
Outpost PMM

And ICS 213 Messaging

User Guide

April 2020
Version 3.2



Contents

1	ABOUT ICS213MM.....	1
1.1	INTRODUCTION	1
1.2	WHAT IS ICS 213?	1
1.3	ICS 213 AND OUTPOST.....	2
1.4	AN Ics213MM SESSION	3
1.5	WHY USE Ics213MM?.....	4
1.6	Ics213MM FEATURES.....	4
1.7	NOTES, ASSUMPTIONS, AND DISCLAIMERS	5
1.8	FIND AN ERROR?.....	5
2	GETTING STARTED	6
2.1	INTRODUCTION	6
2.2	THE MAIN Ics213MM FORM	7
2.3	MENUS AND TOOLBARS.....	7
2.4	MESSAGE STATUS BAR.....	9
2.5	MESSAGE FIELDS.....	10
3	SETUPS.....	13
3.1	ICS 213 PROPERTIES	13
3.2	USER IDENTIFICATION	17
3.3	OUTPOST / OPDIRECT SETUP.....	18
3.4	CHECKING THE Ics213MM-OPDIRECT CONNECTION	19
4	ICS213MM MESSAGES.....	20
4.1	CREATING AN ICS 213 MESSAGE.....	20
4.2	BROWSING FOR MESSAGES.....	21
4.3	RETRIEVING SENT MESSAGES	21
4.4	FINISHING UP A SENT MESSAGE WITH OUTPOST	22
5	SENDING MESSAGES.....	23
5.1	SENDING MESSAGES TO A REMOTE SITE	23
5.2	SENDING MESSAGES TO A LOCAL USER (KEEP LOCAL)	31

Revision History

Date	Revision	Release	Notes
2-April-2012	Original	v2.6	Updated for this release
19-Sep-2013		v2.8	Updated for this release
23-Mar-2015		V3.0	Updated for this release
8-Mar-2017		V3.2	Updated for this release

1 About ICS213mm

1.1 Introduction

This guide will introduce you to Outpost's ICS 213 program and describe how to create ICS messages that interact with the **Outpost Packet Message Manager** program.

1.2 What is ICS 213?

The following are excerpts from <http://www.ics213.com/>

"The ICS 213 General Message Form was originally designed as a multipart self-copying form for use as an interoffice memo. Since its inception, both the usage and physical embodiment have changed significantly.

"The ICS 213 General Message Form is now increasingly used for messages between parties who are not in the same location. Because the nature of incident communications is generally urgent, the form is often originated in one location and transmitted electronically to another location. The reply from that location is returned electronically and the two "parts" of the form are matched together.

GENERAL MESSAGE		
TO:		POSITION:
FROM:		POSITION:
SUBJECT:	DATE:	TIME:
MESSAGE:		
SIGNATURE:		POSITION:
REPLY:		
DATE:	TIME:	SIGNATURE/POSITION:

ICS 213

NFES 1336

“Because of the General Message Form's increased usage between often physically distant locations, the information for an ICS 213 General Message Form is often transcribed onto a blank form or entered electronically via a computer word processing program.”

1.3 ICS 213 and Outpost

This implementation of ICS 213 Messaging is designed to improve the message handling efficiency of communications teams who work closely with served agencies that use the ICS 213 message form.

There are three components of ICS 213 Messaging:

- **Ics213mm.exe.** This is a standalone program that presents the user with a computer-based fill-in-the-blank form with fields that align with the ICS 213 message form. It guides the user in creating a message using some pre-defined message fields values or by direct entry, saving a local copy, and exchanging messages with Outpost.

- **Opdirect.exe.** Opdirect EMS (External Message Service) is a program that listens on the local area network port for and receives messages from Outpost Addons, essentially remote message sources. Once the message is received, Opdirect processes and writes the message to the Outpost message database.

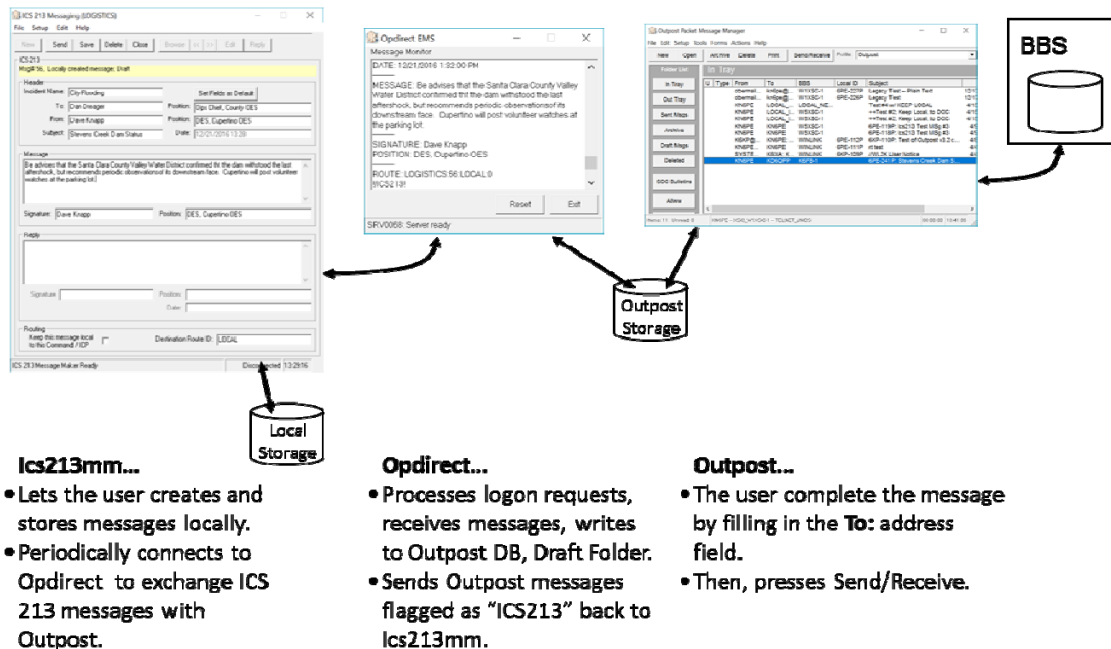
Opdirect EMS listens for, captures, and stores messages from Ics213mm in Outpost, as well as sending back ICS 213 messages received by Outpost from a remote station.

1. **Outpost.** Outpost continues to be the program that interacts with the BBS for sending and retrieving packet messages. Once an Ics213 message arrives, the Outpost operator completes the message and presses **Send**.

1.4 An Ics213mm session

Ics213mm helps the user compose a message and get it sent by packet. Here's what a user needs to do:

1. At the Outpost computer, verify Opdirect.exe is running. See Section 3.3 *Outpost / Opdirect Setup* for details.
2. Run Ics213mm.exe.
3. Enter a user identifier (you define it, such as BOB, DAVEF, CTYOPS, etc.).
4. Check the default field settings (optional).
5. Press **New**. The program pre-populates the message form with any default field settings and opens all message fields for editing.
6. Fill in the subject and the body of the message. When done, press **Send**. Ics213mm stores the message locally for retrieving and updating later.
7. At this point, Ics312mm automatically does the following:
 - a. Connects and logs on to Opdirect.
 - b. Formats any outgoing messages into a user-readable text message.
 - c. Sends the formatted message to Opdirect (which subsequently stores the message in the Outpost Draft folder).
 - d. Requests any messages intended for this user ID. Ics213mm stores any retrieved messages, and then pops up a notification window letting the user know that an incoming message has arrived.
 - e. Logs off Opdirect when done.



1.5 Why use lcs213mm?

- Keeps the focus on the message – lcs213mm is exclusively aimed at ICS 213 message management: creating, sending, receiving, printing, storing.
- Reduce transcription errors – Instead of writing a message down on paper and handing it to a packet operator, the lcs213mm program can be given to the individuals who need to create the message thereby eliminating the possibility of interpretation problems and transcription errors.
- Receives new messages and create replies – lcs213mm can also retrieve messages that Outpost received thereby closing the loop from message creation to reply.
- Deployable anywhere on the same LAN as Outpost – lcs213mm interacts with Outpost through Opdirect MCS (delivered with Outpost) using standard networking to interact with Opdirect. As a result, lcs213mm can be deployed either on the local PC where Outpost is installed, or anywhere on the local area network.
- Multiple copies of lcs213mm can be deployed and interact with a single copy of Outpost. Essentially, lcs213mm can be placed throughout the EOC on the same LAN as Outpost thereby empowering the users to manage their own message traffic. Packet radio room operators retain control operator responsibilities since they complete the message and press Outpost's Send/Receive button.

1.6 lcs213mm Features

Some of the key features of Outpost's lcs213mm Messaging are:

Message Management

- Message Types. lcs213mm supports 2 message types: (i) a Message is what the originator creates, (ii) a Reply is what the recipient sends back. Both the Message and Reply are linked and managed within a single message structure. lcs213mm tracks what it is looking at and ensures the right message control actions are allowed.
- Message Creation. lcs213mm allows messages to be created from scratch, importing text from an ASCII file, cut and pasted in from other applications, or by Replying to a previously received message.
- Text Message Formatting. Messages can be entered in a free-form text area. Simple formatting can be performed, errors corrected, and text can be added and deleted prior to sending the message.
- Storage. All messages and replies are stored locally. This allows the user to create messages with lcs213mm even if the network or Opdirect is down. Once up, lcs213mm forwards all pending messages to Outpost.
- Printing. lcs213mm can print a message in the standard ICS 213 format.
- ICS 213 message outside of Outpost. lcs213mm messages sent by Outpost are formatted in a human-readable and ICS 213-like format for retrieval and use by non-Outpost users.

