



# **MEF 3.0 LSO Sonata Certification**

## **Frequently Asked Questions**

## Summary

This FAQ addresses key questions about certification of MEF 3.0 LSO Sonata APIs that enable automation of business-to-business functions between service providers. MEF 3.0 LSO Sonata certification is on track for general availability in October 2021. Two additional FAQs are available on MEF 3.0 LSO Sonata APIs in general and MEF's LSO API Onboarding & Interop Testing Service, which is also scheduled for general availability in October.

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## MEF 3.0 LSO Sonata Certification & Market Context

### 1. What is MEF 3.0 LSO Sonata certification?

MEF 3.0 LSO Sonata certification is a subset of the new MEF 3.0 LSO API certification program formally launched in September 2021. It builds upon MEF’s years of experience providing service, technology, and professional certifications for Carrier Ethernet and SD-WAN services.

MEF 3.0 LSO Sonata certification enables buyers and sellers of wholesale connectivity services to validate that their suite of APIs used for inter-provider business transactions conform to MEF standards. Tested and certified LSO Sonata APIs are a combination of four elements listed below.

1. Buyer or seller
2. Business function
3. LSO Sonata release
4. Product payload

### 2. When can companies begin LSO Sonata certification?

LSO Sonata certification is scheduled for general availability on 1 October 2021.

### 3. What LSO Sonata APIs are certifiable today, and what is in the roadmap?

The table below illustrates the certifiable LSO Sonata APIs that are available and planned for buyers and sellers of CE Access E-Line services. MEF intends to certify LSO Sonata APIs supporting Internet Access and other services in the future.

MEF 3.0 LSO Sonata Certification

Certifiable MEF 3.0 LSO Sonata APIs for CE Access E-Line Services				
API Business Functions Supported for Buyers & Sellers	Certification General Availability & Release			
	R4	Billie	Celine	Dolly
	Available	Oct 2021	Mar 2022	Planned
Address validation		→	→	→
Site query			→	→
Product offering qualification		→	→	→
Quote		→	→	→
Product order	→		→	→
Product inventory			→	→
Trouble ticket			→	→

### 4. What is the market demand for both LSO Sonata APIs and LSO Sonata certification?

New research from MEF indicates a growing number of service providers are embracing LSO Sonata APIs for automation of inter-provider business functions that will enable them to

accelerate service delivery, speed time to revenue, and improve customer experience. The pace of the transition to LSO Sonata APIs has picked up significantly with the latest “Billie” LSO SDK Release in June 2021.

At least 31 companies are either in production with LSO Sonata or intend to be by the end of 2023, including 24 companies by the end of June 2022. Many companies expect to be certified in the coming quarters.

## **5. What are the benefits of LSO Sonata certification?**

MEF research indicates service provider interest in LSO Sonata certification is driven by two key benefits: (1) accelerate partner onboarding and (2) demonstrate industry leadership. Multiple providers have told MEF they expect the value of certification to grow over time – similar to how CE certification has grown in importance.

## **6. Have any companies received LSO Sonata certification yet?**

As of August 2021, three companies – Sparkle, Ufinet, and TIME dotcom – are LSO Sonata-certified for automated ordering of CE Access E-Line as a result of their participation in the pilot certification program.

## **7. How does LSO Sonata certification relate to CE certification and federated networks?**

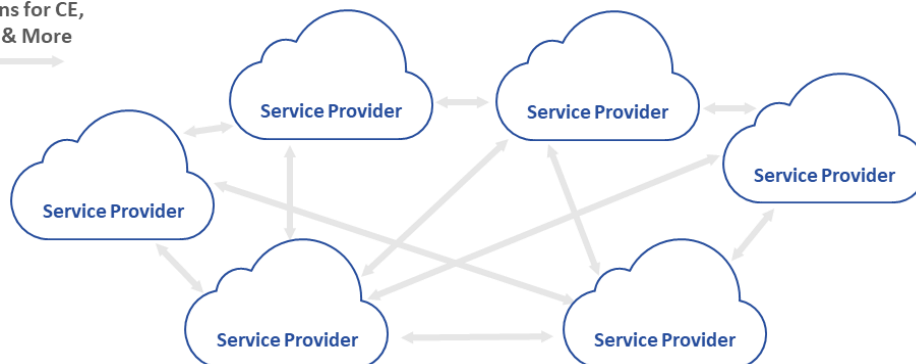
LSO Sonata certification is a logical step for those that have achieved or are planning to pursue MEF 3.0 CE certification, which validates that Carrier Ethernet services have met the highest levels of performance, assurance, and agility available in the industry.

