WNDRVR Studio

USE CASE

**OPERATE:** DIGITAL FEEDBACK LOOP

# IMPROVE VISIBILITY TO SHORTEN TIME-TO-RESOLUTION

## THE CHALLENGE

A smart vehicle OEM is building an automobile gateway using Wind River® Helix™ Virtualization Platform running VxWorks® for the control system and Linux as the guest OS running the infotainment system and climate control applications.

Test engineers are experiencing a lagging user interface in the infotainment system. There is degradation when the outside temperatures are extremely high and the climate control for air-conditioning is set below 70 degrees.

## THE SOLUTION

Wind River Studio can collect real-time analytics of the operating systems and applications running in the vehicle gateway through a digital feedback loop (DFL) capability. A runtime agent in Helix Platform, VxWorks, and Wind River Linux collects sensory and telemetry data and sends it back to the developer through the cloud. As the real-time data flows automatically into the DFL cloud, anomalies occurring in the vehicle operation can trigger an alert to developers.

In Studio, developers can analyze this data and display the results in a graphical dashboard that is accessible to permissioned stakeholders. They can also quickly identify and fix the code problem, building and testing a new containerized application in a simulated virtual environment.

Developers can then deploy that new software over the air to the vehicle. Instantaneously, new telemetry data is generated and sent back to the vehicle dashboard, allowing developers to determine whether the CPU load issue was resolved. Meanwhile, test engineers can verify that the problem with UI unresponsiveness has been fixed.

## THE RESULTS

The digital feedback loop in Studio provides greater visibility into real-time operation data, which helps both developers and operators improve outcomes.

**Developers can quickly identify problems in code and shorten time-to-resolution. Operators can deliver higher-quality service and improve customer satisfaction.**

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