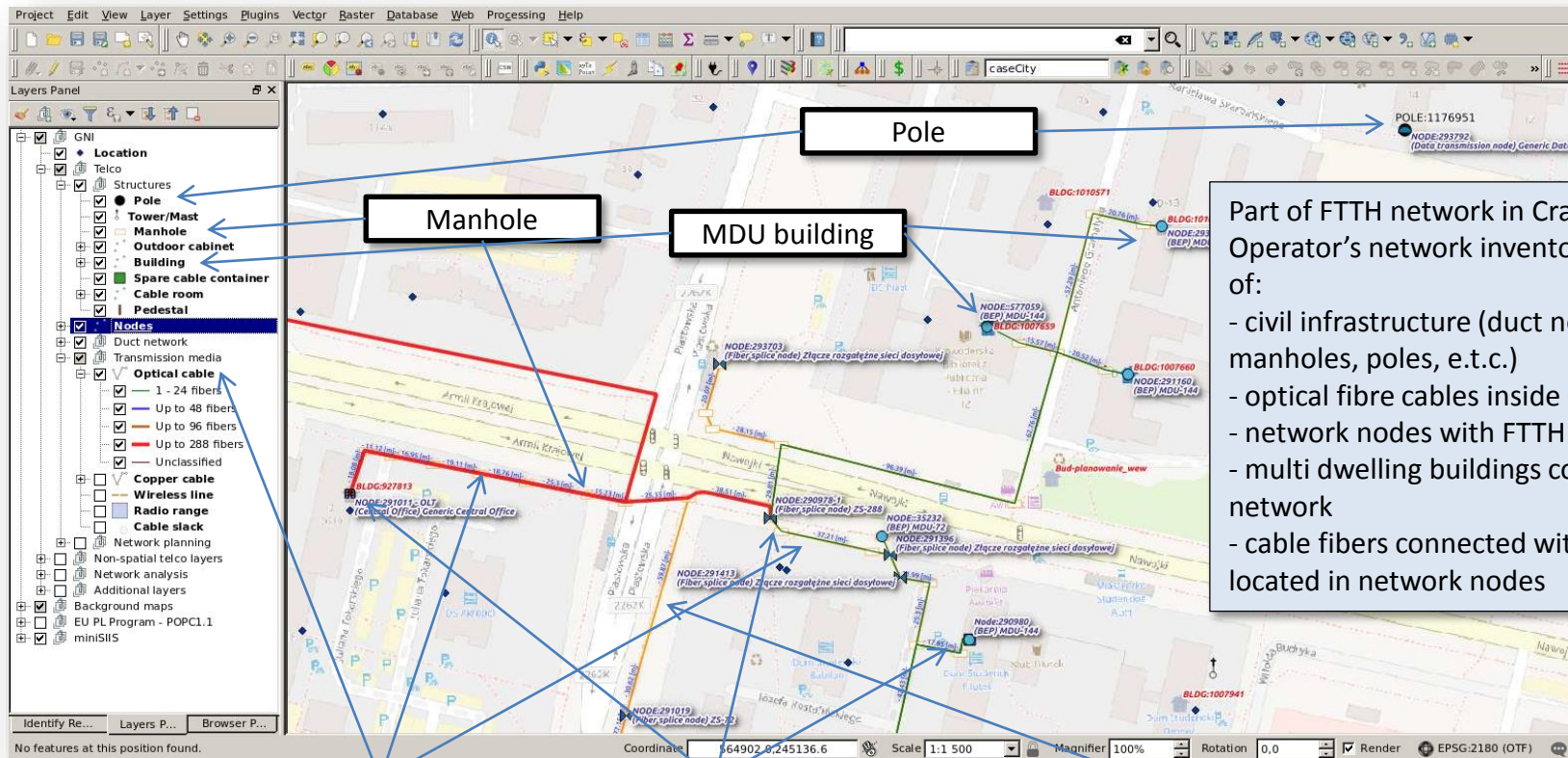


Geospatial Network Inventory

FTTH network – city deployment



Optical cable

Fiber Network Nodes

Underground ducts

Cable fibers are connected in Connection Manager module.

The screenshot displays the 'Connection Manager - Cable mode' window. It features a map in the background with fiber paths highlighted in red and green. On the left, a 3D rack view shows fiber trays. The main window contains a table of fiber connections between two nodes.

From Node	From Item	Unit	Status	Type	DB Loss	Medium	To Node
NODE:291011 - OLT 19/10/48	1	Planowany	Spaw termiczny	Tube 1 Fiber 1 (1)	0.14	NODE:290978-1 MUF-6/288/Slot-01/Splice	
NODE:291011 - OLT 19/10/48	2	Planowany	Spaw termiczny	Tube 1 Fiber 2 (2)	0.14	NODE:290978-1 MUF-6/288/Slot-01/Splice	
NODE:291011 - OLT 19/10/48	3	Planowany	Spaw termiczny	Tube 1 Fiber 3 (3)	0.14	NODE:290978-1 MUF-6/288/Slot-01/Splice	
NODE:291011 - OLT 19/10/48	4	Planowany	Spaw termiczny	Tube 1 Fiber 4 (4)	0.14	NODE:290978-1 MUF-6/288/Slot-01/Splice	
NODE:291011 - OLT 19/10/48	5	Planowany	Spaw termiczny	Tube 1 Fiber 5 (5)	0.14	NODE:290978-1 MUF-6/288/Slot-01/Splice	
NODE:291011 - OLT 19/10/48	6	Planowany	Spaw termiczny	Tube 1 Fiber 6 (6)	0.14	NODE:290978-1 MUF-6/288/Slot-01/Splice	
NODE:291011 - OLT 19/10/48	7	Planowany	Spaw termiczny	Tube 1 Fiber 7 (7)	0.14	NODE:290978-1 MUF-6/288/Slot-01/Splice	

