to be retrieved. It is OK to leave the Delete message number window blank. Single click on OK to retrieve the email message. The RETRIEVE DATA window will disappear. The following status messages will appear superimposed over the Opening Window in the order indicated. Each message will alternately highlight and fade to gray indicating activity in progress.
 - A. **Retrieving E-Mail....** This message indicates that the iModem is preparing to dial the local access phone number.
 - B. **SENDING EMAIL # n.** This message indicates that the iModem is dialing the POP and is beginning Retrieve Email message attempt n .
 - C. **AUTHENTICATING.....** This message indicates that the iModem is authenticating the ISP password.
 - D. **CONNECTING.....** This message indicates that the iModem is connecting to the ISP via the POP.
 - E. **RETRIEVING EMAIL.....** This message indicates that the iModem is retrieving the email message from the POP3 server.
 - F. **EXITING POP3.....** This message indicates that the iModem is disconnecting from the POP3 server.
 - G. **DISCONNECTING.....** This message indicates that the iModem is terminating the ISP connection.

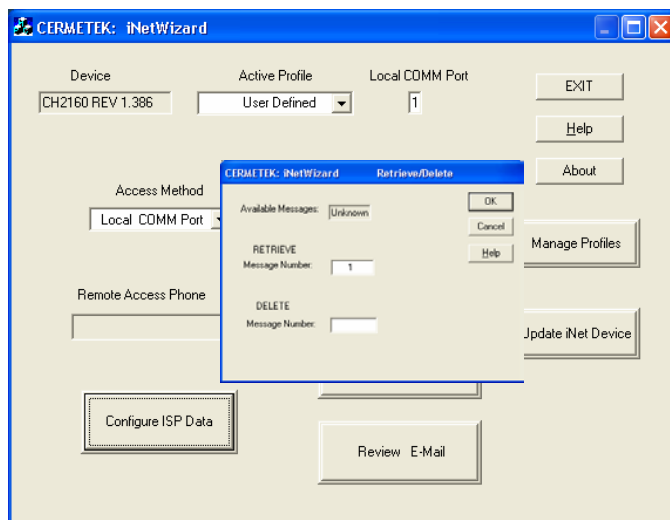


Figure 34. Retrieve Data pop-up window per Example 7.

Step 4. When the retrieve process is completed, the VIEWING AN INCOMING EMAIL MESSAGE window will open. Note that the RETRIEVING EMAIL status message will also be displayed. See Figure 35.

Step 5. Single click on the OK button. The Email Activity Counter will be displayed. See Figure 9.

Step 6. Single click on the OK button to return to the Opening Window (Figure 17).

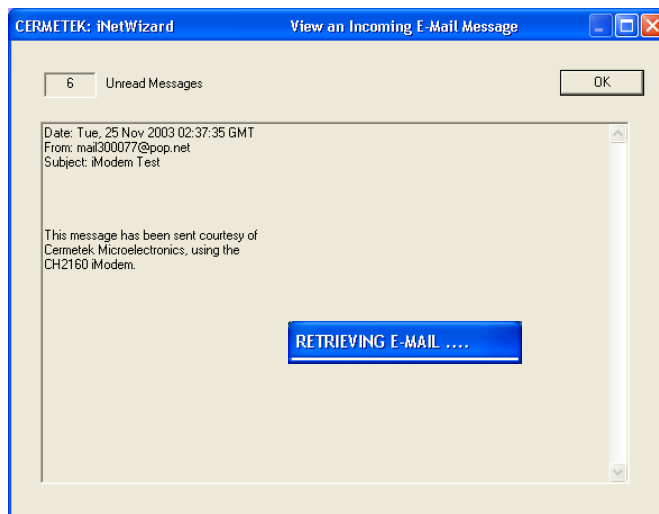


Figure 35. Review Retrieved Email Message window per Example 7.

Retrieval Of MIME Encapsulated Email Messages. Currently, Cermetek iNet devices do not support retrieval of MIME email messages. If retrieval of a MIME message is attempted, iNetWizard® will properly retrieve the email headers and other associated ASCII data. iNetWizard® will then display the ASCII portion of the email message body in the message display dialog window along with a simple description indicating that the message contained a MIME encapsulated portion. See Figure 36.