Keep Local

- With version 3.2, lcs213mm messages can now be set to **Keep Local**, that is, messages can be exchanged between lcs213mm users on the same network with Outpost acting as the local mail drop. In this mode, there is no interaction

by the Outpost packet operator thereby allowing for timely and seamless message passing within an EOC or ICP.

Configurations and Setups

- Default fields. Some message fields can be defaulted to predefined values, particularly if they are the same from message to message. For instance, the FROM: and FROM POSITION may be set to your name and preloaded at message creation time.
- Network parameters. Because lcs213mm talks to Opdirect through a network connection, the user defines the IP address and Port where Opdirect is listening. Once set, it is always used when lcs213mm runs.

1.7 Notes, assumptions, and disclaimers

- The program attempts to guide the user through the process of creating, sending, reviewing, retrieving, and printing messages. If you observe obvious problems, please let me know
- Error handling will continue to evolve over time. Most of the errors are properly trapped and reported, however, it is not 100% foolproof.

1.8 Find an Error?

If you find an error or unsure how Outpost's ICS 213 Messaging is supposed to work, post a message to the Outpost Users Group or send me email to kn6pe@arrl.net.

2 Getting Started

All ICS 213 Messaging activities are managed and controlled by the lcs213mm.exe program. This section provides an overview of the program.

2.1 Introduction

The following are basic concepts to help get you started.

User Identification. Because more than one instance of lcs213mm could be installed on the LAN, a User ID is stamped on each outgoing message so that the reply message knows the route back to this user (and copy of lcs213mm).

Message Storage. lcs213mm will locally store messages (independently of Outpost) that you create, or that are received from Outpost. This allows the user to start a message or reply, but not send it because of some missing information, as well as editing a previously sent message thereby creating an update.

Any viewed message can also be printed as desired.

While there may be a tendency to keep messages forever, this is not the intent of lcs213mm.

Message States. lcs213mm can create a message or reply as well as view a received message or a received reply. Because of this, it is important to understand some of the message references that you will see as you work with messages:

Created Message:	This is a message that is originated by you and is to be sent to someone else. You can get to message text area by pressing New . Only the message area of the form is enabled for editing.
Received Message:	This is a message received by you that was originated by someone else. The received message text area is read-only and cannot be edited.
Created Reply:	After you receive a message, you can create a reply to be sent back to the messages' originator. After pressing Reply, the Reply text area of the form is enabled for editing.
Received Reply:	This is a copy of your original message and the reply as created by the person to whom you sent the original message. The message and reply text areas are read-only and cannot be edited.

2.2 The main lcs213mm form

When you start the program, you will see the main window letting you know that lcs213mm.exe is ready.

2.3 Menus and Toolbars

The *Program Controls* portion of the User Interface controls the operation and execution of all program tasks.

The lcs213mm menus provide different options for setting up and controlling the application.

NOTE: Some of the more common menu items are also implemented as Tool Bar buttons. See the associated menu item below for their description.

Menus	Description
File	Open: Lets the user pick a text message and load the message into the Message Area or Reply Area, depending on the message type.

Menus	Description
	<p>Save: Saves the message back to the local lcs213mm message store.</p> <p>Print Setup. Allows the user to select a default printer.</p> <p>Print. Allows the user to select a printer, and then print the message in an ICS 213 format.</p> <p>Exit: Exits the program. If a connection with Opdirect is in progress, the connection will end first, then the program will exit.</p>
Setup	<p>Properties: Sets various parameters to control the behavior of the program:</p> <ul style="list-style-type: none"> • Formatting. Allows the user to set up some message fields as defaults. Additionally, the date and time format can be specified. • Remote Access. Sets up the IP address and Port number for Opdirect. Also, defines the polling interval that lcs213mm uses to poll for incoming messages from Outpost. <p>See <i>Section 3.1 ICS 213 properties</i> for more information.</p> <p>Identifier: opens a box for entering the User ID.</p>
Edit	<p>Cut: Copies and deletes any highlighted text from any text area of the form. The text is placed in the MS-Windows clipboard.</p> <p>Copy: Copies any highlighted text in any from any text area of the form. The text is placed in the MS-Windows clipboard.</p> <p>Paste: Inserts text from the clipboard at the position where the cursor is located.</p>
Help	<p>About: Lists information about lcs213mm.</p>

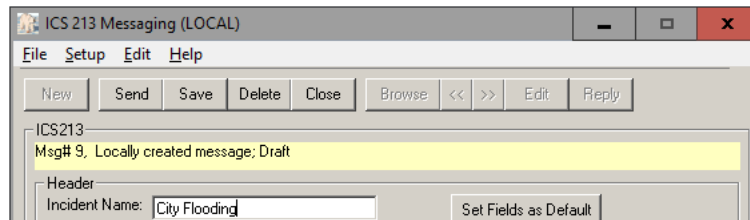
The following are other controls found on the main form.

Controls	Description
New	This option is enabled at startup. Sets up lcs213mm for entering a new message.
Send	This option is enabled whenever you are editing a message or reply. On pressing Send , the message is saved and locked, and lcs213mm attempts to deliver the message to Opdirect.
Save	This option is enabled whenever you are editing a message or reply. On pressing Save , the message is

Controls	Description
	saved and locked.
Delete	This option is enabled whenever you are viewing any message. On pressing Delete , the message is deleted from the Ics213mm local message store.
Close	This option is enabled whenever you are viewing or editing any message. On pressing Close , the message is cleared and the New and Browse buttons are enabled.
Browse	This option allows the user to Browse the messages found in the Ics213mm local message store. The number of messages and the position of the message in the store is shown to the Right of the buttons.
<<	Browse “left”. This option brings up earlier created messages for display.
>>	Browse “right”. This option brings up a later created messages for display.
Edit	<p>This option is enabled whenever you are browsing messages. On pressing Edit, you can edit the message text area of Created Messages or edit the reply text area of Created Replies.</p> <p>Pressing this button for sent messages allows you to update the message thereby letting it be sent again.</p>
Reply	<p>This option is enabled only when viewing a Received Message.</p> <p>On pressing this option, the status bar will be listed as...</p> <p>Locally created reply, status is Draft.</p>
Set Fields As Default	Takes the current set of header fields and makes them the current default fields on all subsequent messages.
Keep this message local to this Command / ICP	<p>Checking this box turns on “Keep Local” for this message.</p> <p>Keep Local sets up the message so cannot be transmitted by Outpost, but can be picked up by another local Ics213mm instance. This control works in conjunction with the field Destination Route ID.</p>

2.4 Message Status Bar

The **message status bar** is just below the control buttons. This field describes the type and state of the message that is currently being displayed.



You may see one of these Status line messages:

Status Line Messages	Meaning
Locally created message, status is Draft	A message that you are creating is not complete or ready to send. This is primarily due to a missing field.
Locally created message, status is Ready/Not Sent	A message that you created. It is ready to send, but for some reason, has not been transferred to Opdirect.
Locally created message, status is Sent	A message that you created. It has been transferred to Opdirect.
Received message, status is Unread	This is a message received by you, and you are seeing it for the first time.
Received message, status is Read	This is a message received by you, and you have already read it.
Locally created reply, status is Draft	A reply to someone else's message that you are creating. It is not complete or ready to send
Locally created reply, status is Ready/Not Sent	A reply that you created. It is ready to send, but for some reason, has not been transferred to Opdirect.
Locally created reply, status is Sent	A reply that you created. It has been transferred to Opdirect.
Received reply, status is Unread	This is a reply sent to you for a message that you originated, and you are seeing it for the first time.
Received reply, status is Read	This is a reply sent to you for a message that you originated, and you have already read it.

2.5 Message Fields

Field	Description
Incident Name	Name of the incident as assigned by the agency that activates the event. Default: Blank, or loaded with the value defined from Setup > Properties, first tab.
To	Name of the individual to whom this message is intended. This person would be the likely individual to create the reply. Default: Blank, or loaded with the value defined from Setup > Properties, first tab.
(To) Position	The organizational position of the message recipient. Default: Blank, or loaded with the value defined from Setup > Properties, first tab.
From	Name of the individual that is originating this message. Default: Blank, or loaded with the value defined from Setup > Properties, first tab.

