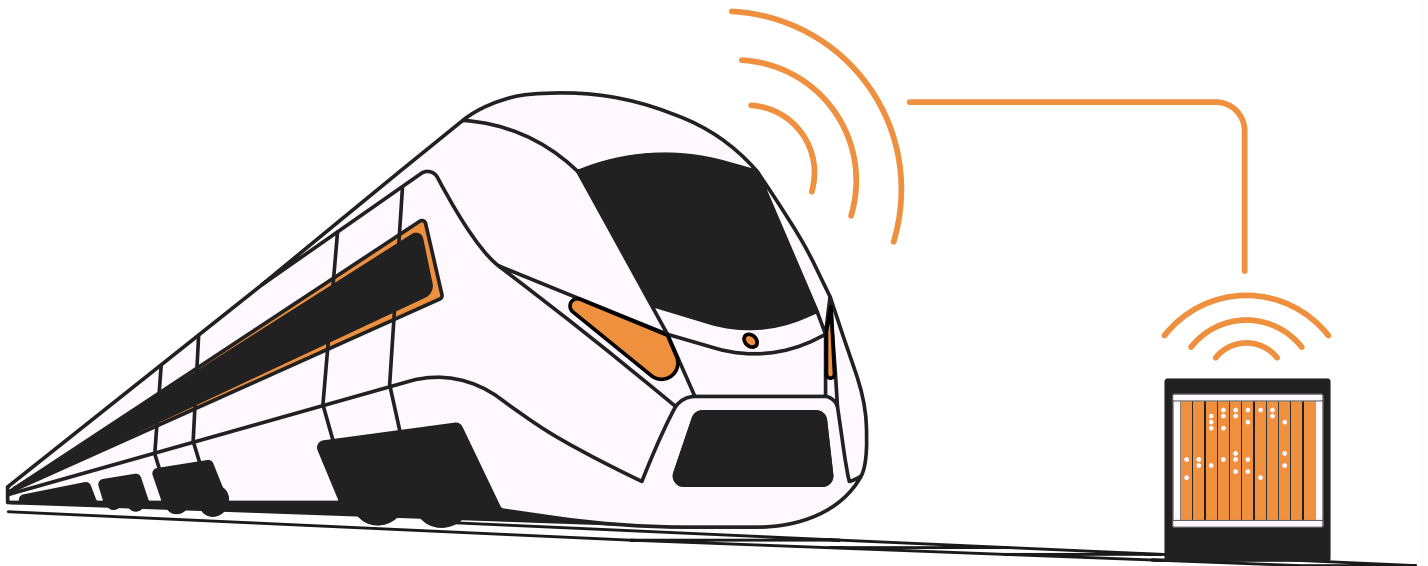# PTC PRODUCT REFINEMENT: NEW FEATURES FOR LEGACY SYSTEM

Datasheet

Project objective

Prepare the legacy PTC-enabled product for modernization and upgrade it, ensuring the ultimate reliability of its safety-critical functions. Critical troubleshooting was required first to ensure reliable cab-to-ground communication before modernization could proceed.

Result

The safety-critical interlocking controller now fully supports advanced PTC features and can be integrated for a regional railroad. 42 items were assessed and successfully implemented during the project.

Scope of work

- ◈ Code review, issues investigation, and risk assessment for modernization activities
- ◈ Defect resolution for the interlocking application logic builder: activation and application generation crash, aspect table issue, etc.
- ◈ Defect resolution for the executive firmware: timely alert messages, configuration saving post-restart, etc.
- ◈ New features for the interlocking application logic builder: adding parameters to Wayside Interface Units setup, input data validation, etc.
- ◈ New features for the executive firmware: time synchronization request, backup synchronization, Switching to daylight-saving time, ACSES-compliant nomenclature integration, etc.

Activities

- ◈ Investigation & risk assessment
- ◈ Defects resolution
- ◈ Software development

About the project

Technologies

- ◈ C/C++
- ◈ Javascript
- ◈ MicroLok II
- ◈ ACSES

Project size

- ◈ 2 Software Engineers

Duration

9
months