Email Retrieval: NO RESPONSE Email POP3 Server Error Message. iNetWizard® will display this error message (see Figure 37) for various reasons. It indicates that the POP3 server is not processing the iNet Devices message retrieval request, that error was encountered during Authentication or that the carrier was dropped during the email retrieval activity. It is recommended that the user re-initiate the email retrieval activity. If the failure persists, then the user must wait the RFC imposed 12 minutes for the POP3 connection to close, then re-initiate the email retrieval activity.

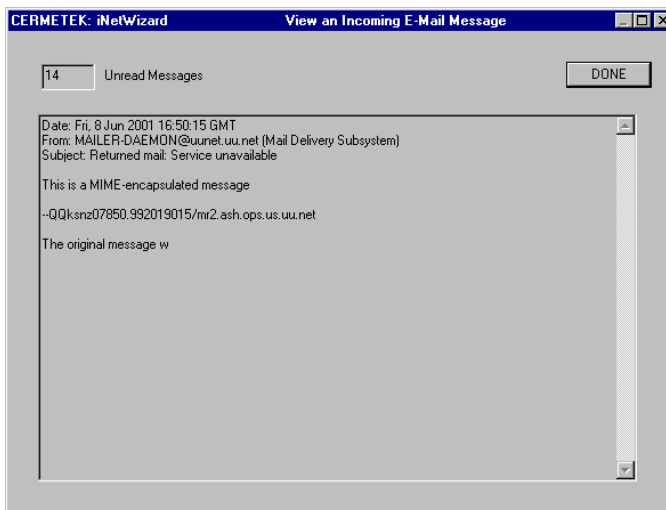


Figure 36. Retrieved MIME Encapsulated Email Message.

Delete Email Examples. Just as for the case of retrieve email, the email POP3 server needs to know the number of the message the user wishes to delete. The delete email activity is performed as either an adjunct activity to the retrieve email activity or as a separate activity – depending on the selections specified in the Retrieve/Delete Dialog Window. In other words, **iNetWizard®** retrieves email messages first and then deletes email. Refer to section **EMAIL RETRIEVAL/DELETION DIALOG WINDOW** for a detailed discussion of this topic.

If a retrieve message number is specified (other than 0), the Retrieve Email activity will be attempted first. In this case, the Delete Email activity will become DELETE PENDING - assuming the delete message number specified is non-zero (or non-blank) and will be performed via a separate dial-up call following the email Retrieval activity. DELETE PENDING indicates that the delete activity has been scheduled by **iNetWizard®** but can not be performed immediately. **iNetWizard®** will initiate the delete email activity after the user closes the Viewing Incoming Email window resulting from the Retrieve Email activity. If a delete message number is not specified (i.e., blank) or specified as 0, no follow-up delete email activity will be attempted

If a retrieve message number is specified as 0, the Retrieve Email activity will not be attempted and **iNetWizard®** will proceed to the Delete activity.

The following example illustrates the delete email feature of the iModem.

Example 8: Use the CH2160 to delete email message # 5.

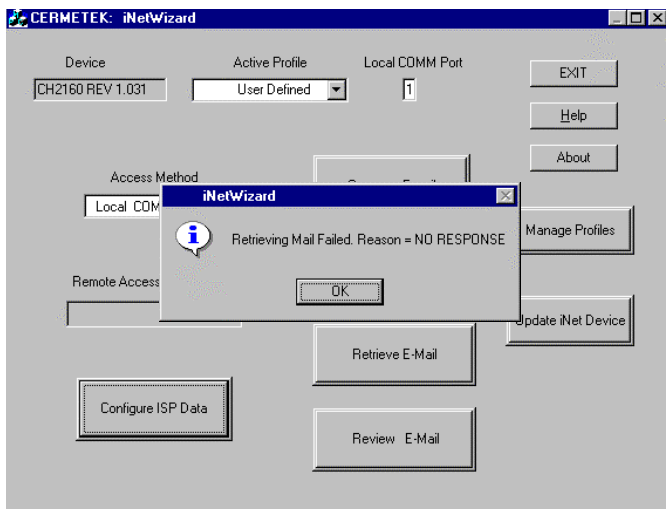


Figure 37. NO RESPONSE POP3 Email Server Error Message.

