

# **“Waiting for Data” Error Message**



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## **Telxon "Waiting For Data" Issue While In Session**

### **Introduction**

There have been field reports of Telxon terminals actively in session going to "waiting for data" and then terminating the session.

### **Requirements**

Verify that the AP's model 4800E installed are running version 8.24 firmware. Also, Telxon Terminals can utilize a software assigned MAC address. This results in the second terminal that connects disconnecting the first terminal connected.

### **Revised Loading Instructions**

What you will need:

- Obtain firmware from Telxon.
- Obtain firmware loading instructions from Telxon.
- Using the Telxon instructions, upgrade the firmware in the AP's.
- Follow Telxon's instructions for using the Hardware MAC address and not the Software MAC address.

## Symbol S24 Terminals "Waiting for Data" RF Send Error

### Introduction

The following describes an issue with Symbol terminals that cannot detect Out of Range.

### Problem Description

The terminal is out of range of an Access Point, but does not report it correctly. This frees the application to send the data to a **non-associated** Access Point and will Lock up the terminal.

### Resolution

Obtain new drivers from Symbol.

## Access Point ARP Issues "Waiting for Data", Session Disconnects

### Introduction

The following describes an issue in which an Access Point ARP issues a "Waiting for Data" error message and the session disconnects.

### Problem Description

When the host ARP table entry ages out, the host sends an ARP request for the terminal IP/MAC information. The terminal may not respond to that request in a timely basis, especially if it is powered down.

If the response is not answered within the allotted time (terminal in wait state, busy or powered down), the host does not retransmit and the terminal has no entry in the ARP table.

When the terminal wakes up and tries to transmit to the host application, it errors because its connection to the host applications has been dropped due to lack of an entry in the HOST ARP table. In the meantime, the terminal waiting for a host response appears to have locked up.

### Resolution

The solution is to verify that all your access point's firmware and settings for ARPs and inactivity timers are set long enough.

When this is setup, the AP will answer ARP requests in "Proxy" to the terminal, even if powered down or out of range.

Also, verify that your host processor is not aging them out. This is a known issue in Windows and can be verified with netstat and ARP commands on the windows box in a command window. If you do not see the IP address of the terminal and its Mac address, you have the problem. See A1024 in our Lotus Notes Technical Documents database on how to set up static ARPs for RF terminals.

Resolution for Symbol: Use AP firmware that supports proxy ARP (2.51-16 or higher), and terminal firmware that turns this option on in the AP (5.00-27 or higher). When this is set up, the AP will answer ARP requests in "Proxy" to the terminal, even if powered down or out of range.

## **"Waiting for Data" and "Disconnects" with Symbol xx42 Terminals**

### **Introduction**

The following describes a problem and the resolution to an issue that will show up as increased "Waiting for Data's" and "Disconnects " when using an xx42 version of a Symbol series 3000 terminal.

The xx42 is a terminal that has a 2MB radio installed, that will operate in the 1MB compatible mode. This was done to cut production costs by needing to produce one less radio type.

### **Problem Description**

**Note:** The problem is intermittent and elusive and may be reported in a number of ways.

Below is a list of common ways this has been reported to us:

I get a lot of "Waiting for Data's" and most of them do not recover and I must reboot.

The NEW 6842 terminals work much slower than the older 3840 terminals we are also using.

I am right under the AP and it will not associate.

I get a lot of "Out of Range" complaints under HEAVY scanning.

The terminal is very sluggish.

I get a lot of "TAP Terminates" for no apparent reason.

### **Resolution**

Version 2.07 of the Symbol NDK library has a fix that corrects this problem. We included this library in Twin Client Versions starting at 6.3.1.

**Note:** This NDK library is not part of Symbols LWP and requires it be compiled into the terminals EXE code.

To find the current version of the PowerNet client, key an uppercase "I" (for Information) at the "Press any Key" prompt. This will give you the version number.

If it is a version earlier than 6.3.1 - please update.

Also ensure that LWP is at the current version. We highly recommend that both be done at the same time.

<http://www.symbol.com/services/downloads/downloads.html>

## **“Waiting for Data” and Proxim Access Points**

### **Introduction**

The following details how to configure Proxim Access Points for a roaming environment.

### **Resolution**

1. Configure all Access Points as Masters with the same Domain and Security ID.
2. Each Access Point should have a different Channel and Sub-channel pair. Only use sub-channels if you have used all the 15 channels.
3. Cells between Access Points must overlay.
4. Roaming will not occur across routers.
5. Terminals should be configured for the same Domain and security ID.

## **"Waiting For Data/Host" Prompt in IP-Based Terminals**

### **Introduction**

This simple technique can be used to determine the source of "Waiting for Data/Host" on IP based terminals.

### **Problem Description**

A terminal that sits at "Waiting for Data/Host" is in this state:

1. The terminal believes it is in Range of an Access Point.
2. It believes the session is still active with the Host.
3. The last data it sent to the host has been acknowledged by the IP stack.

Or in other words:

*It is waiting for a Host response on what it has been told is a healthy connection.*

To test and to help isolate where this breakdown is, you can use ping from the Host segment.

Example: ping xxx.xxx.xxx.xxx where "xxx.xxx.xxx.xxx" is the terminals IP address.

The results of this test while in the "Waiting for Data/Host" state are below:

### **Ping Responds**

This is a host/application/database problem in that it did not send a response to the last transaction.

### **Ping Does Not Respond**

This is a Wired or Wireless network problem in that the host response was not delivered to the terminal.

### **Resolution**

A Licensed copy of Vision can be used to troubleshoot these types of problems, along with Network analyzers that SNIFF the ethernet or the RF.

Vision info here: <http://www.connectrf.com/Class/vregister.htm>

Vision Software here: <http://www.connectrf.com/Resources/service/software.htm>

## **About This Document**

This document is based on the following Technical Documents in our Notes Database that have been made obsolete: A1028, A1051, A1054, A1071/A1103, T1160, and T1171.

Please let us know about any errors in this document at:

<http://207.241.78.223/isoxpert/calltrak.nsf/WebTracking?OpenForm>.