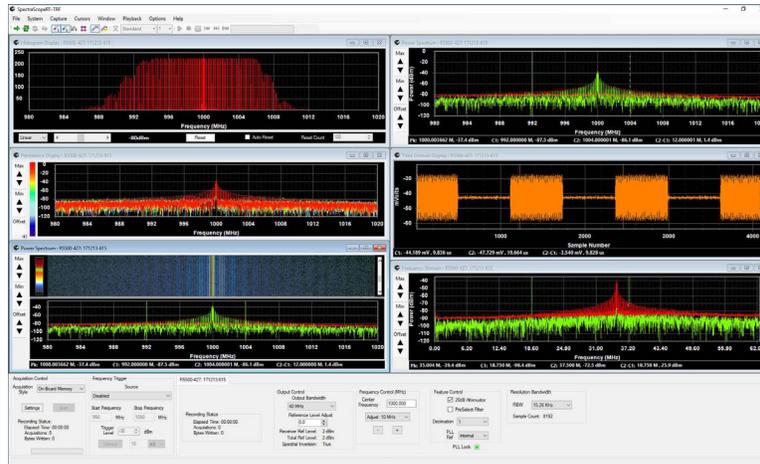




New Enhancement Updates for SpectraScopeRT: Spectrum Analyzer Recording Software



SpectraScopeRT, the Windows based spectrum analyzer application that requires no programming and allows for integrated operational control of both the downconverter receiver and the digitizer for signal capture, analysis, and real-time streaming signal recordings, has now been enhanced with the following new feature updates:

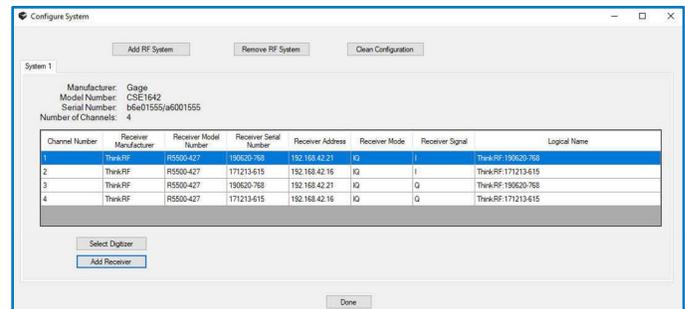
- New Support for Multiple Defined RF Systems
- New Support for Receiverless Direct Under Sampling Method
- New Server & Remote Client Editions with Script Based Operations Support
- New Save/Restore Display Plot Configurations
- New Support for External Clock Option

Multiple Defined RF Systems

SpectraScopeRT now utilizes a new System menu that is used to select and configure the targeted digitizer(s) and downconverter receiver(s) to be considered part of the defined RF system.

Any tuner, downconverter, or receiver with an IF output or a virtual receiver is supported.

Multiple RF Systems, with multiple receivers and digitizers, can now be defined and added for operations within a single running instance of SpectraScopeRT.



Receiverless Direct Under Sampling Method

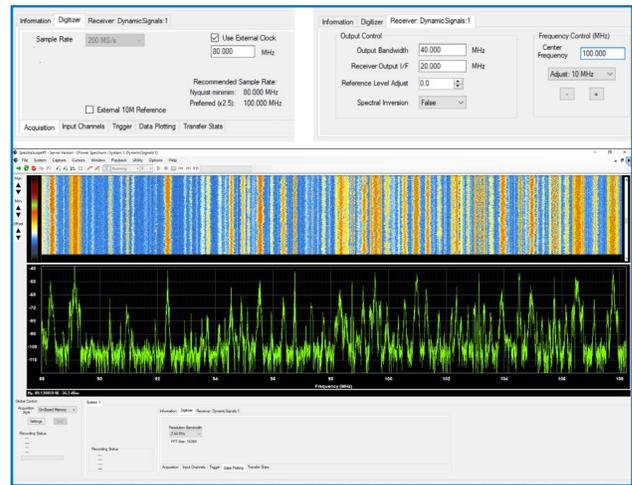
SpectraScopeRT supports a physically receiverless system with the use of a virtual receiver setup panel.

The virtual receiver mode allows for input of Center Frequency, Bandwidth, IF Frequency, and whether frequency inversion is used. Amplitude levels are calibrated using the “Reference Level Adjust” input. These features allow IF signals to be viewed at the correct center frequency and level.

With digitizer support for external sample clock, this mode allows support for IF direct-to-digital conversion, or under sampling. This technique requires an analog bandpass filter before the digitizer input, instead of a tuner or downconverter. Under sampling advantages include:

- Capturing IF signals higher than $\frac{1}{2}$ the digitizer sample rate (F_s)
- More efficient recording by reducing the stream rates to reflect the needed IF bandwidth

The combination of external sample and support for a virtual receiver allows broad support for recording any IF signal within the analog bandwidth of the selected digitizer.



