

A Sierra Monitor Company

Driver Manual (Supplement to the FieldServer Instruction Manual)

FS-8700-95 Notifier NFS3030

APPLICABILITY & EFFECTIVITY

Effective for all systems manufactured after May 1, 2001

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1. Notifier NFS3030 Description

The NFS3030 Serial driver allows the FieldServer to record data from Notifier Onyx Series NFS3030 Fire Panels over RS-232.

The FieldServer acts as a Passive Client receiving messages and recording the status of a Notifier 3030 Fire Alarm Panel. There is no active polling by this driver; the communications are one-way through the panel's printer port.

This driver is not capable of emulating a Notifier NFS3030 panel and the very limited Server functionality has only been implemented to facilitate FieldServer's Quality Assurance program.

The main purpose of this driver is to record the status of Fire Alarm System detectors and Modules in Data Arrays - one Data Array per loop. It is limited by the information that the Notifier NFS3030 unit sends in the form of text messages through its RS-232 printer port. The accuracy and timeliness of the data is therefore limited to the frequency of update messages that the Notifier Fire Panel issues. The types of Notifier messages supported by this driver are summarized later in this manual. Also, a detailed table in the manual shows each type of NFS3030 message the FieldServer recognizes and the effect that it has on the status of points in the Data Array. The device status to the Data Array mapping is also provided in the manual. The driver is capable of supporting the panel's port supervision message if configured to do so.

Max Nodes Supported

FieldServer Mode	Nodes	Comments
Client	1	Each FieldServer port can connect to only 1 NFS3030 panel
Server	0	The NFS3030 driver cannot be used as a Server.

2. Driver Scope of Supply

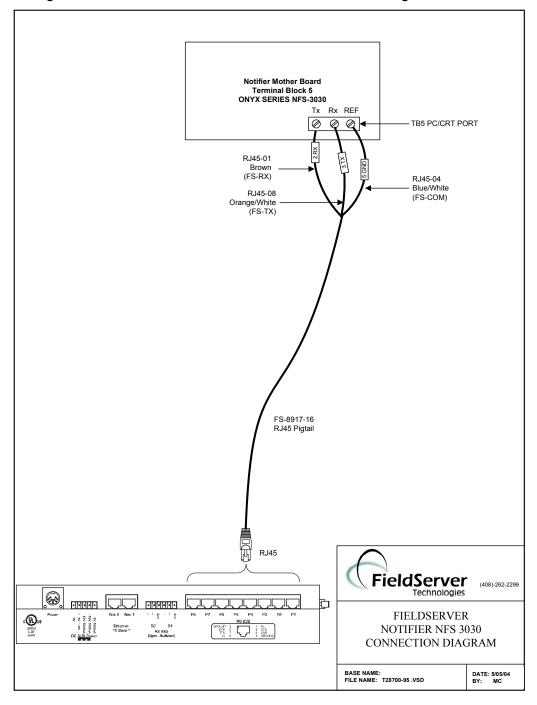
2.1. Supplied by FieldServer Technologies for this driver

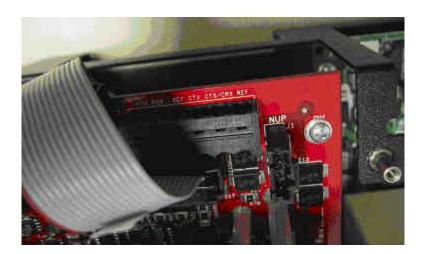
FieldServer Technologies PART #	Description
FS-8917-16	RS-485 Pigtail for RJ45 Port
FS-8700-95	Driver Manual.

3. Hardware Connections

The FieldServer is connected to the Notifier NFS3030 Fire Panel as shown in the connection drawing.

Configure the Notifier NFS3030 Fire Panel according to manufacturer's instructions.





Notifier 3030 TB5: Use PTX, PRX, and REF to connect to the FieldServer.

3.1. Hardware Connection Tips / Hints

The printer port must be enabled on the unit and set to 80 columns with NO supervision unless port supervision is enabled in the driver configuration.