Field	Description
(From) Position	The organizational position of the message author. Default: Blank, or loaded with the value defined from Setup > Properties, first tab.
Subject	For new messages, enter a subject for this message. When viewing an existing message, this field contains the subject of the message. The subject will be used by Outpost when it sends this as a packet message.
Date	The date that this message is created and sent. Default: Set with the current date and time based on the date/time format as defined from Setup > Properties, first tab.
Message	This is a free-form text field for creating the message to be sent to the recipient. The message size is limited to 4000 characters. Default: Blank
Signature	On the standard ICS 213 form, this is the signature of the individual creating this message. Default: The content of the From: field is copied here. However, it can be overridden if necessary.
Position	On the standard ICS 213 form, this is the position of the individual creating this message. Default: The content of the From Position: field is copied here. However, it can be overridden if necessary.
Reply	This is a free-form text field for creating the reply to the above message to be sent back to the originator. The reply size is limited to 4000 characters. Default: Blank
Signature (Reply)	On the standard ICS 213 form, this is the signature of the individual replying to this message. Default: The content of the To: field is copied here. However, it can be overridden if necessary.
Position (reply)	On the standard ICS 213 form, this is the position of the individual replying to this message. Default: The content of the To Position: field is copied here. However, it can be overridden if necessary.
Date	The date that this reply is created and sent. Default: Set with the current date and time based on the date/time format as defined from Setup > Properties, first tab.
Destination Route ID	When set, the lcs213mm message is passed to Outpost with the Destination Route already configured. This is ideal when the originator of the message knows to whom the message needs to be routed on the receiving end.

When a message is being edited, lcs213mm unlocks the necessary fields so that they can be changed. The field text is colored **BLACK**. When viewing a message that is not editable, the message text is colored **BLUE**. This helps the user identify which fields are changeable depending on whether they are creating or editing a Message or a Reply.

3 Setups

There is a mix of optional and required setups available that should be considered before starting to use Ics213mm. This section describes these setups.

3.1 ICS 213 properties

Program properties cover 3 areas: Message Formatting, and Remote Access. Access this form from the **Setup > Properties** menu. There are 2 tabs on this form:

Tabs	Description
Formatting	This tab allows you to define some default message field values that are automatically loaded whenever you create a new message. All fields are required.
Remote Access	This tab captures the network parameters that Ics213mm uses to find Opdirect.
Receiving	This tab sets up what to do when a message is received. Currently, the only option to set is to make an announcement or play a sound on a message arrival.
Routes	This tab lets the user set up how the default routing should be configured. It can be overridden once a new message is started.
Other	Sets the starting location (beginning or end of the list) when browsing a list of messages.

Tab 1 – Message Formatting

Ics213mm allows you to define some default message field values that are automatically loaded whenever you create a new message.

The screenshot shows the 'ICS 213 Properties' dialog box with the 'Formatting' tab selected. The 'Defaults - New Messages' section contains the following fields:

- Incident Name:** City Flooding
- To:** Dan Dreager (Name) / Ops Chief, County OES (Position)
- From:** Dave Knapp (Name) / OES, Cupertino OES (Position)
- Report Format:** (empty field)
- Date format:** mm/dd/yyyy
- Time Format:** hh:mm

At the bottom right are 'OK' and 'Cancel' buttons.

These fields are:

Fields	Description
Incident Name	Name of the incident. Default: blank
To: Name	Name of the individual to which this message is intended. This person would be the likely individual to perform any reply to you. Default: blank
To: Position	The organizational position of the message recipient. Default: blank
From: Name	Name of the individual that is originating this message. Default: blank
From: Position	The organizational position of the message originator. Default: blank
Date Format	The format of the date. This can take many forms, including: mm/dd/yy 11/24/09 mm/dd/yyyy 11/24/2009 dd-mmm-yyyy 24-Nov-2009 d-mmm 24-Nov Default: mm/dd/yy
Time Format	The format of the time. This can take many forms including: hh:mm 13:05 h:mm AM/PM 1:05 PM h:mm:ss 13:05:47 Default: hh:mm

The 2 controls at the bottom of the form apply to both tabs.

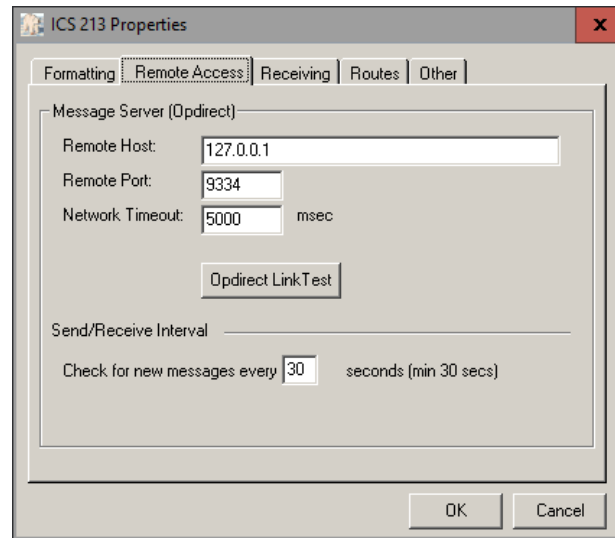
Controls	Description
OK	Saves the settings and closes the form.
Cancel	Ignores any changes and closes the form

To make message format setup changes, do the following:

1. Determine the names and positions of the **To:** and **From:** individuals that will be getting these messages. Any field left blank must be filled in at message creation time.
2. Change the date and time format if necessary. It is recommended that this format remain the same, or be set to whatever standard format is used.
3. Press **OK** when done.

Tab 2 – Remote Access

This tab allows you to configure lcs213mm networking. The goal is to point to the PC where lcs213mm can find Opdirect on the network.

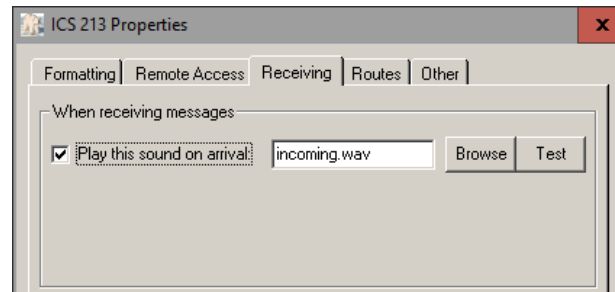


Fields, Controls	Description
Remote Host	<p>The IP Address or host name of the PC where Opdirect is running.</p> <p>The default setting tells lcs213mm to look for the Opdirect on the PC where lcs213mm is running.</p> <p>Default: 127.0.0.1</p>
Remote Port	<p>Ports are used with TCP to name the logical connection on a specific network node. This setting must match what is set up in the Opdirect Winsock Interface form.</p> <p>Default: 9334 (DO NOT CHANGE: must match the Opdirect default port number)</p>
Network Timeout	<p>The network timeout tells lcs213mm how long to wait for a network interaction with Opdirect before giving up and reporting an error. A setting of 5000 milliseconds (5 seconds) is plenty, particularly if Opdirect is operating on the same PC as lcs213mm.</p> <p>For remote instances of Opdirect, the timeout may need to be longer depending on the network traffic.</p> <p>Default: 5000</p>
Send/Receive Interval	<p>lcs213mm will poll Opdirect for any incoming messages at this interval.</p> <p>See <i>Section 3.4 Checking the lcs213mm-Opdirect connection</i> for a description of how to perform</p> <p>Default: 60 seconds</p>
Opdirect Link Test	<p>Performs a test network connection with Opdirect.</p> <ol style="list-style-type: none"> 1. A successful test is indicated by a pop-up box stating Link test to Opdirect passes.

Fields, Controls	Description
	<p>2. An unsuccessful test is indicated by a pop-up box stating Link test to Opdirect failed. Check the following:</p> <ol style="list-style-type: none"> 1. Confirm that Host Name and Port number match Opdirect. 2. Confirm that Opdirect is running

Tab 3 – Receiving

This tab lets you configure how lcs213mm will notify you when a message arrives.



Operation	Description
Play this sound on arrival	<p>This option allows you to select a .wav file to be played when a message is saved in Outpost.</p> <p>The user can browse for a .wav file, select it, and test it to confirm that it is suitable for their environment.</p>

Play on Arrival Considerations

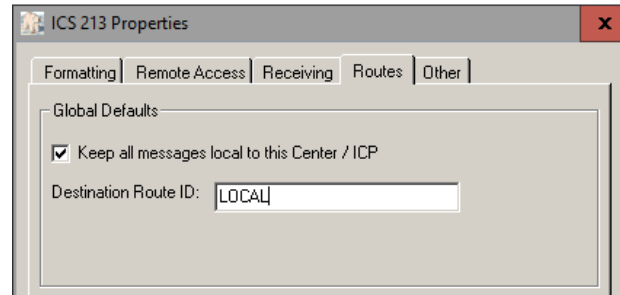
This feature requires that an operational Sound Card is installed in the Outpost PC. Once you choose a .wav file, pressing the **“Test”** button will cause the .wav file to play. If there is a problem with the file or the sound card, a sound card is not installed or enabled, then lcs213mm will issue a “beep” instead.

While any .wav file can be used or created, two three .wav files are included with the Outpost distribution as examples for how this feature could be used.

- Sound38.wav – a very obnoxious alarm. If you use this file with the sound turned up, you will definitely know when a message arrives.
- Sound136.wav – used for Notifications.
- incoming.wav – a spoken notification. The phrase “Attention, incoming packet message” is spoken.

Tab 4 – Receiving

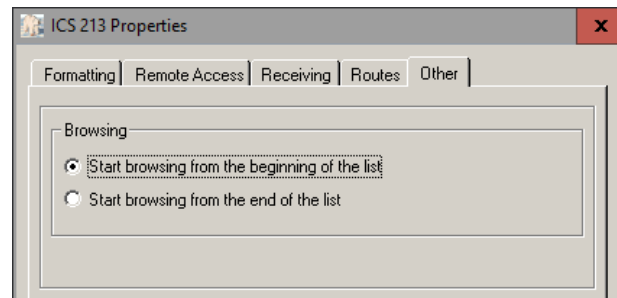
This tab lets you configure how lcs213mm will notify you when a message arrives.