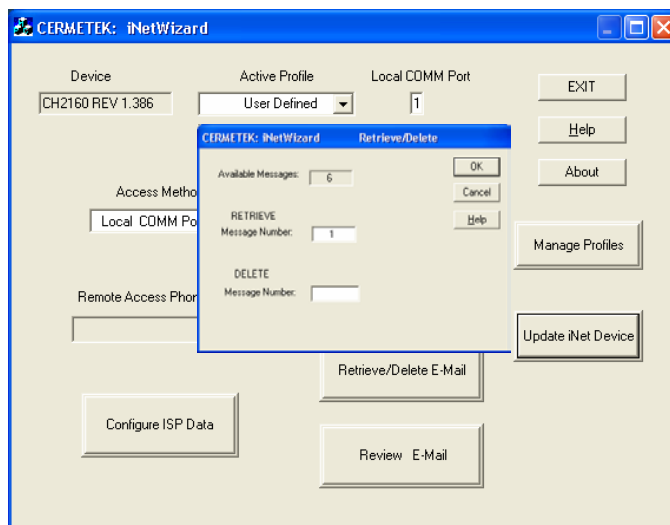


Figure 38. Retrieve Data pop-up dialog box per Example 8.

- Step 1. Picking up after Step 6 in Example 7, single click on the RETRIEVE E-MAIL button in the Opening Window (Figure 17).
- Step 2. The pop-up RETRIEVE/DELETE window will appear. See Figure 38. Notice that the AVAILABLE MESSAGES window contains the number of messages available on the POP3 server. This was also displayed in the UNREAD MESSAGES window in the VIEW AN INCOMING E-MAIL MESSAGE window (see Example 7, Figure 35).
- Step 3A. Specify the email message number to be deleted. Highlight the data in the DELETE Message Number window and specify the message number to be deleted. Do not enter <CR> after the required edits as this will cause iNetWizard® to exit the RETRIEVE/DELETE window after executing the specified change(s).

Enter: 5

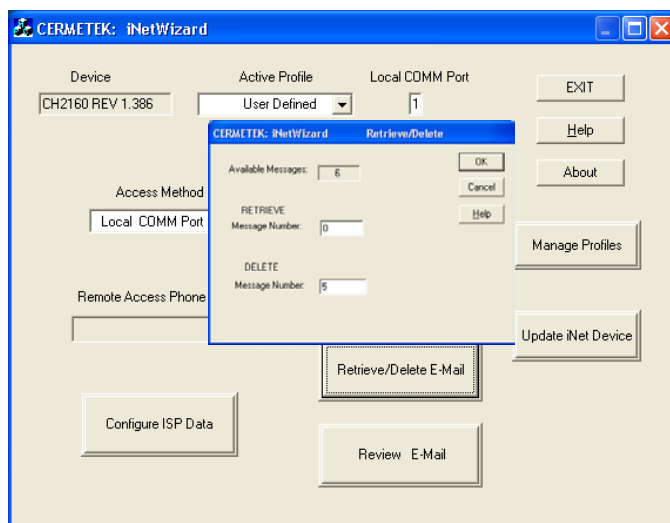


Figure 39. Retrieve Data pop-up dialog box with retrieve email message number specified selected per Example 8.

- Step 3B. Set the retrieve email message number to zero. Highlight the data in the RETRIEVE Message Number window and specify the message number to be retrieved as 0. Do not enter <CR> after the required edits as this will cause iNetWizard® to exit the RETRIEVE/DELETE window after executing the specified change(s). See Figure 39.

Enter: 0

Step 4. Single click on OK button.

Step 5. **iNetWizard®** will initiate the dialing sequence automatically. The following status messages will appear superimposed over the Opening Window in the order indicated. Each message will alternately highlight and fade to gray indicating activity in progress.

