Windows 10/11 IoT Enterprise LTSC Road Map

Figure 1

What you need to know about shifting to Windows 11 IoT Enterprise LTSC

Microsoft has officially announced the release of Windows 11 Long-Term Servicing Channel (LTSC), a highly anticipated version designed to meet the stability and security needs of enterprises. But what does this mean for IT administrators and business leaders? We sat down with our in-house expert to break it down.

Q1: What is Windows 11 IoT Enterprise LTSC 2024?

Tech Insights Team: Windows 11 IoT Enterprise LTSC 2024 is a long-term servicing channel (LTSC) version of Windows 11 specifically designed for fixed-purpose, mission-critical devices in industrial environments. It offers 10 years of support, fewer updates, lower hardware requirements, and improved stability—ideal for manufacturing, logistics, mining, port, and transportation.

Q2. How is it different from standard Windows 11 editions?

Tech Insights Team:

Component	Standard Windows 11	Windows 11 IoT Enterprise LTSC
Memory	4GB RAM (minimum)	As low as 2GB RAM
Storage	64GB (minimum)	As little as 16GB
System firmware	UEFI required	BIOS compatible
TPM	TPM 2.0 required	Completely optional
Secure Boot	Mandatory	Optional
DirectX	DirectX 12 required	DirectX 10 or none
Display	9-inch, 720p minimum	Custom size or no display

Figure 2

Q3. Why should I consider upgrading to this version?

Tech Insights Team: Because it enables long-term operational stability with minimal IT overhead. If your devices must operate 24/7 in rugged or secure environments—this version prevents downtime caused by frequent updates and compatibility issues and extends the life of existing hardware.

Q4: What industries will benefit the most from Windows 11 IoT Enterprise LTSC?

Tech Insights Team: Manufacturers, logistics and supply chain operations, ports and yards, field service and mining operations, medical equipment manufacturers, retail point-of-sale systems, any business relying on fixed-purpose devices, and long lifecycle support.

Q5. Is Windows 11 IoT Enterprise LTSC compatible with older hardware?

Tech Insights Team: Yes. Unlike standard Windows 11, this version works with a broader range of legacy and specialized equipment. The optional TPM 2.0 requirement also allows deployment on older systems that may not support it.

Q6: What happens when Windows 10 support ends in 2025?

Tech Insight Expert: Support for certain builds of Windows 10 ends on October 14, 2025. If you purchased your devices before 2020, you may be out of support soon. Organizations still using those systems should begin planning their migration. Windows 11 IoT Enterprise LTSC 2024 is a natural replacement if you're seeking long-term reliability and hardware flexibility. If you are using one of the latest versions of Windows 10 IoT Enterprise LTSC you still have some years left of support, refer to 'Figure 1' at the top.

Q7: Can you share some specific features of Windows 11 IoT Enterprise LTSC that benefit JLT's customers?

Tech Insight Expert:

- Stability: 10 years of support without disruptive feature updates. It provides a stable operating system with fewer updates, reducing the risk of compatibility issues.

- Reduced Hardware Requirements: Compatible with older and specialized equipment.

- Enhanced Security: Optional TPM 2.0 support. Long-term support includes security updates, ensuring devices remain protected against threats.

- Simplified Maintenance: Less IT overhead due to reduced update frequency.

- Extended Device Lifecycle: Use specialized equipment for longer periods.

- Optimized for Resource Efficiency: Designed for continuous operation in critical environments. Rugged devices run smoothly even under heavy workloads.

Q8: How does Windows 11 IoT Enterprise LTSC 2024 help with hardware obsolescence?

Tech Insight Expert: Windows 11 IoT Enterprise LTSC 2024 has relaxed hardware requirements, making it compatible with older devices and specialized equipment. This flexibility allows businesses to extend the life of their existing hardware investments.

Q9: How long will Windows 11 IoT Enterprise LTSC be supported?

Tech Insight Expert: Microsoft has committed to providing 10 years of support for Windows 11 Enterprise IoT LTSC—five years of mainstream support and five years of

extended support. This means businesses can rely on a consistent and secure platform without worrying about disruptive upgrades.

Q10: Will Windows 11 IoT Enterprise LTSC support modern hardware and applications?

Tech Insights Team: Yes, it will support modern hardware and applications. However, organizations should check with software vendors to ensure compatibility, as some applications may require frequent feature updates that LTSC does not provide.

Q11: Should businesses start planning for migration now?

Tech Insights Team: If you purchased your devices before 2020, you may be out of support soon. If your organization is using Windows 10 IoT Enterprise LTSC and needs continued long-term support, now is the time to start planning. Refer to 'Figure 1' at the top.

Q12: What real-world applications have you seen with Windows 11 IoT Enterprise LTSC on JLT's devices?

Tech Insights Team: Our customers have successfully used Windows 11 IoT Enterprise LTSC in various applications:

- **Warehouse Management:** Enhanced connectivity and real-time data access improve inventory management and logistics.

- **Field Operations:** Rugged devices with Windows 11 IoT Enterprise LTSC withstand harsh conditions, ensuring reliable performance in remote locations.

- **Manufacturing:** The stability and security features support critical operations, reducing downtime and increasing productivity.

Q13: How do you see the future of Windows 11 IoT Enterprise LTSC in the rugged IT industry?

Tech Insights Team: Windows 11 IoT Enterprise LTSC is set to play a pivotal role in the rugged IT industry. Its long-term support and stability make it ideal for environments where reliability is paramount. As technology evolves, we anticipate even more advanced features that will further enhance the capabilities of our rugged devices.

Q14: Is Windows 11 IoT Enterprise LTSC already tested with JLT devices?

Tech Insights Team: Yes! JLT Mobile Computers has tested and validated compatibility with Windows 11 IoT Enterprise LTSC 2024. You can confidently run this OS on JLT rugged devices to ensure secure and stable performance in demanding industrial environments. For EMEA we have OS-images ready for all processors in our current product portfolio and we may design customized OS for other processors that Intel and Microsoft support as well as older systems under special agreements.

Q15: Where can I learn more or get support for deployment?

Tech Insights Team: You can reach out to your JLT sales or support team for guidance. We're here to help assess your current systems and ensure a smooth transition to Windows 11 IoT Enterprise LTSC.

Q16: Any final thoughts for IT leaders considering Windows 11 IoT Enterprise LTSC?

Tech Insights Team: Windows 11 IoT Enterprise LTSC offers a stable, secure, and long-term solution for mission-critical environments. Organizations should consult with technology partners to determine the best migration strategy for their needs and ensure they are making the right decisions for the future of their IT infrastructure.