Fields, Controls	Description
Keeps all messages local...	Checking this box turns on “Keep Local” for all subsequent messages. It can be disabled on a message by message basis on the message form if needed.
Destination Route ID	When set, all lcs213mm messages are passed to Outpost with the Destination Route already set. This can be cleared on a message by message basis on the message form if needed.

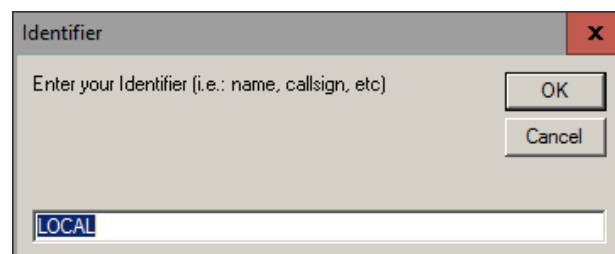
Tab 5 – Other

This tab lets you set up which end of the message list the program will show on pressing the **Browse** button.

**3.2 User Identification**

Multiple copies of lcs213mm could be deployed on the same LAN with all feeding Outpost via Opdirect. To ensure messages are routed to and from the right owner, lcs213mm “tags” all messages with a User ID or **Routing Identifier**.

This routing identifier is the same as the User ID. The User ID form is presented each time lcs213mm runs, as well as from the **Setup > Identification** menu.



The Identifier must be unique for all lcs213mm's that connect to a specific instance of Outpost. No unique ID checking is performed.

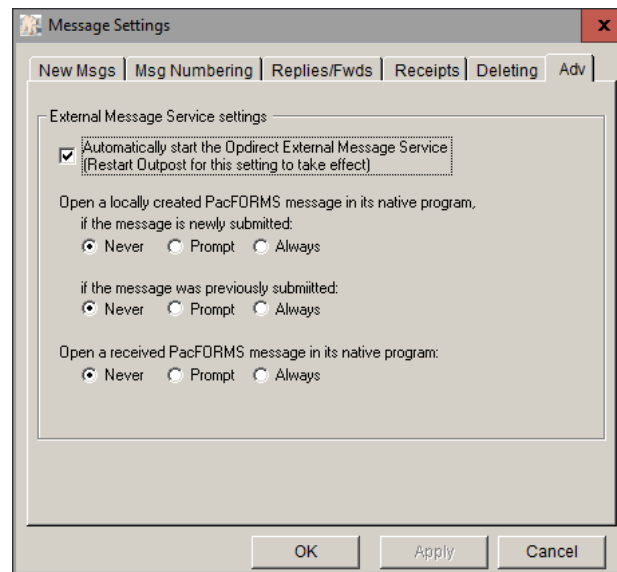
This form has only one field. If there are no changes, just press **OK** or **Enter** to continue.

3.3 Outpost / Opdirect Setup

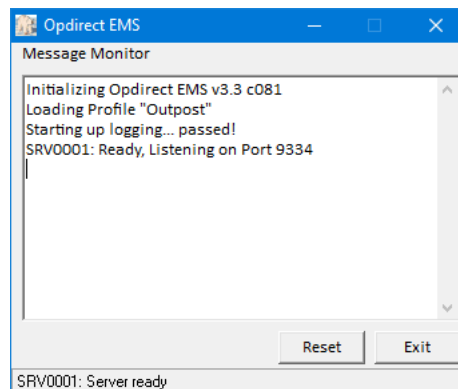
For lcs213mm to complete the message transfer to Outpost, it needs the help of the Opdirect.exe program.

Opdirect listens on a specific network port for message requests from lcs213mm. When a connect request is detected and a message is sent, Opdirect creates a valid Outpost message and writes it to the Outpost message database.

Opdirect must be running for lcs213mm to exchange messages with Outpost. The best way to do this is to set up Opdirect to run automatically from Outpost.



1. In Outpost, go to **Tools > Message Settings** menu, select the **Adv Tab**.
2. Check the bottom Box to "... **Automatically start Opdirect External Message Service**". Press **OK**.
3. Exit and restart Outpost. Opdirect will start up, and you will see the following window open.



The benefit of using this approach is that, on exiting Outpost, Outpost will also shut down Opdirect as well. To manually start the Opdirect.exe, navigate to the Outpost programs directory and double-click on Opdirect.exe.

- As Opdirect starts up, it will report that it is listening on **Port 9334**. This is the default port number that Opdirect, lcs213mm, and PacFORMS use for passing external message traffic.

NOTE: Some PCs may have firewalls with port blocking turned on and you may be prompted to **Continue Blocking** or **Unblock**. For Opdirect to work, click on **Unblock**.

NOTE: There should never be a reason to change the port number that these 3 programs use. PacFORMS is hard-coded to use this port number. However, if you must change the port number, then it must be changed for Opdirect and for lcs213mm. The Opdirect.ini file (in the Outpost data directory) has an entry that defines the Port Number.

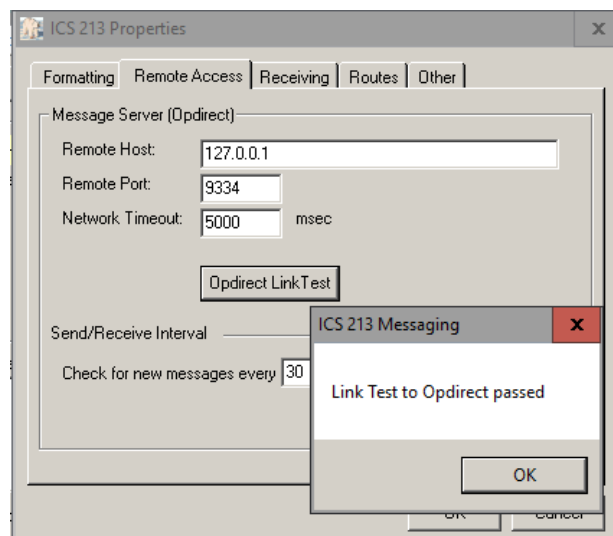
```
[Opdirect ECS]
ConnectNum=302
PortNumIn=9334
Pausev=100
```

When you start Outpost, Opdirect will also start up. As you exit Outpost, Opdirect will be terminated. Outpost is now ready to interact with lcs213mm.

3.4 Checking the lcs213mm-Opdirect connection

To verify that Opdirect and lcs213mm are set up correctly, run the Link Test from lcs213mm.

- Start Opdirect as described above.
- Start lcs213mm if it is not already running. **Select Tools > Properties**, then Tab 2 named **Remote Access**.
- Press the **Opdirect Link Test** button. A short connection test is made with Opdirect and a pop-up message box indicates the state of the test.



- If the test fails, check that the Host Name/IP address and Port Number match what is set up on Opdirect, and that Opdirect is running.

4 Ics213mm Messages

Ics213mm relies on Outpost for getting an ICS 213 formatted message sent by packet to its destination.

- Ics213mm creates and formats the ICS 213 message.
- The Opdirect program listens for and receives message requests from Ics213mm, and then writes the message to the Outpost message database.
- The Outpost operator performs the final steps to get the message on its way.

This section describes how to use ICS 213 messaging and what you will see as it interacts within the rest of the Outpost environment.

4.1 Creating an ICS 213 message

The steps for creating a new ICS 213-based message includes:

1. Configure and start up Outpost and Opdirect (see *Section 3.3 Outpost / Opdirect Setup*).
2. Set up any common message field defaults (**Setups > Properties**).
3. Set or change the Ics213mm User ID (**Setups > Identification**). The user ID will be displayed in the Program's Header line in parentheses.
4. Press **New** to load the message field defaults, set the Signature and Position to the From/Position fields, and enable the messages fields for editing.
5. Fill in the blank message fields. Since you are creating a *Message* and not a *Reply*, the reply fields are locked and will not take any text input.

The screenshot shows the 'ICS 213 Messaging (CUPDES)' application window. The title bar includes standard window controls. The menu bar has 'File', 'Setup', 'Edit', and 'Help'. Below the menu bar is a toolbar with buttons: 'New', 'Send', 'Save', 'Delete', 'Close', 'Browse', '<<', '>>', 'Edit', and 'Reply'. The main area is titled 'ICS213' and shows 'Msg# 10, Locally created message; Draft'. It contains a 'Header' section with fields for 'Incident Name' (City Flooding), 'To' (Dan Dreager), 'From' (Dave Knapp), 'Subject' (Stevens Creek Dam Status), 'Position' (Ops Chief, County OES), 'Position' (DES, Cupertino OES), and 'Date' (03/08/2017 21:25). There is a 'Set Fields as Default' button. Below the header is a 'Message' section with a text area containing: 'Be advised that the Santa Clara Valley Water District confirmed that the dam withstood the last aftershock, but recommended periodic observations of its downstream face. Cupertino will post volunteers to keep watch.' At the bottom, there are 'Signature' (Dave Knapp) and 'Position' (DES, Cupertino OES) fields. A 'Reply' section is partially visible at the bottom.

