

4 ways to accelerate IT/OT integration with Red Hat and Intel

Industrial control systems (ICS) solutions help manufacturers strengthen resiliency and profitability. As impressive as these gains are, they are the first steps toward realizing the potential of an integrated information technology and operational technology (IT/OT) environment. Red Hat and Intel are collaborating to provide industrial organizations with Industry 4.0 technologies that integrate existing OT systems and give organizations more control over their operations. Use this checklist to understand four ways a new approach to IT/OT integration can transform your business strategy.

1 Unlock your data

Industrial organizations struggle to access data locked away in proprietary OT systems. Inaccessible data hampers the ability to make decisions, and makes it difficult to gather valuable insights that advance growth, efficiency, regulatory, and profitability goals.

Red Hat's open source software and edge computing expertise, combined with Intel's leading hardware architecture and software toolsets, can help organizations build a data-driven environment that works with ICS environments and makes data more available.

- ▶ By 2025, 50% of facility managers will have their performance measured by sustainability indicators, up from 5% in 2021¹. Does your infrastructure provide an accurate picture of power consumption, or provide ways to minimize energy usage?
- ▶ Can you automatically collect data related to production machinery or process performance, and quickly use that information to enhance performance and efficiency?
- ▶ Do you have unified visibility into your industrial environment performance from the datacenter to the supply chain?

2 Accelerate innovation

Another challenge facing industrial organizations is the lack of agility and flexibility in aging OT systems. Traditional systems demand time and attention from teams that is better spent on initiatives designed to move the business forward.

Red Hat and Intel collaborate to take advantage of software reference architectures, letting industrial organizations quickly add new workloads without having to overhaul their ICS systems. With a common foundation that brings IT capabilities to OT environments, businesses can implement artificial intelligence (AI), machine learning (ML), and other advanced digital solutions quickly and at scale, and take advantage of new innovations.

- ▶ Is it easy for your teams to add off-the-shelf hardware or build and implement new applications?
- ▶ Are you able to use technologies like containerization, virtualization, and orchestration that meet industrial-grade requirements?
- ▶ Do you have a path to implementing 5G, private wireless, and other technologies that can benefit your organization?

¹Gartner®. "Emerging Technologies: Top Sustainability Trends for Technology and Service Providers," 21 July 2021. ID: G007452166.

3 Cut operating costs

Companies with older or heavily customized OT systems are forced to make significant capital investments to keep them operational. Because 60% of enterprise decision makers say they face pressure to decrease operations and maintenance costs², updating customized systems can become a costly waste of resources.

Red Hat and Intel make it possible to bypass costly and complex migration projects, and transition ICS to software-defined solutions based on open source technology.

- ▶ Do you have the ability to proactively predict or prioritize risk, take action quickly, and prevent issues that may impact your business objectives?
- ▶ Can your organization minimize downtime by automatically migrating workloads in the event of system upgrades or unexpected failures?
- ▶ Can you deploy and manage software remotely and rapidly?

4 Reduce complexity

Disparate OT systems make it difficult for industrial organizations to implement standardized platforms commonly used in IT operations.

By taking advantage of Red Hat and Intel combined solutions, organizations can layer standardized, flexible IT capabilities over OT environments and introduce new capabilities without manual configuration. [Red Hat® Edge](#) also provides a common platform extending from the core to the edge that minimizes complexity and costs, letting organizations reduce the number of vendor solutions and the skills needed to maintain them.

- ▶ Does scaling your IT or OT operations require you to manually configure components?
- ▶ Can you easily standardize configuration and deployment across edge environments?
- ▶ Can your teams remotely configure and manage the platform with little or no on-site support?

Begin your OT transformation

Learn more about [edge computing for manufacturing](#) and how [combining](#) Red Hat Edge, Red Hat open hybrid cloud technologies, and Intel industrial solutions can holistically provide real-time factory floor control and AI/ML for IT manageability.

² Frost & Sullivan. "IT-OT Convergence: Sales Enablement and Customer Engagement," Executive summary presented to Red Hat, December 2021.



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Red Hat helps customers standardize across environments, develop cloud-native applications, and integrate, automate, secure, and manage complex environments with [award-winning](#) support, training, and consulting services.