

# Accelerating the 5G Ecosystem with Dell Technologies Open Telecom Ecosystem Lab

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DELL Technologies

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# Needs of the Next Generation Telecom

## Technology Acceleration



- Speed up the development and deployment of open, disaggregated, and standards-based technology solutions
- Develop and deliver the high-quality connectivity solutions

## Greater Flexibility



- Implement 5G architectures rich array of dynamic and programmable network, edge and cloud assets
- Transform network with Cloud, NFV, and open technologies that are at the foundation of 5G

## New Opportunity



- Collaborate across suppliers, developers, integrators and others to discover, design and deploy new technologies and services
- Use 5G technology for the development of new applications and markets for consumers and enterprises

High **risk**, high **reward**

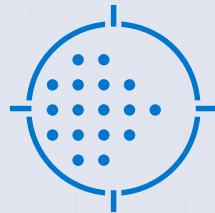
# Introducing The Open Telecom Ecosystem Lab

Driving innovation and choice in the creation of an open and modern telecom ecosystem

CSPs and vendors **working together** to certify solutions and co-create services



**De-risk** the telecom transformation process



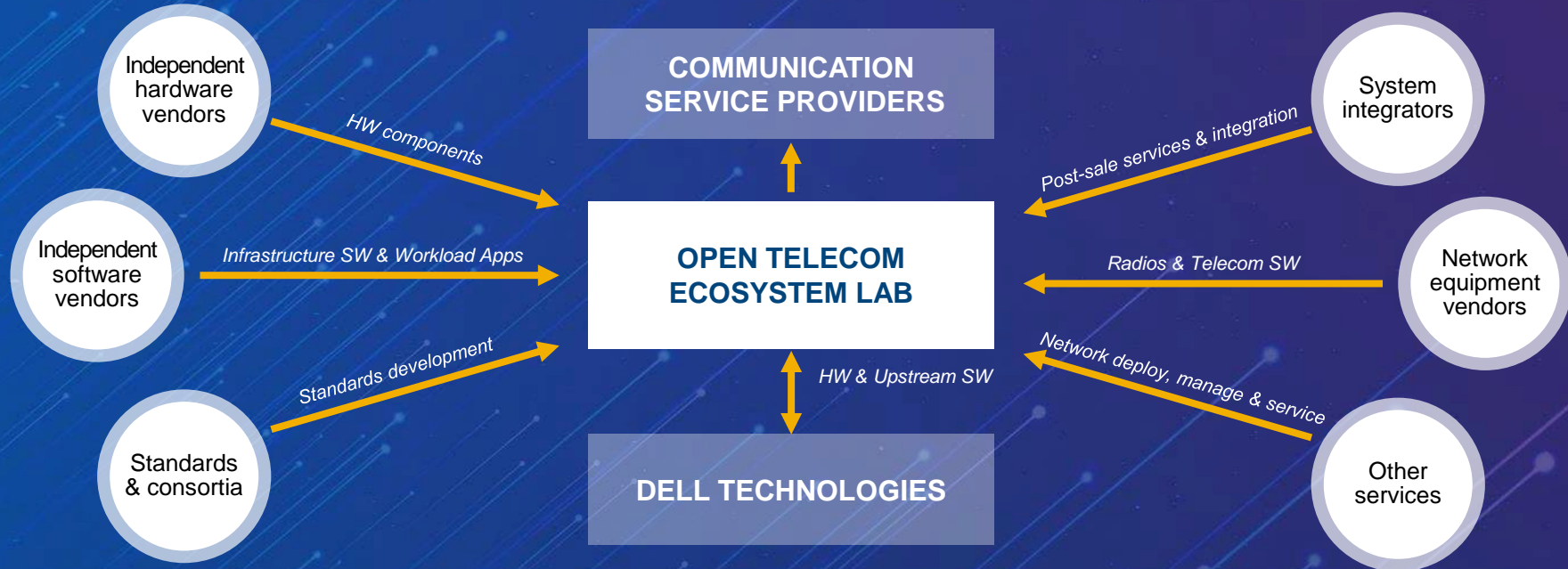
**More choices**, faster innovation and value creation



Dell wants to be the trusted partner in the industry's transformation journey

# The Open Telecom Ecosystem Platform

## Realizing telecom industry collaboration



Accelerate and simplify the creation of an **open and modern telecom ecosystem**



# Open Telecom Ecosystem Lab

Complete OTEL VR Experience



# OTEL Benefits Between Dell Technologies and You

Broaden our collective relevance and increase the telecom market opportunity

## Our Businesses

Expand our combined telecom development opportunities by being exposed to new perspectives, use cases, and expertise

