
Outpost

Packet Message Manager

Release Content Description For Version 2.0

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1 Introduction

1.1 Purpose of the Document

This Release Content Description document provides information about new or changed functionality that will be found in Outpost Packet Message Manager Release 2.0.

Existing functionality from the original release is not described here. For current information on Outpost, refer to the following documents:

Name	Release Date
Outpost Packet Message Manager User Guide, Version 1.3	December 2004

1.2 Organization

The information in this document is organized under the following sections:

- **New Features.** A new feature is a new capability that has not existed in any prior version of Outpost in any form.
- **Enhancements.** An enhancement is a change to an existing feature that further improves the performance or usability of the application. Enhancements include minor changes, internal changes (that may not be evident to the user, but contribute to improved supportability increased stability, or application performance) and bug fixes.
- **Changes since Version 1.3.** A list of the various capabilities that have been introduced in maintenance/defect releases since the v1.3 release.

2 New Features

“New Features” refer to the creation of new functionality in Outpost that was requested by Outpost users to support the emergency response mission. The following New Features are implemented in version 2.0.

2.1 #240 AGW Packet Engine support

One of the most frequent requests I have received since Outpost’s initial release has been to add AGWPE support. Release 2.0 will include it.

The following are excerpts from Ralph Milnes' KC2RLM website (and an excellent source of information on AGWPE and soundcard support) (<http://www.soundcardpacket.info/>):

"AGWPE is a multi-TNC management utility written by George SV2AGW. Before AGWPE, a packet device such as a TNC or other radio modem could only be used by one program at a time. Likewise, a packet program could only use one packet device at a time. AGWPE changed all that. It lets a program access multiple packet devices at one time, and lets a packet device be shared by multiple programs at one time.

"AGWPE performs this magic by placing the TNC in KISS mode and assuming responsibility for handling most of the logic functions built into the TNC. The TNC is left to handle just tone modulation/demodulation, or modem functions. AGWPE also works with radio modems, such as the YAM and Baycom that already lack logic functions and must rely on the logic functions of a control program such as AGWPE."

More importantly, AGWPE supports sound-card packet, the largest request from the general packet, and Outpost user community. There are 2 versions of AGWPE available for download:

1. AGW Packet Engine is a free version for the ham radio community
2. Packet Engine Pro is a commercial grade version available for a fee

The currently distributed free version (**AGWPE.zip**, “**AGW Packet Engine ver 2004.1108 Win95/98/NT/2k/ME/XP**”) works fine with Outpost.

Outpost v2.0 implements AGWPE in the following manner.

1. AGWPE Setup. Not described here.
2. TNC Setup. The Outpost TNC Setup menus have been expanded to allow the user to select either a direct Comm Port TNC Device (what we currently have), an AGWPE interface, or Telnet interface (see #430 below).
3. Send/Receive Session Manager. Outpost will perform all required checks to determine that AGW is running, all initiation (registration and login if required), and all handshaking with the BBS as usual through the AGWPE Interface.
4. AGW Interactive Packet Window (AIPW). Similar to the current Comm Port IPW, Outpost allows the user to manually configure AGWPE and log on to a BBS manually.

5. Underlying AGWPE Interface. As recommended by George SV2AGW, Outpost has implemented the Outpost-AGWPE interface using Microsoft Windows Sockets (abbreviated as "Winsock"). Winsock is an API that lets a Windows program send data over any network transport protocol, including TCP/IP.

For users wishing to use AGWPE, I **STRONGLY RECOMMEND** that you thoroughly understand how AGWPE works, is set up, and can be confirmed operational before deploying it with Outpost. Time permitting, I'll look at developing an Application Note on setting up and using AGWPE with Outpost. However, AGWPE support is a field of study unto itself and is out of scope in terms of Outpost Support.

From the user's perspective, implementing an AGWPE interface can occur in 2 ways:

1. AGWPE is installed on the same PC where Outpost is running. This is a typical installation of a stand-alone system.
2. AGWPE and its associated TNC or sound-card packet interface are installed on one PC and Outpost is installed on another. This implementation can be as easy as 2 PCs with CAT-5 network cable between them or within a local area network. In either case, networking must be set up and confirmed operational before attempting to run with Outpost. I recommend getting AGWPE and Outpost running on the same PC before attempting to split the 2 up.

If you do not intend to use AGWPE with Outpost, there is no overhead added to the existing Outpost operating environment.

For more information on AGWPE, use your favorite internet search engine with the search string "description of AGWPE", or check out these 2 sites...

<http://www.elcom.gr/sv2agw/index.html>

<http://www.soundcardpacket.info/>

2.2 #430 Telnet support

A few requests have come in to support BBS access by Telnet.

In general, Telnet is a terminal emulation program for TCP/IP networks that runs on your computer and connects your PC to a server (where a BBS resides) on the network. You can then enter commands through the Telnet program and they will be executed as if you were entering them directly on the remote server. To start a Telnet session, you must log in to a server by entering a valid username and password.