4. Configuring the FieldServer as a (Notifier NFS3030) Client

For a detailed discussion on FieldServer configuration, please refer to the FieldServer Configuration Manual. The information that follows describes how to expand upon the factory defaults provided in the configuration files included with the FieldServer (See ".csv" sample files provided with the FieldServer).

This section documents and describes the parameters necessary for configuring the FieldServer to communicate with a Notifier NFS3030 Server.

It is possible to connect the Notifier NFS3030 to any RS-232 port. These ports need to be configured for Protocol="nfs3030" in the configuration files.

4.1. Panel Status - Data Array Mapping

Note: all troubles will be recorded as a counter because there may be several troubles for a single device. This counter will be incremented or decremented as additional troubles are reported or cleared.

Parameter	Registers (f	loat)
{per loop}		
Fire Alarm	0-199	detectors
File Alailii	200-399	modules
Trouble		
each point will increment/decrement the number of	500-799	detectors
troubles recorded, system normal will reset the counter to zero	700-899	modules
PreAlarm	1000-1199	detectors
FICAIAIII	1200-1399	modules
Security Alarm	1500-1799	detectors
Security Alaim	1700-1899	modules
Supervisory	2000-2199	detectors
Supervisory	2200-2399	modules
Disabled	2500-2799	detectors
Disabled	2700-2899	modules
On/Off	3000-3199	detectors
Olivoli	3200-3399	modules
Active	3500-3799	detectors
	3700-3899	modules
{system points only}		
System Troubles	0-100	
	1000-1999	General Zones
Disabled Zones	2000-2099	Releasing Zones
	2100-2199	Trouble Zones
	3000-3099	Fire Alarm
Panel	3100-3199	Trouble
	3200-3299	*
*note: some of these Data Arrays are not	3300-3399	Security Alarm
appropriate for panels but arranged in this fashion	3400-3499	*
for symmetry in message parsing	3500-3599	Disabled
.s. cys. y in moodage pareing	3600-3699	On/Off
	3700-3799	*

4.2. Calculating array offset for a given Panel

The Data Array arrangement is fairly self-explanatory. There is a separate Data Array for each Notifier 3030 Loop. There can be up to 10 loops per panel, and status of the detectors and modules on any particular loop is recorded in the appropriate section of the Data Array according to the device address.

e.g. For a detector L02D054 in PREALARM, the address would be 1054 in the Data Array for loop 2.

Panel Circuit, System Troubles, and Disabled Zones are recorded in the system Data Array assigned to Loop 0. This is where all data not associated with a loop, but is related to the Fire Panel is stored.

e.g. For a Panel Circuit P12.7 in FIRE ALARM the address = 3000 + 11*8 + 7 = 3095 would be set to 1.

4.3. Data Arrays/Descriptors

The configuration file tells the FieldServer about its interfaces, and the routing of data required. In order to enable the FieldServer for Notifier NFS3030 communications, the driver independent FieldServer buffers need to be declared in the "Data Arrays" section, the destination device addresses need to be declared in the "Client Side Nodes" section, and the data required from the Servers needs to be mapped in the "Client Side Map Descriptors" section. Details on how to do this can be found below.

Note that in the tables, * indicates an optional parameter, with the bold legal value being the default.

Section Title			
Data_Arrays			
Column Title	Function	Legal Values	
Data_Array_Name	Provide name for Data Array	Up to alphanumeric characters	15
Data_Array_Format	Provide data format. Each Data Array can only take on one format.	Float	
Data_Array_Length	Number of Data Objects. Must be larger than the data storage area required by the Map Descriptors for the data being placed in this array.	1-10,000	

Example

// Data Arrays	_	<u> </u>
Data Arrays		-
Data_Array_Name,	Data_Format,	Data_Array_Length,
Loop_01,	FLOAT,	4000
Loop_02,	FLOAT,	4000
Loop_03,	FLOAT,	4000
Loop_04,	FLOAT,	4000
Loop_05,	FLOAT,	4000
Loop_06,	FLOAT,	4000
Loop_07,	FLOAT,	4000
Loop_08,	FLOAT,	4000
Loop_09,	FLOAT,	4000
Loop_10,	FLOAT,	4000
SYSTEM_INFO,	FLOAT,	3800