## Our People

Strengthen the joint solution offerings each of our companies brings to the CSPs

## Our Customers

## With Quantifiable Customer Outcomes

↓ T2V

↓ RISK

↑ MTBF

↓ TCO

↑ ROI

# Dell Technologies Telecom Partner Self-Certification

Accelerating the open and modern telecom ecosystem

**DELL**Technologies

**TELECOM CERTIFIED**

**DELL**Technologies

# Expanding the 5G partner ecosystem

- The architecture of 5G networks is becoming more virtualized, open, and programmable, allowing new vendors and best-of-breed components to proliferate
- Innovative start-ups and smaller ISVs not only need access to the latest telecom equipment to validate their solutions but also need access to CSPs and Enterprise customers

**ISVs want to increase brand credibility**

**ISVs want to remove barriers to enter telecom**

**ISVs want to increase revenue opportunities**





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# Introducing Dell Technologies Telecom Partner Self-Certification

## Program Summary

### What the program is

- A program for Independent Software Vendors (ISVs) and other partners to Self-Certify their solutions on Dell Technologies hardware platforms
- Verifies that their software is ready for deployment on Dell hardware across several standardize solution stacks
- A simple and transparent process for validating their solutions on carrier-grade Dell hardware configurations and OS layers - all based in the Dell Technologies Open Telecom Ecosystem Lab

### What the program will achieve

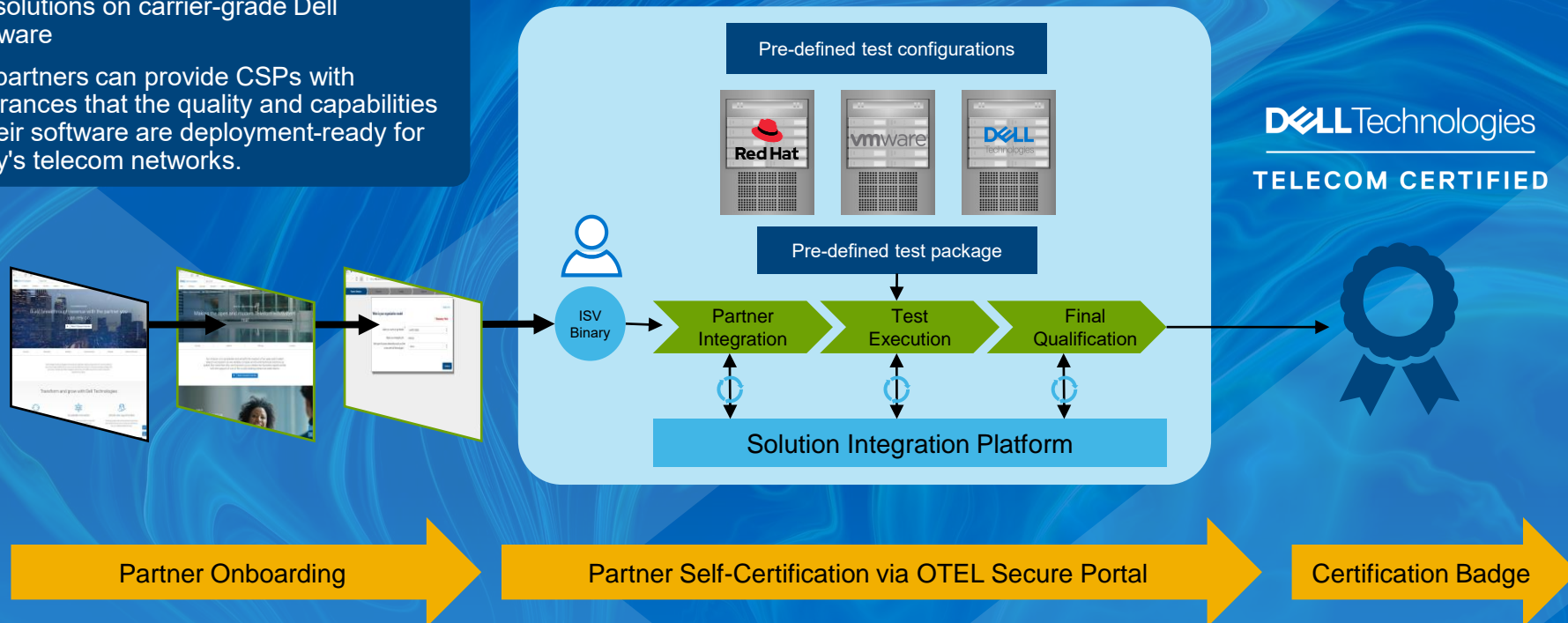
- ISV partners can provide CSPs with assurances that the quality and capabilities of their software are deployment-ready for today's telecom networks
- “Dell Technologies Telecom Certified” badge issued for all ISV and partners that successfully complete Self-Certification

# Telecom Partner Self-Certification Process Overview

Validating ISV software is ready for deployment on Dell Technologies hardware

Self-Certification is an automated, simple, and transparent process for validating ISV solutions on carrier-grade Dell hardware

ISV partners can provide CSPs with assurances that the quality and capabilities of their software are deployment-ready for today's telecom networks.



