

Taking Serial Capture Logs

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Introduction

When experiencing communications issues with any Serial devices, it is necessary to take a Serial Capture Log before contacting Technical Support. When experiencing communications issues with anything other than Serial devices, it is necessary to take a Snapshot Capture log before contacting Technical Support.

Using FST Diag to Take a Serial Capture log

FST_Diag is the preferred method for capturing serial logs. The FST_Diag Utility connects to a FieldServer, collects information about the FieldServer setup and current processes, downloads the configuration, zips all information into one file and reports back to FieldServer support with the information.

The FST_Diag Utility **cannot** capture a log of Ethernet based message contents. Refer to Enote0063 at www.FieldServer.com for information on how to achieve this.

Installation

The utility is provided in the form of a self-executing installer. Double clicking on the installer will result in the utility being installed in a folder of your choice and added to the list of programs linked to the start button. An option added the start menu program group would allow the utility to be uninstalled.

The name of the installer is  install_Fst_Diag.exe

The version number of the utility may be included in the installer name.

Before using the FST DIAG

Before using this Utility, please make sure of the following conditions:

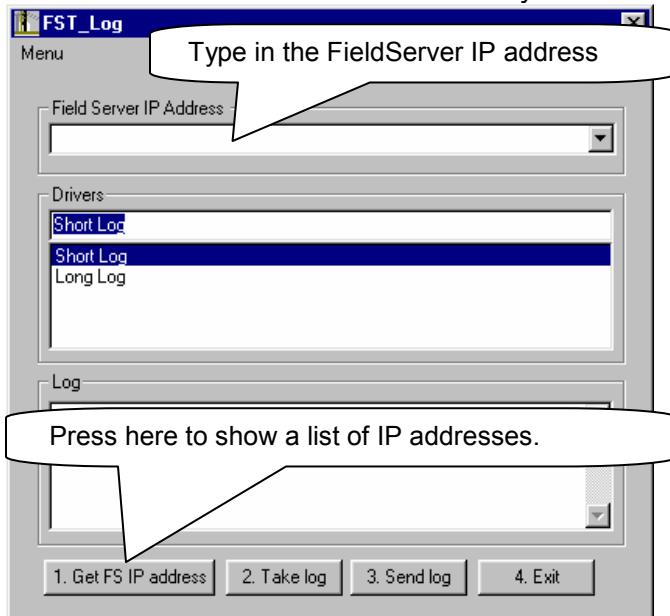
- The computer and the FieldServer are on the same subnet. Refer to Enote 0026 at www.FieldServer.com for more information.
- Connection is directly to the same network as the FieldServer and not through a VPN or other remote networking software.
- There are not multiple Ethernet cards active on the computer. For laptops especially, check the Ethernet settings and ensure that separate wireless Ethernet cards are deactivated.
- That Antivirus software is not preventing the NIC card from operating properly.

If there are Ethernet protocols (such as BACnet_IP, Ethernet_IP, Modbus_TCP) running on the computer it is advisable to capture an Ethernet log too. This process is not automated. Start the Ethernet log before pushing the button to 'Take Log' and end the Ethernet log after being told to 'Now Send Log'. Refer to Enote 0063 at www.FieldServer.com for more information.


Using the FST Diag

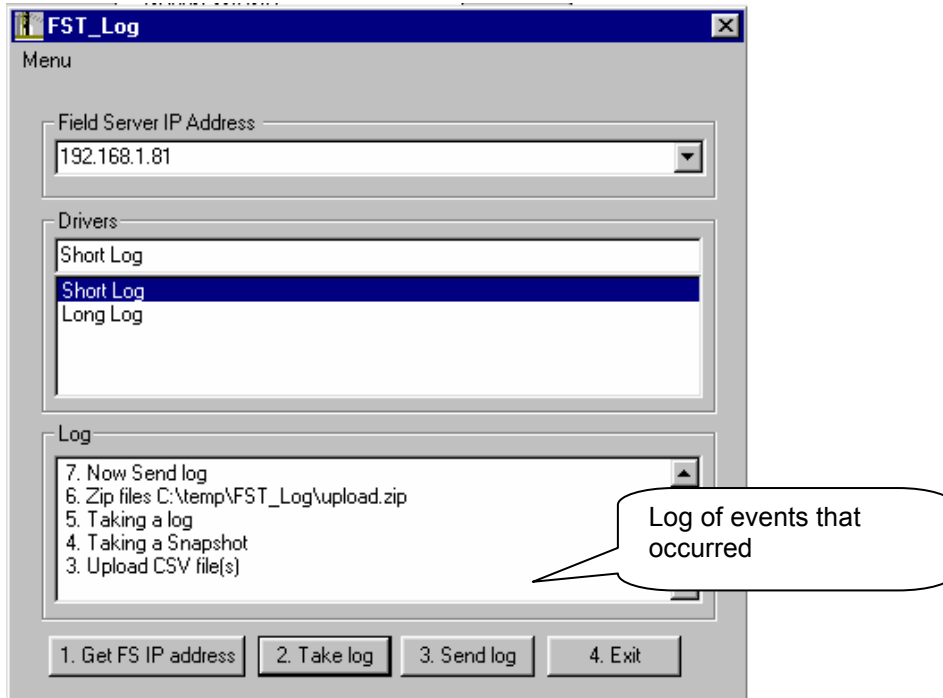
Step 1: Select a Field Server IP Address.

