

# Avcom Network GUI Example Scenario

## 4 Spectrum Analyzers

Analyzer Name	IP Address	Analyzer TCP Port
SLOT#1	192.168.200.1	26500
SLOT#2	192.168.200.2	26502
SLOT#3	192.168.200.3	26504
SLOT#4	192.168.200.4	26506

## 1 Network GUI Server on a PC

- IP address **192.168.200.149**
- Configured for the GUI Network (CONFIG -> Miscellaneous)
- Set up to display 4 windows
- Each window connects to one analyzer - SLOT#1 to SLOT#4. Set up connection (SA List) entries normally as Connection Type = "LAN"
- The Network GUI Server will automatically listen for Client GUI connections for a given Spectrum Analyzer on a port number that is 100 less than the port number configured on the analyzer.

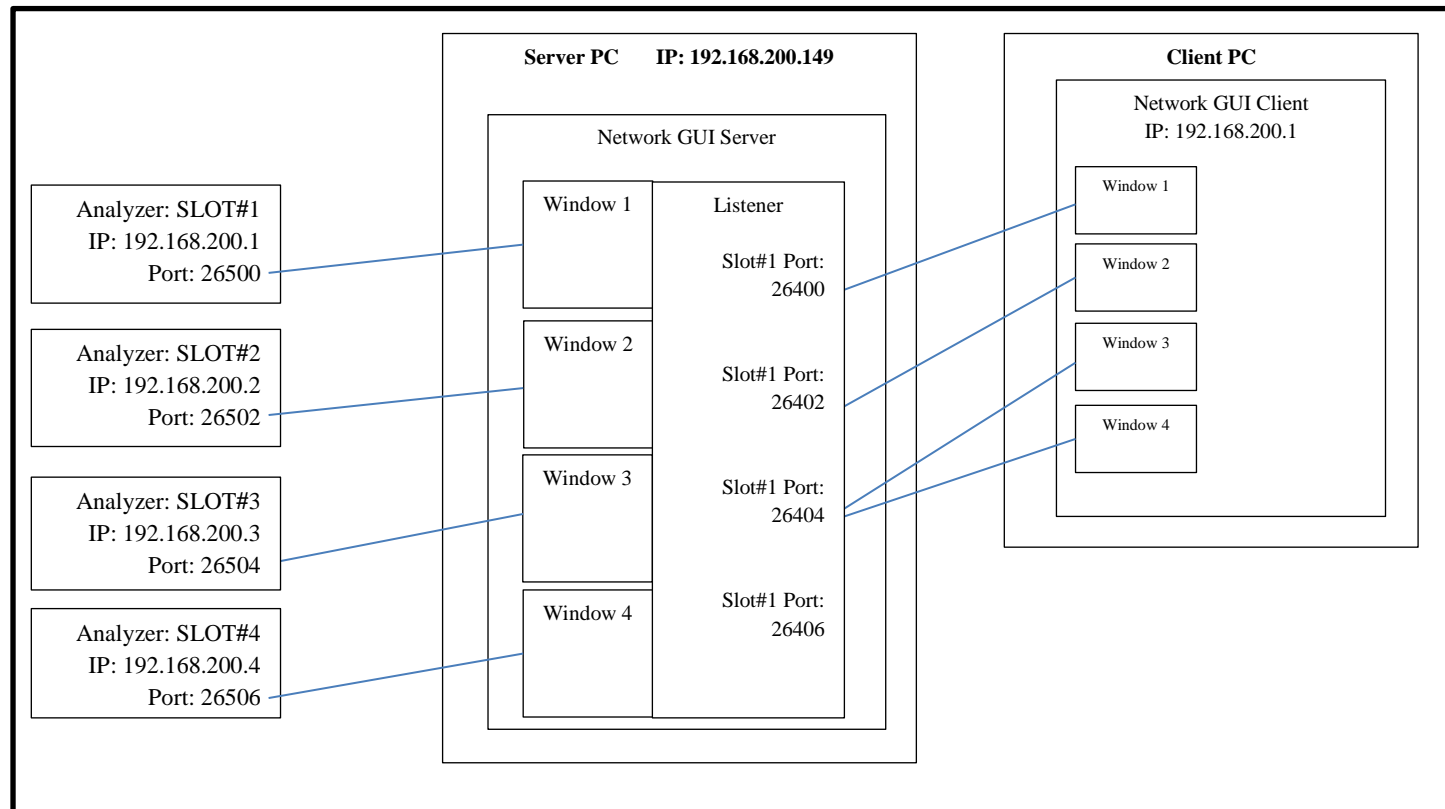
## 1 PC to act as a Network GUI Client

- Configured for the GUI Network
- 4 connections created in Spectrum Analyzer list for connecting to the 4 analyzers via the Network GUI Server. Connection Type = "LAN – GUI Server"

Analyzer Name	IP Address	GUI Server TCP Port (Listen)	Notes
SLOT#1 (server)	<b>192.168.200.149</b>	26400 *	26500 – 100
SLOT#2 (server)	<b>192.168.200.149</b>	26402 *	26502 - 100
SLOT#3 (server)	<b>192.168.200.149</b>	26404 *	26504 – 100
SLOT#4 (server)	<b>192.168.200.149</b>	26406 *	26506 - 100

