



The Industrial Internet Consortium: Accelerating the Growth of the Industrial Internet Globally

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Industrial Internet Consortium



2018 工业互联网峰会



The Industrial Internet Consortium

Vision: The Industrial Internet Consortium (IIC) is the world's leading organization transforming business and society by accelerating the Industrial Internet of Things (IIoT).

Mission: Our mission is to deliver a trustworthy Industrial Internet of Things (IIoT) in which the world's systems and devices are securely connected and controlled to deliver transformational business outcomes.

>250 Member Organizations
Spanning 33 Countries



Released 2016-12

Business Strategy and Solution Lifecycle



Business Strategy



Solution Lifecycle



Project Toolkit

Released 2015-06

IIRA

Security Framework

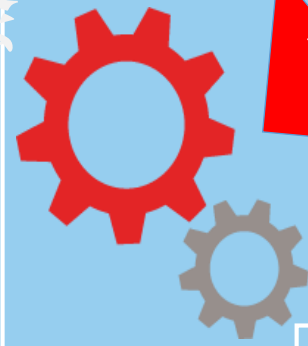


Released 2016-09

Requirements for Standards



Topics and Themes



Connectivity:
Released 2017-03

Business Model,
Project Mgmt,
Practices



Project Specifications & Reports



Architecture & Design



Ind'l Analytics:
Released 2017-09

Testbeds & Projects

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IIC

General IIoT Ecosystem

Connectivity Framework

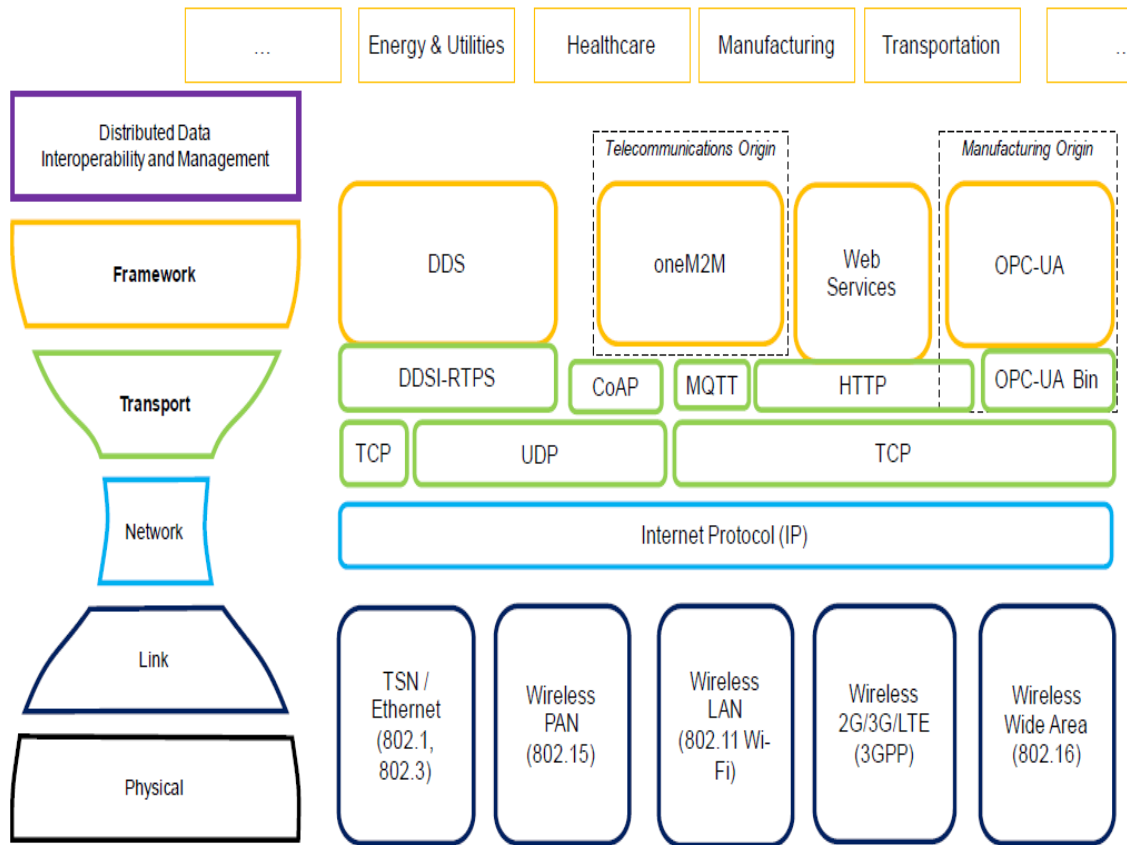


Figure 7-1. IloT connectivity standards

- Maps the rich landscape of IloT connectivity
- Clarifies the IloT connectivity stack
- Offers an assessment template for evaluating and categorizing any connectivity technology and determining its suitability for the system at hand
- Defines a connectivity reference architecture for data sharing and criteria for core connectivity standards
- Provides a catalog of IloT connectivity standards and defines criteria to help identify core connectivity standards

Industrial Analytics Framework

- Industrial Analytics is the process of collecting data and evaluating it to discern meaningful patterns that can deliver useful, actionable insights.
- The [framework](#) provides guidance and assistance for decision makers in development, documentation, communication and deployment.
- It outlines the concepts, components and characteristics of a viable analytical system and what is required from business and technology to perform successfully in an industrial setting.

