

The MEF's mission is to accelerate the worldwide adoption of Carrier-class Ethernet networks and services. In April 2005, the MEF Certification Program was launched to verify compliance of vendor equipment and service provider services to MEF technical specifications through a rigorous series of tests based on MEF approved Test Suites. The MEF Certification Program has continued its steady growth recently reaching a total of 100 certified companies including the world's largest service providers and telecom equipment vendors.



## Program Summary

There are currently four MEF Carrier Ethernet service certifications based on MEF Abstract Test Suites. Certifications include MEF 9, 14, 18 and 21.

- MEF 9 Certification provides compliance to MEF 6.1, 10 and 11 specified required attributes.
- MEF 14 Certification focuses on Carrier Ethernet Services including Service Performance, Bandwidth Profile Rate Enforcement, Traffic Management defined in MEF 10, and complements MEF 9.
- MEF 18 Certification focuses on conformance of equipment for delivering Circuit Emulation Services over Ethernet (CESoETH).
- MEF 21 Certification focuses on Link OAM.

## Key Benefits for Service Providers

- Assurance that vendor equipment complies with MEF Specifications.
- Reduces service costs, charges and time on complex testing between vendors, especially on global installations.
- Establishes solid foundation for Carrier Ethernet ubiquity, & interoperability.

## Key Benefits for Equipment Vendors

- Globally recognized standards and independent validation of service functionality and conformance.
- Significantly reduces testing costs, time-to-market by providing a single universally recognized test and certification process.
- Strengthens product launch by guaranteeing full MEF compliance.

## Key Benefits for the Enterprise

- Assures business users services are MEF compliant and capable of delivering well defined levels of service quality.
- Accelerates Carrier Ethernet deployment at reduced cost.
- Provides IT departments with the knowledge to make informed decisions at greatly reduced risks.

## Testing Process for Equipment Vendors

- A complete set of Certification documents are available to MEF Members.
- Iometrix has a dedicated staff to provide technical support during the preparatory phase of testing.
- Testing generally takes place in the Iometrix lab located in South San Francisco, CA.
- An on-site support engineer is required during the whole testing period
- Testing generally lasts one week and is scheduled at least one month in advance.

## Testing Process for Service Providers

- A complete set of Certification documents are available to MEF Members.
- Iometrix has a dedicated staff to provide technical support during the preparatory phase of testing.
- The Service Provider and Iometrix will agree on field test locations based on the Service Provider's service coverage area (metro, regional, national, international)
- Testing probes are deployed on a number of sites.
- Equipment operating at the UNI (equipment at edge where provider network interfaces customer network to deliver services) must be MEF Certified.
- Testing is scheduled at least one month in advance.

## Certification Program overview

### MEF 9 Certification

**Executes tests against procedures defined in MEF 9 [Abstract Test Suite for Ethernet Services at the UNI].**

The purpose of MEF 9 is to verify that E-Line and E-LAN Ethernet Services delivered by a Carrier Ethernet Network to the Subscriber across the UNI comply with the EVC and UNI Services Attributes defined in MEF 10 Ethernet Services Attributes Phase 1, the Ethernet Services definitions defined in MEF 6.1 Metro Ethernet Services Definitions Phase 1, and MEF 11 specified required attributes.

### MEF 14 Certification

**Executes tests against procedures defined in MEF 14 [Abstract Test Suite for Traffic Management Phase 1].**

The purpose of MEF 14 is to verify that E-Line and E-LAN Ethernet Services delivered by a Carrier Ethernet Network to the Subscriber across the UNI comply with the EVC related Services Performance Attributes, and the UNI related Bandwidth Profiles Services Attributes defined in MEF 10 Ethernet Services Attributes Phase 1 as well as Ethernet Services definitions defined in MEF 6 Metro Ethernet Services Definitions Phase 1.

### MEF 18 Certification

**Executes tests against procedures defined in MEF 18 [Abstract Test Suite for Circuit Emulation Services over Ethernet].** The purpose of MEF 18 is to verify that T1, E1, T3 and E3 Services transported over Ethernet comply with the requirements defined in MEF 8 Implementation Agreement for the Emulation of PDH Circuits over Metro Ethernet Networks and the Circuit Emulation Services Definitions defined in MEF 3 Circuit Emulation Service Definitions, Framework and Requirements in Metro Ethernet Networks. MEF 18 certification speeds implementation and enables full inter-operability and is suitable to many applications; however is key to Mobile Backhaul migration strategies.

### MEF 21 Certification

**Executes tests against procedures defined in MEF 21 [Abstract Test Suite for UNI Type 2 - Part 1 Link OAM].**

MEF 21 defines test procedures based on a combination of requirements for Link OAM described in the UNI Type 2 Implementation Agreement, in clause 57 of [IEEE 802.3-2005] and covers the Link OAM functions defined in MEF 20 UNI Type 2 Implementation Agreement. MEF 21 Certification sets the industry benchmark for Link OAM compliance. Service providers are increasingly opting for Link OAM, reassuring them that certified implementations fully comply with specifications.

## Registering for Certification

Certification is performed by Iometrix, the MEF approved testing lab. Pre-requisites for certification require that a company must be a member in good standing of the MEF to apply for certification. A technical pre-requisite requires that equipment operating at the UNI of the service provider network must be MEF certified equipment. This requirement only applies to equipment operating at the edge of the service provider network at the point where the provider interfaces with the customer to deliver the service. For more details go to <http://www.metroethernetforum.org/certification>.