



## FAQ GMS-xx Setup Datastream Ethernet

### 1. Introduction

- This procedure describes how to setup datastream on a GMS-xx through ethernet (LAN).

### 2. Required Tools

- GeoDAS installed on Windows Computer
- GMS-xx, connected via Ethernet
- Serial connection to console of GMS-xx  
[http://www.geosig.com/files/FAQ\\_GMS-xx\\_How\\_to\\_Connect\\_Serial\\_Console\\_with\\_uCon.pdf](http://www.geosig.com/files/FAQ_GMS-xx_How_to_Connect_Serial_Console_with_uCon.pdf)

### 3. Setup Datastream from GMS-xx Serial Console

- Connect to the serial console of your GMS-xx
- Press **C** to enter the configuration menu and press **C** again to edit current configuration
- Press **F** and enter the number of output streams (1 stream per 3 channels)  
Means for a GMS-xx with 3 channels, you enter 1 output stream

```
Main Menu
A) Station description ..... Service 100495
B) Station code ..... SV495
C) Location description ..... GSO
D) Seismic network code ..... BS
E) Number of Channels ..... 3
F) Number of Output Streams ..... 1
G) Number of Trigger Sets ..... 1
H) Number of Preset Triggers ..... 0
I) Channel Parameters ..... ->
J) Stream Parameters ..... ->
K) Trigger Parameters ..... ->
M) File Storage and Policy ..... ->
N) Communication Parameters ..... ->
O) Miscellaneous Parameters ..... ->
P) Auxiliary Devices ..... ->

Select <A>...<P>. <Esc> to exit |
```

- Press **J** to enter **Stream Parameters**

```
Main Menu
A) Station description ..... Service 100495
B) Station code ..... SV495
C) Location description ..... GSO
D) Seismic network code ..... BS
E) Number of Channels ..... 3
F) Number of Output Streams ..... 1
G) Number of Trigger Sets ..... 1
H) Number of Preset Triggers ..... 0
I) Channel Parameters ..... ->
J) Stream Parameters ..... ->
K) Trigger Parameters ..... ->
M) File Storage and Policy ..... ->
N) Communication Parameters ..... ->
O) Miscellaneous Parameters ..... ->
P) Auxiliary Devices ..... ->

Select <A>...<P>. <Esc> to exit |
```

- Press **B** until Stream type shows **GSBU**

```

Main Menu | Stream
A) Stream name ..... Stream_1
B) Stream type ..... GSBU
C) Port configuration .....
D) Channels in the stream ..... 3
E) List of streamed channels ... ->

```

Select <A>...<E>. <Esc> back to Main Menu

- Press **C** to enter **Port configuration**

```

Main Menu | Stream
A) Stream name ..... Stream_1
B) Stream type ..... GSBU
C) Port configuration ..... ->
D) Channels in the stream ..... 3
E) List of streamed channels ... ->

```

Select <A>...<E>. <Esc> back to Main Menu

- Press **A** until Communication port shows **TCP/IP**

```

Main Menu | Stream | Port
A) Communication port ... TCP/IP
C) Protocol ..... TCP (Server)
E) Network port ..... 4001 (0xFA1)

```

Select <A>...<E>. <Esc> back to Main Menu | Stream

- Press **C** until Protocol shows **TCP (Server)**

```

Main Menu | Stream | Port
A) Communication port ... TCP/IP
C) Protocol ..... TCP (Server)
E) Network port ..... 4001 (0xFA1)

```

Select <A>...<E>. <Esc> back to Main Menu | Stream

- Press **E** to enter the communication port (default is 4001)  
Only one stream with max. 3 channels can use the same port! A second stream would need to use a different port (e.g. 4002)

```

Main Menu | Stream | Port
A) Communication port ... TCP/IP
C) Protocol ..... TCP (Server)
E) Network port ..... 4001 (0xFA1)

```

Select <A>...<E>. <Esc> back to Main Menu | Stream

- Press **Esc** followed by **ENTER** and again **Esc** followed by **ENTER** to get back to the main menu
- Press **Esc** to exit the menu
- Press **C** to save the configuration as "current"

```

Select <A>...<S>. <Esc> to exit .
Save as (C)urrent, save to a (F)ile or just (E)xit without saving....> C
PLINK 192.168.100.12 | TELNET SRVR OFF | MYIP: 192.168.100.11 | ROW/COL: 22/75 | XFER: Idle