- A. **Retrieving E-Mail....** This message indicates that the iModem is preparing to access the POP3 server.
- B. **DELETING EMAIL....** This message indicates that the DELETING EMAIL activity has been initiated.
- C. **DIALING.....** This message indicates that the iModem is dialing the POP.
- D. **AUTHENTICATING.....** This message indicates that the iModem is authenticating the ISP password.
- E. **CONNECTING.....** This message indicates that the iModem is connecting to the ISP via the POP.
- F. **DELETING EMAIL....** This message indicates that the POP3 server has begun the DELETE EMAIL activity.
- G. **Deleting E-Mail....** This message indicates that the POP3 server has completed the email deletion activity.
- H. **DELETING EMAIL....** This message indicates that the POP3 server is updating the Retrieve/Delete Window.
- I. **EXITING POP3.....** This message indicates that the iModem is disconnecting from the POP3 server.
- J. **DISCONNECTING.....** This message indicates that the iModem is terminating the ISP connection.

Step 6. Upon completion of the delete email activity, **iNetWizard®** will return to the Opening Window (Figure 17).

Attachment I

Summary Of Typical Failure Modes And Suggested Remedies.

Page 1 of 4

ELECTRICAL CONNECTION RELATED FAILURE MODES

Failure Conditions/Diagnosis.

- A. The iNet product is not properly powered.
 - Check the AC/DC adapter for proper operation.
 - Check to ensure that the evaluation board power switch is turned on.
 - Verify that +5V is applied to the iNet product VCC pin.
- B. The electrical connection to the COMM Port is faulty.
 - Check to ensure proper electrical connection between the Evaluation Board/Test System and the COMM PORT connection on the PC.
 - Replace the COMM PORT connection cable.

Recovery Procedure.

- A. Correct the failure condition.
- B. Click on the OK button in the error message. **iNetWizard®** will cycle through two additional re-tries. During each retry, the OK button must be selected to proceed to the next retry.
- C. If the failure condition persists after the third re-try, recycle through another set of three re-tries by highlighting the COMM PORT number and entering the number. DO NOT press <CR>. This will ensure that **iNetWizard®** has attempted communication with the perceived failure condition corrected.

COMM PORT SOFTWARE RELATED FAILURE MODES

Failure Conditions/Diagnosis.

- A. The wrong COMM PORT number was specified.
 - Verify that the COMM PORT number specified is correct by checking the back panel of the PC.
- B. The COMM PORT is already OPEN (and presumably) in use by another application.
 - Close all conflicting applications.
- C. Some unusual or unexpected data transmission is occurring on the COMM PORT link (presumably) by another application.
 - Close all conflicting applications.

Recovery Procedure.

- A. Click on the OK button in the error message. **iNetWizard®** will cycle through two additional re-tries. During each retry, the OK button must be selected to proceed to the next retry.
- B. Single click on the EXIT button to exit **iNetWizard®**.
- C. Close all conflicting applications leaving MS Windows running.
- D. Restart **iNetWizard®** per the procedures described in the **Accessing iNetWizard®** section of this application note.

COMM PORT HARDWARE RELATED FAILURE MODES

Failure Conditions/Diagnosis.

- A. The COMM PORT will not communicate with **iNetWizard®**.
 - Verify that the COMM PORT will transmit and receive data in serial fashion by using an independent application (such as MS HyperTerminal).
 - Verify that the COMM PORT will transmit and receive data in the bit pattern summarized below:

	CH2124/A	CH2160
Bits Per Second =	2400	57600
Data Bits =	8 bits	8 bits
Parity =	None	None
Stop bits =	1	1
Flow Control =	None	None

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Summary Of Typical Failure Modes And Suggested Remedies.

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Recovery Procedure.

- A. Click on the OK button in the error message. **iNetWizard®** will cycle through two additional re-tries. During each retry, the OK button must be selected to proceed to the next retry.
- B. Single click on the EXIT button to exit **iNetWizard®**.
- C. Use MS HyperTerminal (or an equivalent terminal emulation application program) to verify that the data transmission capabilities of the existing COMM PORT are adequate for proper **iNetWizard®** operation and that the COMM PORT is operating properly. Refer to Cermetek Application Note # 157, Using MS HyperTerminal With iModem Products, for detailed instructions concerning COMM PORT operation and verification using the MS HyperTerminal terminal emulation program.
- D. Replace the COMM PORT card if it is determined to be inadequate and/or faulty.
- E. Restart **iNetWizard®** per the procedures described in the **Accessing iNetWizard®** section of this application note.