Pressing New, then Save

6. Pressing **Save** causes Ics213mm to validate that all fields are filled in. If they are not, the user is prompted whether they want to continue to Save and edit it, or send it later.
7. If the user pressing OK, the message is saved, and the fields are locked (formatted in **BLUE TEXT**).

Pressing New, then Send

8. Pressing **Send** causes lcs213mm to perform a Save (see the validation description above), and then attempts to pass the message to Outpost via Opdirect.
9. If Opdirect is running, it loads the message into Outpost and lcs213mm flags the local message as being sent.
10. If Opdirect is not running, lcs213mm flags the local message as ready, but not sent.
11. Regardless of whether Opdirect is running, the message is saved, and the fields are locked (colored **BLUE**).

4.2 Browsing for messages

Because lcs213mm can save messages locally, the **Browse** function allows you to review what messages have been created and in what state the messages are in.

Messages are stored in the order in which they were created or loaded. Browsing lets you step through the list of messages from first to last and select an additional action to perform on them. **Browse** can be used as long as there is at least one message present.

After pressing **Browse**, the first message is loaded into the message form, is shown as locked (colored **BLUE**), and the following actions can be applied to it:

1. **Delete**. The user can delete the message from lcs213mm. Once deleted, it is gone.
2. **Close**. After pressing Close, browsing is ended and the base set of controls is enabled: **New** and **Browse**.
3. **<<** (Browse Left). The previous message in the list is reloaded.
4. **>>** (Browse Right). The next message in the list is reloaded.
5. **Edit**. Editing causes all eligible fields to be available for editing. For instance,
 - a. For a previously saved message that was not completed, the message can be opened, edited, and completed. The user can press **Send** to save and send it.
 - b. For a previously sent message, the message can be opened and updated with new information. The user can press **Send** to save and send this updated message. NOTE: this overwrites the original local message copy that was previously sent.
 - c. For a previously saved reply message that was not completed, the reply message area can be opened, edited, and completed. Note that the main message area is still locked (colored **BLUE**). The user can then press **Send** to save and send it.
6. **Reply**. This option is only enabled when you find a message that was received from Opdirect. When pressing **Reply**, The original message area remains locked (colored **BLUE**). However, the message reply area is eligible for editing and updating.

4.3 Retrieving sent messages

There is no automated way to retrieve a message you may have accidentally sent once it is transferred to Outpost. The best you can do is to contact the Outpost

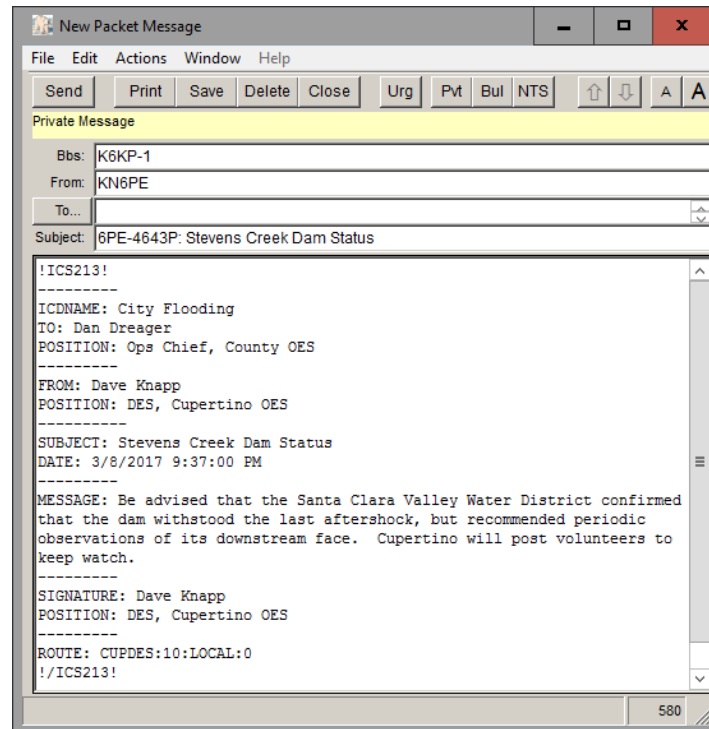
packet operator as soon as you discover that the wrong message was sent, and ask him/her to delete the message before Outpost attempts to transmit it to the BBS. If Outpost already posted the message to the BBS, then the lcs213mm user or Outpost operator should send a follow-up message requesting that message be ignored or deleted.

4.4 Finishing up a Sent message with Outpost

Outpost assumes that any message created and stored in its message database is a valid message.

One of the side benefits of setting Outpost's option to run Opdirect on startup (**Tools > Message Settings** menu, Advanced Tab) is that, once the message is sent from lcs213mm, Outpost automatically opens it so that the operator can complete the packet message.

lcs213mm formats an ASCII message that can be imported by another Outpost and lcs213mm program as well as read by a non-Outpost / non-lcs213mm user.



With the above example, here are some things to note:

- The **!ICS213!** and **!/ICS213!** tags begin and end the message.
- You can add other text either before the **!ICS213!** tag or after the **!/ICS213!** tag. While this text will show up in the Outpost message, it will not show up in the lcs213mm message.
- **DO NOT** add any text in between the tags: This will change the content and possibly the meaning of the message.

To complete the message, the Packet Operator enters the destination address in the To: field, and then presses **Send**.

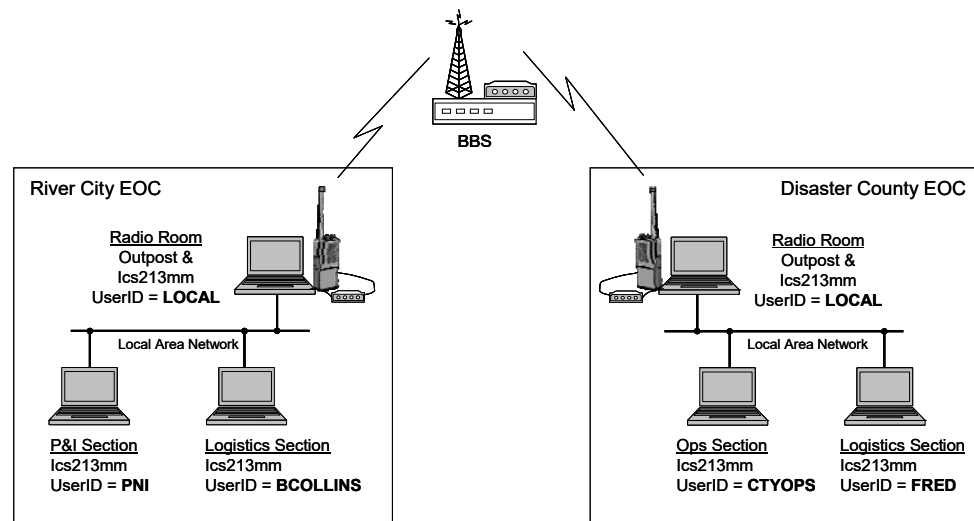
Note the format of the message. Because Outpost sends text messages in the clear, lcs213mm formats the message so that it is user-readable even if the recipient is not an Outpost/lcs213mm user.

5 Sending Messages

5.1 Sending Messages to a remote site

Because of the network interconnectivity between Ics213mm and Opdirect, Ics213mm does not necessarily need to be installed in the radio room. Instead, it can be installed anywhere on the local area network PROVIDED Ics213mm is on the same LAN as Outpost.

To get the right message or reply to the right user, Ics213mm needs to perform a certain amount of message routing, particularly if there is more than one instance of Ics213mm deployed.



To help explain routing, let's assume the following scenario.

Disaster County has its' share of problems and responds whenever a disaster strikes within its jurisdiction. Most of the problems come from River City which is located on the Fullbanks River that flows through the county.

At the River City EOC, they have implemented the following:

1. In the Radio Room, the Communications Team has a laptop loaded with Outpost and an instance of Ics213mm. Because this is the ICS 213 central node for their EOC, they set the User ID to the default "**LOCAL**". Their Outpost PC is on the City' EOC LAN.
2. There are 2 PCs in the EOC also on the same LAN. The Planning and Intelligence (P&I) Section has Ics213mm installed on their PC. This user, Bob Johnson, decided on a User ID of "**PNI**".
3. The other EOC PC is run by the Logistics Section. Bill Collins is the PC user and decided on an Ics213mm User ID of "**BCOLLINS**".

At the Disaster County EOC, they have implemented the following:

1. In the County Radio Room, the Communications Team also has a PC loaded with Outpost and an instance of Ics213mm. Because this is the ICS 213 central node for the county EOC, they also set the User ID to the default **"LOCAL"**. Their Outpost PC is on the County EOC's LAN.
2. They also have 2 PCs in the EOC. The Operations Section has Ics213mm installed on their PC, and the PC user decided on a User ID of **"CTYOPS"** (abbreviation for County OPS).
3. The other EOC PC is run by the Logistics Section. Fred Jones is the PC user and decided to set the Ics213mm User ID to **"FRED"**.

River City EOC: Sending a Message to County

Today, it's raining hard in River City and NOAA reports the river will crest later this afternoon. River City's EOC just activated and their Logistics Section needs to send a message to County Logistics requesting more sand bags.

1. Bill Collins (River City Logistics Section Chief), creates the message in Ics213mm by pressing **New**, then filling in the **Subject** and **Message**. All other fields were automatically filled in. He then presses **Send**.

