

Spotlight on cost savings and revenue benefits of xWDM solution.

Who I am

Uplink

Metro

Access

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WDM Technology Evangelist

**xWDM Solution
Coherent technology
Alien wavelength**

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Spotlight on cost savings and revenue benefits of xWDM solution.

Who I am

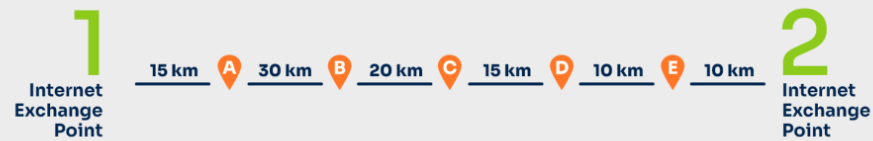
Uplink

Metro

Access

Example no.1

2x IX - 5x ISP - 10x 10GbE



Pricing
Table

Problem
and Solution
positioning

Benefits

Pricing Table

Dark fiber

per km/month

dual fiber 15EUR

single fiber 10EUR

Services

per month

1GbE - 50EUR

10GbE - 500EUR

100GbE - 3.000EUR

DWDM Transceivers

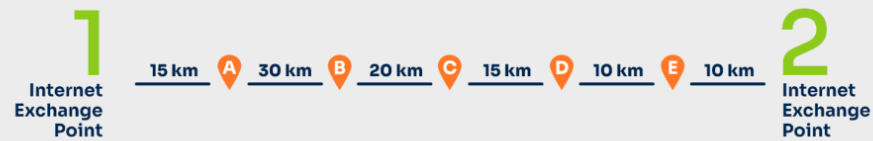
per pair

