

FactoryNext™ Lab as a Service (LaaSS)

Accelerating Digital Transformation | Streamlining OT PDLC Journeys



Purposeful. Agile. Innovation.

Global manufacturers and product OEMs continue to face significant challenges in implementing Industry 4.0 use cases and driving accelerated next-gen product releases. With rapid advancements in technology and specifications, they require a range of diverse Operation Technology (OT) systems infrastructure to architect, develop, test, prove, and implement manufacturing solutions and systems integrations.

The growing demand for rapid next-gen product releases and the accelerating need for support from Machinery and OT Security OEMs further calls for rapid OT validation services across manufacturing scenarios – without a compromise in quality. Products must be tested and validated at all points of the OT hardware and software infrastructure. OT Security Product OEMs also expect a reliable infrastructure to reliably test and validate their software tools across key activities like packet captures, vulnerability management, packet dissection, and file parsing.

As a result, we are witnessing a rise in the need for deep expertise in OT and infrastructure for ensuring robust and reliable product testing paradigms.

WHAT WE OFFER

L&T Technology Services' (LTTS') **Factory Next™ Lab** provides cutting edge solutions designed to empower OT device manufacturers and manufacturing OEMs worldwide. By enabling next-gen product development and facilitating seamless solution deployment and testing, we help clients stay ahead in the competitive landscape. Our offerings minimize the need for additional capital investments while fostering extensive experimentation with Industry 4.0 use cases. The approach ensures enhanced operational excellence, and drives unmatched efficiency and innovation across the manufacturing value chain and Product Development Life Cycle (PDLC) journey.

The Factory Next™ Lab provides a comprehensive suite of services, including:



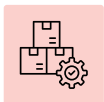
OT Applications Development:

Accelerating the development, testing, and validation of operational technology (OT) applications tailored to the client's specific needs



OT Security Product Development:

Capturing thorough PCAPs (Packet Capture), identifying threats and vulnerabilities, and ensuring robust embedded security across OT security products



Prototype Testing:

Enabling prototype bench testing for new products and integrating with other manufacturing OT systems to ensure compliance with performance standards before full-scale production



Multi-Site Rollout:

Driving remote customization and deployment of manufacturing solutions across multiple factories for ensuring a consistent implementation



24/7 Steady State Support:

Ensuring continuous support toward maintaining optimal operations and addressing potential issues in a proactive manner



Data Connectivity with Multi OEM Controls:

Offering seamless integration and communications across various OEM systems for enhanced operational efficiencies



Shop-Floor to Top-Floor Architecture PoC:

Demonstrating the capability to connect shop floor operations with top-level management through proof-of-concepts, with enhanced real-time data flow and decision-making



Cloud-Enabled Solutions:

Facilitating Industry 4.0 use case design, development, testing and validation before deployments by leveraging a comprehensive suite of cloud environments, including Azure, AWS, and GCP

KEY DIFFERENTIATORS

150 ICS/OT hardware types

100+ ICS/OT software tools

60+ product OEMs covered

85 major industrial protocols, ensuring compatibility with a wide range of systems

1 **Wider Coverage of OT Technologies:**
Ensuring comprehensive support across various operational technologies to enhance system integration and functionality.

2 **Remote Connectivity:**
Facilitating secure and efficient remote access to systems, enabling real-time monitoring and management from anywhere.

3 **Multi OEM Products Availability:**
Supporting a diverse range of OEM products to ensure compatibility and flexibility in system design.

4 **Shop Floor to Top Floor Connectivity:**
Bridging the gap between operational and management levels, promoting seamless communication and data flow across all organizational levels.

5 **Rapid Testing Turnaround and Collaborative Development Support:**
Accelerating testing processes while fostering collaboration among teams to enhance innovation and responsiveness to market needs.

VALUE TO CUSTOMER

- Optimized product development life cycles
- Standardized machine-to-machine connectivity
- Increased batch efficiencies
- Minimized data loss from shop floor to top floor
- Accelerated multi-site rollouts



INDUSTRIES WE CATER TO



Mobility



Industrial Products



Hi-Tech and Telecom



Medical Devices



FMCG

SUCCESS STORIES

- **Connected Factory Rollout for a Leading Industrial Product Client:**
150+ Factories | Production Line Twin | Golden Batch | Energy Management
- **IIOT Implementation for a Semiconductor Major:**
18 Factories | Data Nucleus | Test Plans | Driver Automation
- **Improved Reliability for an Energy Leader:**
24 Mfg. Sites | Edge to Cloud | IT/OT Infra Monitoring | Complex Event Processing
- **Enhanced Efficiency for a CPG Manufacturer:**
PLC/HMI Application Development and Simulation | Solution Development | Golden Batch | OEE
- **Streamlined Technology Refresh for a Switchgear Major:**
Control Upgrade/Tech Refresh Development and Simulation | OT/ICS Security | Software Deployment and Testing | Panel Engineering
- **Accelerated Product Journey for an OT Security OEM:**
OT Security Product Development Support | Diverse Manufacturing Scenarios | Vulnerability Management | PCAP Dissection