

CableLabs[®]

DOCSIS[®] 4.0 CM Certification Program

Q&A Session

CableLabs

June 28, 2023

Agenda

- DOCSIS 4.0 CM Certification Program Overview
- DOCSIS 4.0 CM Certification Program Logistics
- Open Q&A

Program Overview

DOCSIS 4.0 CM Certification

Industry Objective

**Deploy DOCSIS 4.0 CMs at scale
as soon as possible**

CableLabs Role

- Ensure DOCSIS 4.0 CMs are interoperable with variety of DOCSIS 3.1 and DOCSIS 4.0 CMTS systems
 - Done through testing specification compliance and direct interoperability testing, resulting in CableLabs Certification
- Goal for CableLabs and Kyrio is to help vendors achieve Certification for their devices
 - Helps to enable large scale deployments

Getting There ASAP

Two key changes relative to DOCSIS 3.1 Certification

Success-Based Testing
and
2-for-1 Test Results

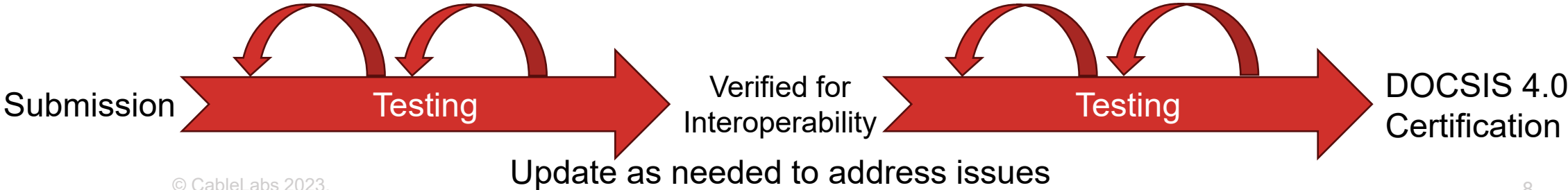
Success-Based Testing

- Iterative approach
 - As issues reported to submitter as they are found in device testing
 - Submitter makes updates if/as needed to address issues
 - Regression testing followed by new testing
 - Continues until no more fixes are needed (determined by Cert Board)
- Key point: as an introductory offer, no fee for these updates
 - Unlike standard process for D3.1, which charges update fee



2-for-1 Test Results

- Testing conducted in two phases
 - Phase 1: DOCSIS 3.1 backward compatibility testing (testing against D3.1 CMTSs)
 - Phase 2: DOCSIS 4.0 specific testing (testing against D4.0 CMTSs)
- When Phase 1 is completed successfully
 - Devices added to “Verified for Interoperability” list on CableLabs website for D3.1
- When Phase 2 is completed successfully
 - Devices added to “Certified/Qualified” list on CableLabs website for D4.0
- Net effect: single submission with 2 published results



Program Logistics

DOCSIS 4.0 CM Certification

Certification Process Overview



Five Steps to Achieving Certification

REGISTER

1

Register for access to the Product Submission Tool (PST) and CableLabs documents

PLAN

2

Understand what you need to do to get your device certified

SUBMIT

3

Submit your application and devices to be tested

DOCSIS 4.0 submission starts June 26, 2023

TESTING

4

Test your device to ensure that it is compliant with the specification

BOARD APPROVAL

5

Upon completion, your device results are sent to the Certification Board for approval

Online Application Submission



CableLabs® Certification

Home / CableLabs® Certification

CableLabs® Certification for DOCSIS® and PacketCable™

Developed in cooperation with cable operators and cable equipment manufacturers, this leading Certification program is crucial for ensuring interoperability, maintaining quality standards, instilling customer confidence, and promoting collaboration and innovation within the cable industry. It serves as a mark of excellence and facilitates the success of companies operating in the ecosystem. A device that is "CableLabs Certified" or "CableLabs Qualified" has passed a series of compliance tests and has demonstrated interoperable functionality with other CableLabs Certified devices.

[NEW CUSTOMER: REGISTER NOW](#)

[EXISTING CUSTOMER: SUBMIT NEW DEVICE NOW](#)

Process View



CableLabs Certification for DOCSIS 4.0 compliance is here!

To support the rollout of this new technology, CableLabs and Kyrio have incorporated several innovations into the certification testing process for DOCSIS 4.0 devices. Two of the key highlights include Success-Based Testing and 2-for-1 Test Results.

Success-Based Testing

As an introductory offer, devices submitted for DOCSIS 4.0 Certification will be tested using an iterative approach which permits devices to be updated as many times as necessary to achieve CableLabs Certification without additional fees. This allows device manufacturers to submit devices as early as possible without risk, rapidly address issues, and therefore demonstrate specification compliance and interoperability as soon as possible.

2-for-1 Test Results

Devices submitted for DOCSIS 4.0 Certification testing will be tested both for compliance to the DOCSIS 4.0 specifications as well as for interoperability with DOCSIS 3.1 networks in order to support some early deployments. Once submitted, initial device testing will focus on verifying operation on DOCSIS 3.1 systems. After that testing is completed successfully, devices will be listed on the CableLabs website as Verified for Interoperability for DOCSIS 3.1. Devices will then be tested against DOCSIS 4.0 systems to verify compliance with DOCSIS 4.0 specific requirements to become CableLabs Certified for DOCSIS 4.0 compliance, providing 2 test results in a single submission.

Supporting Documents

CableLabs®



[About](#)

[Testing Services](#)

[Software Services](#)

[Security Services](#)

[Resources](#)

[Connect with Kyrio](#)

Resources and Documents

The following materials include information to prepare and submit for certification as well as links to the DOCSIS and PacketCable engineering documents. Your company's [CableLabs](#) login is required to access certain CableLabs documents.