```

- In the main menu, press **R** followed by **Enter** to restart the instrument

```

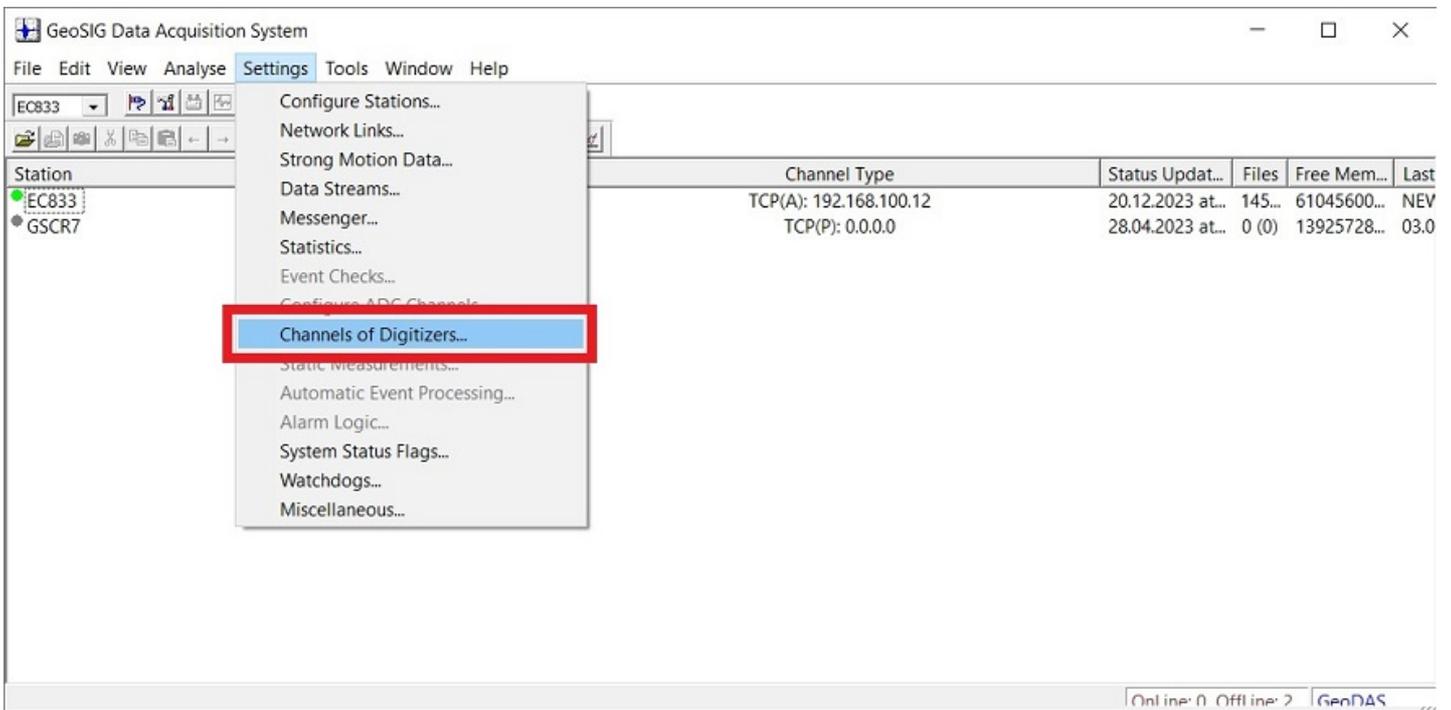
Main menu:
C - Configuration
M - Messages ->
S - Shell command
L - List firmware images
N - List network tunnels
X - Display errors (0) and warnings (0)
W - Clear errors and warnings
F - View/reset RTC trim values
T - File statistics
G - View RTC status
A - View Alarm status
P - View GPS information
H - Set RTC time
U - User request
R - Restart
Q - quit
r