Server & Remote Client Editions with Script Based Operations Support

Multiple systems running the new SpectraScopeRT Server Edition can be accessed and operated as remote nodes with a single user interface over an Ethernet network with the new Remote Client Edition.

This is beneficial in cases where multiple systems, that may be dispersed in different locations, need to have acquisition and/or recording operations controlled without physical attendance at each system.

For network access to the remote nodes, all participating computers must be on the same subnet.

In the remote client software, the Global Operations section contains the controls that operate on all participating remote nodes. The SpectraScopeRT Nodes is a list of participating remote nodes along with their status. Access to the individual remote nodes is selected using the Network Node Tab. The hostname for the remote node is displayed on the label for the tab.

Node Name	Node Address	Connection	Configured	Acquisition Mode	Acquiring	Recording	Recording Percent	Elapsed Record Time
STN1651205	192.168.42.15	Active	Active	On-Board Memory	Active	Inactive	---	---
STN1684225	192.168.42.25	Active	Active	On-Board Memory	Active	Inactive	---	---
STN1684212	192.168.42.12	Active	Active	On-Board Memory	Active	Inactive	---	---

The remote client software includes a scripting tools editor allowing for automated control and operation of SpectraScopeRT remote notes for easily repeating acquisition/recording sequences.

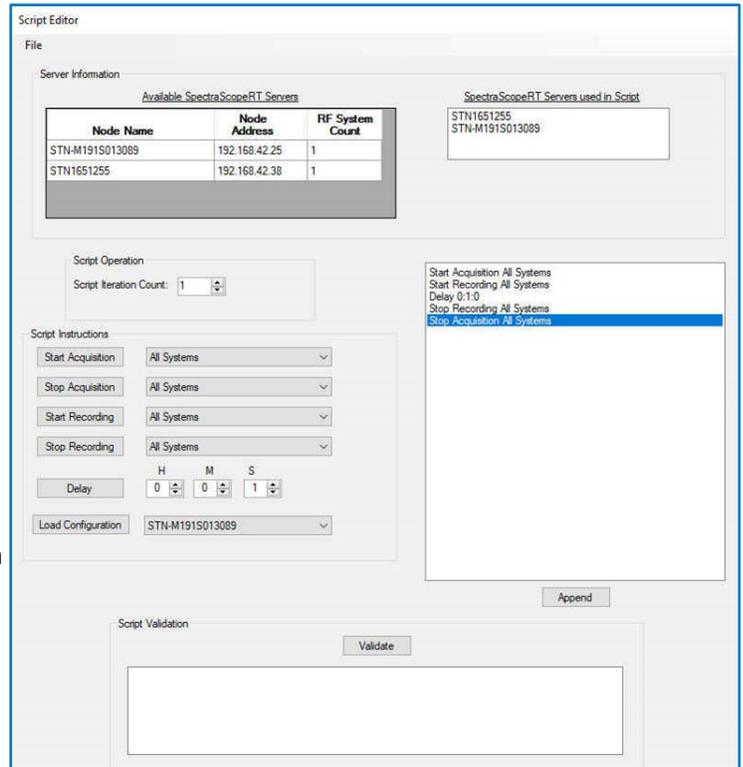
The script editor Server Information section displays the currently available remote nodes that can be included in the script operations.

The Script Iteration Count specifies the number of complete iterations (loops) that the script will execute. This value can range from 1 to 1000.

The Script Instructions section is used to generate the script to be executed. The associated instruction list section displays the order of script instruction execution.

The Load Configuration is used to select the targeted remote node specific configuration setup to be included in the script. The configuration setup must already exist on the remote node for it to be included in the script, and all available configuration files will be listed for possible selection.

A script validator tool performs a quick logical test on the script sequence to check for any inconsistencies.



Save/Restore Display Plot Configurations

SpectraScopeRT now features the capability to save targeted displays plots, including customized defined color schemes and layouts, with the configuration files, thus saving time from manually re-applying display settings upon loading of saved system configurations.



External Clock Option

Digitizers that are part of the RF system can be clocked from an external frequency source. The external clock is used when a required sample rate is not a part of the native sample rate selections for the digitizer or to synchronously clock multiple digitizers.

SpectraScopeRT provides a means through the user interface to specify the external sample rate provided so that the application can perform the requisite calculations for display. In addition, SpectraScopeRT supports certain 3rd party signal generator sources for integrated operational control.

For complete details on SpectraScopeRT, please visit:

[Spectrum Analyzer Recording & Playback Viewer Software | Signatec](#)

We invite you to contact us to discuss your specific project requirements and learn more about our product solutions.