DOCSIS Customer Premise Equipment (CPE) / Headend Equipment/Distributed Architecture ^

[Understand CableLabs' Levels of Certification \(Definitions\)](#)

Start here to understand Certification, Verification and Qualification.

[Certification Guidelines](#)

A full explanation of CableLabs Certification submission requirements.

[DOCSIS Specifications](#)

The full DOCSIS Specification can be viewed here.

[Digital Certificates: securing the device](#)

How and why to create and download the Test and Production certificates.

[CableLabs Certification Wave Schedule](#)

Understand when your device can be submitted and what version of the Specification it will need to meet.

[DOCSIS 4.0 Certification Testing FAQ](#)



Fees



Certification Fees

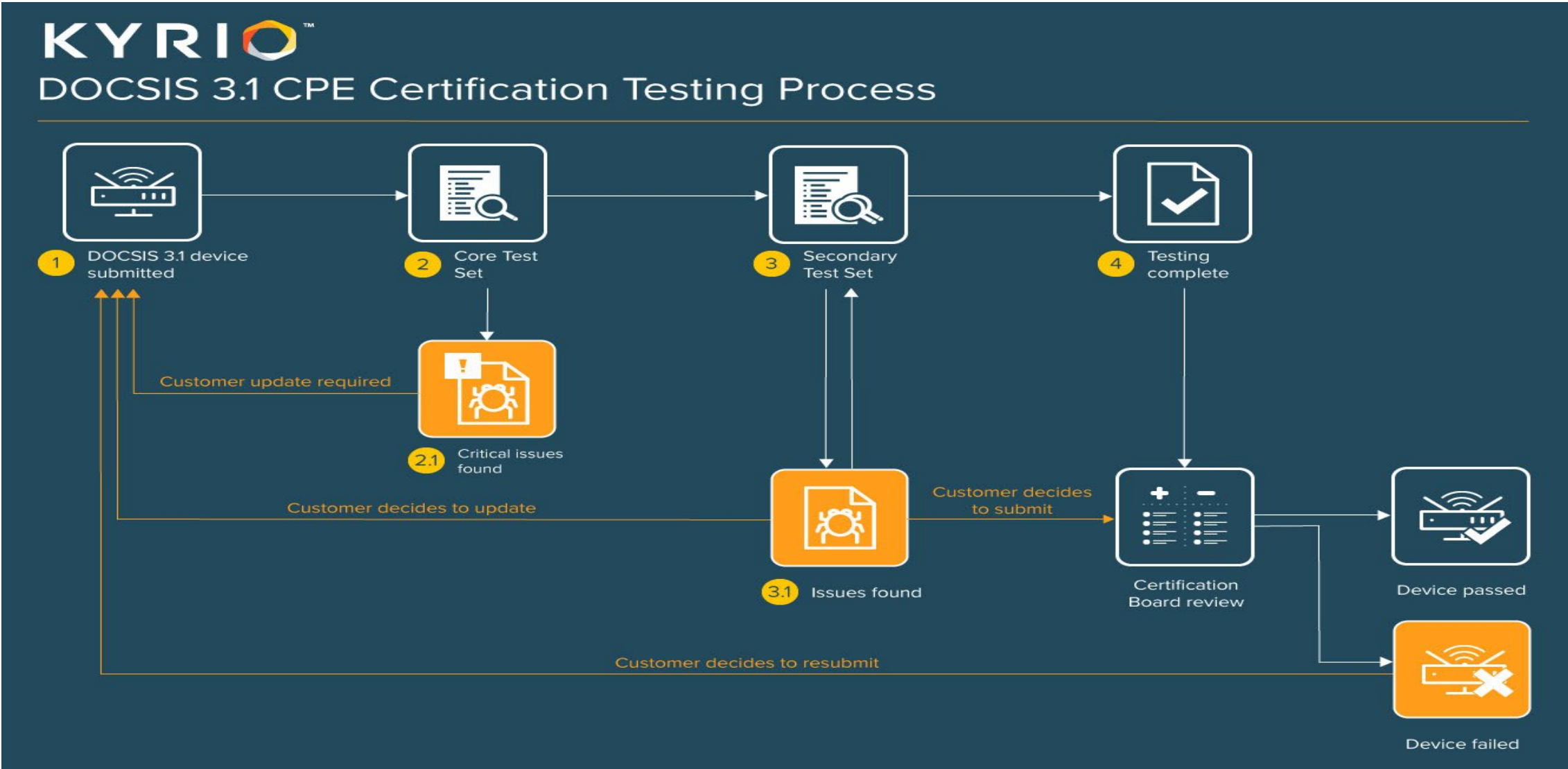
Certification Fees



Submission (May include VFI and/or eCMM)	Initial Submission	Device Update	Core Phase Update
DOCSIS® 4.0 Cable Modem (FDD or FDX)	\$209,000	N/A	N/A
DOCSIS® 4.0 Cable Modem (combination FDD and FDX)	\$262,000	N/A	N/A
DOCSIS® 3.1 Cable Modem	\$189,000	\$84,000	\$70,000
DOCSIS® 3.0 Cable Modem	\$150,000	\$39,000	
EuroDOCSIS® 3.0 Cable Modem	\$150,000	\$39,000	
PacketCable™ 1.5 or EuroPacketCable™ 1.5	\$60,000	\$60,000	

Note: contact us at info@kyrio.com for FlexTest pricing

D3.1 Process stays the same



Need Help?

Labs@CableLabs.com

Labs@Kyrio.com

We are here to help you succeed at certification!

Open Q&A

DOCSIS 4.0 CM Certification



DOCSIS 4.0 Certification Program Q&A Session

CableLabs

Matt Schmitt: m.schmitt@cablelabs.com

Jason Lauer: j.lauer@kyrio.com

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