SOFTWARE RELATED FAILURE MODES FOR WINDOWS 95, 98 OPERATING SYSTEMS (OS)

Failure Conditions/Diagnosis.

- A. **iNetWizard®** will not recognize/communicate with the host system.
 - Verify that the COMM PORT is functioning properly per the software/hardware COMM PORT debug procedures listed above.
- B. An error window appears prior to the **iNetWizard®** opening window.
 - Verify that the **profiles** directory exists in the proper system directory for the operating system (OS) currently running on the host computer. For **MS Windows 95 or 98**, the **profiles** directory must be in the following location on the host computer:

C:\Program Files\Cermetek\profiles

Recovery Procedure.

- A. Click on the OK button in the error message. **iNetWizard®** will cycle through two additional re-tries. During each retry, the OK button must be selected to proceed to the next retry.
- B. Single click on the EXIT button to exit **iNetWizard®**.
- C. Re-Install **iNetWizard®** per the **Installation Instructions** section of Attachment II.
- D. Restart **iNetWizard®** per the procedures described in the **Accessing iNetWizard®** section of this application note.

SOFTWARE RELATED FAILURE MODES FOR WINDOWS NT, XP OPERATING SYSTEMS (OS)

Failure Conditions/Diagnosis.

- A. **iNetWizard®** will not recognize/communicate with the host system.
 - Verify that the COMM PORT is functioning properly per the software/hardware COMM PORT debug procedures listed above.
- B. An error window appears prior to the **iNetWizard®** opening window.
 - Verify that the **profiles** directory exists in the proper system directory for the operating system (OS) currently running on the host computer. For **MS Windows XP**, the **profiles** directory must be in the following location on the host computer:

C:\Program Files\Cermetek\profiles

Recovery Procedure.

- A. Click on the OK button in the error message. **iNetWizard®** will cycle through two additional re-tries. During each retry, the OK button must be selected to proceed to the next retry.
- B. Single click on the EXIT button to exit **iNetWizard®**.
- C. Re-Install **iNetWizard®** per the **Installation Instructions** section of Attachment II.
- D. Restart **iNetWizard®** per the procedures described in the **Accessing iNetWizard®** section of this application note.

Attachment I

Summary Of Typical Failure Modes And Suggested Remedies.

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SOFTWARE RELATED FAILURE MODES FOR ME and 2000 OPERATING SYSTEMS (OS)

Failure Conditions/Diagnosis.

- A. **iNetWizard®** will not recognize/communicate with the host system.
 - Verify that the COMM PORT is functioning properly per the software/hardware COMM PORT debug procedures listed above.
- B. An error window appears prior to the **iNetWizard®** opening window.
 - Verify that the **profiles** directory exists in the proper system directory for the operating system (OS) currently running on the host computer. For **MS Windows XP**, the **profiles** directory must be in the following location on the host computer:

C:\Program Files\Cermetek\profiles

Recovery Procedure.

- A. Click on the OK button in the error message. **iNetWizard®** will cycle through two additional re-tries. During each retry, the OK button must be selected to proceed to the next retry.
- B. Single click on the EXIT button to exit **iNetWizard®**.
- C. Re-Install **iNetWizard®** per the **Installation Instructions** section of Attachment II.
- D. Restart **iNetWizard®** per the procedures described in the **Accessing iNetWizard®** section of this application note.

RUNTIME FAILURE MODES

Failure Conditions/Diagnosis.

- A. The SMTP (Send Mail) or POP3 (Retrieve Mail) Server is NOT RESPONDING during an **iNetWizard®** session.
 - Verify that the PSTN connection is functioning properly.
- B. **iNetWizard®** “Hangs” or is NOT RESPONDING during an **iNetWizard®** session.
 - Verify that the PSTN connection is functioning properly.
- C. The SMTP or POP3 mail server has not released the prior socket connection.
 - Wait 5 minutes for SMTP (i.e., Send email) and retry.
 - Wait 15 minutes for POP3 (i.e., Retrieve/Delete email) and retry.