NOTE: \* Make sure firewall on Server PC has these ports open for inbound TCP connections

- Set up to display 4 windows
- Each window connects to an analyzer - SLOT#1 (server) to SLOT#4 (server)



## Configuration screen shots

GUI Server PC at 192.168.200.149

Configure Miscellaneous

# Windows to Show: 4

Allow single window maximize graph?  YES

Window Maximize Time: 5 (min)

Start Polling after Close?  YES

Poll Time: 10 (sec)

Standard dynamic range: -- (dBm)

Desired waveform refresh rate (0.1 min):  
As fast as possible  YES 14.0 /sec

GUI Administrator?  YES  
password: \_\_\_\_\_

Eng Password: \_\_\_\_\_

GUI Network?  YES

User Name: SERVER1

Control Permissions Mode: None

Start Running automatically at next GUI startup?  YES

Run Timeout?  YES

This is Lead GUI?  YES

Maximum Run time: 60 (min)

Control Time: 30 (sec)

Close

Network GUI Server

Network GUI Client PC

Configure Miscellaneous

# Windows to Show: 4

Allow single window maximize graph?  YES

Window Maximize Time: 5 (min)

Start Polling after Close?  YES

Poll Time: 10 (sec)

Standard dynamic range: -- (dBm)

Desired waveform refresh rate (0.1 min):  
As fast as possible  YES 14.0 /sec

GUI Administrator?  YES  
password: \_\_\_\_\_

Eng Password: \_\_\_\_\_

GUI Network?  YES

User Name: CLIENT

Control Permissions Mode: None

Start Running automatically at next GUI startup?  YES

Run Timeout?  YES

This is Lead GUI?  YES

Maximum Run time: 60 (min)

Control Time: 30 (sec)

Close

Network GUI Client

Note: The User Name is useful when using a controlled permissions mode

## Network GUI Server configures direct connections to analyzers

Configure Spectrum Analyzer List

SA List: Slot#1 Move Up Move Down New SA List name: Slot#1

Connection Presets RF Inputs

Connection Type: LAN

Spectrum Analyzer IP: 192.168.200.1

Spectrum Analyzer port: 26500 Port must be unique on each analyzer when using the Network GUI Server

Modify Add Delete Undo Close

## Network GUI Client configures connections to the GUI Server

Configure Spectrum Analyzer List

SA List: SLOT#1 (server) Move Up Move Down New SA List name: SLOT#1 (server)

Connection Presets RF Inputs

Connection Type: LAN - GUI Server Special Connection Type when connecting to GUI Server

GUI Server IP: 192.168.200.149 IP Address where the Network GUI Server is running

GUI Server port: 26400 For a given analyzer The GUI Server listens on a port that is 100 less than the GUI Server uses to connect to the actual analyzer. Here it is 26400 since the GUI Server connects to the SLOT#1 analyzer on port 26500.

Modify Add Delete Undo Close

Configure Spectrum Analyzer List

SA List: Slot#2 Move Up Move Down New SA List name: Slot#2

Connection Presets RF Inputs

Connection Type: LAN

Spectrum Analyzer IP: 192.168.200.2

Spectrum Analyzer port: 26502 Port must be unique on each analyzer when using the Network GUI Server

Modify Add Delete Undo Close

Configure Spectrum Analyzer List

SA List: SLOT#2 (server) Move Up Move Down New SA List name: SLOT#2 (server)

Connection Presets RF Inputs

Connection Type: LAN - GUI Server

GUI Server IP: 192.168.200.149

GUI Server port: 26402

Modify Add Delete Undo Close

Configure Spectrum Analyzer List

SA List: Slot#3 Move Up Move Down New SA List name: Slot#3

Connection Presets RF Inputs

Connection Type: LAN

Spectrum Analyzer IP: 192.168.200.3

Spectrum Analyzer port: 26504

Port must be unique on each analyzer when using the Network GUI Server

Modify Add Delete Undo Close

Configure Spectrum Analyzer List

SA List: SLOT#3 (server) Move Up Move Down New SA List name: SLOT#3 (server)

Connection Presets RF Inputs

Connection Type: LAN - GUI Server

GUI Server IP: 192.168.200.149

GUI Server port: 26404

Modify Add Delete Undo Close

Configure Spectrum Analyzer List

SA List: Slot#4 Move Up Move Down New SA List name: Slot#4

Connection Presets RF Inputs

Connection Type: LAN

Spectrum Analyzer IP: 192.168.200.4

Spectrum Analyzer port: 26506

Port must be unique on each analyzer when using the Network GUI Server

Modify Add Delete Undo Close

Configure Spectrum Analyzer List

SA List: SLOT#4 (server) Move Up Move Down New SA List name: SLOT#4 (server)

Connection Presets RF Inputs

Connection Type: LAN - GUI Server

GUI Server IP: 192.168.200.149

GUI Server port: 26406

Modify Add Delete Undo Close