The screenshot shows the ICS-213 Messaging application window. The title bar reads "ICS-213 Messaging". The menu bar includes "File", "Setup", "Edit", and "Help". Below the menu bar is a toolbar with buttons: "New", "Send", "Save", "Delete", "Close", "Browse", "<<", ">>", "Edit", and "Reply". A status bar at the top indicates "Msg# 15. Locally created message, status is Draft". The main form contains the following fields:

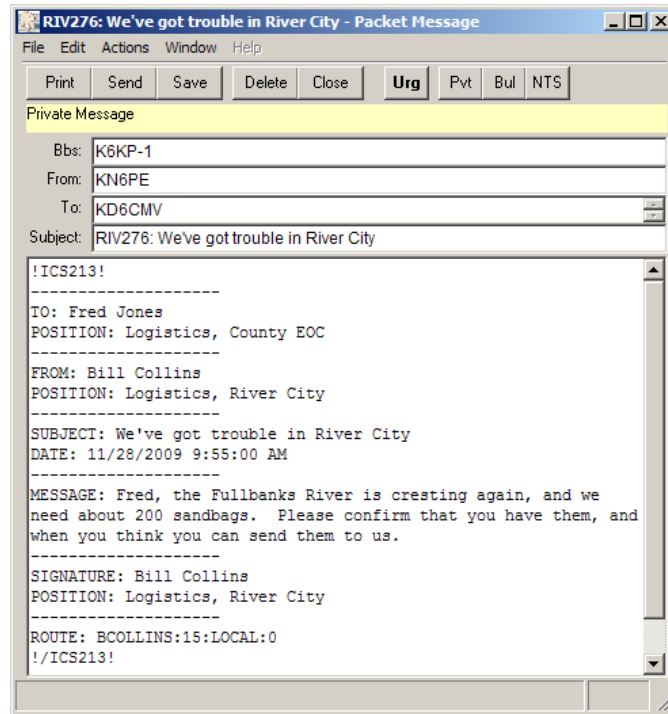
- To:** Fred Jones
- Position:** Logistics, County EOC
- From:** Bill Collins
- Position:** Logistics, River City
- Subject:** We've got trouble in River City
- Date:** 11/28/2009 09:53

The **Message** field contains the text: "Fred, the Fullbanks River is cresting again, and we need about 200 sandbags. Please confirm that you have them, and when you think you can send them to us." Below the message field are fields for **Signature:** Bill Collins and **Position:** Logistics, River City. At the bottom, there is a **Reply** section with empty fields for **Signature**, **Position**, and **Date**. The bottom status bar shows "Disconnected" and the time "09:54:52".

2. Bill's Ics213mm program connects to Opdirect, passes the message to Outpost, and checks for any incoming messages. Opdirect writes the message to the Outpost message database, and then tells Outpost that a new outgoing message is there. Outpost detects this message and automatically opens it.

River City Radio Room: Completing the Message to County

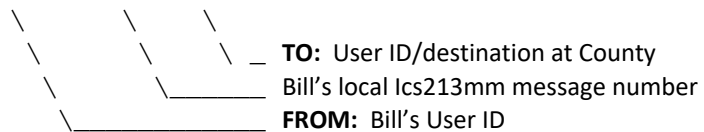
- The Packet Operator in the radio room sees Bill's message pop up and fills in the **To:** field indicating that this message needs to go to the County EOC (either the County's call sign or tactical call).



- When done, the Packet Operator presses **Send**. Because Outpost is set up to check the BBS every 5 minutes, the message is automatically sent on its way.

Note the **Route** line at the bottom of the above message. The format is as follows:

ROUTE: BCOLLINS:15:LOCAL:0

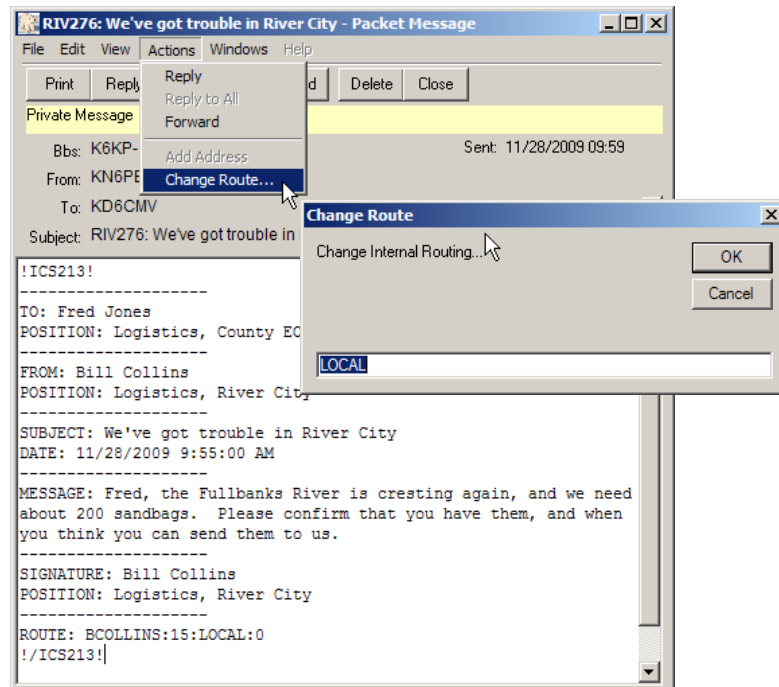


More on this as the scenario unfolds.

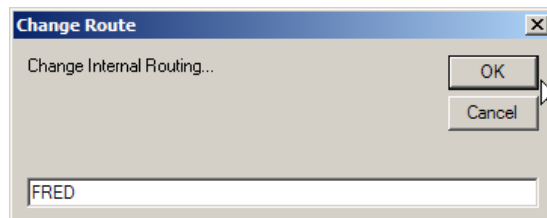
Disaster County Radio Room: receives the message

5. At the County EOC, Outpost polls the BBS as usual, retrieves this message, and indicates that the message arrived (some type of audio message or tone is heard).
6. The County packet operator opens the message in Outpost, sees that it is an ICS 213 message, and it is addressed to Fred Jones, the County Logistics guy. Because the County packet operator was helping the EOC staff with Ics213mm, he knows that Fred's Ics213mm User ID is "FRED".

With the message open, he selects **Actions > Change Route**. The sending station originally set the Destination Route to **LOCAL** causing the message to load into the Radio Room's copy of Ics213mm (who's User ID is LOCAL).

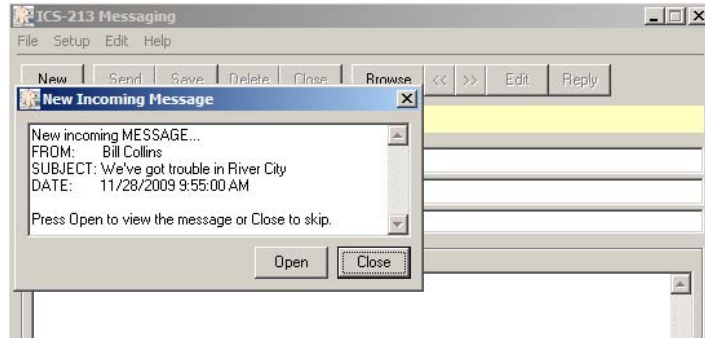


7. The County packet operator changes the Route to match what Fred set up on his Ics213mm, which is, "**FRED**", presses **OK**, and then presses **Close** to close the message.

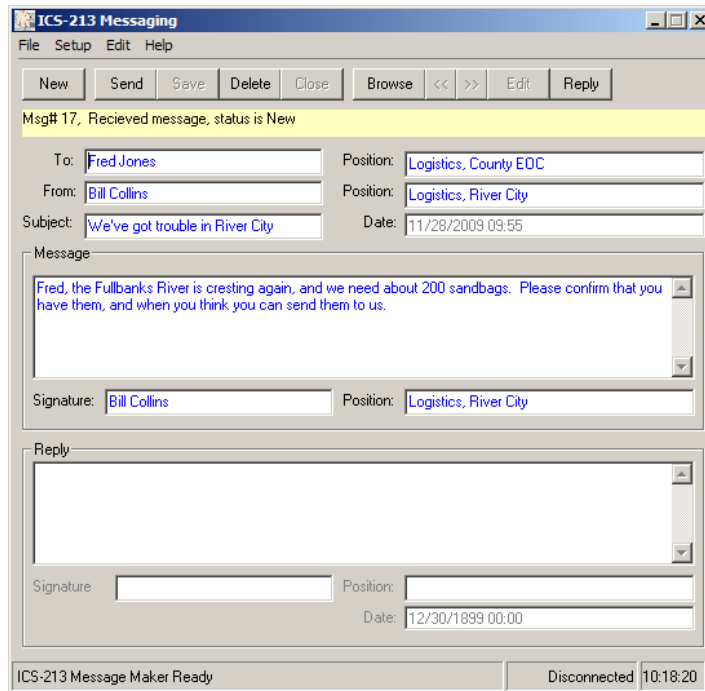


Disaster County EOC: receiving the message

8. Shortly thereafter, Fred's lcs213mm program automatically polls Outpost for any incoming messages with a routing for "**FRED**", and finds one. At Fred's PC, lcs213mm pops up the notification letting him know that a message arrived.