Recovery Procedure.

- A. Wait at least 5 minutes or 15 minutes, as appropriate. **iNetWizard®** has a built in time-out recovery routine that waits 3 minutes and then automatically terminates the SEND/RETRIEVE activity.
- B. Single click on the OK button when the NO RESPONSE error message is displayed.
- C. Wait an additional 5 minutes for the SMTP or 15 minutes for the POP3 server to close.
- D. Re-try the SEND/RETRIEVE activity.

LOW EMAIL TRANSMISSION SUCCESS RATE

Failure Conditions/Diagnosis.

- A. The email transmission success rate is <50%. Typical success rate for local access dial-ups phone numbers is $\geq 90\%$.
 - Verify that the PSTN connection is functioning properly.
- B. **iNetWizard®** “Hangs” or is NOT RESPONDING during an **iNetWizard®** session.
 - Verify that the PSTN connection is functioning properly.
- C. The SMTP or POP3 mail server has not released the prior socket connection.
 - Wait 5 minutes for SMTP (i.e., Send email) and retry.
 - Wait 15 minutes for POP3 (i.e., Retrieve/Delete email) and retry.

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Summary Of Typical Failure Modes And Suggested Remedies.
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Recovery Procedure.

- A. Wait at least 5 minutes or 15 minutes, as appropriate. **iNetWizard®** has a built in time-out recovery routine that waits 3 minutes and then automatically terminates the SEND/RETRIEVE activity.
- B. Single click on the OK button when the NO RESPONSE error message is displayed.
- C. Change the ISP phone number.
 - Single click on the dash mark in the upper right hand corner of the **iNetWizard®** Opening Window. This will minimize the **iNetWizard®** window.
 - Log on the internet and go to the Cermetek web site at www.cermetek.com.
 - Click on the imodem.net item. This will take the user to the iModem Network web site.
 - Single click on the LOCAL ACCESS item.
 - Select a new local access phone number and an alternate.
 - Log off the internet.
 - Double click on the **iNetWizard®** item in the lower task bar of the MS Windows desktop screen. This will restore **iNetWizard®** to the desktop.
- C. Wait an additional 5 minutes for the SMTP or 15 minutes for the POP3 server to close.
- D. Re-try the SEND/RETRIEVE activity.

Attachment II
iNetWizard® Installation Instructions For MS Windows Operating Systems.
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SUMMARY OF FILES

iNetWizard® Program Files.

The **iNetWizard®** download Zip file or the Cermetek **iNetWizard®** diskette contains four files and the profiles directory. Note that the profiles directory is empty. The complete contents by file name below:

1. iNetWizard.exe
2. iNetWizard.hlp
3. MENUA.hlp
4. iNetWizard.cnt
5. profiles

FROM THE INTERNET

Downloading Instructions.

These instructions will download the compressed file **iNetWizard.zip** containing the files listed above. To download from the internet, proceed as follows.

- Step 1. Go to the iModem Network web site at www.imodem.net.
- Step 2. Single click on the **iNetWizard® Download** item. The **iNetWizard®** download window will appear.
- Step 3. Single Click on **Download Now**. A **Download** window will appear.
- Step 4. Select **Save This File to Disk**, then single click on **OK**.
- Step 5. A **Save As** window will open. Find the desired location on the destination system, then single click on **Save**.
- Step 6. When the download progress window disappears, the **Download** is complete.

FROM FLOPPY DISKETTE

Downloading Instructions.

Downloading not required. Simply insert the **iNetWizard®** diskette into the floppy drive and proceed to the **INSTALLATION INSTRUCTIONS** section below.

INSTALLATION INSTRUCTIONS

Installation Instructions For MS Windows Operating Systems.

The following instructions install **iNetWizard®** so that it can be accessed through a desktop icon.