OLT ISP view

Connection Manager

Splice closure ISP view

Optical cable - Feature Attributes

Attributes | All Nodes | Used duct network | Main conduits | Subducts/Microducts | Lease | Contact point | \$

Designation: FIB-235154

A-Z Nodes

A-Node: NODE:291011 - OLT ((Central Office) Generic Central Office)

Z-Node: NODE:290978-1 ((Fiber splice node) ZS-288)

Model: A-DQZY-288((24x12))(24x12)

Model features

Number of units: 288

Profile: 24x12

Installation environment: Underground

Bundling schema: Tube%Fiber

Attenuation per km: 0.40000000

Status: Planned

Owner: FTTH Everywhere

Created On: 09.04.2017

Calculated lenght [m]: 188.28

Optical length [m]: NULL

OK Cancel

Nodes - Feature Attributes

Attributes | Equipment | Optical cables | Copper cables | WireLess lines | Interfaces | Serving Area | Installations | \$

Model: ((Fiber splice node) ZS-288)

Designation: NODE:290978-1

Status: Planned

Owner:

Structure

Structure: Manhole | MANH:927797

Created on: 08.04.2017

Capacity: NULL

Remarks:

Building - Feature Attributes

Attributes | Location | Building structure | Underground ducts | Nodes | Collocation | \$ | ISP View

Model: Multi-Dwelling unit with business unit

Designation: BLDG:1007659

Status: Active

Owner:

Remarks:

