Colocation:
Value Proposition

Increasing move to Colocation Data Centers

Enterprises continually look for reducing cost in their operations, but still maintain a level of business uptime which usually allows for little to no outage/down time. The cost of maintaining their data center environments such as their power, cooling and telecommunications systems presents a great cost. The proper maintenance on things such as generators, Uninterrupted Power Supply (UPS) batteries, HVAC systems, and Security/surveillance systems becomes costly. This cost savings initiative has made enterprise IT leaders consider alternate methods to host their critical applications.

Even with the charter of reducing cost, enterprises are still hesitant to move critical applications to the cloud or even have migrated back to on-premise data centers. Reasons cited by Uptime Institute in their "Uptime Institute Global Data Center Survey 2021" are cost, compliance and security concerns. They want to maintain as much control as they can. COVID-19 has also shown that IT professionals do not actually need to be located with the data center as professionals were "forced" to work from home. These facts make colocation a very reasonable option.

This increase in demand has made the colocation market begin to grow. Allied Market Research has that market growing at a rate of 15.7% each year. Colocation providers are looking for competitive advantages to capture as much of that market as possible.

Sensus and AllPath Director

Sensus LC and MPO ports can detect cable presence and read cable information directly from any cable enabled with Fiber Mountain ICID (Intelligent Connection IDentification) technology. Fiber Mountain's orchestration software, AllPath Director (APD), can correlate cables to panel ports and create a live graphical representation of the physical layer topology. Per-port tri-colored LEDs can be controlled remotely from APD or from an API. Fiber Mountain ICID cables contain NFC ID tags, which when held over the NFC symbol on the management module, display detailed cable information locally.

Value to the Colocation Provider

Fiber Mountain's Sensus combined with AllPath Director provides the following:

∇ Presence Detection - Sensus is built with sensors taht detect cable insertions and removals automatically

 o Allows for automated documentation of port availability and usage for capacity planning

 o Provides additional security with the ability of notifying users of cable tampering

 o Provides a log of all port activity to be able to present as a troubleshooting tool for possible root cause of any accidental removals, or show that nothing has occured with that connection

∇ Cable Identification - Sensus does not only sense presence, but if the cable is equipped with Fiber Mountain's ICID^{TM} cables can provide the A and Z location of connections connected to Sensus panels

 o Provides the ability to automate documentation of connections even with changes

  ❖ Real time accuracy

  ❖ No need to manually update spreadsheets or documentation systems

 o AllPath Director uses that information and can present topolgraphic view of the cable plant

∇ Application Programmable Interfaced (API) - AllPath Director presents an Restful API interface

 o Integration with existing business systems such as Billing, Work order, etc. are made possible

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With the above capabilities, colocation providers can provide differentiation/value add with potential additional revenue streams.

- API - Allows colocation providers to interface with customer facing portals, giving them never before seen remote real time visibility at their finger tips. This would give them the feeling of more control of the environment.
  - o Port Status - using presence detection customers can tell:
    - ❖ Give the customer the view of port usage allowing them to do capacity planning
    - ❖ Potentially having them illuminating an LED for remote hands identification if Sensus available in their cage
  - o Audit/logging - Logs can be generated to view all activity on the client's ports/assets
    - ❖ Verify connect and disconnects
    - ❖ Unintentional activity records or to verify that nothing happened to the connections
    - ❖ Security - provides a comfort feel that no monitoring or man-in-the middle activity may have occurred
  - o Infrastructure information can provide the customer with:
    - ❖ Cable lengths, type, polarity, etc.
- Provided that customer have a Sensus in their cage, they can have the visibility into their cage as well
- For Department of Defense and Government customers, Sensus and AllPath Director has gone through their security validation with Joint Interoperability Testing Command (JITC)

Conclusion

Fiber Mountain's Sensus and AllPath Director products are geared to providing greater visibility of the physical infrastructure than seen before in the industry. Colocation providers can benefit from this visibility and can use it for differentiation to attract customers wanting to maintain as much control of their network and security as possible by going beyond the physical security that is already being provided by providers in access controls with even placing armed guards at the entry point to the facility. The more perceived control and visibility provided to the end customer, the greater comfort that they can when moving to a managed facility without feeling they are loosing control of their environment.