10GbE - 500EUR

100GbE - 6.000EUR

Example no.1

2x IX - 5x ISP - 10x 10GbE



Pricing Table

Problem and Solution positioning

Benefits



Problem and Solution positioning

Service based model:

- 10x 10GbE -> 5.000 EUR/M
- 5x 100GbE -> 15.000 EUR/M

xWDM Solution:

- 100km fiber rent -> 1.500 EUR/M
- Equipment -> 1.500 EUR/M (36M)
- 5x 100GbE -> 1.000 EUR/M (36M)

10x 10GbE
5000 vs 3000

5x 100GbE
15000 vs 4000

40%

less for 10GbE

75%

less for 100GbE

70%

less for OPEX

1
Internet
Exchange
Point



2
Internet
Exchange
Point





Problem and Solution positioning

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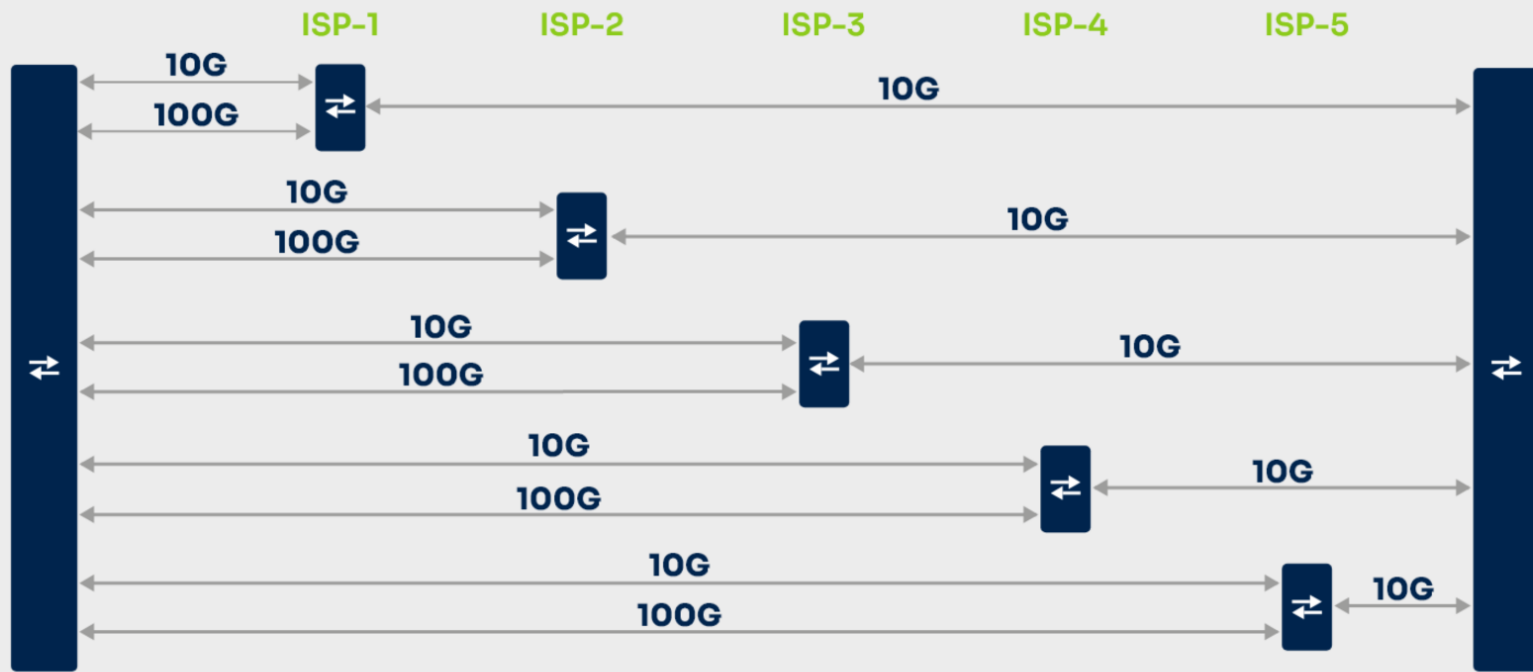
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Problem and Solution positioning

