



Memfault

GREASEBOSS

Empowering Industrial IoT: How Memfault Transformed Greaseboss' Product Reliability



Memfault's remote monitoring and alerting capability has been pivotal in helping us realize our remote fleet management strategy, allowing us to scale our product knowing that we can confidently support it.



Peter Condoleon

Co-Founder & CTO, Greaseboss

About Greaseboss

GreaseBoss are pioneers in setting the standards for lubrication management, giving customers unique data that can be turned into actionable outputs and decisions. Engineered to perform in the most hostile environments, their system is simple to use and can be easily retrofitted onto existing industrial equipment and grease delivery systems. GreaseBoss combines heavy industry experience with the complex and varied needs of customers, to continuously develop and improve their innovative and adaptable lubrication management solutions. Using track and trace technology and a simple reporting system, GreaseBoss guarantees their customers continually improve their plant safety, reliability and productivity. The end result of that journey is simple. When it comes to their machinery, GreaseBoss's clients can lubricate with confidence and improve preventative maintenance in Industrial IoT applications.

Company Profile

- **Industry:** Industrial IoT
- **Product:** Industrial Lubrication Monitoring
- **Location:** Queensland, Australia
- **Chipset (with Memfault):** nRF52
- **Operating System:** ZephyrRTOS
- **Connectivity:** Bluetooth LE over Gateway connected via LTE/ WiFi/ Ethernet

Benefits

- **Streamlined Operations:** Faster time-to-market with shorter iteration cycles
- **Cost Savings:** Reduced on-site customer visits and product returns
- **Improved Efficiency:** Reduced repetitive and manual debugging processes with all-in-one platform
- **Enhanced Reliability:** Minimize downtime and ensure optimal performance with device diagnostics

Challenge

GreaseBoss decided to bring the first cloud-based automatic lubrication monitoring system to market that would help industry eliminate 99% of the risk of grease-related failures. To bring this new product to market successfully, GreaseBoss knew they would need to integrate the right monitoring tools for robustness and scalability. They recognized that without reliable and scalable technology, accurate measurement of industrial machinery performance would be compromised and result in high costs for repair and replacement.

As a startup hardware manufacturer, GreaseBoss needed to constantly push to accelerate the traditionally slow iteration cycles hardware makers face. They wanted to deliver a high-quality product to market but without having to spend years in development before launching. To stay competitive, GreaseBoss needed to accelerate time-to-market and found they could do this with Memfault's all-in-one platform for monitoring, debugging, and OTA updates. The team saw they could shorten their release cycles from multiple months to weeks by automatically detecting issues as they arise, debugging and validating them quickly and sending OTA updates with Memfault's robust system.

Solution

GreaseBoss sought a new solution to address their need for reliable remote monitoring of device health and performance, faster firmware iteration cycles, and robust over-the-air (OTA) updates. They saw Memfault to be the ideal choice as the platform is highly configurable with numerous options for out-of-the-box metrics helping the GreaseBoss team gather critical data on their devices quickly. Once up and running, the quality and scope of data they were collecting helped GreaseBoss identify new opportunities to further accelerate their development process.

Although the team was initially looking for a solution to give them more visibility into in-field devices, they quickly saw the benefits of Memfault on their devices in the factory. They could use Memfault to test and validate the hardware and firmware reliability in-house before shipping to customers. Memfault provided the ideal solution by offering everything GreaseBoss needed in one platform while allowing them to streamline their development and deployment processes.



