SR5500 WIRELESS CHANNEL EMULATOR

VDT-Conversion Tool

RF engineers want the realism of physical drive testing, but without the inherent impact to budgets and schedules. They also need to be confident that the RF conditions they're using today are the same as those they'll run tomorrow.

APPLICATIONS

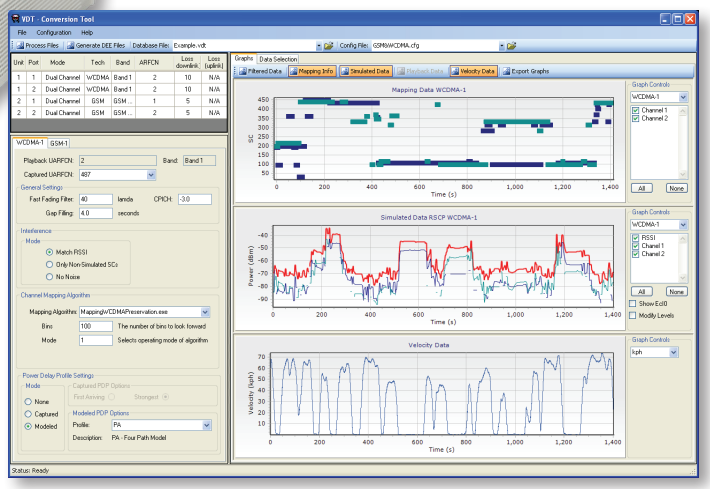
- Research and Development
- Design Verification
- Regression Testing
- UE Benchmarking and comparison
- Device Design

For years RF engineers have dreamed of a way to take real-world RF data from drive testing, store it, and use it to re-create the same, repeatable RF scenario on the lab bench. Spirent's Virtual Drive Test (VDT) for the SR5500 Wireless Channel Emulator brought that capability to the market for those who had the resources to convert captured drive-test data,.

Now Spirent introduces a tool to automate the conversion process without requiring any software effort on your part. Now it's faster and easier than ever to take advantage of Spirent's Virtual Drive Test capabilities. The powerful VDT-Conversion Tool takes RF data collected during drive testing and automatically converts it within minutes for storage and playback in the lab.

BENEFITS

- *Reduced development costs* – Minimize the need for expensive drive testing.
- *Reduced time-to-market* – Fewer physical drive tests eases the strain of tight deployment schedules. Start "drive testing" whenever you see the need… within minutes.
- *Enhanced product quality* – An absolutely repeatable drive test on a bench top. Quickly home in on RF issues that might otherwise go unnoticed until after deployment.



KEY FEATURES

- Supports all bands for GSM, WCDMA & CDMA/EV-DO
- Converts 4+ hours' worth of drive test data within a few minutes
- All data can be graphically displayed to allow easy analysis

MORE ON THE VDT-CONVERSION TOOL

The VDT – Conversion Tool helps resolve issues in days rather than weeks. It supports up to 8 separate RF channels using lab-based base stations and SR5500 channel emulators. All combinations of RF technologies are supported (e.g. three GSM signals and five WCDMA). When the number of channels captured exceeds the resources available in the lab, mapping algorithms let you select the most significant information for your emulation.

Because scanning sample rates don't always capture fast fading effects, the tool includes algorithms for filtering out captured fast fading effects. The software then combines captured velocity data with statistically sound fast fading to create realistic RF effects. Multipath Power Delay Profiles (PDFs) can be stored as captured or modeled.

A rich, inclusive graphical interface keeps complex data organized. Graphical data includes:

Filtered Data/Data Played Back

- WCDMA : (Received Signal Strength Indicator [RSSI], Common Pilot Channel, Received Signal Code Power [CPICH RSCP] & E_c/I_o)
- CDMA data (RSSI, CPICH RSCP & E_c/I_o)
- GSM data (RX Level)

Mapping Data

- WCDMA (Primary Synchronization Code [PSC] vs Time / Channel)
- CDMA (Synchronization Code [SC] vs Time / Channel)
- GSM (Absolute Radio Frequency Channel Number [ARFCN] vs Time / Channel)

Velocity Data

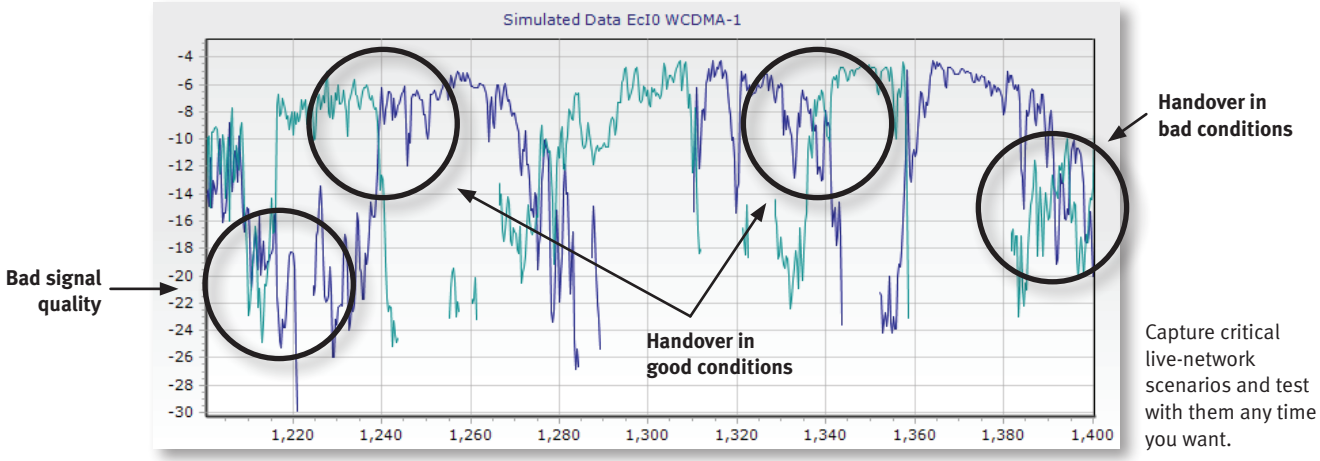
- **Captured velocity**

ORDERING INFORMATION

Part Number	Description
VDT-CT	VDT - Conversion Tool
VDT-CT-UMTS	WCDMA & GSM Option
VDT-CT-CDMA	CDMA Option
SR5500M-VDT-CT-PLAYBACK	VDT - Playback License

SPIRENT GLOBAL SERVICES

Spirent Global Services provides a variety of professional services, support services and education services — all focused on helping customers meet their complex testing and service assurance requirements. For more information, visit the Global Services website at www.spirent.com/gs or contact your Spirent sales representative.



Capture critical live-network scenarios and test with them any time you want.

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