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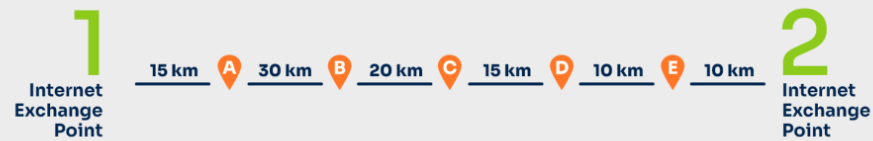
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Example no.1

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Pricing
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and Solution
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Benefits

Benefits



Fixed and low OPEX

Just fiber rent fee

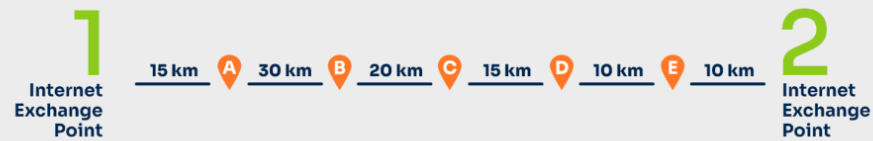


Capacity

10GbE/100GbE/400GbE per channel
18 channels per company
Instant upgrade

Example no.1

2x IX - 5x ISP - 10x 10GbE



Pricing Table

Problem and Solution positioning

Benefits

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Example no.2

4x node, 5x links, 5x 100GbE

Topology

Calcualtion

Benefits

Ring/Mesh topology
Metropolitan area
Traffic demanding

Topology





Example no.2

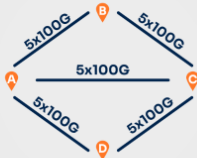
4x node, 5x links, 5x 100GbE

Topology

Calcualtion

Benefits

Calculation



5x 100GbE

DWDM Solution

80km, 1 pair of fiber -> 1.200EUR
Equipment -> 220.000EUR

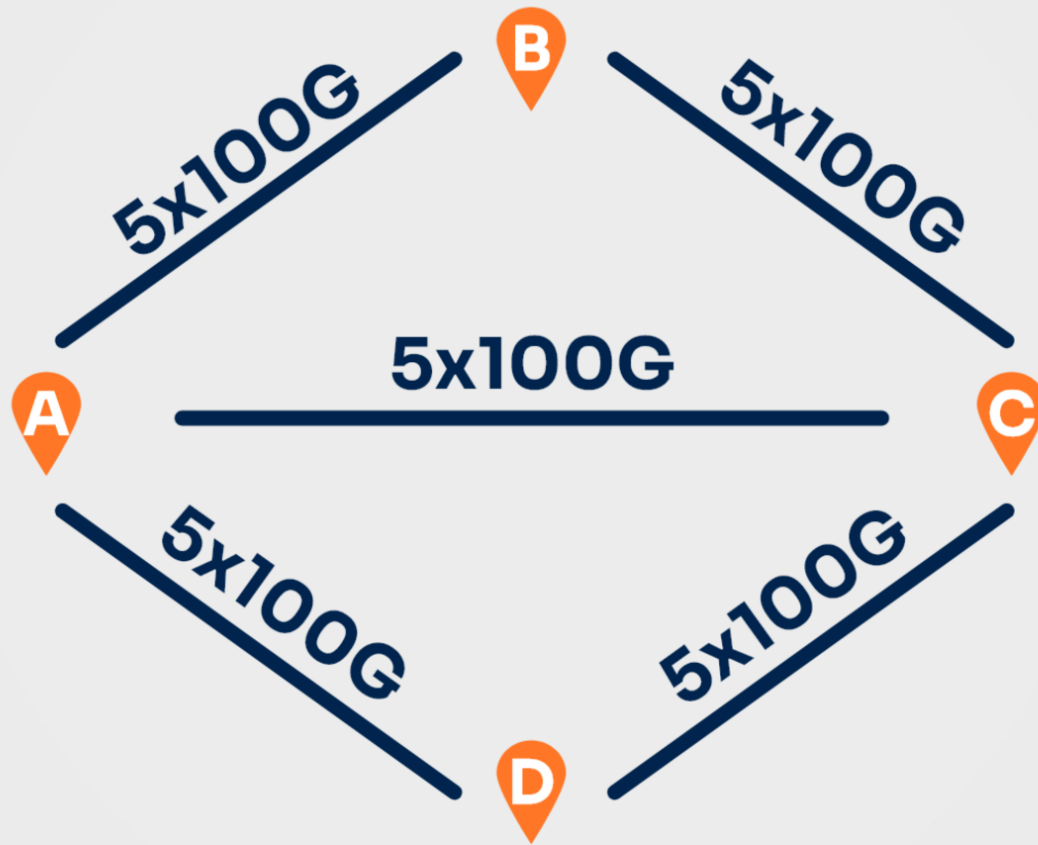
Dark fiber solution

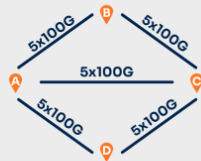
80km, 5 pairs of fiber -> 6.000EUR/M
Grey optics 25 pairs -> 83.000EUR