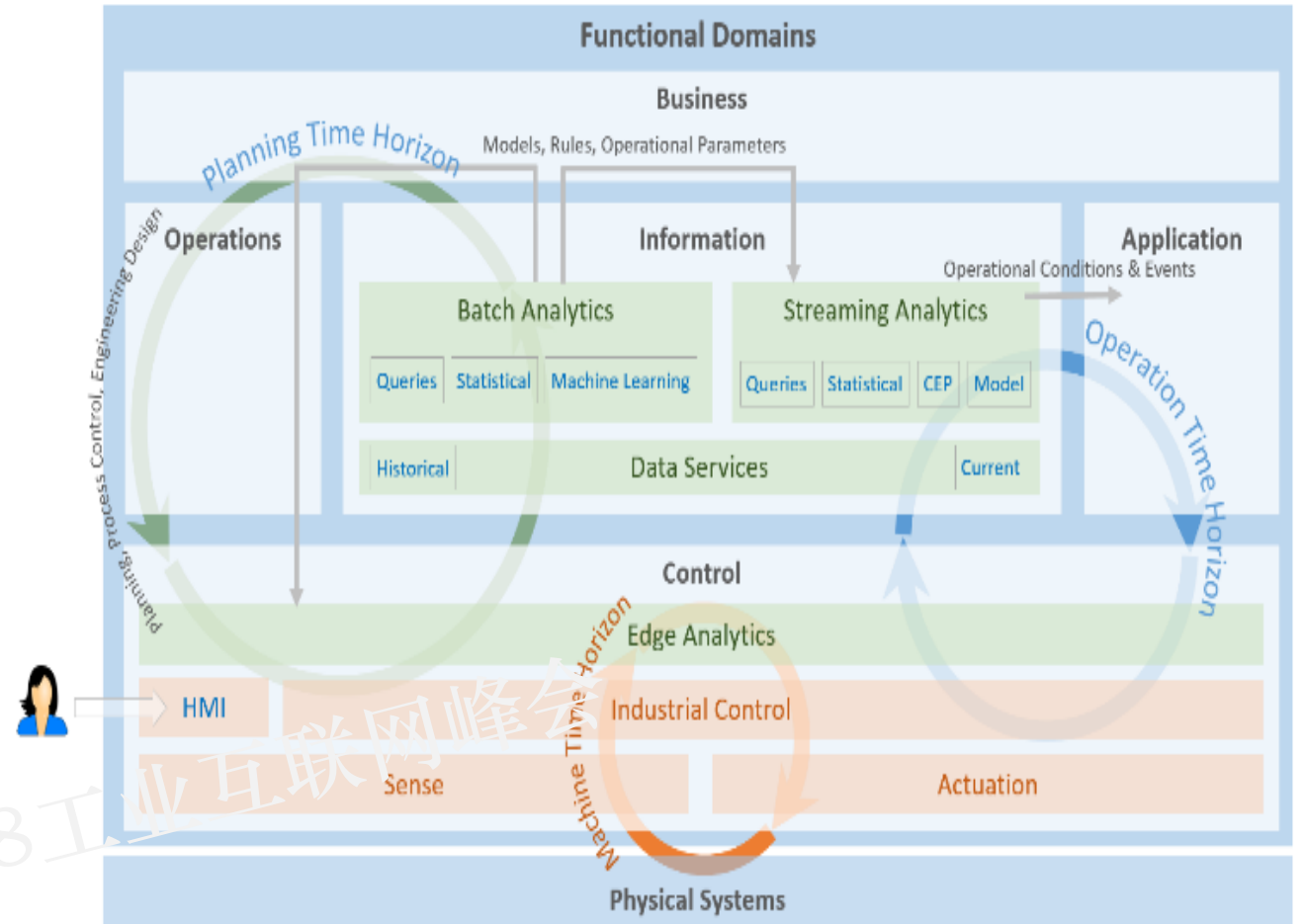


Figure 4-1. Analytics Mapping to the Industrial Internet Reference Architecture



Current Publicly Announced Testbeds



Asset Efficiency Testbed



Condition Monitoring Testbed



Connected Care Testbed



Edge Intelligence Testbed



FA PaaS Testbed



FOVI Testbed



High-

- Aerospace & Defense
- Agriculture
- Buildings & Facilities
- Energy & Utilities
- Healthcare
- Manufacturing
- Public Safety
- Telecom & IT
- Transportation & Shipping



