CASCADING COST OVERRUNS

The Problem

Our customer in the communications industry needed to improve the profitability of its flagship broadband product line. Its time-to-market had increased and development and test cycles were taking too long. In addition, R&D costs were climbing due to the increasing time and effort required to maintain and constantly secure earlier versions of its Linux platform. Another key issue was the months of effort required to validate the dozens of various hardware boards from NXP, Intel®, Broadcom, and AMD that it used in its product line.

With a fixed team and no ability to increase budget, skilled engineers were working on maintenance problems rather than innovating and adding critical features to upcoming releases. The lack of stimulating work created an employee retention problem for designers with key skills.

Wind River Solution

Wind River worked with the customer's engineering management team on a Solution Assessment to determine what was needed and how to prioritize implementation. This assessment led to three key discoveries:

- The customer was spending a significant amount of time just building the Linux platform. We transitioned the customer from the aging in-house platform to a Yocto Project–based platform.
- The customer was spending months of effort on hardware validation. One immediate benefit of the new Yocto Project platform was the ability to leverage board support packages (BSPs) from key board vendors. Wind River worked with the vendors to get early access to BSPs and was able to cut the validation time in half.
- The customer was not upstreaming vulnerability and defect fixes. Over time this resulted in spending significant effort to remove technical debt -- time that could have been spent innovating new functionality. To address this, Wind River agreed to continuously monitor and manage the health of the customer's code. Wind River will identify new security vulnerabilities and defects, prioritize them, and perform immediate remediation.

Business Result

Once the program was started, the customer was able to shorten time-to-market by about 50%. In addition, the company was able to reduce internal costs by transitioning three key developers from maintenance activities to more innovative tasks.

Because Wind River Studio Linux Services was managing the lifecycle maintenance process, the customer was able to move five support engineers into other roles, including test and integration.

In all, it was able to save or reallocate 15 positions, resulting in budget savings of $2.6 million dollars per year.