3Y TCO

Dark Fiber Solution -> 299.000EUR
DWDM SYSTEM -> 265.000EUR







5x 100GbE

DWDM Solution

80km, 1 pair of fiber -> 1.200EUR

Equipment -> 220.000EUR

Dark fiber solution

80km, 5 pairs of fiber -> 6.000EUR/M

Grey optics 25 pairs -> 83.000EUR

3Y TCO

Dark Fiber Solution -> 299.000EUR

DWDM SYSTEM -> 265.000EUR

Calculation



10x 100GbE

Dark fiber solution

80km, 5 pairs of fiber -> 12.000EUR/M

Grey optics 25 pairs -> 166.000EUR

DWDM Solution

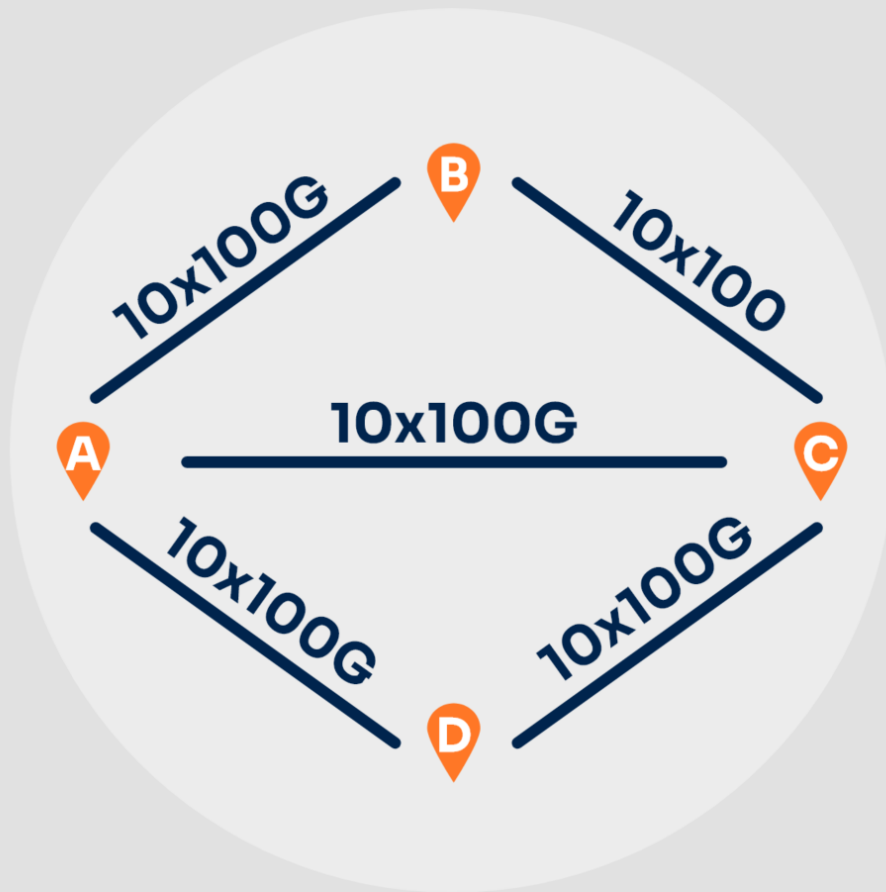
80km, 1 pair of fiber -> 1.200EUR

Equipment -> 370.000EUR

3Y TCO

Dark Fiber Solution -> 598.000EUR

DWDM SYSTEM -> 415.000EUR





5x 100GbE

DWDM Solution

80km, 1 pair of fiber -> 1.200EUR

Equipment -> 220.000EUR

Dark fiber solution

80km, 5 pairs of fiber -> 6.000EUR/M

Grey optics 25 pairs -> 83.000EUR

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DWDM SYSTEM -> 265.000EUR

Calculation





Example no.2

4x node, 5x links, 5x 100GbE

Topology

Calcualtion

Benefits

Benefits

Lower cost per Gigabit
Easy upgrade
Fixed OPEX
400G ready network





Example no.2

4x node, 5x links, 5x 100GbE

Topology

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Benefits

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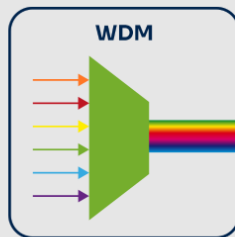
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Example no.3

Switch or Multiplexer?