Some BBS systems, such as the F6FBB BBS, support a telnet interface in addition to the standard radio/TNC interfaces. Some Emergency Response Teams have exploited this capability within their own EOC. The benefit of this approach is that, when the BBS supporting an operational area is also network accessible, a telnet connection could be made from the EOC to the BBS without tying up an additional radio and TNC. While this implementation is typically the case when the BBS is co-located with the EOC, it could be remotely located as well. However, it does rely on the supporting internet infrastructure to be operational to use it (disaster permitting).

Outpost v2.0 implements Telnet in the following manner.

1. TNC Setup. The Outpost TNC Setup menus have been expanded to allow the user to select either a Direct Comm Port TNC Device (what we currently have), an AGWPE interface (see #240 above), or Telnet interface.
2. Send/Receive Session Manager. Outpost will perform all required checks to determine that a network connection can be established to the BBS/server, perform all initiation (logons), and all handshaking with the BBS as usual through the Telnet Interface.
3. Telnet Interactive Packet Window (TIPW). Similar to the current Comm Port IPW, Outpost allows the user to manually configure Telnet and manually log on to and interact with a telnet-enabled BBS.
4. Underlying Telnet Interface. Similar to AGWPE, the Telnet implementation also uses the Microsoft Windows Sockets (abbreviated as "Winsock"). Winsock is an API that lets a Windows program send data over any network transport protocol, including TCP/IP.

For users wishing to use Telnet, consult with your BBS Sysop to determine if Telnet access is available on your BBS. If it is, I **STRONGLY RECOMMEND** that you thoroughly understand how Telnet works, is set up, and can be confirmed operational before deploying it with Outpost. Time permitting, I'll look at developing an Application Note on setting up and using Telnet with Outpost.

If you do not intend to use Telnet with Outpost, there is no overhead added to the existing Outpost operating environment.

3 Enhancements

An enhancement is a change to an existing feature that further improves the application. Enhancements include minor changes, internal changes (that may not be evident to the user, but contribute to improved supportability increased stability, or application performance) and bug fixes

3.1 Message Handling

- #108: Outpost now checks for and removes any “/EX” that may have been inadvertently added to the end of a message. Outpost automatically generates the CNTL-Z end-of-message character when a message is sent to the BBS.
- #280: DEFECT: Corrects a problem when opening a report form the 2nd time and the full path and file name are displayed in the file name field.
- #399: In a new message form, on pressing the NTS button, Outpost will now immediately bring up the NTS Message Maker form. **NOTE:** If an NTS message was previously created, it is not reloaded back into the form if the NTS button is pressed again.
- #408: Adds a delete button on the Message form. This allows the user to delete a message without first closing it. The deleted message is moved from the current folder and stored in the Deleted Msgs Folder.
- #409: DEFECT: Resolves a Runtime Error 53, and program aborts when on the Import>Open a file function, you type in a name that does not exist and then do not choose one.
- #419: Adds a Function Key **Shift-Cntl-F4** to move a message to the archive folder. Also, all moves can now be performed in this manner. See the **Shift-Cntl-Fx** listing in the Outpost Menu: Edit>Move to folder
- #422: On a New Message Form, enables the **From:** field to be editable at message creation time. The data from this field only shows up in message listings and printouts. This information is not sent to the receiving station.

3.2 On-line Reports

- #437: For On-line Reports, adds a user control to remove any remaining input prompts (“=”) from On-line reports. This would be performed prior to sending the message for a cleaner message.
- #441: For On-line Reports, adds the capability to progress from input prompt to prompt by Left-Mouse-Clicking. This control is in addition to **Cntl-TAB** control.

3.3 Setups

- #383: On the Send/Receive Settings form, when it is opened then closed, the Interval timer was reset regardless of whether a change was made or not. This change now causes the interval timer to be updated whenever **OK** or **Apply** is pressed on the Send/Receive Settings form.

- #414: On the Send/Receive Settings form, changes the logic to allow the user to select either **Retrieve All Bulletins** or **Retrieve Filtered Bulletins**. It will no longer be an option to have both set at the same time.
- #435: Adds a new Outpost General Settings menu, and option to selectively show Station Identifier form at startup. This change accommodates users that are configuring PCs to automatically run Outpost on a re-boot, and begin send/receive sessions without any user intervention (i.e.; setting the Station ID). A valid setup (ID, Device, BBS, etc) must be previously defined for this to work.
- #443: On the Send/Receive Settings form, the **Retrieve Filtered Bulletins** function option has been expanded from 5 to 10 filter settings.