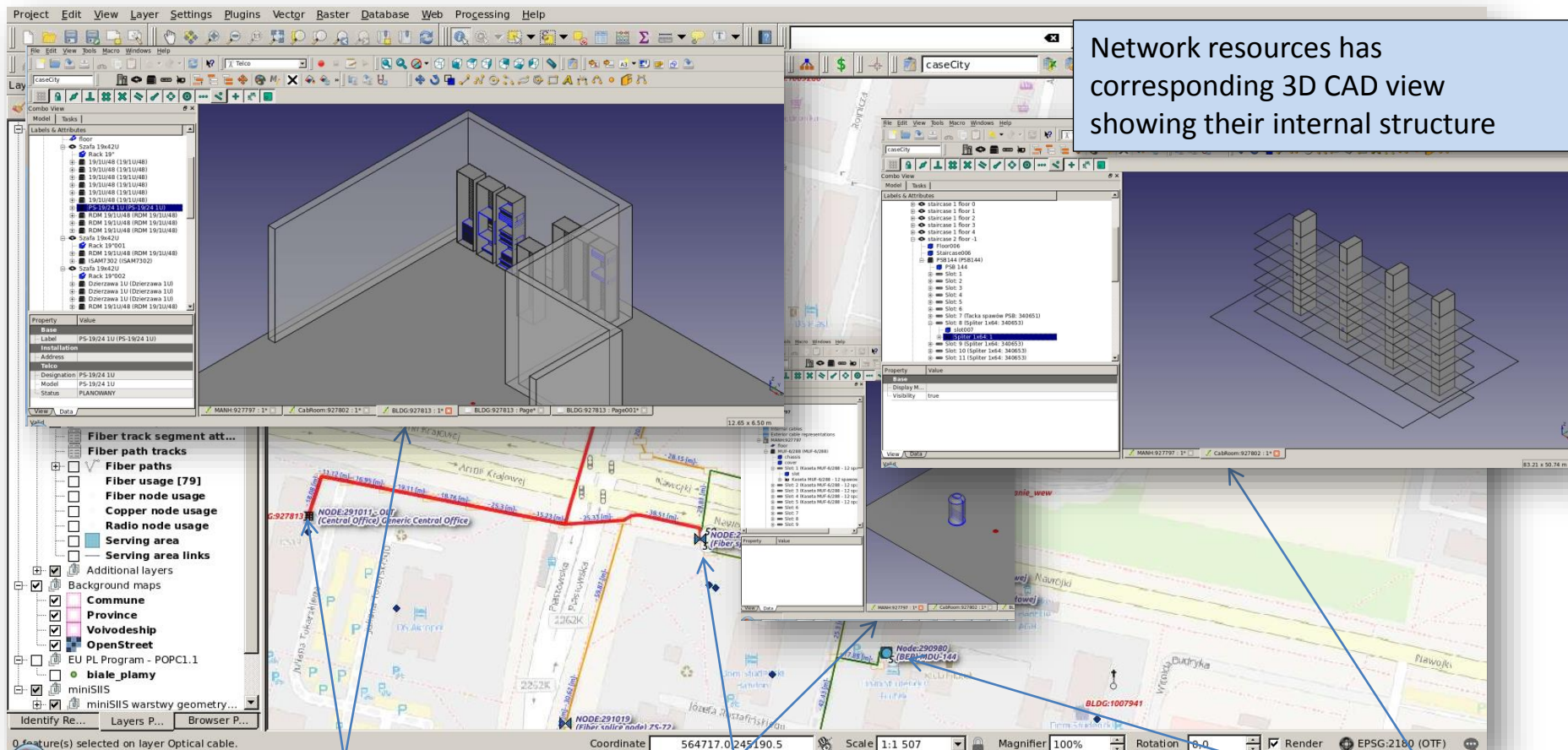
OK Cancel

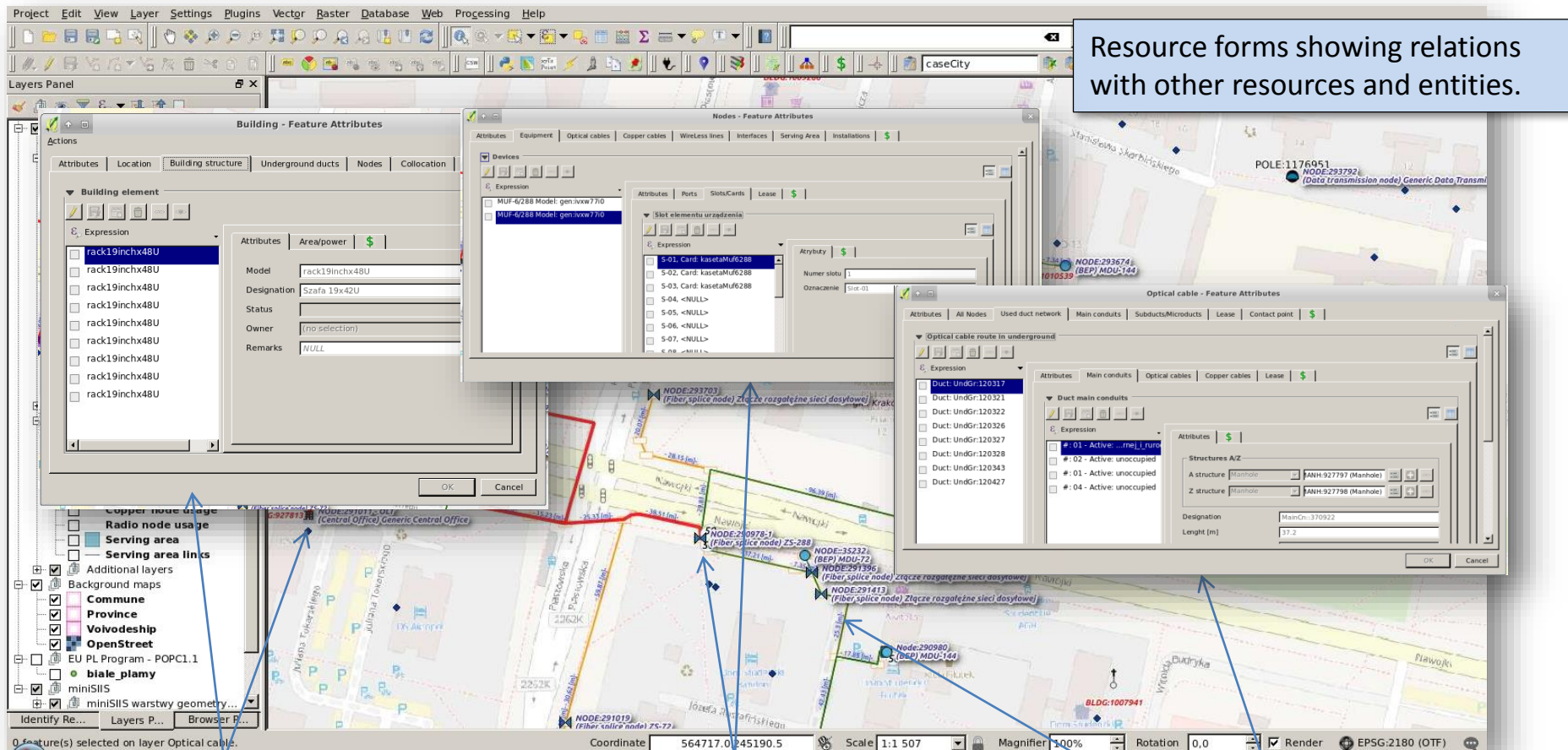
Optical cable

Node

Building

Each network resource has dedicated form showing its business attributes and relations





Resource forms showing relations with other resources and entities.

Rack in Central office

Device in Node

Cable in Duct network

Project Edit View Layer Settings Plugins Vector Raster Database Web Processing Help

Layers Panel

- Nodes
 - Duct network
 - Transmission media
 - ☒ Optical cable
 - ☒ Copper cable
 - ☒ Wireless line
 - ☒ Radio range
 - ☒ Cable slack
 - Network planning
 - Non-spatial telco layers
 - Network analysis
 - Fiber track segment att...
 - Fiber path tracks
 - ☒ Fiber paths

Fiber paths - Feature Attributes

Attributes | Tracks

Tracks in path

- ☒ Z-Node: NODE:291160 / Terminating unit (Port) number: 4
- ☒ Z-Node: NODE:291160 / Terminating unit (Port) number: 2
- ☒ Z-Node: NODE:291160 / Terminating unit (Port) number: 1
- ☒ Z-Node: NODE:291160 / Terminating unit (Port) number: 3