- Step 1. Double click on the **isetup** icon to launch the **iNetWizard®** setup program.
- Step 2. The setup program will progress automatically. Refer to images in Figure 40A-40K.
- Step 3. Answer the questions, as appropriate.

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iNetWizard® Installation Instructions For MS Windows Operating Systems.
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Step 4. **isetup** will terminate automatically when **iNetWizard®** has been successfully installed.

Step 5. Double click on the **iNetWizard®** desktop icon to run **iNetWizard®**.

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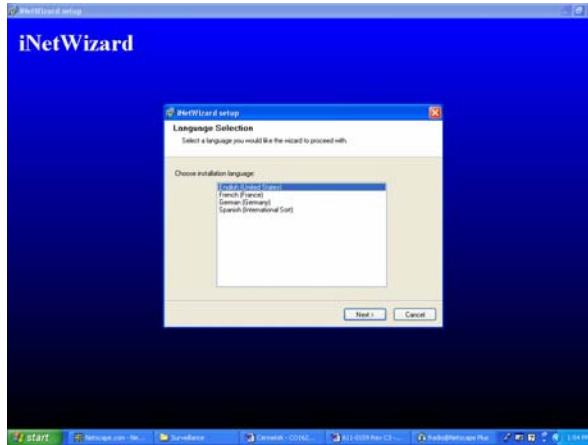


Figure 40A. Opening window for the iNetWizard® installer. Single Click on the NEXT button to proceed.

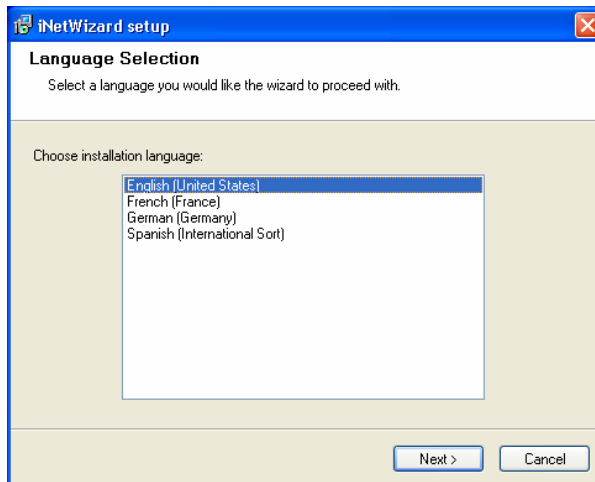


Figure 40B. Language selection window. Select one and single Click on the NEXT button to proceed.

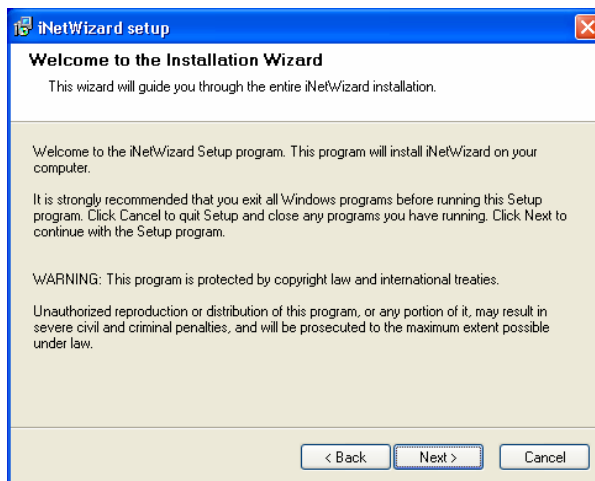


Figure 40C. Installation Wizard disclaimer. Select one and single Click on the NEXT button to proceed.

