

### Benefits:

- Up to 50% time to market reduction
- 25 to 35% savings in development costs
- One stop complete MEF UNI 2.2 software solution to reduce the cost of software development and support
- Pre-tested software modules minimize project risks
- Integrated solution delivery by AFORE R&D design services
- Portable to any OS and hardware platform
- Accelerates failure recovery

### Features:

- Complete protocol implementation of MEF UNI 1.1/1.2 and 2.1/2.2 (MEF 13 and 20)
- Supports all attributes specified in MIBs for MEF UNI protocols
- Includes a complete set of Application Programming Interfaces (APIs)



## InterPort™ MEF UNI 2.2 Software Solution

The large scale and profitable deployment of Ethernet services requires that Ethernet access products have the capabilities to lower operating costs. These capabilities include automatic connectivity, service monitoring, diagnostics, performance monitoring, SLA reporting and automatic provisioning of CPE/CLE devices. The Metro Ethernet Forum (MEF) User Network Interface (UNI) Type 2.2 Implementation Agreement (MEF20) is designed to address these requirements. The key requirements defined in MEF20 are: 1) End to end service level fault management and performance management via Service OAM, link level connectivity monitoring and diagnosis via Link OAM, remote service attributes auto-provisioning and retrieval via Ethernet-LMI, and port protection via Link Aggregation.

AFORE provides a one stop solution for networking equipment manufacturers to source MEF UNI 2.2 compliant protocol software and custom development services to integrate AFORE's InterPort™ software modules and additional data plane software development onto various platforms, being Ethernet access, mobile backhaul, WiMAX/LTE, or Ethernet microwave equipment.

InterPort™ MEF UNI 2.2 Solution is built upon a number of standards compliant software modules including Ethernet LMI (MEF 16), Link Aggregation/LACP (802.3ad), Service OAM (802.1ag and Y.1731) and Link OAM (802.3ah). Integration and porting effort is simplified with the use of three API layers; Hardware Abstraction API, Operating System Abstraction API, and Configuration and Management API.

### Features

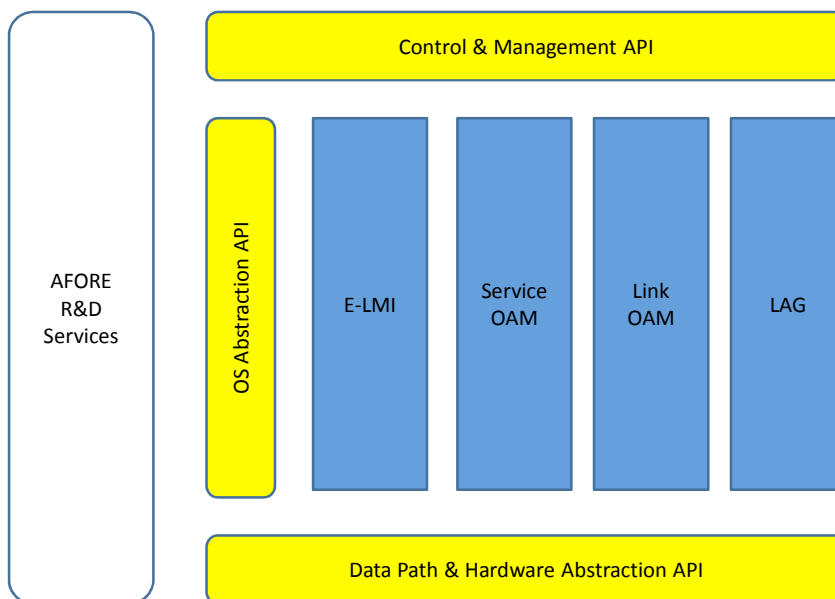
The AFORE InterPort™ MEF UNI 2.2 Solution includes a complete set of Application Programming Interfaces (APIs) to implement control plane components as defined by MEF specifications. The MEF UNI 2.2 solution provides the following benefits:

- Easy integration with other MEF defined functions, e.g. MEF service layer functions and VLAN and provider VLAN bridging functions
- Automatic configuration and management of Ethernet UNI functions and services
- Complete OAM functions including Fault Management, Performance Management and Discovery
- Increased bandwidth and load sharing with linear increments of units of links
- Ethernet link/port protection with rapid configuration and reconfiguration

Feature	InterPort™ MEF UNI 2.2
Support MEF UNI Types	MEF UNI 1.1/1.2 and 2.1/2.2
Complete APIs to external functional blocks	Yes
Ethernet-LMI	Yes
Ethernet Link Aggregation and Protection	Yes
Ethernet Service OAM – IEEE 802.1AG	Yes
Ethernet Service OAM – ITU Y.1731	Yes
Complete Ethernet Service OAM including Interworking of 802.1AG and Y.1731	Yes
Ethernet Link OAM	Yes

## Architecture

The AFORE InterPort™ MEF UNI 2.2 solution has well defined interfaces including OS Abstraction APIs, Data Path & Hardware Abstraction Layer (HAL) callbacks and APIs and Control & Management APIs. These APIs enable portability to various platforms using different operating systems and different data plane designs whether FPGA, network processor or Ethernet silicon based.



## Deliverables

- Source code in C
- Programmer's Reference Guide
- Porting Guide

## About AFORE Solutions

AFORE is a leading provider of innovative technology solutions for network equipment providers spanning both wireline and wireless network infrastructures and applications. AFORE's solutions are based on advanced design capabilities, system expertise and InterPort™ software technology for Carrier Ethernet, Wireless Backhaul, Broadband Access and Enterprise Backbone networks. Our unique blend of technical expertise and Intellectual Property building blocks enables Service Provider and Enterprise focused network equipment providers to accelerate innovation and deployment of differentiated solutions. Visit: [http://www.aforesolutions.com/ip\\_products.php](http://www.aforesolutions.com/ip_products.php).

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**AFORE Solutions Inc.**  
 2680 Queensview Drive  
 Suite 150  
 Ottawa, Ontario, Canada  
 K2B 8J9  
**Tel:** (613)-224-5995  
**Fax:** (613)-224-5410

**For sales information:**  
[afore\\_sales@aforesolutions.com](mailto:afore_sales@aforesolutions.com)

**For general inquiries:**  
[afore\\_info@aforesolutions.com](mailto:afore_info@aforesolutions.com)

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Rev 1.0 February 2009