4.4. **Client Side Connection Descriptions**

Section Title		
Connections		
Column Title	Function	Legal Values
Port	Specify which port the device is connected to the FieldServer	P1-P8 ¹
Protocol	Specify protocol used	nfs3030, 3030
Baud*	Specify baud rate	9600 (Vendor
Daud	Dadu Specify Dadu Tale	
Parity*	Specify parity	None
Data_Bits*	Specify data bits	8
Stop_Bits*	Specify stop bits	1
Handshaking*	Specify hardware handshaking	None
Poll Delay*	Time between internal polls	N/A Passive
1 Oil _Dclay	Time between internal polis	Client
Supervision_Mode ²	The driver is able to process port supervision queries sent by the panel. Refer to Appendix A.6 for more information.	0,1,2,3,4,5

Example

// Clier	nt Side Connection	ıs		
Connections				
Port,	Protocol,	Baud		
P8,	nfs3030,	9600		

Not all ports shown are necessarily supported by the hardware. Consult the appropriate Instruction manual for details of the ports available on specific hardware.

² If the parameter is not specified or is Zero, then port supervision must be disabled at the panel.

4.5. Client Side Node Descriptors

Note: This driver does not utilize the Node_ID or station address as there can only be one panel per RS-232 Port. However, the configuration files require that this be defined. See below or Client.csv as an example.

Section Title		
Nodes		
Column Title	Function	Legal Values
Node_Name	Provide name for node	Up to 32 alphanumeric characters
Node_ID	station address of physical Server node	1-255
Protocol	Specify protocol used	nfs3030, or 3030
Connection	Specify which port the device is connected to the FieldServer	P1-P8 ³

Example

// Client Side Nodes			
Nodes Node Name,	Node ID,	Protocol,	Connection
Panel_1,	1,	nfs3030,	P8

_

³ Not all ports shown are necessarily supported by the hardware. Consult the appropriate Instruction manual for details of the ports available on specific hardware.

4.6. Client Side Map Descriptors

4.6.1. FieldServer Related Map Descriptor Parameters

Column Title Function Legal		Legal Values
Map Descriptor Name	Name of this Map	Up to 32 alphanumeric
map_beenpter_rtame	Descriptor	characters
Data_Array_Name	Name of Data Array where data is to be stored in the FieldServer	One of the Data Array names from "Data Array" section above
Data_Array_Offset	Starting location in Data Array	0
Function	Function of Client Map Descriptor	Passive_Client

4.6.2. Driver Related Map Descriptor Parameters

Column Title	Function	Legal Values
Node_Name	Name of Node to fetch data from	One of the node names specified in "Client Node Descriptor" above
Length	Length of Map Descriptor	4000 (LOOP_X) 3800 (SYSTEM_INFO)
Address	Starting address of read block	1
Loop	Loop number	1 to 10

4.6.3. Map Descriptor Example 1: Standard Example

This shows the standard Map Descriptor setup for a panel with 10 loops plus a single "system_info" Map Descriptor assigned to loop 0.

// Client Side Map Descriptors	ptors				_		
Map Descriptors							
Map_Descriptor_Name,	Data_Array_Name,	Data_Array_Offset,	Function, Passive Client	Node_name,	Address,	Length	Loop 1
Loop 02.	DA Loop 02.	ó o	Passive Client	Panel 01.	o o	4000,	- 2
Loop 03,	DA_Loop_03,	0,	Passive Client,	Panel_01,	ō oʻ	4000,	က
Loop_04,	DA_Loop_04,	O,	Passive_Client,	Panel_01,	o,	4000,	4
Loop_05,	DA_Loop_05,	o,	Passive_Client,	Panel_01,	o,	4000,	2
Loop_06,	DA_Loop_06,	o,	Passive_Client,	Panel_01,	o'	4000,	9
Loop_07,	DA_Loop_07,	o,	Passive_Client,	Panel_01,	o'	4000,	7
Loop_08,	DA_Loop_08,	o,	Passive_Client,	Panel_01,	o,	4000,	∞
Loop_09,	DA_Loop_09,	o,	Passive_Client,	Panel_01,	ó	4000,	တ
Loop_10,	DA_Loop_10,	°,	Passive_Client,	Panel_01,	o,	4000,	10
System_Info,	DA_System_Info,	o,	Passive_Client,	Panel_01,	o,	3800,	0
Select the array for data storage according to the loop id. System data is stored under loop 0.		All Map Descriptors are passive waiting for a message from the NFS3030 panel.			Identify the loop id for which this Map Descriptor will store data		

