

Raycom s.r.o.

tyco / Electronics

42networks[®]

FTTH in Prague – now reality!



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Reference FTTH project

- Developer: Matrostav Krutec s.r.o.
- Installation company: Suptel a.s.
- Service Provider: UPC a.s.
- Passive Technology: Raycom s.r.o.
 - Tyco Electronics Raychem
 - Kabex
- Active technology: Raycom s.r.o.
 - 42Networks
- Design: Satca s.r.o.

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Location

- Praha 6, Vokovice
- Residential area
- I. Stage
 - 54 apartments
 - 16 town houses
- II. Stage
 - 13 villa houses
 - Sports centre



Objective: Provide modern telecommunication services

Design proposal

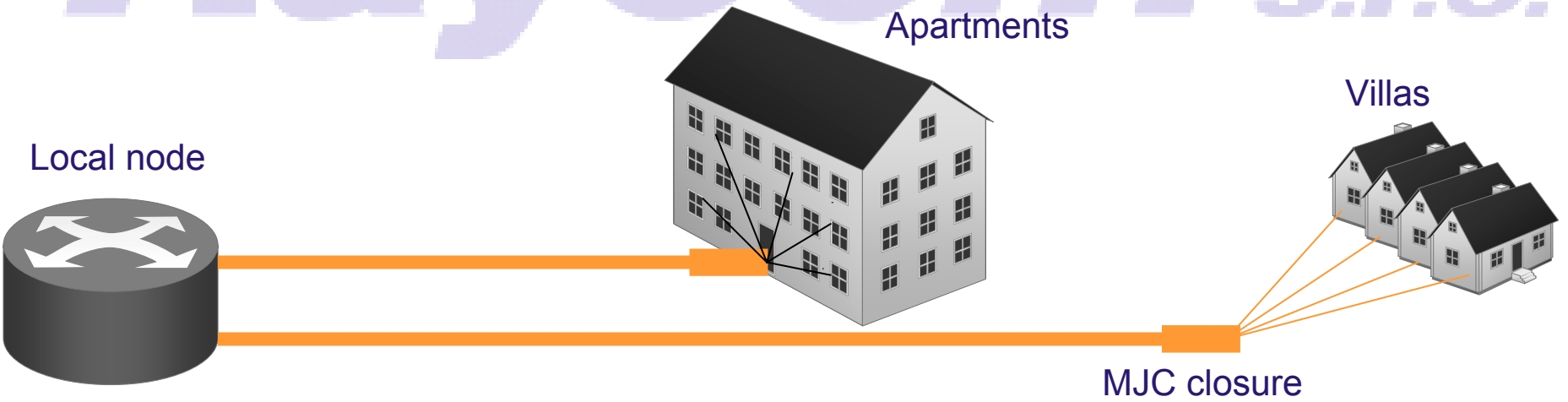
- New generation network
 - Cost distribution over time
 - Open simple structure, expandable
 - Voice facilities available
 - Standard free to air TV available – (no IPTV)
 - Future proof
- FTTH concept FIST
 - Multiduct based network
 - Ethernet switched network
 - VoIP integration
 - TV signal transmitted over parallel fibre + CATV module
 - IPTV ready

Network design - Multiduct part

- Microtubes 5/3,5 mm
- Fire retardant coating for internal installations
- Direct buried
- Integrated rip cord and trace wire
- Colour variations



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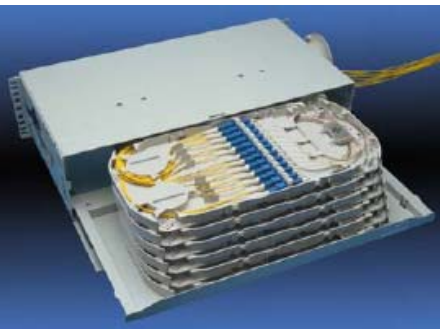


Network design – Optical part

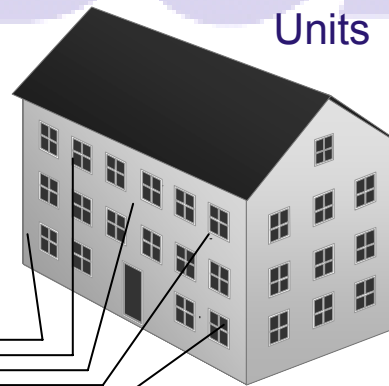
- 2 fibre SM micro bundle connected directly to each customer (real point – to - point)
- SC/PC connectors for Ethernet and SC/APC for CATV
- ODF using 19" FIST-GPS2
- Customer termination in FTU unit

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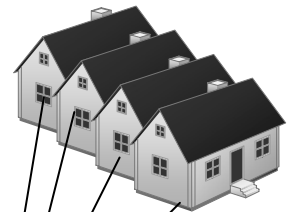
Local node



Units



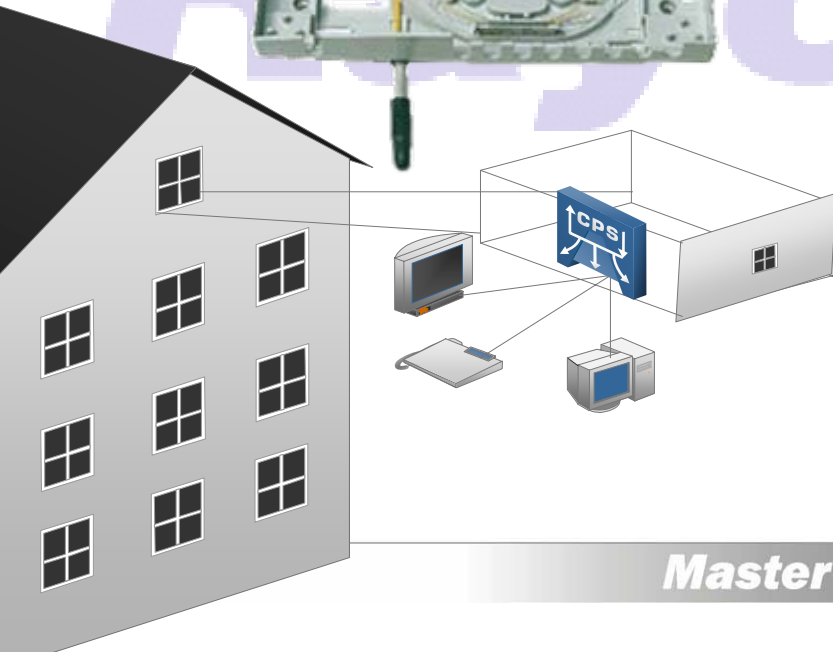
Houses



Network design – Customer Termination



- 2 parts : Active Switch Unit with VoIP (DRG48) + Fibre Termination Unit (FTU-D) with CATV module.
- SM single fibre optical input
- All services accessible from one point
- Remote management
- Modules can be installed separately



Services



- **Data** – switch with 4 ports RJ45 up to 100 Mbps, VLAN, IGMP snooping, QoS, SNMP



- **Voice** – 2 PSTN category 5 ports RJ11, VoIP protocols MGCP, SIP, H.323, H.248, T.38 Fax; DTMF



- **TV** – coax F port, services in band 40 – 862 MHz

Service provider:



Thank you for your time

Questions?

Presentation available at:

<http://www.raycom.cz/prezentace/krutec.pdf>