Attributes | Track segments

Track length [m] 406.81

Track loss [dB] 0.722724

Number of segments 2

A-Side

A-side node NODE:291011 - OLT ((Central Office) Generic Central Office)

A-side device Device 19/1U/48

A-side port number 8

Z-Side

Z-side node NODE:291160 ((BEP) MDU-144)

Z-side device (cable) Card 1

Attributes | Track segments

Fiber track segments

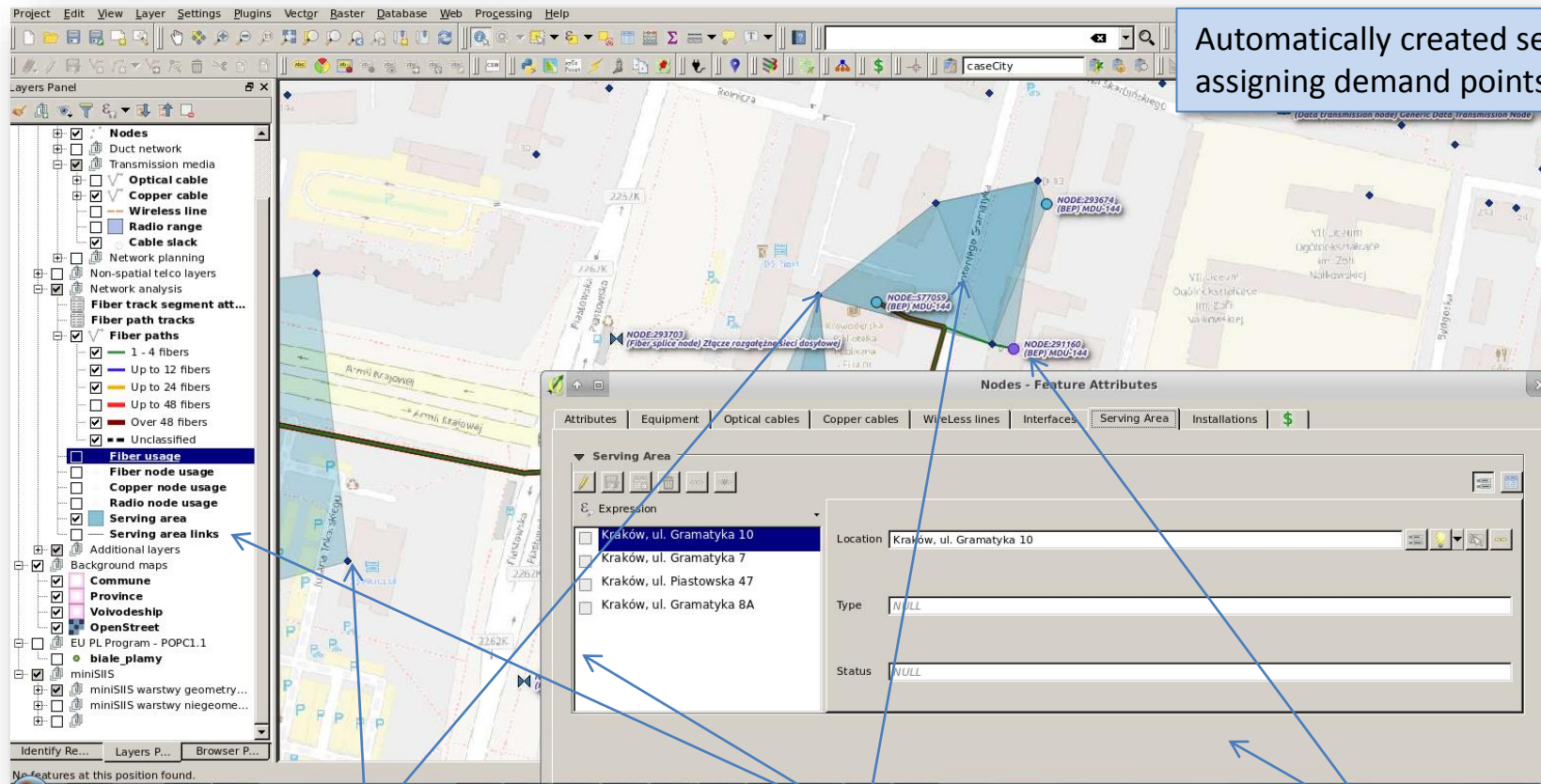
- ☒ 01.1: A[db]=0.14; source=connection
- ☐ 01.2: A[db]=0.22; source=cable
- ☐ 02.1: A[db]=0.36; source=connection
- ☐ 03.1: A[db]=0.5; source=connection
- ☐ 03.2: A[db]=0.58; source=cable
- ☐ 04.1: A[db]=0.72; source=connection

Connected fibers establish fiber paths with full information about their route, attenuation and amount of fibers in the same relation.

