Paul D Turner, TSS TSI

Frequency Asked Questions (FAQ)

Our FAQ is an integral component of our Kestrel Technical Journal user experience. Learn from the collective experience of other Kestrel TSCM ® Professional Software technical operators.

Question 1 | I recently noticed that the Spectrum Display and Activity control group is grayed out and not accessible when I was trying to generate a session report during post analysis. I was unable to customize the spectrum display settings to facilitate a secondary report. The first report on a single band was RTE Vs PEC as was by default, displayed on the UI. I wanted to select PEC Vs SAT to display the distributed peak energy across the capture bandwidth referenced as TSB 6000 using the PEC Vs SAT with background fill active. What am I missing?

Answer 1 | The most likely root cause for this to occur is another spectrum band or location is currently displaying the Differential Signal Analysis (DSA) mode. When the technical operator selects another spectrum band or location during runtime, or while working with a historical file, <u>without</u> first exiting the DSA mode, the display parameters are locked and cannot be accessed globally across other locations which might be currently displayed. It will be necessary to check each of the other spectrum bands or locations and exit the DSA mode should any of these have been left active during runtime or analysis. The last displayed state is persistent within the software and is available when viewing a historical file, so opening and closing the file, will not clear the DSA mode. Once the DSA mode is disabled, return to the spectrum band or location for which you wish to change the session reporting display parameters. All display parameters should now be active and available, with the exception of the TDSA button, unless the technical operator has a current TDSA filter enabled.

Comment 1 | There are code level interactions that must be managed, depending on the mode of operation, and this often requires algorithm locks that prevent other undesirable behaviour at the application level.

The use of predictive logic and artificial intelligence (AI) ensures each software component module provides the optimal result as intended, within the design and code level development implementation.

Question 2 | I recently generated a Kestrel ® session report, utilizing the Session Report Generator ™, and the output file only display a few lines of Waterfall Display (WFD) data? I captured several DSA locations across the TSB 6000 bandwidth of 5000 traces at $1/n = 50$ resulting in 100 Kestrel Super Traces (KST) ™ however, the SRG did not display 100 traces in the report output. Help Please?

Answer 2 | The solution to this issue is as simple as unchecking the | **WFD Summarizing** | option checkbox within the SRG setup control window. This feature was implemented to better represent the Waterfall Display (WFD) trace level data within the SRG output. Essentially, when there are more WFD traces than would fit in the 1UP, 2UP, or 3UP printed page space allocated to the WFD, selecting the | **WFD Summarizing** | checkbox, automatically compresses the WFD trace data to fit within the print rendering space available, in the report output similar to the runtime WFD compression feature. However, if the | **WFD Summarizing** | feature is utilized when our write compression $< 1/n = ? >$, is utilized, this results in a smaller number of Kestrel Super Traces (KST), such as 100 KST in your above example. Selecting the | **WFD Summarizing** | checkbox, results in the further compression, of limited data available, and therefore only a limited number of WFD traces are displayed. Unchecking the | **WFD Summarizing** | checkbox results in all of the available WFD trace data rendering within the SRG output. If it is desirable to have more WFD trace data available for reporting purposes, the use of less write compression is recommended during collection.

Comment 2 | This technical operator observation, raised a question and review of the | **WFD Summarizing** | feature operation, which by default, is selected active. Depending on the selection of 1UP, 2Up, or 3UP, there is more or less WFD paging area available.

The important question as to whether or not the | **WFD Summarizing** | checkbox should be selected by *Default* is currently under review and software behaviour changes maybe considered in a future release.

Question 3 | I noticed that there is a new feature referred to as | **Automatic Export Control (AEC)** |. I recently downloaded the current software release, but still cannot find the new feature. Can you point me in the right direction?

Answer 3 | Our new recently released, Kestrel TSCM ® Professional Software feature | **Automatic Export Control (AEC) ™** | is an optional software module and does not appear in the base software unless purchased. However, if you purchased the Kestrel TSCM ® Professional Software license prior to the end of September 2016, the | **OPT AEC** | is provided free of charge upon request. A new Activation Security Key (ASK) is required to enable | **OPT AEC** | within the current full installer < v1.33-8 >, that you have recently installed.

Comment 3 | Our Automatic Export Control (AEC) **™** | **OPT AEC** | is designed for Remote Spectrum Surveillance and Monitoring (RSSM) ™ applications, and brings powerful new capability to the Kestrel TSCM ® Professional Software. The ability to automatically export time periodic ,and triggered events across the, Minimum Detection amplitude (MDA), Spectrum Baseline Logging (SBL), Dynamic Alert Annunciator (DAA), Chirp Threat Mode (CTM), and Harmonic Signature Threshold (HST) are fully supported. You can export all or new Automatic Threat List (ATL) parameters, including RSSI values, and Spectra values to CSV format. AEC also includes the ability to export triggered IQ samples. The technical operator can customize the | **CSV Table Data Format** | for each time periodic or triggered CSV export parameter to further refine the data values desired independently. The | **OPT AEC** | is a very powerful feature and adds just $495.00 CAD to the cost of the Kestrel TSCM ® Professional Software.

Canadian Technical Security Conference (CTSC)

A World of Opportunity – On Both Sides!

It has never been easier for individuals and state players to engage in economic-espionage activities targeting businesses, organizations and governments worldwide. There are many avenues of attack, any one of which has the potential to compromise valuable information. Yet, although annual losses from economic-espionage are immense, many potential targets are largely unaware of the threat - indeed, the victims often have little or no awareness that they have been successfully targeted.

Contrast this situation with the realities facing those tasked with technical security. Even highly trained and experienced technical operators are hard pressed to keep on top of the rapidly evolving threat environment. Up to date knowledge of the actors, their tools and methods, coupled with the specialist expertise needed to identify and pro-actively counter threats, is a necessity. Consequently, it is important for the technical security practitioner to leverage the expertise resident in the Technical Security community of practice through participation in relevant activities such as the annual Canadian Technical Security Conference (CTSC).

The CTSC, now in its 12th year, is a focused technical security event that brings together professional technical operators and others having a range of related interests. This year's conference has a special focus on the threat of economic-espionage with emphasis on the means for combating it. Over a three-day period, participants will acquire relevant theoretical and practical knowledge, including opportunities for hands-on experience with Technical Surveillance Countermeasures (TSCM), a vital, but often over-looked, line of defence for safeguarding information in a technological world.

Participation in activities, such as the Canadian Technical Security Conference (CTSC), positions technical operators and knowledgeable clients to identify potential and actual security compromises and respond appropriately. It just might be an investment that will pay off by helping prevent or limit damage to your organization.

| www.pdtg.ca | www.kestreltscm.com | www.ctsc-canada.com |

Kestrel TSCM ® Professional Software is innovative industry leading, disruptive technology, now sold in 27 countries worldwide.