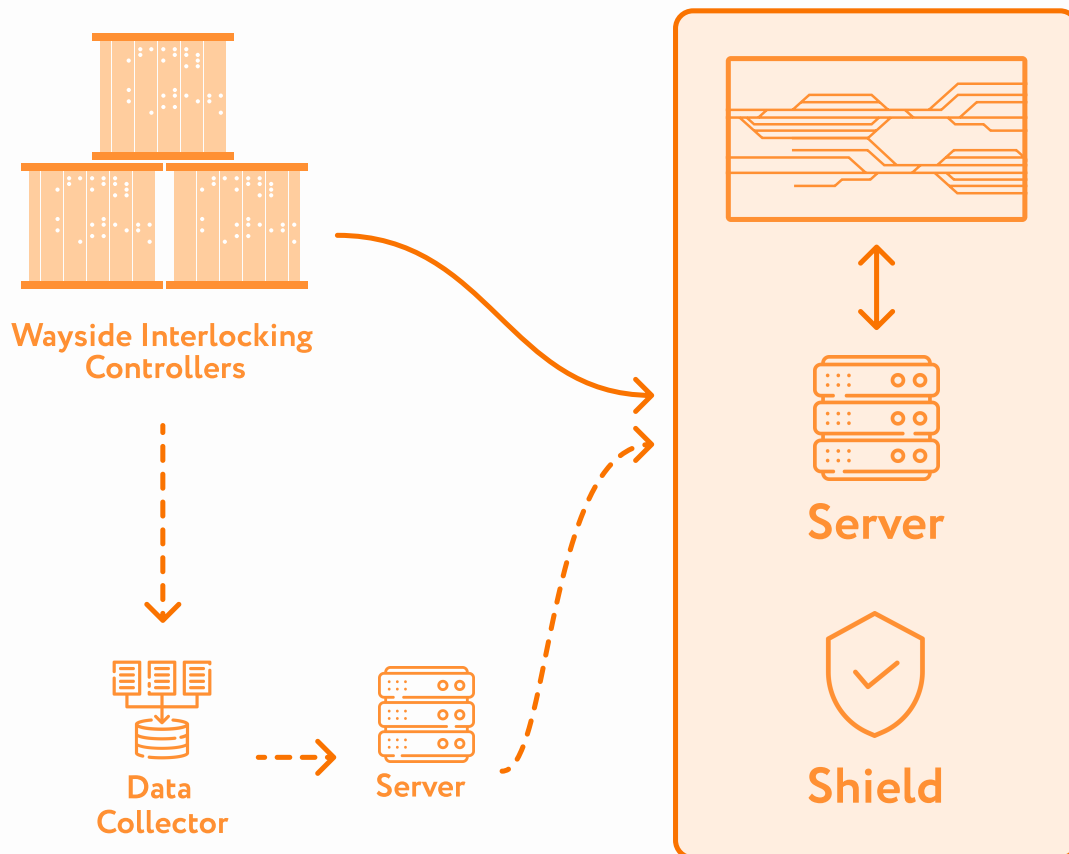


# MANAGEMENT SYSTEM FOR TRAIN MOVEMENTS

Datasheet

# Project objective

Create a new version of the system for the real-time management of train movements that can be easily implemented for every separate rail sector. Enable dispatchers to continuously monitor the current on-track situation and intervene if necessary. Eliminate human mistakes while managing the respective rail locations.



# Result

A dispatching system tool allows for continuous safety monitoring of interlocking on the specific rail location. It is easily installed on the operator's working computer and prohibits running other tools when operating. The software package can be customized and delivered to any rail location where the client's equipment is used, considering each location's unique features: amount and arrangement of switches and signals, construction features, restrictions, etc. By 2023, PSA has developed and uniquely customized control software package for 10 stations across the US.

## Scope of work

- ❖ Continuous data transfer from wayside interlocking devices to the management system
- ❖ Elimination of conflicts in operating interlocking controllers that were incorrectly programmed to use one IP address
- ❖ Visual representation of the status of interlocking controllers and the ability for their management in a convenient way for a dispatcher
- ❖ Joint management of the station's elements on the borders of rail sections
- ❖ Ability to study the data in technical representation and research the reasons for errors
- ❖ Observation of historical data by connecting to the additional tool

## Activities

- ❖ Requirements definition
- ❖ Architecture design
- ❖ Software development
- ❖ GUI development
- ❖ Writing technical documentation
- ❖ Product testing
- ❖ User manuals creation
- ❖ Continuous support

# About the project

## Technologies

- ✚ C/C++
- ✚ Qt
- ✚ PowerShell
- ✚ Batch
- ✚ VB
- ✚ Python
- ✚ TCL
- ✚ GitLab
- ✚ Inno Setup



TCL



## Project size

- ✚ 1 Software Engineer

## Duration



42+ months  
from November, 2019

## Platform

Windows