The combination of MEF 3.0 LSO Sonata and CE certifications will play a critical role in accelerating the industry transformation to dynamic services across a global federation of automated networks. Together, these certifications validate that APIs at the LSO Sonata interface and orchestration-ready CE services are able to interact in a seamless, standardized manner between business partners worldwide.

Participation in the emerging federation of automated networks is particularly valuable because it creates an opportunity to provide higher margin, highly differentiated inter-provider services that leave behind lower margin fixed-bandwidth services.

## LSO Sonata & Federated Networks

LSO Sonata APIs Automate Business Functions for CE, Internet Access & More

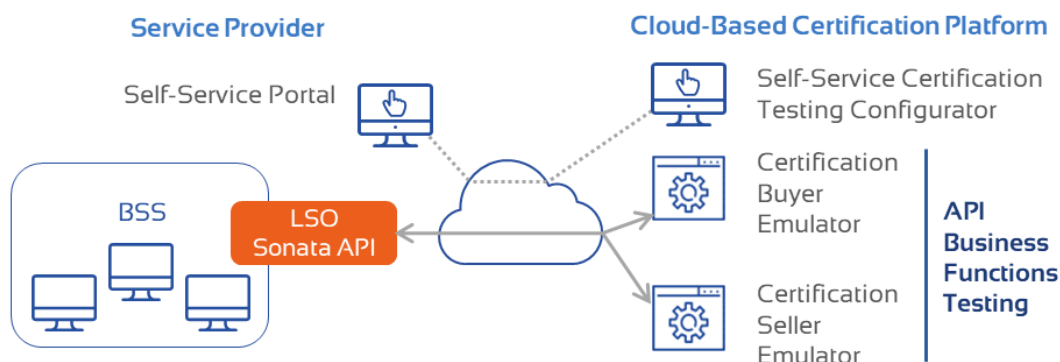


## Certification Platform & Process

### 8. How is LSO Sonata certification delivered?

Certification is delivered via a cloud-based platform that dynamically generates buyer & seller emulators based on specific service provider input to deliver a self-service testing experience. Iometrix is MEF's Authorized Test and Certification Partner for both MEF 3.0 LSO Sonata APIs and MEF 3.0 CE.

### LSO Sonata Certification Platform



### 9. What standard is used to test compliance?

MEF 3.0 LSO Sonata certification (Billie Release) is based on the [MEF 92.1 LSO Cantata/Sonata Test Requirements draft standard](#). Tests are organized into easy-to-understand scenarios that are built to map to the full list of test cases defined in the standard. Test scenarios include both positive and negative test cases to ensure the integrity and robustness of the implementations being tested. Service providers can select options they have implemented, and this information is then used by the Iometrix Lab in the Sky platform to dynamically generate buyer or seller emulators that automatically test the API and its pre-selected options to validate compliance with the MEF 92.1 draft standard.

## 10. What are the key steps in the certification process?

For MEF member companies, the entire process is carried out through the lometrix Lab in the Sky cloud-based platform, including: opening an account, submitting an order, activating a certification test project, testing and retesting as required for up to six months, and finally submitting results for validation.

## 11. What is the process for executing tests?

APIs are tested via emulators that interact with the API code that the service provider is seeking to certify. Buyer emulators are used to test seller APIs and vice versa. Emulators are generated automatically by Lab in the Sky based on input provided by the service provider, such as the type of address that is supported by their API. The process allows service providers to test and retest their API code for up to six months. When all test scenarios pass, the service provider can submit for validation and certification.

## 12. How long does the certification process take?

The length of time to complete certification of an LSO Sonata API essentially depends on the readiness of the code submitted by the provider. Test runs on the Lab in the Sky platform are sub-second and can provide developers with hundreds of error codes to help them substantially accelerate the total develop and test time.

