

Identify the potential.

EDX® SignalPro® is the principal building block of EDX's comprehensive line of wireless network engineering tools. It offers all of the study types you need to design a basic wireless network, including area studies, link/point-to-point studies and route studies. EDX SignalPro also incorporates the finest telecom-specific mapping features, meticulous equipment data storage capabilities and convenient utility functions.

Basic EDX SignalPro can be extended to become a fullyfeatured, carrier-class, network design tool by attaching the EDX network design and indoor modules, post-processing toolkits and data management products. This building block approach gives you the ability to create the right tool for your specific needs – putting the Power of Planning to work for you.

Studies

Propagation Models

EDX SignalPro includes a complete set of the most accurate propagation prediction models, appropriate for systems from 30 MHz to 60 GHz.

For ultimate flexibility, you can select from the extensive set of over 20 published propagation models, customize the coefficients of selected empirical models, or create your own proprietary propagation models with an external dynamic link library. All models have completely adjustable environmental and reliability parameters.

For refined accuracy, many models can consider the attenuation and height values of underlying clutter databases. This additional attenuation can be considered along the entire study path for each calculation point.

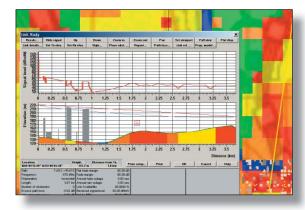
Area/Coverage Studies

A comprehensive selection of over 15 area study types are available for:

- Shadowing/Line of Site
- Path Loss
- Field Strength
- Received Power
- Downlink Signal Levels
- Uplink Signal Levels
- C/(I+N) & Aggregate C/(I+N)
- Group-To-Group Interference
- Bit Error Rate
- Percent Service Availability
- Number of Available Servers
- Simulcast Delay Spread

Unmatched Area Study Capabilities

Multiple area studies can be simultaneously calculated. displayed, and stored for future use. For maximum flexibility. you can create your own customized "Hybrid" studies with an easy-to-use dialog box that assists you in applying mathmatical functions to existing area studies or doing Boolean "and/or" comparisons of two existing studies. You have complete control of your study displays.



Full Point-to-Point Path Analysis

Calculate a full microwave path analysis including path profile, rain and fade outage, percent availability, dispersive fade margin, antenna diversity reception, and cross-link interference. All links are bi-directional, and you can edit your link studies by selectively adding trees, buildings, or terrain elevation modifications. Cross-link interference studies are also calculated.

Route Studies

Use a route study to calculate and store detailed propagation properties and most likely servers along a 2D or 3D route. Routes contain a series of specific points that can be easily created with the included EDX drawing tools



Features

Project Management

A project management tree lets you see all the components of your project at a glance. Click on any component of the tree to quickly view relevant details.

Project Wizard

The Project Wizard helps you to rapidly set up a project from a selection of system-specific templates. EDX SignalPro will instantly display a map view with relevant GIS data for your chosen area. which can be selected by simply entering a city name.

Transmit & Receive Equipment

Easily add and manage your network equipment. EDX SignalPro gives you the most detailed equipment definition parameters available. Complex antenna patterns for omni, directional, or adaptive "smart" antenna types are supported with co-polarized and crosspolarized directional transmit and receive antenna considerations. For more accurate interference analysis, you can also describe the Power Spectral Density and receive filters for your equipment.

Equipment can be quickly accessed and grouped from your map view with convenient right-click menus. Straightforward dialog boxes provide for global equipment edits that can be made to your entire equipment set, or a selected group/subgroup.

Open Software Architecture

The Component Object Model (COM) and XML interfaces provide easy ways to import, export, and share transmitter, link, and CPE details with other applications.

This also provides for external control of the tool beyond the included GUI, customizing EDX SignalPro for your specific needs.

Link "Rubberband" to Server

Link server lines show "rubber band" connections to 1st. 2nd. and 3rd most likely servers as you move the mouse around your area studies.

Comparisons of Measured and Predicted Signal Levels

Drive test data can be imported, displayed, and used for statistical comparison with predicted results. The dialog boxes showing the RF equipment parameters show predicted values alongside measured values, providing you with relevant information at your fingertips.

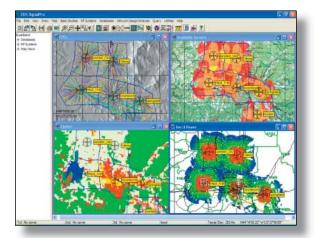
You can also get the most value from your database investments with EDX SignalPro by using measurement data to adjust the attenuation values of your underlying clutter databases for location-specific accuracy.

Database Support

U.S. and worldwide terrain, clutter, building, GIS, demographic, and traffic data can be added as map layers. Open, flexible format compatibility makes it easy to use data from many sources, thereby giving you maximum control of your database investment - including quality and cost.







Mapping

Multiple Map Display

Multiple map views conveniently show your project studies and GIS map data simultaneously. Views can also be saved as common image files such as JPG, BMP, GIF, TIF and others.

Display Types

Whether you're displaying signal levels, terrain, demographic or traffic data you can select from several types of map views:

- Composite Grid with Color Levels by Range
- Composite Grid with Color Gradient
- Composite Contours
- Composite Grids Draped Over 3D Terrain

3D Display

Create impressive 3D displays such as shaded terrain relief with illumination control, integrated 3D building and terrain displays, map images and aerial/satellite photos draped onto the 3D terrain elevation. Also Viewpoint Perspective is easy & quick.

Customizable Status Bar

A customizable status bar allows you to control the information you need to view. It can include most likely servers, terrain elevation, building height, and clutter category.

Transmitter Map Icon Display

Display base stations on your map view with options such as cell range, directional antenna beam width and traffic loading.

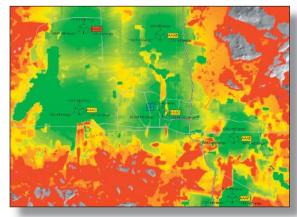
Recalculate & Redisplay

You can easily recalculate and redisplay all project studies with a single mouse click. This feature is ideal for assessing the total impact of a changed system parameter on all aspects of the system analysis.

Utilities

Easy to Integrate with other Mapping Tools

If you use MapInfo® or Arc View®, EDX SignalPro can automatically generate study results in a compatible format. Map views can also be exported as Geo-coded TAB/TIF files. Further, EDX SignalPro imports MIF/MID and ArcView® DBF/SHP files as map layers, as well as exports study results in MIG, MID/MIF or SHP/DBF.



Worldwide GIS Database

A worldwide GIS database is included for your ease of use. With this data, you can create relevant map views for anywhere in the world. It includes seven layers of telecom-specific map data.

Query Capabilities

Extensive abilities to query your project include query libraries accessible by other applications as well as the ability to right-click on any point to view multiple layers of propagation analysis and GIS information. You can also select entire areas for query analysis.

Utility Functions

Utility functions are easily accessible for coordinate conversion, distance and bearing calculations, ERP calculations, intermodulation calculations and creating and plotting directional antenna patterns. Address matching to geographic coordinates is available.

Modules

Make EDX SignalPro Even More Powerful

Add on to EDX SignalPro with specialized modules and toolkits that add even more powerful functionality for design and optimization of your wireless network including:

- Network Design Module ideal for carrier class network deployment
- Microcell/Indoor Module a unique tool for indoor & outdoor – includes ray-tracing
- EDX Pre-Qualification Toolkit for post-processing your engineering studies
- Building Editor making it easy to manage building databases



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