The IP address can be entered manually or selected using the Utility.



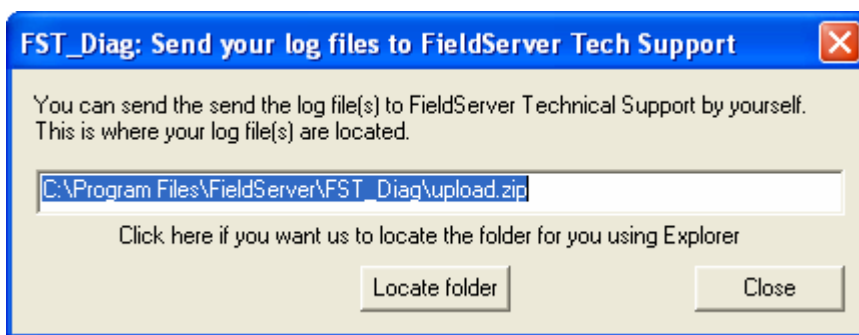
Step 2: take a log

Press the  button near the bottom of the dialog. As the utility runs a few DOS prompts will appear and disappear. Don't click or type anything in to these DOS prompts. This step may take a few minutes depending on the selected Log Type and computer speed. When the utility is finished a log of events that have occurred will be presented.



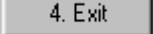
Step 3: Send Log

Now send the log file to FieldServer support by clicking the “Send Log” button located near the bottom of the dialog. The following dialog should appear.



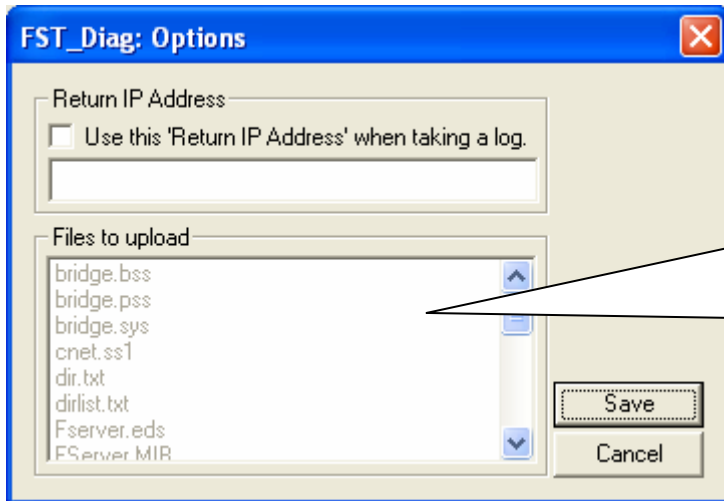
Push the ‘Locate Folder’ button to launch explorer and have it point directly at the correct folder. It is the file – upload.zip – that must be sent to Tech Support.

Step 4: Close the Program

Press the exit button . Wait until the utility has completed the log taking operation before exiting.

Options

From the Menu selection 'Options'. You are presented with the following dialog.



This is a list of files found in upload_list.ini which is used to configure the utility.

The utility tries to upload these files.

The list cannot be edited within the FST_Diag application but it can be edited externally. Each time you re-install FST_Diag your changes will be lost.

Return IP Address

Leave the checkbox and edit field blank unless directed by FST Tech Support personnel. When a valid IP is specified and the checkbox is checked then the Utility adds the following to the command line of Ruidebug: "-mReturn_IP_Address"

Configuring the "Log Type" List

In the install folder an Ascii file named config.ini controls the contents of the list named 'Log Types'. The default contents of this file are as follows:

```
// This line is ignored because it begins with //
//
// File Format
// Description, Time_In_Seconds, Command_Line
//
// Where Description      Is a text field which will be shown when the list of 'Log Types' is displayed
//     Time_In_Seconds  Is the log duration specified by the -qn command for ruidebug
//     Command_Line     Is normally left empty.
//                     When you specify a cmd line it overwrites
//                     part of the command line used by default for the program
//                     The app still specified -i -q -a and if
//                     required -m. The command line specified here is added.
5 Minute Log (Short Log),300,
10 Minute Log           ,600,
15 Minute Log           ,900,
20 Minute Log (Long Log),1200,
30 Minute Log           ,1800,
45 Minute Log           ,2700,
60 Minute Log           ,3600,
90 Minute Log           ,5400,
2 Hour Log              ,7200,
6 Hour Log              ,21600,
12 Hour Log             ,43200,
24 Hour Log             ,86400,
Custom: sil003         ,300,-zP1[at]
```

This file can be edited using a text editor.