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Appendix A. Advanced Topics

Appendix A.1. Message to Data Array Mapping

This driver was designed to be connected to the Notifier Onyx NFS3030 printer port and listen for incoming messages. The panel's default setting for the printer port is off. To utilize this driver, the printer must be enabled on the unit and set to 80 columns with NO supervision unless port supervision is enabled in the driver configuration. Refer to Appendix A.6 for information on how to enable port supervision.

The primary purpose of this driver is to record the status of devices connected to the NFS3030 system by interpreting the text messages sent to the printer port. Not all messages will be interpreted, as many messages do not directly pertain to device status, or are currently supported. The following subset of event messages is recognized:

Active Events:
FIRE ALARM
TROUBLE
PREALARM
SECURITY ALARM
SUPERVISORY
DISABLED
ON/OFF detectors, modules, panels only
ACTIVE

A detailed mapping of message interaction System Trouble messages provided by Notifier at the time this driver was written is tabulated below. Any changes or additions by Notifier will not be reflected in this driver unless specifically revised.

Appendix A.2. Notifier NFS3030 CRT Message Types Recognized

Event Keyword	Data Arrays Affected	Clearing Event	Notes
Fire Alarm	Modules/Detectors	Cleared Fire Alarm or System Normal	states: {0,1}
Trouble	Modules/Detectors System Panel Circuit	Cleared Trouble System Normal	This is for both point and system trouble - system troubles are only 1 line messages with no point address. states: {counter}
Pre Alarm	Detectors	Cleared Pre Alarm System Normal	states: {0,1}
Security Alarm	Modules Panel Circuit	Cleared Security Alarm System Normal	states: {0,1}
Supervisory	Modules	Cleared Supervisory System Normal	states: {0,1}
Disabled	Zones Modules/Detectors Panel Circuit	Cleared Disabled System Normal	states: {0,1}
On/Off	Modules Panel	Off/On	states: {0,1}
System Normal	All		Will reset all Data Arrays for all loops and the system to zero
Active	Modules	Cleared Active	

Appendix A.3. System Trouble Messages

The following table lists the system troubles recognized by this driver. Because of the patterns of the messages, the search string has been truncated to permit message recognition with device address.

Case	NFS3030 message	Alternative search string
1.	LOOP x- x COMM FAILURE	COMM FAILURE
2.	STYLE 4 SHORT x LOOP x	STYLE 4 SHORT
3.	ANNUN x NO ANSWER	NO ANSWER
4.	ANNUN x TROUBLE	TROUBLE

System Trouble	ID#
AC FAIL	0
ADV WALK TEST	1
UDACT NO ANSWER	2
UDACT TROUBLE	3
AUXILIARY TROUBLE	4
BASIC WALK TEST	5
BATTERY	6
CHARGER FAIL	7
CORRUPT LOGIC EQUAT	8
DRILL INITIATED	9
DRILL RECEIVED	10
EPROM ERROR	11
EXTERNAL RAM ERROR	12
GROUND FAULT LOOP	13
GROUND FAULT	14
INTERNAL RAM ERROR	15
LOADING.NO SERVICE	16
COMM FAILURE	17
MAN EVAC INITIATED	18
MAN EVAC RECEIVED	19
MANUAL MODE ENTERED	20
NCM COMM LOSS	21
NETWORK FAIL PORT	22
NFPA 24HR REMINDER	23
NVRAM BATT TROUBLE	24
NO DEV. INST ON L1	25
NO POWER SUPPLY INST	26
PANEL DOOR OPEN	27
PRINTER OFF LINE	28
PRINTER PAPER OUT	29
PROGRAM CORRUPTED	30
PROG MODE ACTIVATED	31
SELF TEST FAILED	32
SOFTWARE MISMATCH	33
STYLE 4 SHORT	34
STYLE 6 POS. LOOP	35
STYLE 6 NEG. LOOP	36
STYLE 6 SHORT LOOP	37
TEST PROGRAM UPDATE	38
TM4 TROUBLE	39
TM4 NO ANSWER	40
TM4 DISABLED	41
TROUBLE	42
NO ANSWER	43
SYSTEM INITIALISATION	44