```

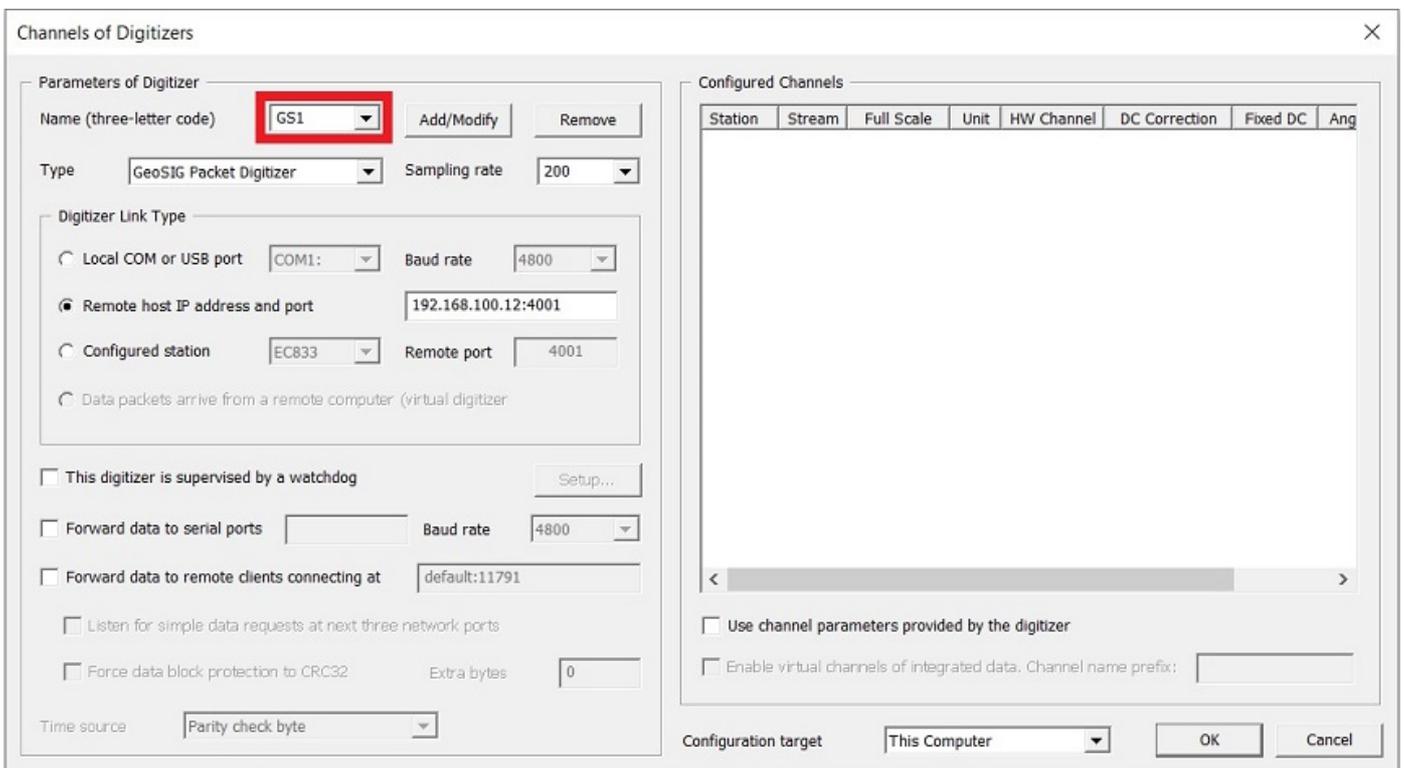
- After the restart, the configuration changes are applied

#### 4. Setup Datastream in GeoDAS

- In GeoDAS, open **Settings-> Channels of Digitizers...**



- Enter a name for the stream (3-letter code)



- Under **Type**, choose **GeoSIG Packet Digitizer** from the dropdown

Channels of Digitizers

Parameters of Digitizer

Name (three-letter code)

Type  Sampling rate

Digitizer Link Type

Local COM or USB port  Baud rate

Remote host IP address and port

Configured station  Remote port

Data packets arrive from a remote computer (virtual digitizer)