“*Memfault has been instrumental in ensuring the reliability of our Industrial Lubrication Monitoring Systems, enabling us to deliver on our promise of reliability to customers.*”

Peter Condoleon
Co-Founder & CTO

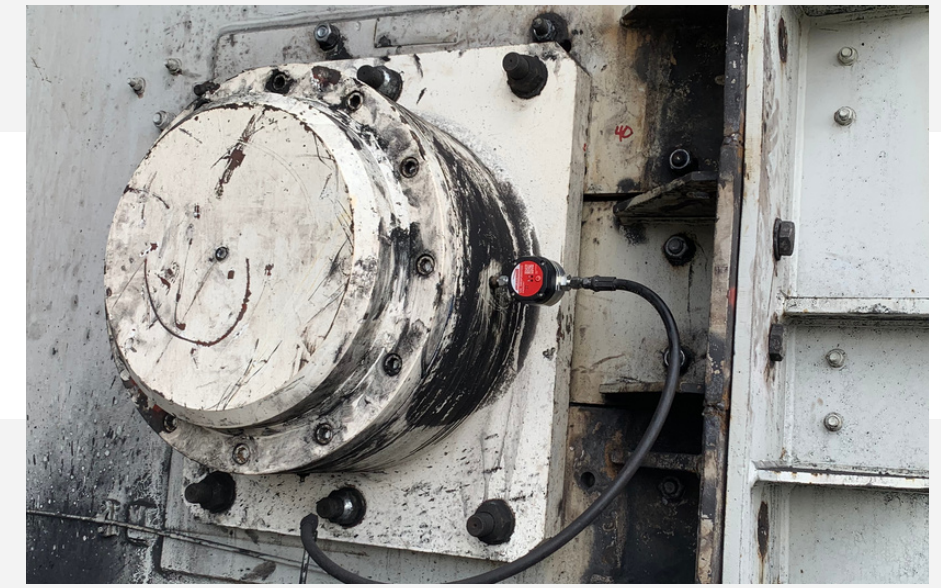
Results

By leveraging Memfault, GreaseBoss significantly reduces the need for unnecessary on-site visits, saving a substantial amount of valuable time and therefore money. Additionally, with Memfault on devices in development, they can do more quality analysis and ensure each device meets their exacting standards before shipping. Now that GreaseBoss has Memfault integrated into their devices, they have complete control over what data they collect and how they manage their firmware versions across the fleet. They can add new custom metrics and device attributes at any point in the product lifecycle and start collecting data straight away, whether it's to see how frequently devices connect, which ones drop off or to compare different firmware versions grouped by specific customers. Memfault makes it easy for GreaseBoss to decide exactly what metrics matter to them, and how they want that information displayed.

Memfault helps GreaseBoss minimize costly site visits by empowering the team with remote device monitoring and operations. With many of GreaseBoss's industrial customers being in difficult-to-reach and international locations, Memfault's remote capabilities are pivotal for GreaseBoss to provide their customers with the best support possible. Another challenge GreaseBoss faces is catering to the harsh and demanding environments of their industrial customers. Through remote monitoring and automated detection of device behavior with Memfault, the GreaseBoss team is able to proactively identify and resolve challenges that customer environments present. For example, with Memfault's built-in alerting system, the GreaseBoss team was alerted to inconsistencies in device Bluetooth connectivity. GreaseBoss was able to quickly identify the issue and make necessary changes to mitigate the inconsistency directly from Memfault's platform.

With Memfault, GreaseBoss has a centralized database for firmware management, making it easier to upload and distribute updates. Previously, GreaseBoss faced challenges managing firmware releases as they relied on manual importing and monitoring processes and customer involvement. Now, Memfault's alerting functionality and benchmarking capabilities allow GreaseBoss to monitor fleet performance and identify bugs quickly, improving product reliability. Memfault's contribution to cost savings and improved operational efficiency is evident for GreaseBoss, enabling them to scale their operations and provide reliable solutions to customers worldwide.

To start the journey with [GreaseBoss](#), simply email GreaseBoss CEO Tim Hall tim.h@greaseboss.com.au or talk to their experts at +61 7 3186 0203.



“*Memfault enables me to efficiently monitor the status of our device fleet, helping me make informed decisions with confidence to help our customers achieve their objectives.*”

Adam Moore
Customer Success
Manager