9. Fred presses **Open**, and the message is loaded for him to review. This what he sees...



Some things to note:

- The Message status is listed as **Received message, status is New**.
- The message is listed in **BLUE** meaning that it is currently READ ONLY.
- Because this is an incoming message, the only actions allowed are to DELETE or REPLY.
- Fred wants to print this; he uses the menu **File > Print** so his team can see if they can meet the request. Fred prints 2 copies (not shown here).

Disaster County EOC: Replies to the message

10. County has 1000 sandbags that they can deliver. Fred presses **Reply** and fills in the Reply section of the message letting Bill know that they can be there in 3 hours.

The screenshot shows the ICS-213 Messaging application window. The title bar is "ICS-213 Messaging". The menu bar includes "File", "Setup", "Edit", and "Help". The toolbar contains buttons for "New", "Send", "Save", "Delete", "Close", "Browse", "<<", ">>", "Edit", and "Reply". A yellow status bar at the top of the message area reads "Msg# 17. Locally created reply, status is Draft". The message fields are as follows:

- To: Fred Jones
- From: Bill Collins
- Subject: We've got trouble in River City
- Position: Logistics, County EOC
- Position: Logistics, River City
- Date: 11/28/2009 09:55

The "Message" text area contains the following text in blue font: "Fred, the Fullbanks River is cresting again, and we need about 200 sandbags. Please confirm that you have them, and when you think you can send them to us." Below this is the "Reply" text area, which contains the text in black font: "Bill, County has 1000 sandbags in reserve. We will deliver 200 sandbags to River City, usual location, by 1:00PM today." The "Reply" signature, position, and date are automatically filled in:

- Signature: Bill Collins
- Position: Logistics, River City
- Date: 11/28/2009 10:23

The bottom status bar shows "Disconnected" and the time "10:24:28".

Note that the original message text area remains locked (**BLUE**) while the reply text area is open for editing (**BLACK**). The reply signature, position, and date that the reply was created are automatically filled in.

11. When done, Fred presses **Send** and the reply is sent back to the County Outpost system.

The screenshot shows the ICS-213 Messaging application window after the reply has been sent. The title bar is "ICS-213 Messaging". The menu bar includes "File", "Setup", "Edit", and "Help". The toolbar contains buttons for "New", "Send", "Save", "Delete", "Close", "Browse", "<<", ">>", "Edit", and "Reply". A yellow status bar at the top of the message area reads "Msg# 17. Locally created reply, status is Sent". The message fields are as follows:

- To: Fred Jones
- From: Bill Collins
- Subject: We've got trouble in River City
- Position: Logistics, County EOC
- Position: Logistics, River City
- Date: 11/28/2009 09:55

The message status is now updated to **Locally created reply, status is Sent**.

Disaster County Radio Room: Complete the reply

12. Back in County's Radio Room, the reply message pops up and the County packet operator completes the message by filling in the **To:** field.
13. When done, the County packet operator presses **Send** and Outpost sends it to the BBS.

The screenshot shows a window titled "New Packet Message" with a menu bar (File, Edit, Actions, Window, Help) and a toolbar (Print, Send, Save, Delete, Close, Urg, Pvt, Bul, NTS). Below the toolbar is a yellow bar labeled "Private Message". The form contains the following fields:

- Bbs: K6KP-1
- From: KD6CMV
- To: KN6PE
- Subject: SSF277: We've got trouble in River City

The main text area contains the following message:

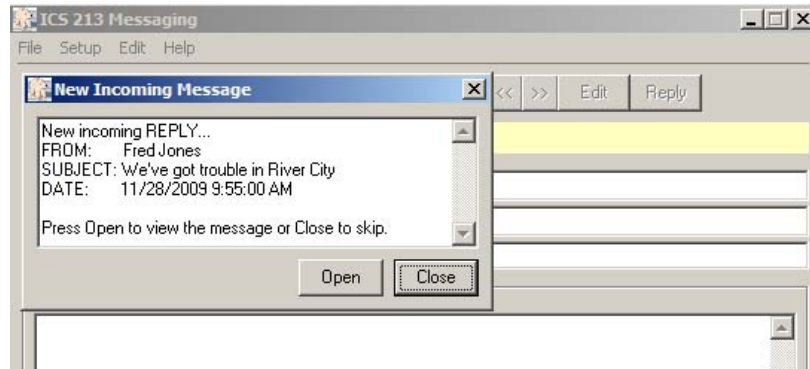
```

!ICS213!
-----
TO: Fred Jones
POSITION: Logistics, County EOC
-----
FROM: Bill Collins
POSITION: Logistics, River City
-----
SUBJECT: We've got trouble in River City
DATE: 11/28/2009 9:55:00 AM
-----
MESSAGE: Fred, the Fullbanks River is cresting again, and we
need about 200 sandbags. Please confirm that you have them, and
when you think you can send them to us.
-----
SIGNATURE: Bill Collins
POSITION: Logistics, River City
-----
REPLY: Bill, County has 1000 sandbags in reserve. We will
deliver 200 sandbags to River City, usual location, by 1:00PM
today.
-----
SIGNATURE: Fred Jones
POSITION: Logistics, County EOC
-----
RDATE: 11/28/2009 10:27:00 AM
-----
ROUTE: FRED:17:BCOLLINS:15
!ICS213!
  
```

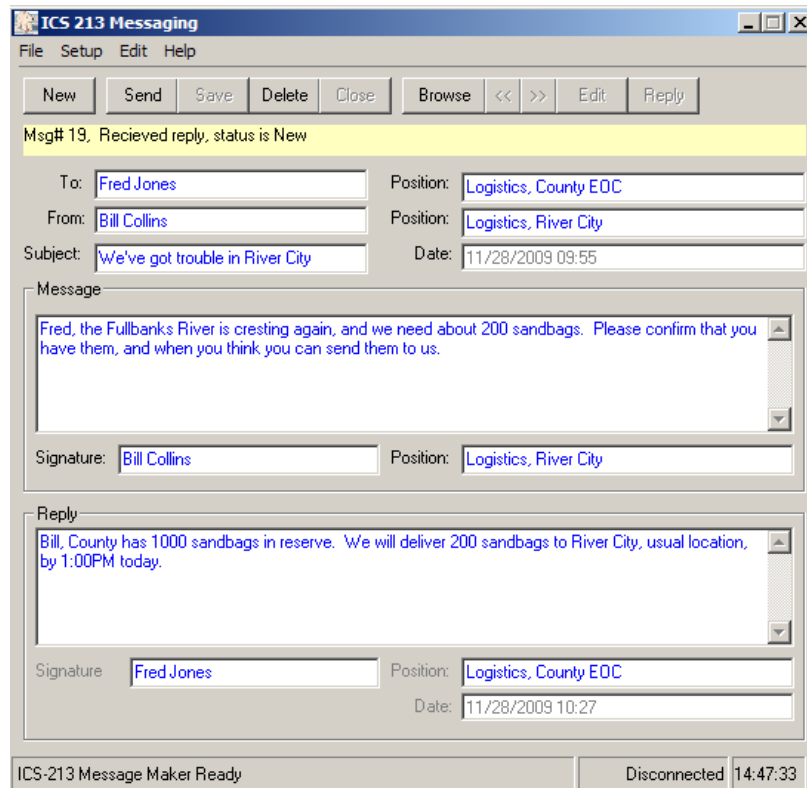
Note the Route. It shows it is from "**FRED**" and to "**BCOLLINS**". This ensures that the reply gets back to the originator without any packet operator intervention.

River City Radio Room: Receives the reply message

14. River City's Outpost retrieves the message. As described above, because the route is set to **BCOLLINS**, there is no need for any interaction with the message.
15. Finally, Bill Collins' Ics213mm automatically polls Outpost for any messages and retrieves the reply from County. The program opens a notification window letting the PC operator know that a reply message has been received.



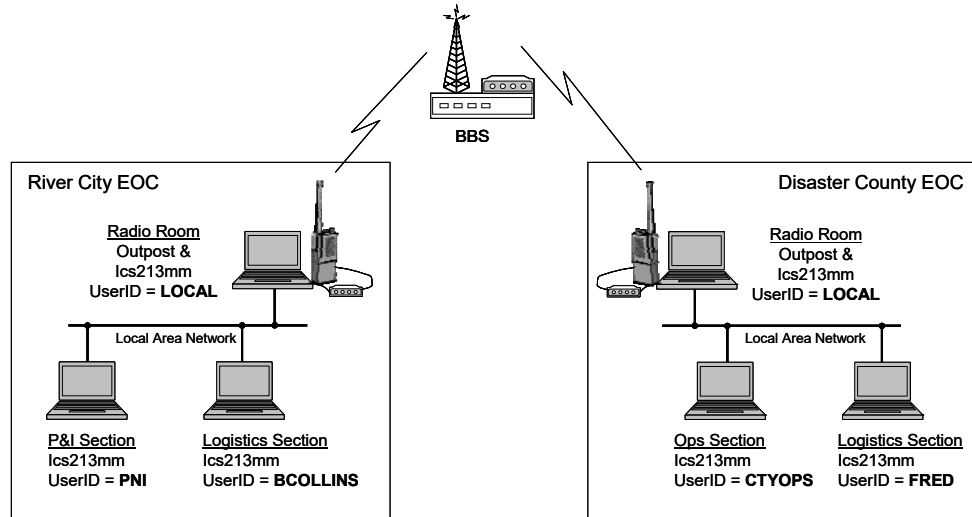
16. Bill clicks on **Open** and sees his original message, plus Fred's reply.