Fiber path

Details of fiber path

Fiber tracks and their segments

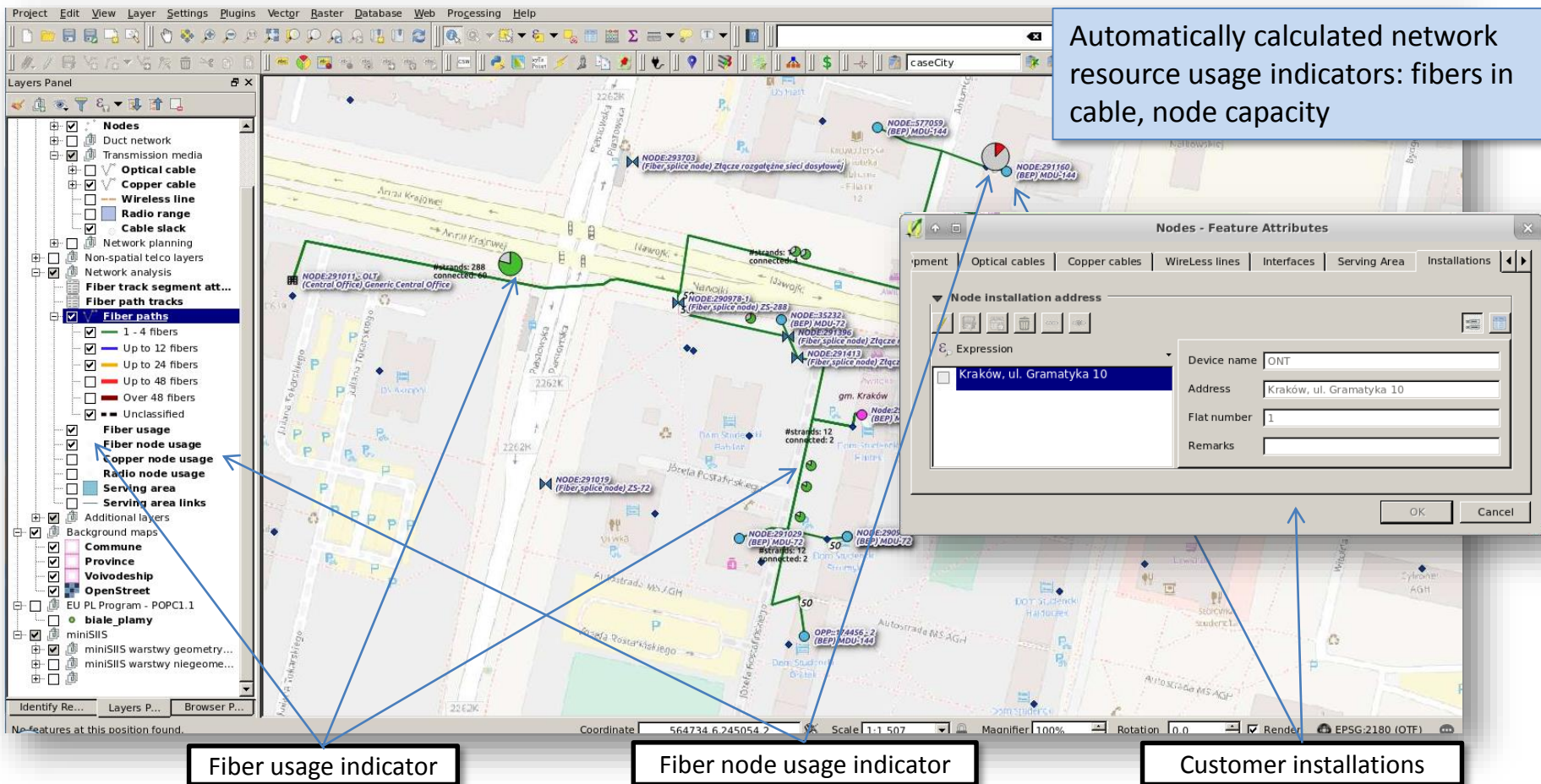


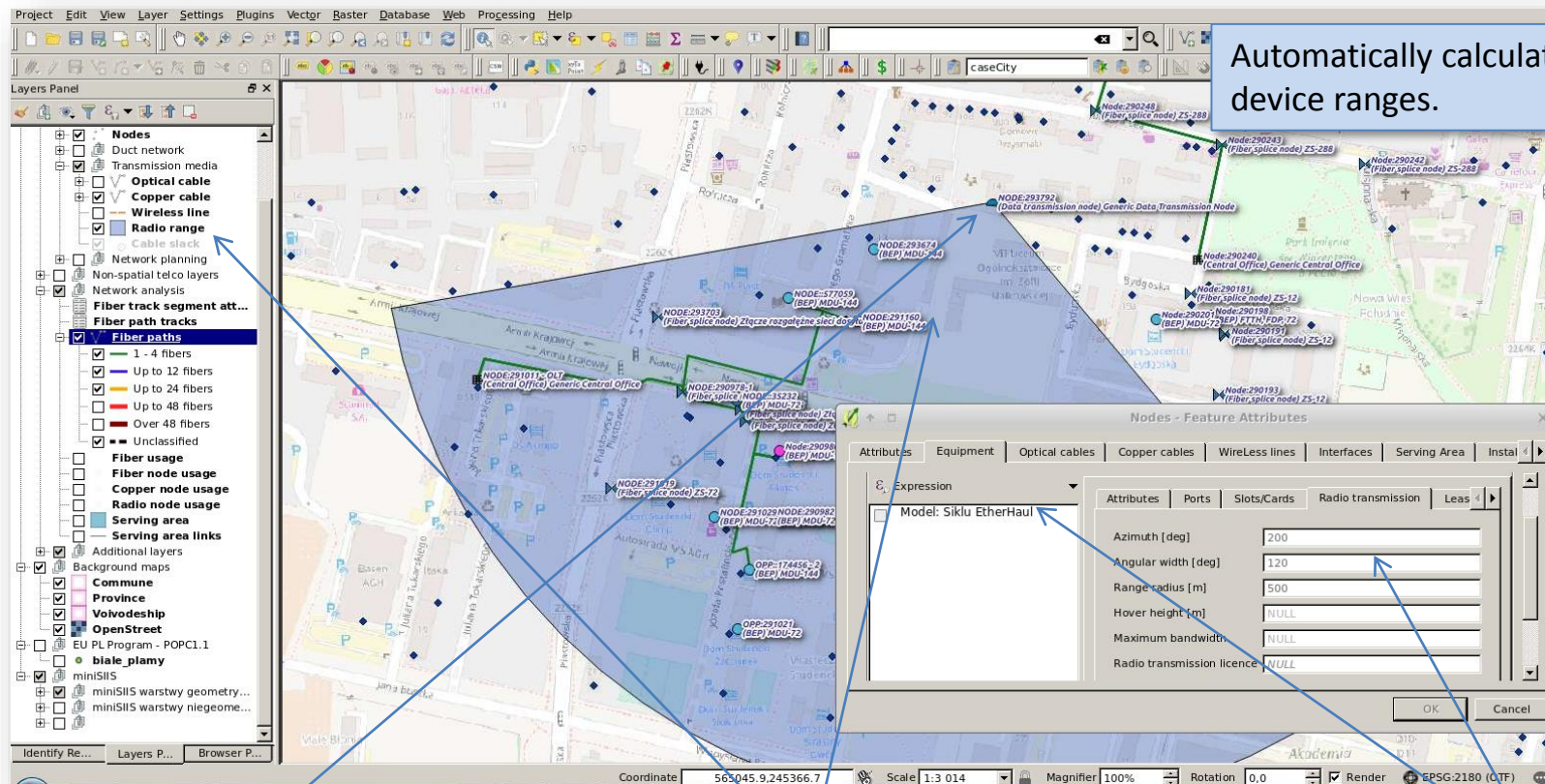
Automatically created serving areas
assigning demand points to nodes.

