OSP/FTTx Design Software & Related Tools Summary

By Jeffery Willis

Lode Data:

Excellent Design Tool for Networks, Head End/Server Room, FTTH, and all intermediary equipment, fairly priced, but requires AutoCAD, and may not last more than 1-2 years…with the price of AutoCAD, it doesn't look so good.

CAD Based
Total Cost: ~10 K (HIGH)
Learning Curve: Medium-Long

FiberPlanIT:

Excellent Design Tool with efficiency and Optimizing perks to save money and time, FTTH with plenty of graphical friendly tools, QGIS based system, integrates Google Earth, and cost is excellent, as in very low, being charged on a per/building basis. This is a great design tool but lacks management software. This necessitates another software platform from APFutura: APEX, for Billing/Usage/Network Management compatible with FiberPlanIT. For splicing and splitting software, KeyCom & KeyPro were expensive tools that would graph, plot, and generate splicing and splitting automatically, but only beneficial for larger networks (like a metropolis, for example).

Compatible with shape files

GIS Based
Total Cost: ~2K-3K (LOW)
O & M Cost through APFutura = ~ 35K/year. Expensive, but not needed right away
Learning Curve: Low-Medium

NOCPlan XS FTTX Planning Software:

Good for feasibility study, with optimization perks, but as a design tool, is null. This software will do everything that we have already done for AEC, and may add only marginal value to our feasibility study. Hardly worth the money:

GIS Based

Total cost: ~10K + (High)

Learning Curve: Low-Medium

IT Simplicity:

In Business since 1994, They've done Amsterdam, Sri-Lanka, Zimbabwe, Parts in UK, Europe, and in India Excellent Design for FTTH, Project and Work Orders Management, and Network Registration and Maintenance Tool, arranged in three volumes, ITS-NetDesign (Competitive with Lode Data), ITS-NetProject, and ITS-NetID respectively.   They claim that a single engineer can actually perform every task. Design and Pre-registration (CAD), network Engineering (CAD), Calculations and Cost Estimates (CAD), Jointing schematics (NetID), Registration and Maintenance (NetID), Route, Trace, and Locate (NetID, Devices & Customers using GIS image).

Designer:

Designer uses "Encrypted Engine files" LISP programming well suited for graphical applications. It includes: Jobs/work –orders, with Plant-Unit system + Job System Project Definition, Extended Data sprace, 300 unique variables to store details, BOM & Quantities, Detailed summaries, Dropline Features for Arialdrop form a single DP on pole, Streetconnect, Branch Connect, Move to Façade, Split, Spider Calculations enforcing P2P / GPON.

Customization Standard with LISP files, ASCII / text files =, both for Implementation, and Interface, Cost optimized automatic CAD design, Dedicated Software for Project-Management, network registration, full process control over projects, Tools for projects of all sizes, can keep up with sudden changes in plan or customer requirements, cost effective networks, over 20 years experience in Telecom OSP network design. Remove the guesswork out of material requirments, create detailed design, build a wining business case, from concept to completion, crowded cities or rural regions, easy to implement, flexible, and full range of services, (They're claim to fame is Amsterdam!! And CERN (LHC)).

NetOptimus:

NetOptimus is much more automatic network engineering, design & planning, creates the highest quality Fibre optic FTTH designs by using complex optimization algorithms within a user friendly graphical interface. Substantial benefits in reducing the engineering time and network building costs. This is said to save 10 Euros per home.

20% less drop cable by improved grouping homes, 2% less distribution cable by best DP positioning, 2% less trenching costs by improved routing, 100 times faster than manual / alternative engineering

CAD based with GIS aspects in NetID Network Registration and Maintenance Tool

Cost: 250 euros /user-seat/month for ITS-Software Suite, and 20-50 Euros / designed unique home/building (price depends on the amount of homes/buildings (sliding scale like with FiberPlanIT)). Price is medium, exceeding 10 K + AutoCAD,

Cost = medium 14-15K
Requested quote in American for 2000-3000 homes.
Learning Curve: Medium due to 3 facets ITS plus AutoCAD foundation

Schneider Electric: Telvent ESRI's ARCFM Facility Management: (overview from Jimmy Chang of Ontario)

Telvent runs over the top of ARCFM. owned by Schneider Electric, Same platform into the fiber world now, all based on ESRI GIS shop, 80-90 K full turnkey, cost location & support; licensing, installation, compensation, implementation, knowledge transfer

GIS Based
Cost: 80-90K (VERY HIGH)
Learning Curve: High, due to many facets of the suite

ETI's Overture, FMS Fiber management software: (overview from Jimmy Chang of Ontario)

Produce services from fiber management, from BSS, OSS, TV delivery, billing, network operation, inventory, tech support, post support, marketing forecasting, FULL SUITE…looked really "slick" as far as usage of it, pricing unknown…Pretty intense, pretty easy

Oracle's "Special Info": (overview from JC of Ontario)

Digital 395 project, CAD backend, they use a product called "Special info", a closed system all using an Oracle backend… A GIS ESRI solution, in conjunction, they use - Microsoft Dynamic CRM as the billing mechanism – Nice, but based on AutoCAD backend

CAD Based
Cost: Unknown
Learning Curve: Unknown

CellForce's Network Engineer: (overview from JC of Ontario)

City of Santa Monica, CellForce.com (CRM Solutions as well), product is called "Network Engineer", Erickson Cellular. – VERY EXPENSIVE (they told you)

NetCracker: (overview from Jimmy Chang of Ontario)

AT&T, Verizon, and Level 3 uses this software, quoting costs of at least 7 figures…*complete* comprehensive OSS (operational Support System), BSS (Billing/Business Support System)