MAIN FEATURES INTRODUCED IN WinRPT[1] 10.0

[1] In respect to 9.4 Version

General Features

- Complete redesign of the Main Menu for an easier usability: graphical user interface (GUI), menu voices, buttons and icons have been totally redesigned;
- Management of new kind of user: Super-User. It enables user to have administrator's privileges only on PP links, WLL systems, Location archives, Transmitters and Networks;
- Extension of Propagation Models for pathloss calculation. There have been included two additional options:
    - Empirical + diffraction;
    - Propagation model + standard deviation obtained from land use clutter;
- In Cross Sections panel, the extremes can now can be imported from Fix Point interface;
- Bidirectional Geocoding: given a point it is possible to obtain its address and given an address it is possible to extract its coordinates (having an internet connection available);
- Implemented the functionality to export multiple polygonals in KML format and import them successively in Google Earth;
- Transformation of the chosen vertices for In-sight Area evaluation in a polyline: the same polyline can then be used in other WinRPT interfaces;
- Grid points generation from a reticule of which is known origin and step;
- Color assignation in a chromatic scale for the shapefiles;
- Management of the Coefficient of Gradient Refraction 1%: that coefficient value is used to calculate the correct P_0 factor during outage calculation;
- Implemented the possibility to delete multiple Locations in the relative archive.

WinRPT - Point-to-Point

- Implementation of NFP (Network Frequency Planning) additive module aimed at optimizing the allocation of radio channels;
- Implementation of ITU-T G.821, G.826/G.828 quality objectives indispensable to handle the outage calculation according to current regulations;
- Extension of Frequency Diversity functionality on beams working at different frequency ranges;
- New details added in Excel and Word reports;
- New management of graphic display on map for links and radio beams;
- A unique Excel format for PP and WLL filters and equipments has been fixed;
- Implemented and managed adaptive modulation in equipments that support more than one modulation. Adaptive modulations are taken into account in links design.

WinWLL - Point-to-Multipoint

- Both Equipment Capacity related to the reference mode and Nominal Capacity can now be set;
- Implementation of ITU-T G.821, G.826/G.828 quality objectives indispensable to handle the outage calculation according to current regulations;
- A unique Excel format for PP and WLL filters and equipments has been fixed;
- Implemented and managed adaptive modulation in equipments that support more than one modulation. Adaptive modulations are taken into account in links design.

CAE and D-CAE Module

- There has been implemented the possibility to perform coverage analysis taking into account the presence of building clutter, that is, the reception points can be placed even on the roofs of buildings where they are present;
- Second Server identifying: during the calculations, in addition to the Best Server analysis, it is possible to identify received power and the best mode for the second best server;
- Possibility to edit Sector Name field (MS) in the coverage panel analysis;
- Color's transparency management associated to each modulation: in this way it is possible to display the modulation/s of interest setting the other in transparency;
- Optimization of Batch calculation: the algorithm allows the automatic calculation of coverage analysis for each individual sector. Each result is then useful to be combined with other sectors to display and analyze the complete scenario;
- Inserted a congruency check on territorial data calculation (in particular on DEM and Clutter used in the analysis);
- New interface for display parameters;
- Engineering of Calculation Parameters and Land Use Clutter interface. Several parameters (as penetration loss, standard deviation, location probability, etc...) are now able to characterize every single class of clutter;
- New coverage map handled: Location Probability.

WinBDC -Broadcasting

- In the Edit mode of curtain interface, all the data used for curtain creation are enabled and hence can be modified;
- The curtain duplication functionality has been introduced. It duplicates the current curtain changing its azimuth;
- Automatic calculation of power distribution when adding/removing panels or curtains;
- Calculation and display of the absolute length of the cables for each of them;
- Inserting of 3D System button inside the Curtain panel;
- Antenna System Optimization:
    - Automatic pointing to the current curtain;
    - "Initial Curve" button restores the situation before calculation;
    - "Confirm" button saves obtained values of phase;
- Antenna System Searching can now be performed also according to network sub-type (MFN/SFN);
- Global Interference analysis is obtained as the sum of interfering antenna systems in different technology (however display according to technology is already permitted);
- "Apply" button in parameter's dialog allows user to display in run-time coverage map according to new parameters;
- Inserting of Map location probability in coverage analysis;
- Export on Google Earth of coverage/interference analysis.