This digitizer is supervised by a watchdog

Forward data to serial ports  Baud rate

Forward data to remote clients connecting at

Listen for simple data requests at next three network ports

Force data block protection to CRC32 Extra bytes

Time source

Configured Channels

Station	Stream	Full Scale	Unit	HW Channel	DC Correction	Fixed DC	Ang

Use channel parameters provided by the digitizer

Enable virtual channels of integrated data. Channel name prefix:

Configuration target

- Tick **Remote host IP address and port** and enter the IP address of your GMS-xx and the port defined for the stream

Channels of Digitizers

Parameters of Digitizer

Name (three-letter code)

Type  Sampling rate

Digitizer Link Type

Local COM or USB port  Baud rate

Remote host IP address and port

Configured station  Remote port

Data packets arrive from a remote computer (virtual digitizer)

This digitizer is supervised by a watchdog

Forward data to serial ports  Baud rate

Forward data to remote clients connecting at

Listen for simple data requests at next three network ports

Force data block protection to CRC32 Extra bytes

Time source

Configured Channels

Station	Stream	Full Scale	Unit	HW Channel	DC Correction	Fixed DC	Ang

Use channel parameters provided by the digitizer

Enable virtual channels of integrated data. Channel name prefix:

Configuration target

- Click the button **[Add/Modify]**

Channels of Digitizers

Parameters of Digitizer

Name (three-letter code)

Type  Sampling rate

Digitizer Link Type

Local COM or USB port  Baud rate

Remote host IP address and port

Configured station  Remote port

Data packets arrive from a remote computer (virtual digitizer)

This digitizer is supervised by a watchdog

Forward data to serial ports  Baud rate

Forward data to remote clients connecting at

Listen for simple data requests at next three network ports

Force data block protection to CRC32 Extra bytes

Time source

Configured Channels

Station	Stream	Full Scale	Unit	HW Channel	DC Correction	Fixed DC	Ang

Use channel parameters provided by the digitizer

Enable virtual channels of integrated data. Channel name prefix:

Configuration target

- Tick the box **Use channel parameters provided by the digitizer**

Channels of Digitizers

Parameters of Digitizer

Name (three-letter code)

Type  Sampling rate

Digitizer Link Type

Local COM or USB port  Baud rate

Remote host IP address and port

Configured station  Remote port

Data packets arrive from a remote computer (virtual digitizer)

This digitizer is supervised by a watchdog

Forward data to serial ports  Baud rate

Forward data to remote clients connecting at

Listen for simple data requests at next three network ports

Force data block protection to CRC32 Extra bytes

Time source

Configured Channels

Station	Stream	Full Scale	Unit	HW Channel	DC Correction	Fixed DC	Ang
✓ GS100	Ch_01	1	g	Channel 001	Enabled	0	N
✓ GS100	Ch_02	1	g	Channel 002	Enabled	0	N
✓ GS100	Ch_03	1	g	Channel 003	Enabled	0	N

Use channel parameters provided by the digitizer

Enable virtual channels of integrated data. Channel name prefix:

Configuration target

- To add another stream, repeat from step 4.  
Make sure to use a different port for each stream!
- Click the button **[OK]**

Channels of Digitizers

Parameters of Digitizer

Name (three-letter code)

Type  Sampling rate

Digitizer Link Type

Local COM or USB port  Baud rate

Remote host IP address and port

Configured station  Remote port

Data packets arrive from a remote computer (virtual digitizer)

This digitizer is supervised by a watchdog

Forward data to serial ports  Baud rate

Forward data to remote clients connecting at

Listen for simple data requests at next three network ports

Force data block protection to CRC32 Extra bytes

Time source

Configured Channels

Station	Stream	Full Scale	Unit	HW Channel	DC Correction	Fixed DC	Ang
✓ GS100	Ch_01	1	g	Channel 001	Enabled	0	N
✓ GS100	Ch_02	1	g	Channel 002	Enabled	0	N
✓ GS100	Ch_03	1	g	Channel 003	Enabled	0	N

Use channel parameters provided by the digitizer

Enable virtual channels of integrated data. Channel name prefix:

Configuration target

- Confirm the appearing pop-up with **[Yes]**

Configuration changed

 You have made some changes to the current configuration of digitizer channels. Would you like to save new configuration and to restart data acquisition?

- Restart GeoDAS