Demand point

Node serving area

Node



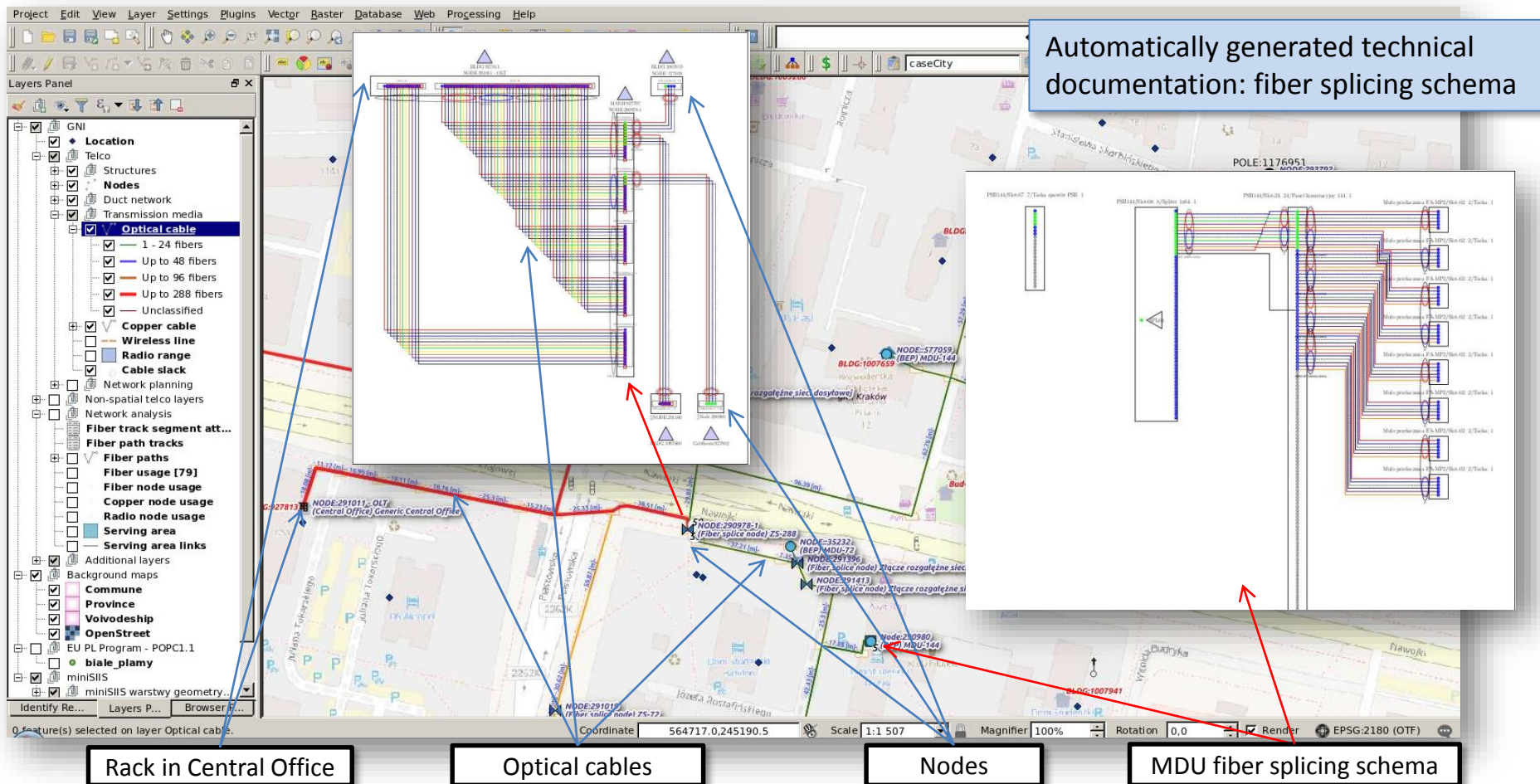


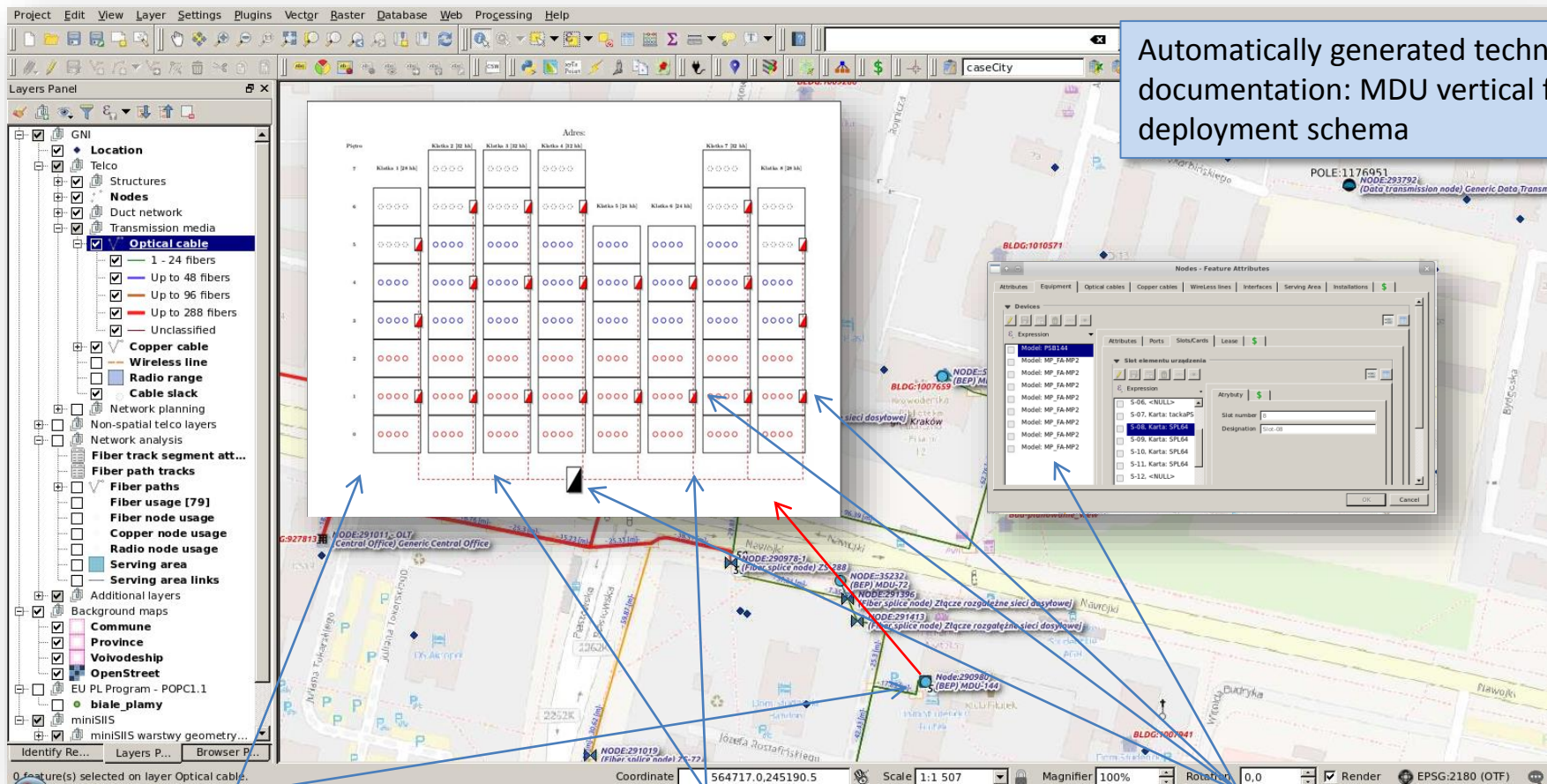
Automatically calculated radio device ranges.