VS



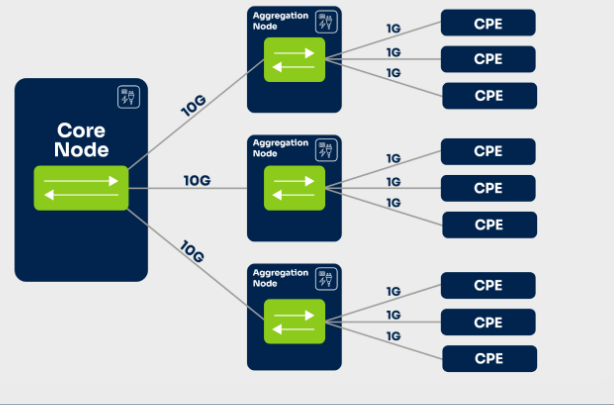
Before

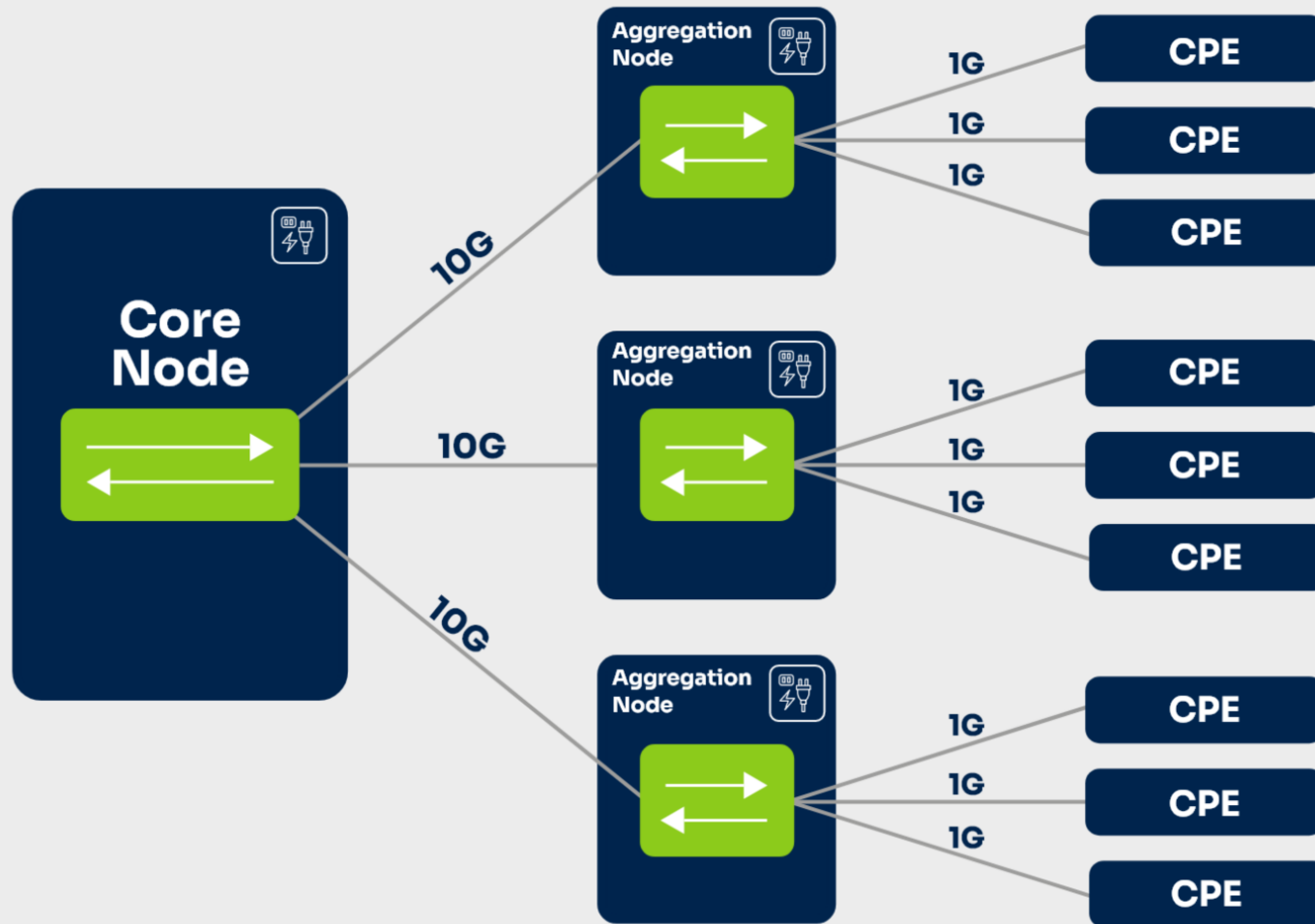
After

Benefits

Before

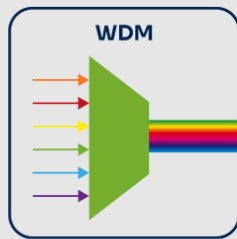
Active node
10GbE Uplink
Power backup
Cabinet





Example no.3

Switch or
Multiplexer?



