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Higher Education | Case Study



integra
optics

Student union: a forward thinking solution positions a university's network for growth



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Customer Challenge

Our customer needed a cost-effective solution for increasing bandwidth capacity on their campus network, ensuring reliability and scalability. Secondary request was to provide the customer copper connectivity within buildings to user endpoints.

1. A low cost reliable solution.
2. Provide a scalable solution.
3. Supply copper small form factor pluggable (SFP) transceivers that work on multiple platforms.

Integra Optics Solution

Integra's solution was to increase bandwidth on existing fiber utilizing a channelized set up, allowing the customer to add capacity as needed on their campus ring. This allowed the customer to reduce costs by adding passive devices to multiplex signals using coarse wavelength division multiplexing (CWDM) optics over existing infrastructure. Integra provided the customer with CWDM optics along with Mux/Demux units for their core devices and copper transceivers for their LAN switches.

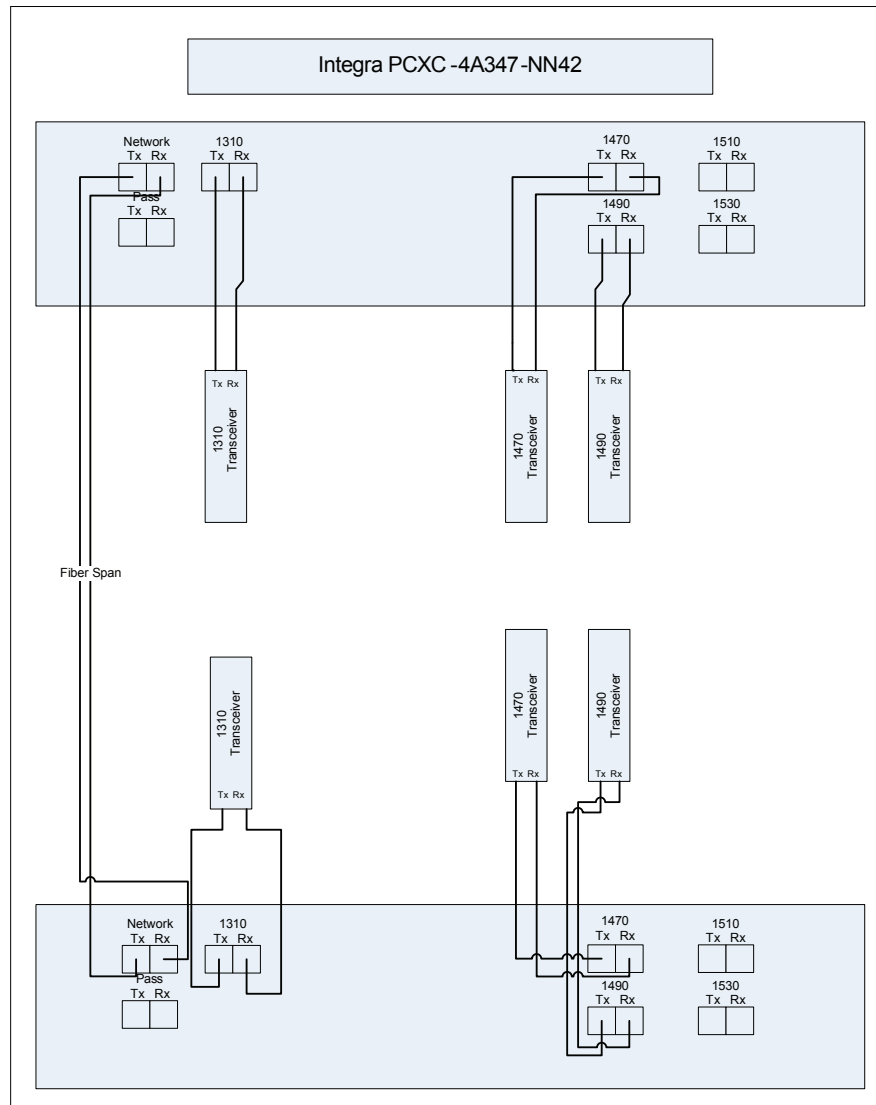
Project Summary

Our customer has a campus ring connecting eight buildings via single mode fiber. Integra installed passive Mux/Demux units at their core devices along with 10gigabit XFP CWDM optics. This allowed the customer to have increased capacity on the ring with room for growth by adding additional wavelengths as required.

The customer's other need was to have intra-building connectivity from their main distribution frame (MDF) and intermediate distribution frame (IDF) switches to end users and access points via copper cabling. The customer had various OEM platforms in their IDF's that would require purchasing additional transceivers from each manufacturer. Integra, with its ability to code optics for all major networking manufacturers, was able to supply all their optics with substantial cost and time savings compared to the OEM.

Result

Because of Integra's extensive in-stock components and passive equipment, the customer received components immediately. Adding to the speed of the solution was Integra's engineering team, who solved the problem by utilizing stock products in innovative ways. This solution proved to be a very efficient way to upgrade.



The Integra Optics passive CWDM units and transceivers supplied to our customer, showing room for additional expansion.

Integra Optics Equipment Used

- ➡ Integra CWDM XFP transceivers
- ➡ Integra Passive CWDM 4 channel Mux/Demux combo units
- ➡ Integra multi-rate copper SFP transceivers