



Red Hat + Qorix Performance

As Official Distributor of Eclipse S-CORE, Qorix Brings Its Latest Release, Version 0.9, to Mixed-Criticality Execution on Automotive Linux.

Together, Red Hat RHIVOS and Qorix Performance, our commercial distribution of Eclipse S-CORE, form a pre-integrated, open-source-based SDV platform, with the commercial support real vehicle programs need. At ELIV, this runs on Eclipse S-CORE v0.9, the project's latest release. This reduces integration effort and creates a cost-efficient path toward SDV-ready Linux platforms.

The Challenge

Linux plays an increasingly important role in SDV architectures, but on its own it doesn't guarantee the deterministic execution or functional separation that mixed-criticality automotive workloads need.

OEMs and Tier-1 suppliers evaluating open-source-based Linux platforms face a gap: openness and developer-friendly workflows on one side, safety-aligned, deterministic runtime behavior on the other, with no clear path to combine both.

The Solution

Red Hat RHIVOS and Qorix Performance close that gap together. Red Hat RHIVOS brings openness, developer-friendly workflows, and a modern automotive Linux foundation. Qorix Performance, natively developed within Eclipse S-CORE, adds the safety-aligned runtime layer: deterministic execution, safe communication paths, and clear functional separation between safety-relevant and non-safety workloads.

Capabilities

- ▶ Mixed-criticality workload execution on Qorix Performance, natively developed within Eclipse S-CORE, and Red Hat RHIVOS (Red Hat In-Vehicle OS)
- ▶ Deterministic scheduling and real-time behavior enabled by the Qorix Performance Stack
- ▶ Clear functional separation across partitions for safety-relevant and non-safety workloads
- ▶ Developer-friendly workflows: container builds, CI/CD alignment, quick iteration
- ▶ Foundation for future containerized deployments of automotive workloads

Why it matters

- ▶ Shows that Eclipse S-CORE v0.9, the project's latest release, already runs mixed-criticality workloads on production-grade automotive Linux, delivered by Qorix as official distributor of Eclipse S-CORE
 - ▶ A clear, cost-efficient, and scalable path for Linux adoption in safety-informed SDV programs
 - ▶ Bridges the gap between developer-centric workflows and safety-aligned runtime behavior
 - ▶ A realistic approach for integrating Linux into Tier-1 development programs
- ▶ **A credible path to using Linux in mixed-criticality SDV environments, delivered on Eclipse S-CORE v0.9 by Qorix, the official distributor of Eclipse S-CORE.**