VS



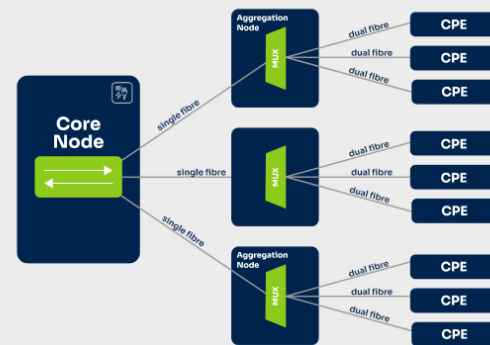
Before

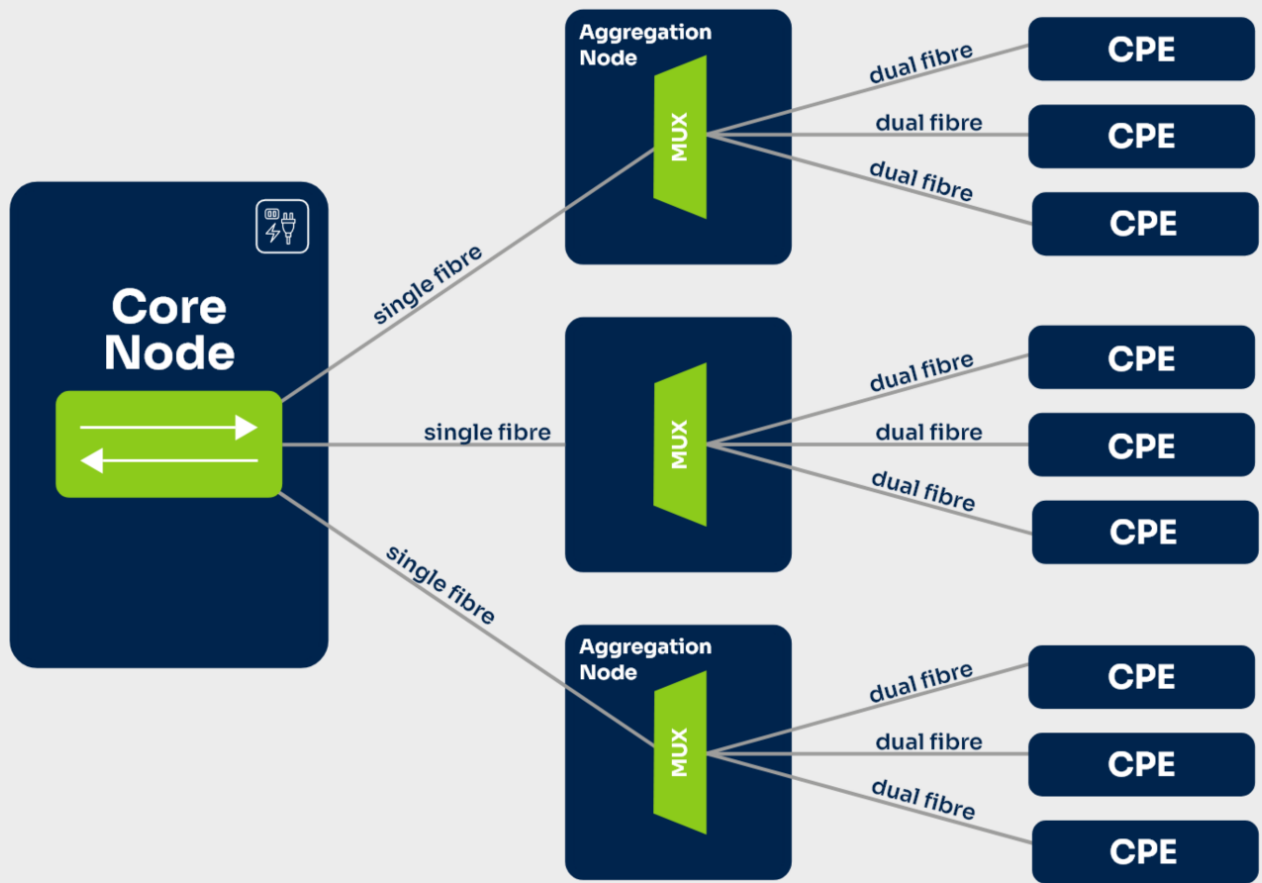
After

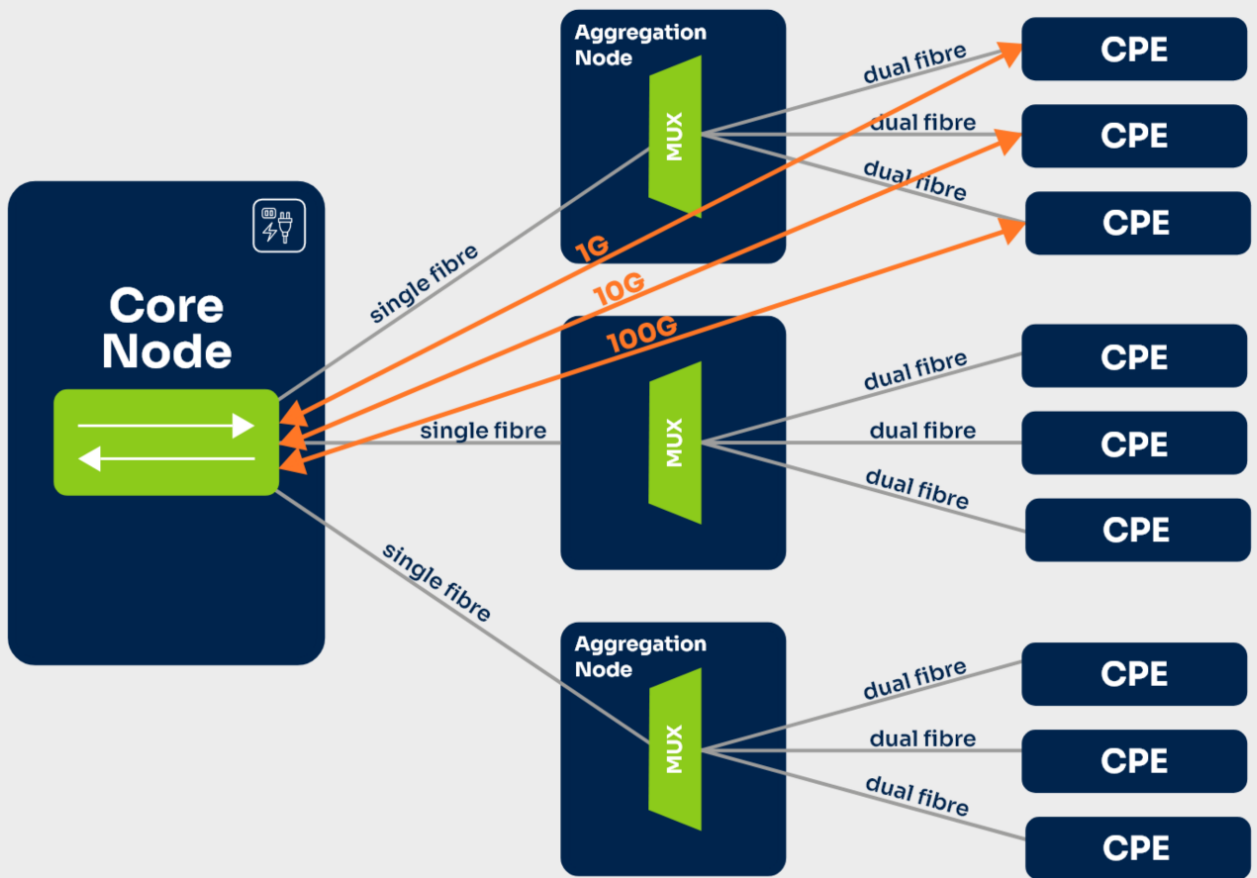
Benefits

After

Passive node
Enclosure
Independent links
Easy upgrade

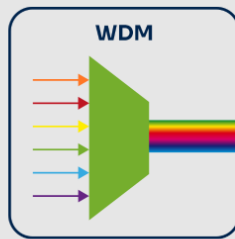






Example no.3

Switch or
Multiplexer?



VS



Before

After

Benefits

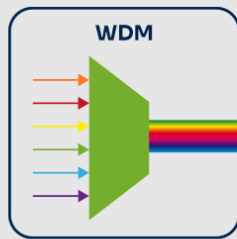
Benefits

- More revenue
- No active equipment in middle point
- Pay-As-You-Grow application
- Up to 18 services over single fiber



Example no.3

Switch or
Multiplexer?



VS



Before

After

Benefits

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