Appendix A.4. Driver Limitations and Exclusions

- General zone disabling will be recorded, but zone information related to corresponding alarm, trouble, pre-alarm, security alarm, supervisory, and on/off will not be recorded
- Synchronization between the NFS3030 panel and the FieldServer can only occur while the panel is in SYSTEM NORMAL mode. At this time the FieldServer can be reset.
- Read point status data will not be recorded as this information is not available at the printer port.
- Printer port must be enabled on the unit and set to 80 columns with NO supervision unless port supervision is enabled in the driver configuration. Refer to Appendix A.6 for more information.
- all data related to non-event driven printer reports will not be recorded by the FieldServer
- This driver was written specifically for the following Notifier 3030 firmware versions. Any changes or additions by Notifier will not be reflected in this driver unless specifically revised.

Boot: 001.001.001 Dec 03 2002 App: 001.005.001 Feb 28 2003

- Information about zone status that is incorporated with point status messages will not be recorded by this driver.
- This driver is not designed for multi-dropped panels there can only be one panel connected to any given FieldServer port.
- This driver records data as presented to the printer port by the Notifier NFS3030, and can only be as accurate as this data.
- The driver cannot send any messages (including Ack, Reset and Silence) to the 3030 Panel.

Appendix A.5. FieldServer Synchronization

To synchronize the FieldServer's Data Arrays with the Notifier NFS3030 fire panel, the fire panel must be in the SYSTEM NORMAL state, and then the FieldServer can be restarted. There is no method of auto-synchronizing the two devices because there is currently no method for polling data from the NFS3030 panel through the printer port.

Appendix A.6. Port Supervision⁴

The driver is able to process port supervision queries sent by the panel. It has several modes for achieving this.

- Mode=1 Driver responds to port supervision gueries.
- Mode=2 Driver responds to port supervision queries unless it fails to process a message correctly (parsing error). In this case the driver starts a 7 second timer during which time it will not respond to port supervision queries.
- Mode=3 Driver accepts the port supervision query but does not respond. This mode is useful for panels where supervision is enabled but no response should be sent.
- Mode=4 This is an internal mode. It means the mode is in transition.
- Mode=5 Similar to Mode 1 but can be made to transition between mode=3 and mode=5 based on the value in a Data Array. This mode is useful for Hot Standby.

⁴ The driver did not support port supervision prior to version 1.02e.

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Appendix A.6.1. Port Supervision in Hot Standby:

A strategy that can be employed is the following.

- Primary FieldServer set to Mode=1 so that it always responds.
- Secondary set to Mode=3 so that it doesn't respond but can transition.
- If the primary fails, the secondary becomes active and does not respond. This causes a trouble at the panel. If the transition is tied to a Data Array value that goes to a value of 1 when the secondary becomes active, then the secondary can be made to transition to mode=5 so that it starts responding. Thus, the trouble occurs for the duration of the transition timer. Thereafter the secondary responds so the trouble is suppressed. This means that the panel logs the event.

Configuration Example

Data Arrays				Monitor	the	Ħ
Data_Array_Name	Data_Format	Data_Array_Length	Data_Array_Function	∠ Standby _	Standby Status Array	ray
HS_Status_nocop	UINT16	32	Hot_Standby_Status_Array			

	Scan_Interval	2.0s				
	Length Task_Name Scan_Interval	MoveStatus1 2.0s				
	Length	1				
	Function	Move_Only				
	Target_Offset	0	t Standby	3030 driver		
	Target_Data_Array Target_Offset Function	NFS_STATS_nocop	Move the Hot Standby	status to the 3030 driver	stats array.	
			Offset 3 relates to the Secondary	ieldServer. Refer to the Configuration	formation.	1
Moves	Source_Data_Array Source_Offset	HS_Status_nocop	Offset 3 relates	FieldServer. Refer	Manual for more information.)

