Ensemble Fiber Director

GIS-based, real-time physical fiber monitoring and fault isolation

Ultra-high-speed optical data networks are ever-more reliant on the performance and integrity of the physical fiber in the outside-plant environment. Such dependence demands comprehensive physical fiber plant monitoring. Simply knowing that a fiber fault has occurred is no longer sufficient. A carrier must react immediately to locate and repair faults in order to meet strict SLA demands in today's always-on world. Automatic alarming with GIS-based fault location/isolation is key to such rapid response demands.

The Ensemble Fiber Director (a component of the Ensemble Controller suite), teamed with our ALM fiber monitoring solution, is designed to pinpoint the precise location of fiber faults or anomalies and direct repair crews quickly to the street address or GIS location of the event. There is no easier or faster way to identify the location of pending service impairment issues, possible malicious intrusions or actual fiber breaks. Ensemble Fiber Director utilizes real-time data from our ALM, enhanced by correlation to the actual location of connectors, and splices in the network for the most precise fault localization. When an ALM unit detects a fault or anomaly, the Ensemble Fiber Director can proactively notify the operator via email and provide a precise location highlighted on a geographical map in the Ensemble Controller display. Diagnostic and repair teams can then be quickly dispatched to a precise geographical location to effect investigation and recovery.

Your benefits

- **Accurate fiber plant layouts**
  Self-explanatory GUI displays accurate locations of fiber plant components on geographical map
- **Pinpoint fiber event and fault locations**
  Fiber event/fault locations identified clearly on geographical map allows rapid deployment of repair teams direct to the location
- **Part of our Ensemble Controller suite**
  Reliable, secure and user-friendly management and surveillance of ADVA FSP and OSA networks, with full FCAPS support
- **Explore individual fiber routes**
  Identify the resources and geographical routing of individual customer services
- **Proactive fiber route planning**
  Plan diverse service routes to ensure no shared resources or common points of vulnerability
- **Identify affected customers**
  Association between affected routes and customers enables proactive notification of faults and restoration activities

High-level specifications

Visualization

- Accurate visualization of fiber plant components on real-world maps
- Precise real-world fault location
- Support for public (Google Maps, OpenStreetMaps, etc) or private tile

Management integration

- GIS application integration with Ensemble Controller
- Automated deployment of Fiber Director with Ensemble Controller
- Brown-field deployment options

Operational simplification

- Associate customers and services to ALM ports and fiber routes
- Provide proactive fault notifications and recovery status direct to customers

GIS data display, navigation

- Browse fiber plant data graphically and in tabular formats from Ensemble Controller
- Tie plant components to geo-locations and real-world addresses
- Quickly trace components in a fiber route

Fault isolation and recovery

- Proactive notification of fiber faults; save troubleshooting time
- Isolate between inside plant and outside plant locations
- Accurately dispatch repair teams direct to fault location

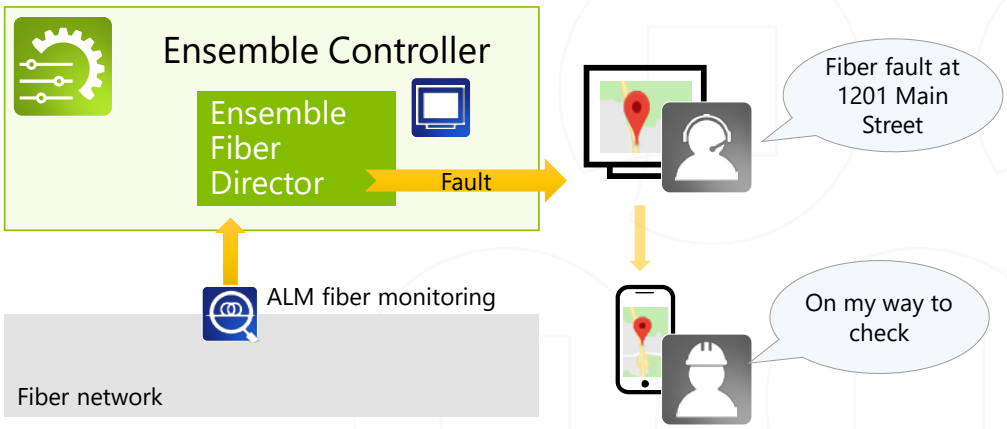
Real-world scaling

- Maintain entire fiber plant in one cohesive database
- Scale to tens of thousands of components
- Visibility to all buildings, ducts, access points

Applications in your network

Advanced fiber plant monitoring, assurance and visualization

- Centralized visibility of entire fiber plant infrastructure
- Real-time, real-world situational awareness
- Proactive notification of fiber faults with precise geographical fault location
- Faster fault recovery



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