Troubleshooting tips

Error Message	Action
TakeLog:#1 Err. Cant execute Utility (Ruinnet)	Check the install directory of FST_Diag ¹ for Ruinet.exe. If it is not there please re-install this Utility.
TakeLog:#11 Err. Cant execute Utility (Ruidebug)	Check the install directory of FST_Diag ¹ for Ruidebug.exe. If it is not there please re-install this Utility.
TakeLog:#12 Err. Cant execute Utility (Zip)	Check the install directory of FST_Diag ¹ for Zip.exe. If it is not there please re-install this Utility.
TakeLog:#13 Err. Cant execute Utility (FST_ping)	Check the install directory of FST_Diag ¹ for FST_ping.exe. If it is not there please re-install this Utility.
Get FS IP Address not working.	Check the install directory of FST_Diag ¹ for FST_Ping.exe. If it is not there please re-install this Utility. If it is there, then it is not working - type in your FS IP address manually.
Error on sending email to FieldServer support.	Check the install directory of FST_Diag ¹ for blat.exe. If it is not there please re-install this Utility.

Contents of Upload.zip

Filename	Description
Upload.bat	This is bridge.bat as found on the FieldServer.
Upload.f	If bridge.bat calls cb8menu with a Forth file then this is that file
Upload0.csv	If bridge.bat calls cb8menu with a config file then this is that config file. If bridge.bat calls cb8menu with a Forth file then this is the 1 st config file loaded by the Forth file. i.e. It is the 1 st file found in the .f file preceded by a "read_csv" command.
Upload1/2/3.....csv	If bridge.bat calls cb8menu with a Forth file then this is the 2 nd and subsequent config file(s) loaded by the Forth file. i.e. It is the 2 nd /3 rd ... file found in the .f file preceded by a "read_csv" command.
Snap.log	This is produced by Ruidebug. It is a simple snapshot.
Upload.log	This is the log file created when Ruidebug starts logging the ports. It contains the snapshot before and after the port log too.
Com_*.log	These are the serial port log files.
*.sys	Device Drivers
*.ini	Various initialization files
.xif, Lon.cfg	Lonworks files
*.mib	SNMP files
*.gse, *.ss1	Profibus files
*.bat	Various bridge script files

¹ default is c:\temp\fst_log\

Using Serial Capture

Serial Capture can be found under Start|Programs|FieldServer Utilities|Tools.

Before starting the Serial Capture, please make sure of the following conditions.

- The computer and the FieldServer are on the same subnet. Refer to Enote 0026 at www.FieldServer.com for more information.
- Connection is directly to the same network as the FieldServer and not through a VPN or other remote networking software.
- There are not multiple Ethernet cards active on the computer. For laptops especially, check the Ethernet settings and ensure that separate wireless Ethernet cards are deactivated.
- That Antivirus software is not preventing the NIC card from operating properly.²
- Ensure that you press Q to quit the Serial Capture. Exiting the program any other way will provide an incomplete log.

While the Serial Capture is running, please make sure of the following conditions,

- Do not reset ANY screens through the Remote User Interface program.
- Once the Serial Capture is running, try to have the event in question occur.

After pressing “Q” to quit the Serial Capture, wait until the DOS window disappears before proceeding.

The following Serial Capture Files will be found in the Debug and Log File Folder under Start|Programs|FieldServer Utilities.

FS-X20 Series:

1. ruidebug.log
2. com_p2.log
3. com_a_p2.log
4. com_h_p2.log

FS-X30 and FS-X40 Series

The same set of files as above, but for each serial port being used, there will be three com_*.log files per port.

It is important that the Serial Capture Log is emailed with the configuration that was in the FieldServer at the time of the Serial Capture.

² Norton antivirus, for example, will allow you to connect to Ruinet, but Serial Capture won't connect.

Taking a Snapshot Log

Taking a Snapshot of the FieldServer will allow Technical Support a detailed view of the communications status of your FieldServer, and will permit a better level of support as a result. To take a snapshot, use the snapshot utility found in Start|Programs|FieldServer Utilities|Tools. The snapshot file, snap.log, is created in the Debug and Log File Folder under Start|Programs|FieldServer Utilities.

It is strongly advised that a Snapshot Log and/or Serial Capture Log be sent to FieldServer Technical Support before reporting a device interface problem.

All Logs should be emailed to Support@FieldServer.com unless otherwise requested.