The 1st element in the Data Array has control over how the driver responds to the port supervision request. Normally the Secondary FieldServer is not active and must not respond to the port supervision query. When it does become active it must start responding

Define the Stats Array as described in Appendix C.2

When does the transition occur?

When the mode=3 and the value at offset zero in the stats array is 1 then the mode will transition to mode=5. When the mode=5 and the value at offset zero in the stats array is 0 then the mode will transition to mode=3. The transition timer is hard coded and takes 5 seconds.

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Appendix B. Troubleshooting tips

Appendix B.1. Connection Tips & Hints

Trouble connecting to the Notifier printer port may occur if the port has not been enabled. By default this port is disabled. Please check the Notifier Manuals on how to enable this port and ensure that it is set to 80 columns no supervision unless port supervision is enabled in the driver configuration.

Appendix C. Error Messages

Most error messages are associated with errors parsing an incoming message from the NFS3030. The most likely cause is a mismatch in expected message format. The driver will flag one of the following error messages and continue. In most cases the message currently being processed by the driver will also be printed so that any problems can be easily diagnosed.

Message	Explanation
NFS3030:#1 Err. Incoming data is being abandoned on port %d. MapDesc's are required to define storage.	Check configuration file settings, a corresponding Map Descriptor with the correct loop number was not found for storing data.
NFS3030:#2 FYI. Attempted to decrement < 0	A "cleared trouble" message appeared for an address when there were no more troubles to clear. This may occur if a history printer dump is made. The Notifier messages may not be printed in chronological order, so the clear will occur before the trouble. Review the logs for any problems beyond this and contact Tech Support.
NFS3030:#4 Err. Two line addressing parsing failure.	Please contact Tech Support.
NFS3030:#5 FYI. The MapDesc called <%s> is too short.	Check the configuration file settings and increase the NFS3030-stats Data Array size
NFS3030:#7 Err. Illegal Map Descriptor length - defaulting to 1.	Check the configuration file settings, and ensure that all Length field entries have been made correctly.
NFS3030:#8 Err. Loop value error. Defaulting to 1	Check the configuration file settings; the Loop parameter has an invalid value.
NFS3030:#9 Err. Undefined Loop.	Check the configuration file settings for the "Loop" field and ensure all entries have been made.
NFS3030:#10 Err. Illegal Node_ID [%d] - Set to 1	Check the configuration file settings for correct Node values. Nodes or stations are not part of this protocol - set the node value to the dummy value recommended in the driver manual.
NFS3030:#11 Err. Parsing Invalid Single Line message: %s	Please contact Tech Support.
NFS3030:#12 Err. Parsing Invalid 2 Line message: %s	Please contact Tech Support.
NFS3030:#13 Err. Parse failure, sys trouble not found in lookup: %s	Please contact Tech Support.
NFS3030:#14 Err. Test file <%s> not found.	For development and testing only, please contact Tech Support.
NFS3030:#15 Err. Diagnostic line ignored.	For development and testing only, please contact Tech Support. This error is produced when the panel simulator tries to send a message from the ini file where the line number is less than zero.
NFS3030:#16 Err. Attempt to store data outside of Data Array range.	Check the configuration file settings for correct Data Array declarations.

Message	Explanation
NFS3030:#17 Err. No polling allowed. Presumed write thru abandoned!	Polling is not supported by this driver. If a poll gets generated by a 'write through' (by poking a value into an associated Data Array or by the up stream driver writing to this driver's Data Array) then this message is printed. The write is not performed and the MD is returned producing a Protocol Error. To avoid the problem, do no poke values into the Data Arrays using the RUINET utility and/or reconfigure the upstream driver so that it does not write data into the Data Arrays associated with this driver's Map Descriptors.
NFS3030:#18 Err. Internal Diagnostic. Call Tech Support.	The driver performed a poll. This is not permitted except as part of the drivers self diagnosing QA tests. Such polls must always be performed by a an MD whose name contains ".ini" This message should never been seen on a FieldServer.