## 13. Is MEF 3.0 CE certification required before beginning LSO Sonata certification?

The new policy in effect does not require prior Carrier Ethernet services certification.

## Certification Ordering & Pricing

### 14. How do companies get started with LSO Sonata certification?

Contact [LSOCert@mef.net](mailto:LSOCert@mef.net) and [Info@lometrix.com](mailto:Info@lometrix.com) to get started with LSO Sonata certification. Service providers order certification online through the Lab in the Sky portal from lometrix. The portal has a description of all the steps from ordering to invoicing.

### 15. What is the LSO Sonata certification pricing model?

The LSO Sonata certification pricing model is in many ways similar to the model for MEF 3.0 CE services certification that is already familiar to most providers. A certification testing fee is charged for each LSO Sonata API and includes up to six months of testing using the automatically generated buyer/seller emulators and extensive debugging capabilities. When a service provider orders multiple APIs or updates to already certified APIs, discounts are applied depending on the volume of LSO Sonata API certification tests ordered. Details on pricing and applicable discount schedules are available from lometrix.



## LSO Sonata Certification Relation to LSO API Onboarding & Interop Test Service

### 16. How does LSO Sonata certification relate to the LSO API Onboarding & Interop Test (OIT) Service?

The goal of MEF 3.0 LSO Sonata certification is to provide MEF member service providers with a structured way to validate that their APIs strictly conform to the same well-defined standards implemented by their certified partner providers. Certification aims to build a community of certified providers based on the same official MEF standards.

The purpose of the MEF OIT Service is to help service providers achieve and maintain interoperability for their LSO Sonata implementation with those of their partners. The OIT Service is a tool that supports the establishment and operation of standard APIs between partners.

MEF 3.0 LSO Sonata certification and the OIT Service differ in that they address different stages of the LSO Sonata adoption lifecycle, and they complement each other in that they both support the same test requirements in the [MEF 92.1. draft standard](#).

### 17. Do you expect companies to use the OIT Service before starting the certification process or could a company certify before entering production with a specific partner?

Some service providers may use the OIT Service prior to certification, while other providers may pursue certification before using the OIT Service and/or entering production with a partner.

A provider could use the OIT Service to test their implementation against the default configurations that ship with the service as well as partner-specific configurations. This ensures a high degree of confidence in aligning to MEF standards before embarking on certification.

On the other hand, LSO Sonata certification could be used first to validate a service provider's API implementation based on MEF standards before using the OIT Service and engaging with specific partners.

Regardless of the path, MEF's intention is to provide options to help service providers achieve their implementation and marketing goals.

### 18. How much work is required for certification if a company has successfully used the OIT Service to enter production?

Providers typically only implement a subset of functionalities defined by the MEF 92.1 draft standard (e.g., specific LSO Sonata features/APIs, specific sub-features, specific product offerings). This subset is determined based on what is needed to support pairwise negotiation with partners. The OIT Service aims to support significant coverage for this same subset of functionalities for pairwise interop testing. Therefore, testing carried out using the OIT service should provide significant coverage for the same test cases a provider needs to pass to achieve

certification. Additional effort should only be needed for test cases not tested using OIT, but which are supported in a provider's implementation.

## Certification Report & Registry

### 19. What is included in the final LSO Sonata certification report?

The LSO Sonata certification report is comprehensive and immediately available to successfully certified companies. The report shows the following:

- Certified LSO Sonata API
- Authentication method used
- Test scenarios submitted for testing
- Test case IDs, references to MEF standards, and descriptions of the test case objectives, procedures, and pass/fail criteria.
- Test Case Dashboard that displays all test cases “passed.”

### 20. How does MEF recognize companies that have achieved LSO Sonata certification?

Companies that achieve MEF 3.0 LSO Sonata certification appear in the [LSO API Certification Registry](#) that has been enhanced to promote these new certifications.

## More Information

### 21. Who should I contact for more information?

Contact [LSOCert@mef.net](mailto:LSOCert@mef.net) and [Info@lometrix.com](mailto:Info@lometrix.com) for more information on LSO Sonata certification.



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