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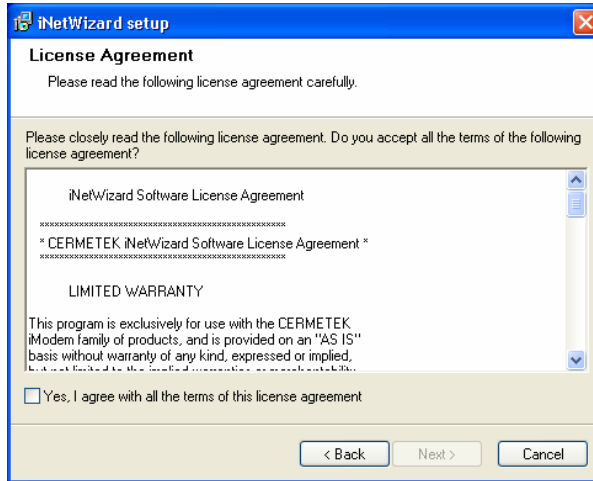


Figure 40D. License Agreement. Check YES then single Click on the NEXT button to proceed.

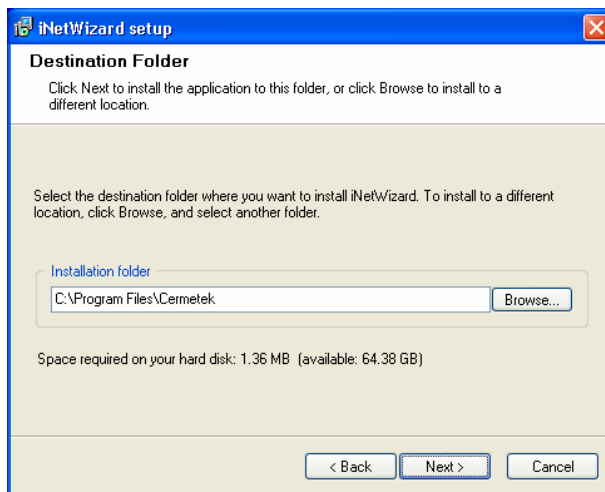


Figure 40E. Destination folder. Cermetek recommends using the default folder location. Single Click on the NEXT button to proceed.

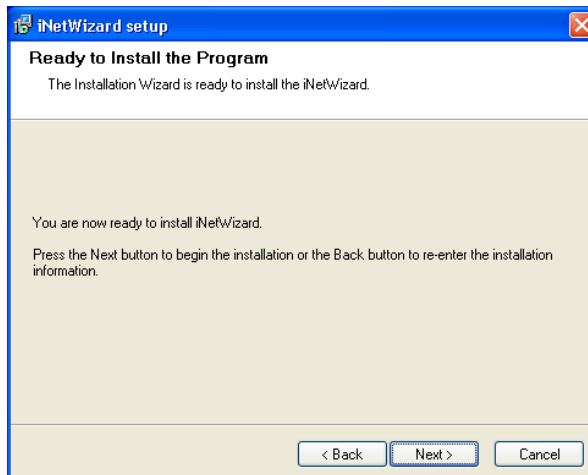


Figure 40F. Installation Beginning window. Single Click on the NEXT button to proceed.

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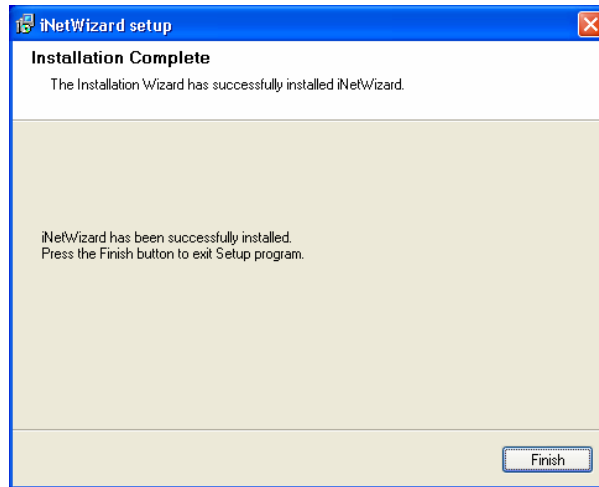


Figure 40G. Installation Complete window. Single Click on the FINISH button to terminate the iNetWizard® installer.

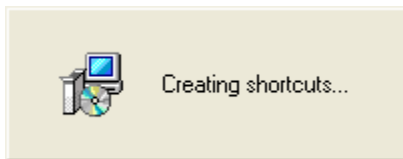


Figure 40H. Creating Desktop Shortcut icon.

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