<u>Note:</u> These errors are produced when the driver is unable to parse a message correctly. This could happen if 1) the message is corrupted or 2) the message contains keywords not recognized by the driver or the message structure is different to what was expected. If the cause is the latter then you need to take a log and send the log together with your configuration CSV file when reporting this problem to tech support. If you get one of these errors on rare occasions then the source of the error is likely to be a corrupted message.

Appendix C.1. FieldServer Statistics

The following table identifies statistics generated by the Notifier NFS3030 serial driver and their meanings.

Message	Meaning			
Messages received	Total number messages of all types received and successfully interpreted from the Notifier NFS-3030 A message can be a single or double line reporting status.			
Bytes received	Total number of bytes received by all message types from the Notifier NFS-3030. This number is independent of whether the message is to be ignored, is producing an error or will be successfully interpreted.			
Protocol Errors	A message could not be parsed or stored correctly.			
Msg Ignored (can be seen on error statistics screen for connection)	Total number of messages ignored by driver. Driver ignores the following messages Complete message but length is less than 50 leading CR (carriage return)character leading LF (line feed)character			

The following table lists the additional statistics recorded by this driver. These statistics may be useful in tracing problems and upgrading the capabilities of the driver.

Appendix C.2. Additional Statistics

Additional statistics are available if the NFS3030-Stats Map Descriptor is declared in the configuration file. The statistics are recorded in a Data Array, and addressed according to the following formula. They may be viewed using the Ruinet application, or by reading the FieldServer's data with another device.

address = {statistic Id#}+ {port #}*{50 stats per port}

To invoke this feature, add the following to the configuration file:

Nodes
Node_Name, Station, Port, Protocol
NFS_stats , 1 , P1 , nfs3030

Data_Arrays
Data_Array_Name, Data_Format, Data_Array_Length
DA_NFS_STATS , UINT32 , 2000

 Map_Descriptors

 Map_Descriptor_Name,
 Data_Array_Name,
 Data_Array_Offset,
 Function,
 Node_Name,
 Address,
 Length

 NFS3030-Stats ,
 DA_NFS_STATS,
 0
 ,
 Server ,
 NFS_stats ,
 1
 ,
 2000

Statistic	Description	ld#
NFS_STAT_SLAVE_BYTES_RCVD	Total number of bytes received on port	30
NFS_STAT_SLAVE_MSGS_RCVD	Total number of full length messages received, whether rejected or successfully interpreted	31
NFS_STAT_SLAVE_BYTES_ REJECTED_BY_COMPLETE	Total bytes rejected if message is not of full length (i.e. <50)	32
NFS_STAT_SLAVE_OCCURRENCES_ REJECTED_BY_COMPLETE	Total number of messages rejected if length is less than 50 or message is only CR or LF	33
NFS_STAT_SLAVE_BYTES_ REJECTED_BY_PARSE_KEYWORD	Total number of bytes rejected if event keyword (see Appendix A.2) is unknown	34
NFS_STAT_SLAVE_OCCURRENCES_ REJECTED_BY_PARSE_KEYWORD	Total number of messages rejected if event keyword (see Appendix A.2) is unknown.	35
NFS_STAT_SLAVE_ADDRESS_ PARSE_FAILURE	Total number of messages producing error because of wrong address for loop, detector, panel, zone etc	40
NFS_STAT_SLAVE_PARSE_ KEYWORD_FOUND_BUT_NOT_HANDLED.	Total number of messages received with known event keyword but not described in Appendix A.2	41
NFS_STAT_SLAVE_ STORE_IGNORES_MESSAGE	Total number of messages for which Map Descriptor is not defined to store data.	42
NFS_STAT_SLAVE_ STORED_MESSAGE	Total number of messages for which Driver stored data.	43
NFS_STAT_CLIENT_ SENDS_POLL	Used during testing only - Increments by 1 each time the Client sends a poll.	44

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