Providing the structured cabling you need to help increase IT availability and lower IT costs

IBM Facilities Cabling Services – fiber transport system

Fostering higher availability by facilitating the way systems work together
It’s the universal IT question: how to get higher availability while also lowering costs. Surprisingly, one answer may lie right under the data center floor. What started out years ago as a few point-to-point connections between systems has most likely grown into an unwieldy tangle of cables that is impeding availability, scalability, problem determination and cooling airflows. Out of sight and out of mind, this growing mass of used and unused subfloor cables has become impossible to manage and may create logjams and operational risks—even thermal failure.

IBM Facilities Cabling Services – fiber transport system provides an enterprise-wide fiber optic cabling solution designed to quickly resolve your cabling problems. Based on the 1990 consolidation of the IBM Enterprise Systems Connection (ESCON®) Architecture® fiber optic transmission technology, this solution leverages proven technologies in combination with IBM’s extensive global experience in managing data centers and deploying information technologies.

Taking a structured approach to connectivity
Because data center management is becoming increasingly complicated, it’s important to take a structured approach to cabling system design and installation. The preponderance of multivendor

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**Highlights**

- Provides comprehensive planning and installation
- Helps minimize cabling system risks
- Supports greater data center efficiency and scalability
- Helps lower IT costs
equipment today means the types and the quantity of optical fiber connections are growing. And, since cabling requirements are increasingly dependent on how each system is physically configured, configurations are becoming more challenging to plan and manage. Add the fact that today’s dynamic business environment requires system growth, timely technology upgrades and machine replacements, and you’ve got a major cabling challenge.

Using IBM Fiber Transport System (FTS) optical fiber trunk cables, IBM connects your data center equipment to centralized fiber patch panels. This isolates active equipment from change activity during new equipment integration or legacy reconfiguration. In addition, the centralized fiber patch panels help reduce scheduled and unscheduled outages.

IBM uses small form factor optical fiber connectors and short fiber jumper cables with the FTS patch panels to help simplify your cable management. In addition, IBM uses under-floor and rack-mounted consolidation patch panels to help streamline fiber cabling in both widely dispersed and clustered equipment locations.

IBM begins implementing your solution by assessing your data center environment—including storage area networks (SANs) and server farms—and then it designs and plans a custom structured cabling solution just for you. The design can include both single-mode and multi-mode fiber optic cabling, along with recommendations for selecting the appropriate fiber types: 9µ, 50µ, laser optimized 50µ OM3 or 62.5µ. IBM can also provide IBM IT Facilities Assessment, Design and Construction Services—optimized airflow assessment for cabling to help ensure better data center cooling. Since IBM also takes care of planning, ordering and installing the correct optical fiber jumper cables, you get a turnkey installation that includes rollout and documentation and overall project management.

Limiting risks to and interference with mission-critical systems

To help ensure reliability and a quick, easy installation, IBM prefits all components with connectors and tests them in an IBM lab. Compatibility is rarely a problem since FTS works with most common computer and communications systems. An open solution, it is fully independent of transmission protocols. Additionally, FTS trunk-mounting kits are designed and tested with IBM System z™ servers and devices to prevent any interference with equipment operation or serviceability. As a result, FTS can help improve cable management in a wide range of environments:

- ESCON environments
- IBM Fiber Connectivity (FICON®) environments
- IBM Parallel Sysplex® environments
- SAN environments
- Open Systems Adapter environments
- Open system architectures (Fibre Channel and Gigabit Ethernet)

Helping improve data center efficiency and scalability

Once your structured FTS cabling system is in place, you can look forward to reduced system outage time and increased system availability. The improved data center cooling capability can help you avoid thermal failure.

In addition, with less congested subfloor areas that are easier to manage, you can grow your systems more easily. You can speed up technology upgrades and machine replacements and install and remove equipment faster and with less disruption. It all adds up to the flexibility you need to grow and make your data center more expandable and redeployable.
Helping to keep costs down
There are a number of ways that IBM Facilities Cabling Services – fiber transport system can help lower your IT costs. It can help reduce costly downtime. It can lower the cost of incremental capacity upgrades. It also can help minimize the impact to your business when you upgrade your systems, limiting the long-term expense of moves, adds or changes. Equally important, fiber transport system can help lower the costs associated with data center cooling. That means your initial investment in a structured fiber cabling solution can be offset by incremental savings for years to come.

Why IBM?
Over the last few decades, IBM has gained extensive experience in structured cabling and data centers. As a result, we now have highly skilled connectivity professionals who have a long track record of success. In addition to our strong working relationship with the IBM Systems and Technology Group, we also have a relationship with Anixter International Inc., which provides additional cabling product expertise.

For more information
To learn more about IBM Facilities Cabling Services – fiber transport system, contact your IBM representative or IBM Business Partner, or visit:

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