Start your journey to become  
Dell Technologies Telecom Certified



# Partner Self-Certification Test Lines

Dell Servers

Dell Switches

Dell Storage



Partner selects one of three test lines for Self-Certification test execution.

# Partner Self-Certification Testbed Sample Equipment

## PowerSwitch Open Network

### PowerSwitch S5232-ON

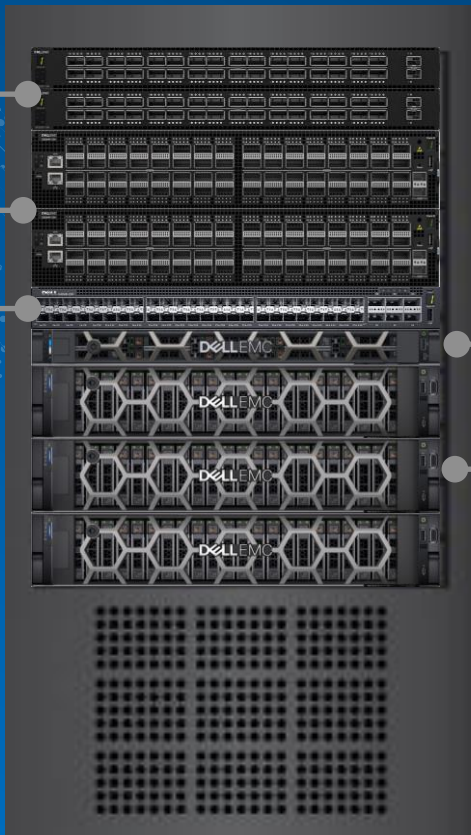
Spine component of Leaf-Spine network topology for internal networks that communicate with the nodes that form clusters

### PowerSwitch Z9264F-ON

Leaf component of Leaf-Spine network topology for internal networks that communicate with the nodes that form clusters

### PowerSwitch S4048T-ON

Top-of-rack (ToR) switch purpose-built for applications in high-performance data center and computing environments.



## PowerEdge Servers

### PowerEdge R640

Dual-socket platform for dense scale-out data center computing and storage used for Cluster System Admin Host (CSAH) and deployment server

### PowerEdge R750

Dual-socket / 2U rack server to address application performance and acceleration used for controller and worker functions

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# Partner Self-Certification Confirmation



## What Dell Technologies Provides You for Promotion

- Issuance of “Dell Technologies Telecom Certified” badge
  - Use in sales and marketing material
  - Post on partner web site
- Dell Technologies branded assets to be used on social media
- Test description document
- Partner specific test report

## What Dell Technologies does for Promotion

- Posting of partner brand on Dell Technologies TSB Partner page
- Social media announcement of successful Self-Certification
- Inclusion in Dell Technologies Self-Certification portfolio catalog for our marketing and sales to use

# Self-Certification Pilot Partners

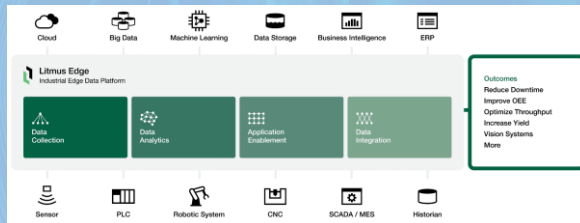


Intel Edge Insights for  
Industrial

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**EDGE INSIGHTS**  
FOR INDUSTRIAL



Litmus Edge Data  
Platform for Industry 4.0



Versa Secure SD-WAN



Secure SD-WAN

SOFTWARE-DEFINED WIDE AREA NETWORKING

# Intel: Self-Certification Pilot

The Intel logo, featuring a small blue square above the word "intel" in a bold, black, sans-serif font.

intel.  
**EDGE INSIGHTS**  
FOR INDUSTRIAL

Intel® Edge Insights for Industrial, a middleware software optimized for AI deployments at the edge, is the first Intel software platform to receive self-certification and ready for deployment on Dell infrastructure. We believe the great features that Edge Insights for Industrial has, such as video and time series ingestion and inference, will allow Dell's customers to deploy AI capabilities quickly and with excellent performance on Intel-based Dell infrastructure

# Intel® Edge Insights for Industrial



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# Market Opportunities and Challenges Co-exist for AI at the Edge