3.4 Send/Receive Changes

- #410: On MSYS processing, cleans up the status bar messages to be consistent with the Session Manager's action.
- #418: Adds a Function Key **F5** to initiate the Send/Receive Session process.
- #426: Establishes an option that allows the receiver of a message to automatically issue a Read Receipt regardless of what the sender requested. This is in response to several requests by EOC staffers who get voice traffic inquiries whether a field-originated packet message was received at the EOC.
- #429: When setting the Outpost Station ID (FCC Call Sign), now disallows setting it with an SSID.
- #440: The MSYS BBS Prompt is hard-coded to ">" and is generally not unique enough based on the content of the message. This change allows the user to optionally set the end of message prompt of "**** **END OF MSG #**" to generate more "uniqueness".

3.5 TNC, BBS Handling

- #190: Resolves confusion I have observed of performing updates on the TNC (TNC, AGW, Telnet) or BBS setup forms. This enhancement implements an **OK** or **Apply** function, and does away with the old **update** button of these forms.
- #432: When accessing a KPC-3 PBBS and another user is also accessing it, a "****<call> **BUSY**" message is generated, but was not detected. This change adds this detection to Outpost.

3.6 Interactive Packet Enhancements

- #411: On the Interactive Packet Window (IPW) form, the whole **cntl-c** vs. **cntl-C** issue (used by Windows to copy text to the clipboard as well as getting the TNC's attention) has been problematic since IPW was introduced. This change disables the **cntl-c** as a Windows clipboard copy function and allows it only to be used for getting the TNC's attention. To copy text from the form, (i) highlight the text, then (ii) Menu Edit>Copy. The **cntl-x** and **cntl-v** still perform a Windows clipboard Cut and Paste respectively.
- #412: On the Interactive Packet Window (IPW) form, addresses another point of confusion with Serial Port IPW. This change re-words the button description from "Connect" (meaning users were thinking this would

initiate a BBS connect) to “Open Comm Port.” Once the Comm Port is opened, the user still needs to press enter to get the TNC’s attention.

However, once IPW for AGWPE and IPW for Telnet are implemented, this button may dynamically change to “Connect” because this is what actually will happen.

3.7 Other

- #417: Changes the program logic to select the text in the field when tabbed to that field.
- #425: For Windows XP systems that are using the XP style (blue borders), the sizing of text has not perfectly aligned in all fields. This change adjusts all text labels and fields to handle the XP display style. If you still see problems, please let me know.
- #439: Fixes the Transaction File creation function to store text that is truncated when the test space gets too large.

4 Changes since Version 1.3

The following is the list of changes that were released as part of the Maintenance releases that followed the release of Outpost v1.2.

4.1 Release 1.3.1

- #398: Corrected bottoms of forms being cut off on PCs with XP-Style turned on.
- #400: On Send/Receive Settings, fixed a typo.

4.2 Release 1.3.2

- #334: Corrected a problem with MSYS BBSs where Outpost did not respond correctly to strings that match a prompt string that are embedded in the message other than at the end of the buffer.
- #402: Corrected a problem with MSYS BBSs where bulletins are downloaded with double-spaces.

4.3 Release 1.3.3

- #403: Corrected more XP-Style issues... Message form, text after default destination wraps on user's machine.
- #404: And even more XP-Style issues... Several Tools>setting forms allow them to be scalable.

4.4 Release 1.3.4

- #367: Run-time error 91 - "Object variable or With block variable not set" when loading v1.3 with either the corrupt TNC to BBS .dat files.
- #405: Expanded the VIA field to 30 characters to support up to 3 station hops.

5 Outstanding Requests

As of this writing, there are several outstanding requests – enhancements and defects – that may/or may not be resolved by the time of the v2.0 release. These are listed below.

5.1 Enhancements

- #106: Software handshaking (Xon/Xoff) is not available. So far, the use of Hardware (RTS/CTS) handshaking is sufficient. Currently, this is assessed as a low priority enhancement request.

Additional tests of implementing Software handshaking pointed to timing issues were characters are dropped. This is unacceptable when passing emergency traffic. This also needs to be looked at in light of the v2.0 release with AGW.

- #139: Implement Binary Attachments. Currently, this is assessed as a low priority enhancement request.
- #241: Add an on-line Help subsystem. Continues to be a good idea, just need to break down and spend the \$\$\$ to buy a Help Builder package.
- #291. Port a stripped down version of Outpost to Pocket PC. Actually, more than one individual has asked about this. This is a lower request and will follow the build-out of PC-based functionality.
- #305: Make the In-Box and Out-Box sort order stay as previous set from run to run. Depending on how the 2.0 testing goes, this may make it into this release, or be part of one of the maintenance releases that inevitably will be required.
- #320: Need the capability to connect to a BBS through a KA node. Currently, there is only one requester on this. If this was a big enough issue, this could make it as part of the next release.

5.2 Defects

- #32: Outpost does not respond correctly to strings that match a prompt string that are embedded in the message other than at the end of the buffer.

This is a problem when (i) the BBS commands are short and not unique (ie: MSYS' BBS prompt is ">") and (ii) message originators include these characters in the body of the message.

PLAN: checking on the extent of the #440 fix released in v2.0.