Note that the message status is **Received reply, status is New**. Because this completes the entire exchange, the message cannot be edited. If a new message is needed, the user presses **New** and creates a new message.

5.2 Sending Messages to a local user (Keep Local)

Ics213mm also lets you send ICS213 messages to other positions within the EOC or Command Post that are on the Local Area Network.



Building on the previous scenario, let's suppose the following is needed.

At the River City EOC, the setup is the same as it was before...

1. In the Radio Room, the Communications Team has a laptop loaded with Outpost and an instance of Ics213mm, with the User ID set to the default **"LOCAL"**.
2. Bob Johnson, the Planning and Intelligence (P&I) Section Chief, has Ics213mm installed on their PC with a User ID of **"PNI"**.
3. Bill Collins, the Logistics Section Chief, set up his Ics213mm with a User ID of **"BCOLLINS"**.

Sending an ICS213 message and keeping it local

Bill Collins needs to keep the City's **Planning and Intel Section** informed of the County's plan for sandbags. The best way to document this is to send an ICS 213 message to P&I.

4. Bill creates the message in Ics213mm by pressing **New**. He then fills in the **Header**, **Subject** and **Message**. In some cases, he may need to override some of the default fields that were automatically filled in.
5. Bill yells across the room to Bob (it's a small EOC) and asks him for his Ics213 User ID. Bob replies **"PNI"**.
6. At the bottom of the form in the **Routing** area, Bill then does the following:
 - a) checks the box **Keep this message local to this Command / ICP** ☒, and
 - b) fills in the **Destination Route ID** field with **PNI**.

ICS 213 Messaging (BCOLLINS)

File Setup Edit Help

New Send Save Delete Close Browse << >> Edit Reply

ICS213

Msg# 11, Locally created message; Draft

Header

Incident Name: River City Flooding Set Fields as Default

To: Bob Johnson Position: Section Chief, Planning & Intel

From: Bill Collins Position: Section Chief, Logistics

Subject: County Sand Bag Plans Date: 03/09/2017 14:20

Message

Be advised that Disaster County has 1000 sandbags available. They have committed to deliver the 200 that we requested by 1:00PM today. If we need more, they can provide more.

Signature: Bill Collins Position: Section Chief, Logistics

Reply

Signature: Position:

Date:

Routing

Keep this message local to this Command / ICP ☒ Destination Route ID: PNI

ICS 213 Message Maker Ready Disconnected 14:28:45

7. Finally, he presses **Send**.
8. Bill's Ics213mm program connects to Opdirect, passes the message to Outpost, and checks for any incoming messages. Because this is a "**Keep Local**" message and already set up to route to **PNI**, the message saved into the In-Tray and is ready for Bob's Program to pick it up.

Outpost Packet Message Manager

File Edit Setup Tools Forms Actions Help

New Open Archive Delete Print Send/Receive Profile: Emergency

Folder List

In Tray

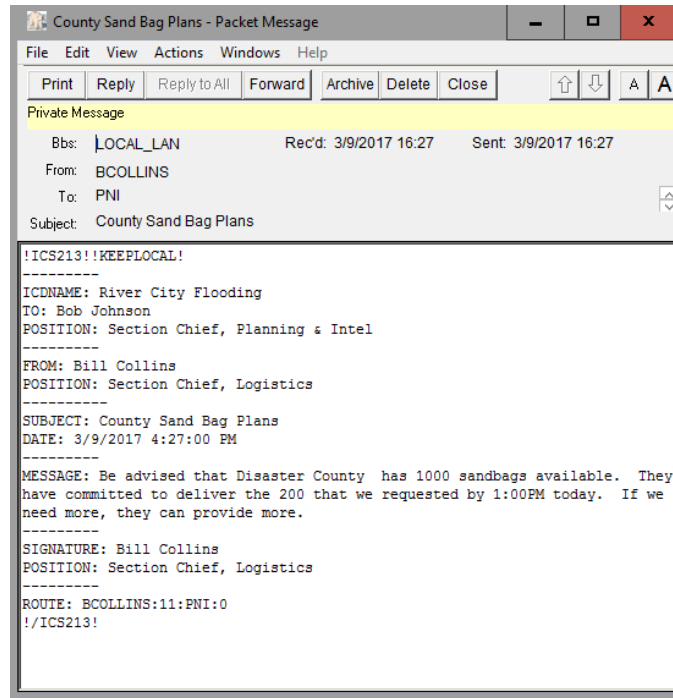
Out Tray

U	Type	From	To	BBS	Subject	Date/Time	Size
BCOLLINS	PNI	LOCAL_LAN	County Sand Bag Pla...	3/9/2017 16:27	581	

Unlike a regular BBS message that has information about the BBS, the From call sign and To call sign, an Ics213mm **Keep Local** message does the following

- a. It sets the Message **From**: field to the sender's Ics213mm User ID.
- b. It sets the Message **To**: field to the recipient's Ics213mm User ID.
- c. It sets the BBS to the value "**LOCAL_LAN**".

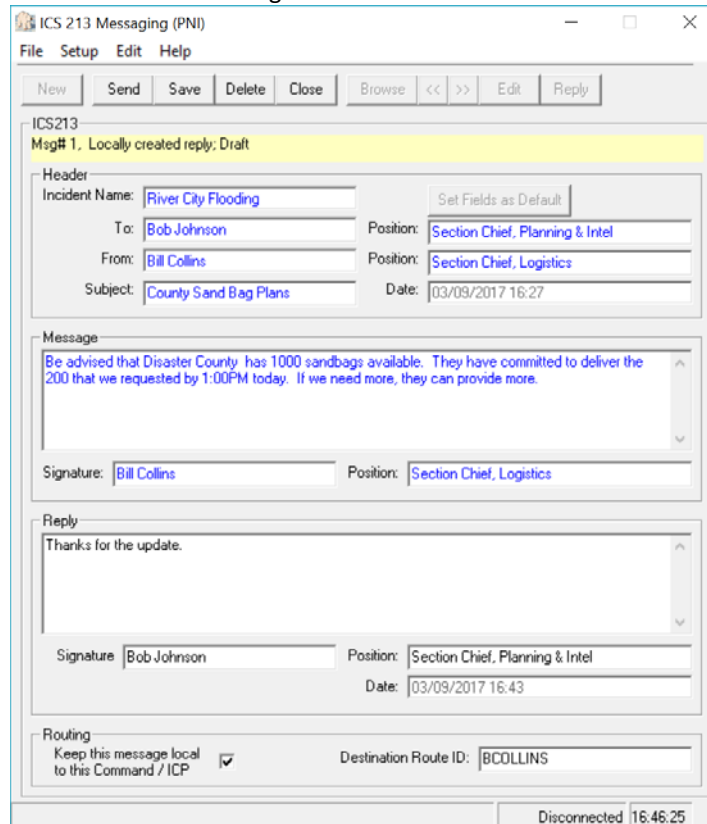
From Outpost's point of view, Keep Local forces this message to look like an Ics213mm message that was just received and is ready to be picked up by the recipient. Opening the message shows all the fields set correctly and non-editable (like all received messages).



In this manner, Outpost acts as a Message drop for all locally passed Ics213mm messages.

Sending an ICS213 message and keeping it local

9. Shortly thereafter, Bob Johnson's Ics213mm program connects, polls Outpost, and retrieves the message that was addressed to him as "PNI".



10. After the message is retrieved from Outpost, Outpost then moves the message to the Sent folder indicating that it has been delivered.
11. Back at Bob's PC, he presses **Reply**, then enters a reply message to Bob. The **Signature** and **Position** fields are automatically filled in from the message header, and the **Date** field is the time now.
12. When done with the reply, he presses **Send** to send his reply back.

Essentially, this is another **Keep Local** message that the system processes and the reverse of the above occurs.

What does Outpost do with Keep Local Messages?

Essentially, Outpost is the mail drop for Keep Local Ics213mm messages.

1. On receiving a **Keep Local** message, Outpost places it in the **In Tray** in a message state similar to when a message is retrieved from the BBS.
2. Once a **Keep Local** message is retrieved, Outpost moves it to the **Sent Folder**. These messages can always be opened and reviewed.
3. Outpost will also create all log entries for **Keep Local** messages to be included in the Ics309clb Communications Log. Note that the first 10 characters of the senders and recipient's name will be listed in the From and To columns.

```

ics309clb170309171723.txt - Notepad
File Edit Format View Help
ICS 309 COMMUNICATIONS LOG

Task #           RCT-17-07
Prepared Date:   03/09/17 17:15
Operational Period: 03/09/17 16:00 to 03/09/17 23:59
Task Name:       Fullbanks River Flood
Radio Operator Name: Jim Oberhofer
Station ID:      KN6PE

Date/Time      From           To           Msg ID      Local ID      Subject
-----
03/09/17 16:27 BILL COLLI~ BOB JOHNSO~           County Sand Bag Plans

NOTE: This report...
Includes: Sent, Received, Private messages
Excludes: No exclusions

*** END OF REPORT ***

```