INFINITE Testbed



Intelligent Urban Water Supply



Microgrid Testbed



Precision



Smart Airline Baggage Management



Smart Energy Management Testbed



Smart Water Management Testbed



Time-Sensitive Networks Testbed



Track and Trace Testbed



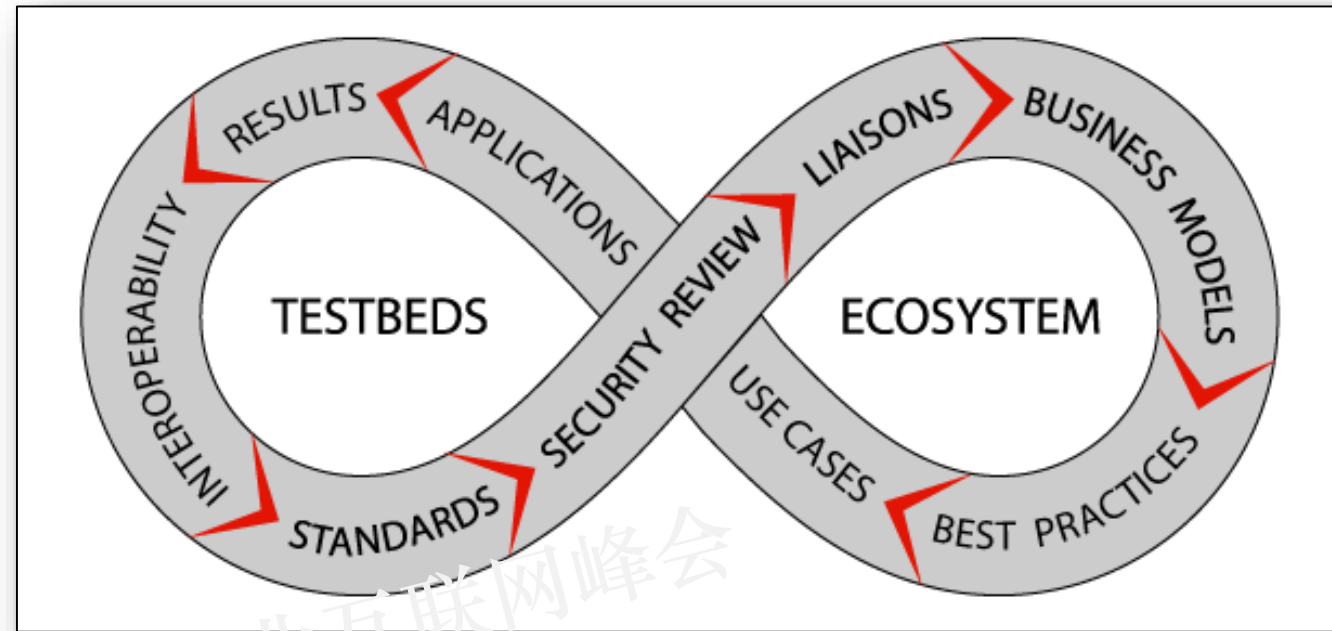


Why we build testbeds

Testbed results are the cornerstones of a feedback loop from concept to reality and back to guidance for further innovation.

- To think through innovations...
- To test new applications, processes, products, services and business models...
- To ascertain usefulness and viability before going to market

i.e. work products as testbed guidelines and vice versa



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Results

Standards contribution

- IEEE 802.1, IEEE 802.3
- Use liaisons to influence standards
- Ecosystem development
- Integration across industries



Time Sensitive Networking Testbed

The Problem

Devices and data hard to access because of

- non-standard networks
- air-gapped networks

Our Solution

Enhances Ethernet to

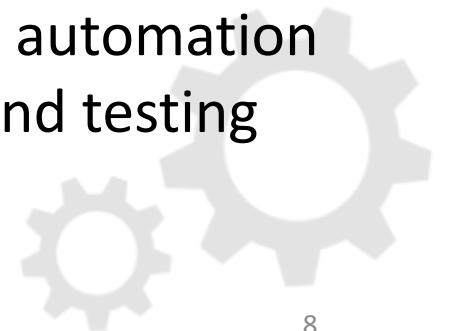
- “shape” data flows
- guarantee latency
- secure and reliable data delivery

Key Benefits

- Converged networks save operating costs
- Simple system operation
- Open ecosystem

Team

Over 20 organizations from chip makers, switches, automation devices and testing products



Results

Use case experiences

- Bluelight,
- First responder,
- SPARKS,
- Flood event advisory service

Business model innovation

- Identified new business models and organizational transformations that aid IIoT adoption

Infinite Testbed

The Problem

- Large amounts of data
- in individual sectors
 - across sectors
- Cross-sector data flows will grow exponentially

Key Benefits

- Improved ambulatory transport times
- Enhanced power grid security
- Enables future use cases

Our Solution

A software-defined network across multiple vendors

Team

- Dell Technologies
- Cork Institute of Technology
- Asavie





Learning & cooperation leads to standards development



Testbeds

Liaisons + ecosystem

Requirements for Standards



Loc
Dev

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International Cooperation with CHINA



MOU between IIC-CAICT



2017 Industrial internet summit



International data analysis workshop



2017 International Industrial Internet Conference(Shanghai)





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Thank you

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Things are coming together