Mast/Tower

Radio range

Radio sector attributes

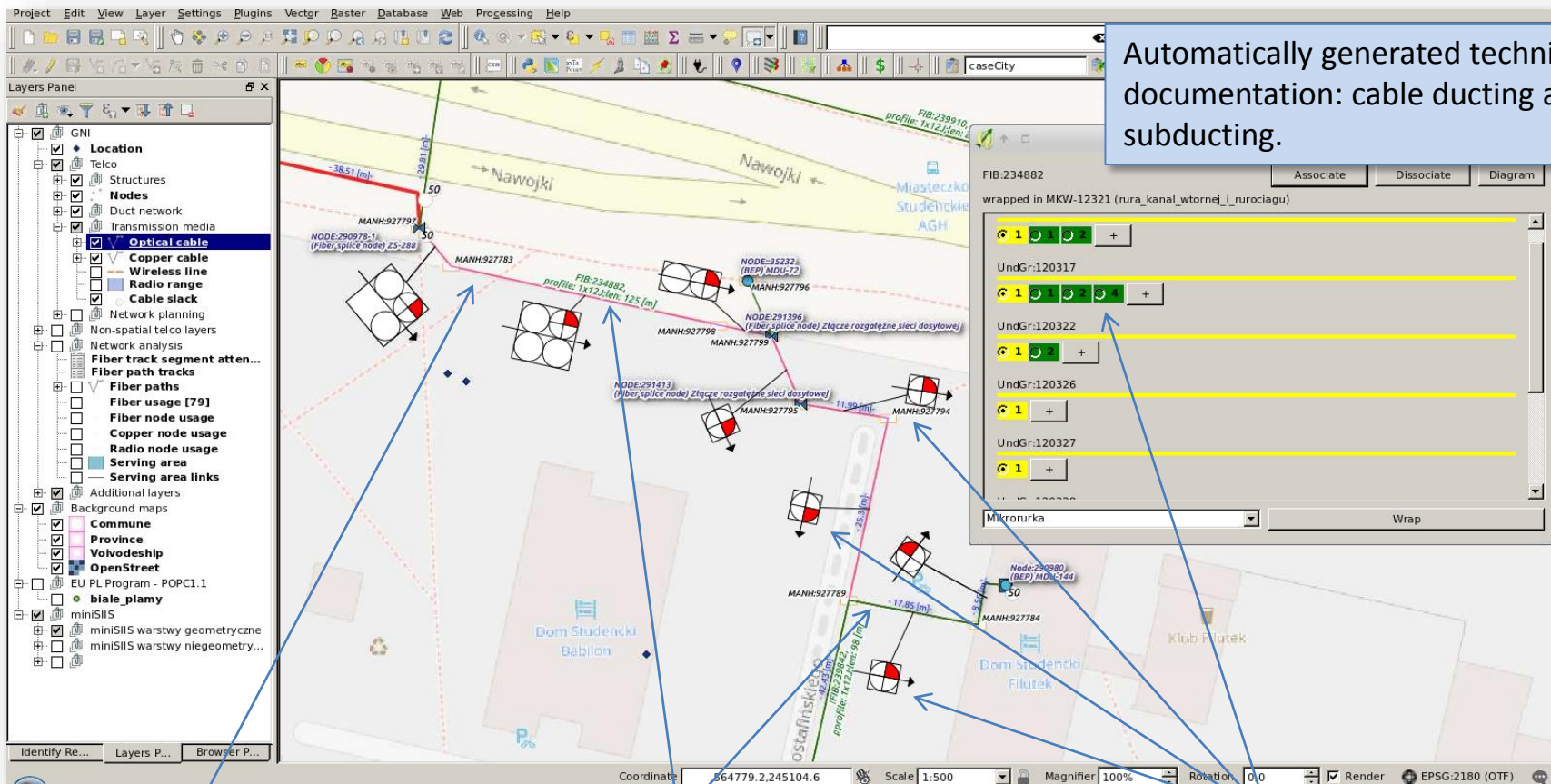




Vertical building view

Optical Internal cable

Devices in node



Automatically generated technical documentation: cable ducting and subducting.

Duct network

Optical cable

Conduits and subducts

Project Edit View Layer Settings Plugins Vectr Raster Database Web Processing Help

Layers Panel

- GNI
- Location
 - Telco
 - Structures
 - Nodes
 - Duct network
 - Transmission media
 - ☒ Optical cable
 - ☒ Copper cable
 - ☒ Wireless line
 - ☒ Radio range
 - ☒ Cable slack
 - Network planning
 - Non-spatial telco layers
 - Network analysis
 - Fiber track segment atten...
 - Fiber path tracks
 - Fiber paths
 - Fiber usage [79]
 - Fiber node usage
 - Copper node usage
 - Radio node usage
 - Serving area
 - Serving area links
 - Additional layers
 - Background maps
 - Commune
 - Province
 - Voivodeship
 - OpenStreet
 - EU PL Program - POPC1.1
 - biale plany
 - miniSIIS
 - miniSIIS warstwy geometryczne
 - miniSIIS warstwy niegeometry...

Central Office

Colour coded rack

Node

Automatically generated technical documentation: technical drawing of any device, installation guidelines

Attributes

Attributes	Equipment	Optical cables	Copper cables	Wireless lines	Interfaces	Serving Area	Installations	\$
Model	19nch3U48							
Port	001 State							
Port	002 State							
Port	003 State							
Port	004 State							
Port	005 State							
Port	006 State							
Port	007 State							
Port	008 State							
Port	009 State							
Port	010 State							

Coordinate: 564602.2245092.8 Scale: 1:1 507 Magnifier: 100% Rotation: 0.0 Render EPSG:2180 (OTF)

Thank you

For more information visit our website

<https://ksavinetworkinventory.com>

or contact us

gni@softelnet.pl