

Description of the Time Scheduling function to the NWRT RCI Scan Table

The RCI scan table function provides a mechanism to schedule multiple scan strategies from a single scan list. Prior to the addition of the ADAPTS function one could easily determine how long a single scan would take to complete. However, with ADAPTS active, scan times are no longer predictable since the times depend on the precipitation coverage.

When setting up a scan table list, one may desire to have one or more list entries run at specific frequencies. To support this, a simple modification was made to the RCI client and RTC software packages to allow an operator to schedule scanning by time. The basic design of the high level scan strategy format allows quite a bit of flexibility on how scans are defined and run. Since the individual scan repeat count is not part of the scan definition it can be used in two ways; first as a simple counter and second as an accumulated time. We refer to these two options as the scan repeat mode.

The first scan repeat mode, using the scan repeat count as a counter, has been the standard default implementation. A scan list entry will be run this many times before the next scan list entry is started. Without ADAPTS active, the timing between scan list entries was easy to determine; multiply the scan list entry scan time by the number of times it is to be repeated. With ADAPTS active the timing is impossible to determine.

The second scan repeat mode, using the scan repeat count as an elapsed time, allows one to control how often in time scan list entries are executed; with or without ADAPTS active.

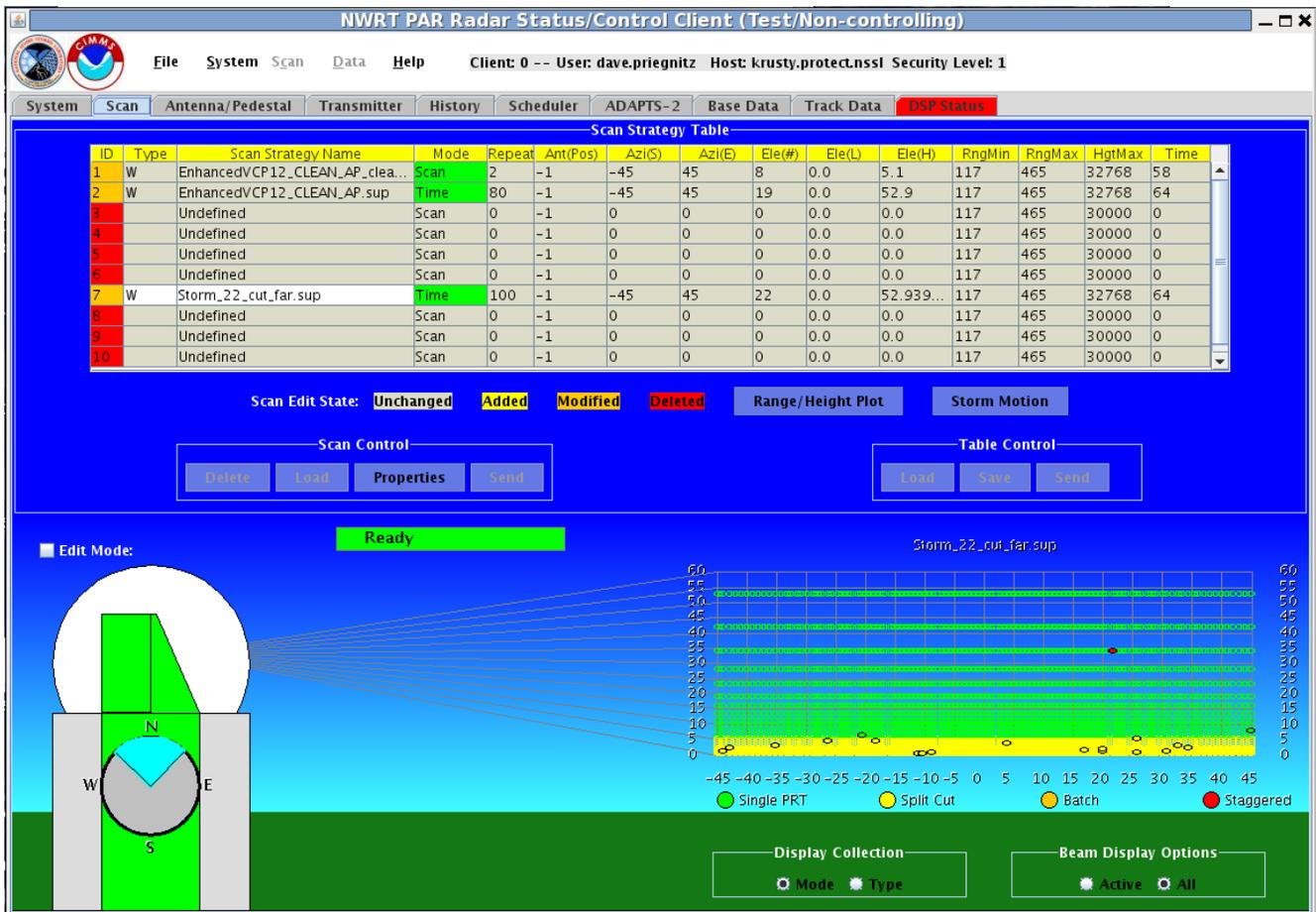


Figure 1 is a screen capture of a sample scan list display from the RCI client. This scan list contains 3 active scan elements; the first element in position 1, scan 1, is defined with a scan repeat mode of “Scan” and a repeat count of 2, the second element in position 2, scan 2, is defined with a scan repeat mode of “Time” and a repeat count of 80, and the third element in position 7, scan 3, is defined with a scan repeat mode of “Time” and a repeat count of 100.

Scan 1 will be repeated two times before the next scan list element, scan 2, is started. . Scan 2 will be repeated until at least 80 seconds has elapsed. When a complete volume has been run and the elapsed time is equal to or greater than 80, the next scan list element, scan 3, will be started. Scan 3 will be repeated until at least 100 seconds has elapsed. Note that scan list positions 3–6 and 8–10 are not defined so the scan execution order is 1, 2, and 7.

The entire scan list can be repeated indefinitely or set up to repeat at a specified frequency.