**\$ 65 BILLION**  
global AIoT  
market by  
2025

**39%** CAGR<sup>1</sup>

**30%**  
OF NEW INDUSTRIAL  
CONTROL SYSTEMS  
WILL INCLUDE  
**ANALYTICS AND  
AI-EDGE INFERENCE  
CAPABILITIES**  
BY 2025, UP FROM LESS  
THAN 5% IN 2021<sup>2</sup>

#### Sources:

- 1. Global Artificial Intelligence of Things (Technology & Solutions) Markets 2020-2025 Oct 2020
- 2. Resource: Market Guide for Edge Computing Solutions for Industrial IoT, Oct 2020
- 3. Artificial Intelligence and Machine Learning Projects Are Obstructed by Data Issues. May 2019 research by Dimensional Research



# Challenges Building AI Solutions for Industrial Use Cases

## MARKET GAPS WITH EXISTING SOLUTIONS



- Locked and proprietary, non-flexible
- High total cost of ownership
- Scalability performance requirements
- Data privacy
- Lack of general purpose platform for multiple analytics use cases

## SOLUTION PROVIDERS' PAIN POINTS TO BUILD



- Lack of flexibility and modularity in base platform
- Opening access to data and third-party apps through microservices architecture
- Security requirements
- High barrier to develop a solution with heavy coding environment and complicated open source SWs

## THE MARKET SEEKS

A flexible base middleware stack on which to build Industrial use cases at ease

# Why Intel® Edge Insights for Industrial?



Open and modular –  
microservices architecture



Optimized performance on Intel  
processors and platforms



Cloud Agnostic

## Intel® Edge Insights for Industrial (Intel® EII)

enables you to easily deploy, optimize and execute  
AI applications and algos at the edge

- ✓ Data ingest, inference, storage, publishing and visualization
- ✓ Both Video and Time Series data
- ✓ Capitalizes on Intel® Distribution of OpenVINO™, OneAPI, DLStreamer, MediaSDK OpenVINO, and EVAM

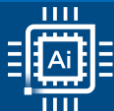


Optimized Performance



OpenVINO™

1  
oneAPI



Ease of AI  
deployment



Faster time to market



Security

# What this means for you



## Improve brand credibility

Use “Dell Technologies Certification” badge as a verification



## Remove barriers to enter telecom

Extend your labs into our labs to access the latest Dell Technologies HW platforms



## Increase revenue opportunities

Enable higher-value business outcomes

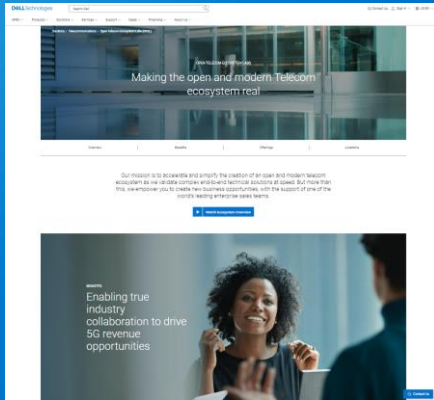
Giving assurance to CSPs that ISV partner software is Dell Technologies platform ready & will support key telecom capabilities

Providing as much ease and transparency for ISVs to validate workloads in OTEL leveraging OTEL lab resources and using automated testing tools with our Solution Integration Platform

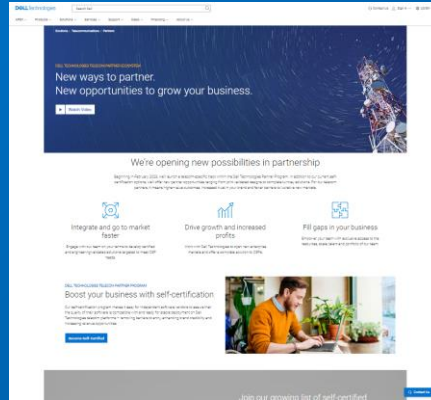
Delivering ISV solutions with better quality and more features that can be exposed to more customers through Dell Technologies sales channels

# Start your journey to become Dell Technologies Telecom Certified

**DELL**Technologies  
**TELECOM CERTIFIED**



Dell Technologies  
Open Telecom  
Ecosystem Lab Page



Dell Technologies  
Telecom Partner Page

A screenshot of the Dell Technologies Telecom Partner Self-Certification Request Form. The header includes the Dell Technologies logo and navigation links. The main content area features the title "Telecom Partner Self-Certification Request Form" and a brief description of the program. Below this, there are several input fields for registration information, including "Company Legal Name", "Company Address", "Company City", "Company State / Province", "Company Country", "Company Post code", "Company Website URL", "Engineering contact name for Partner Self-Certification", "Please provide your email", "Engineering contact mobile number for Self-Certification", and "Name of company officer authorized to sign MOUs and other contracts".

Dell Telecom Partner  
Self-Certification  
Program Registration

# Q&A



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