DAF Project Demonstrations

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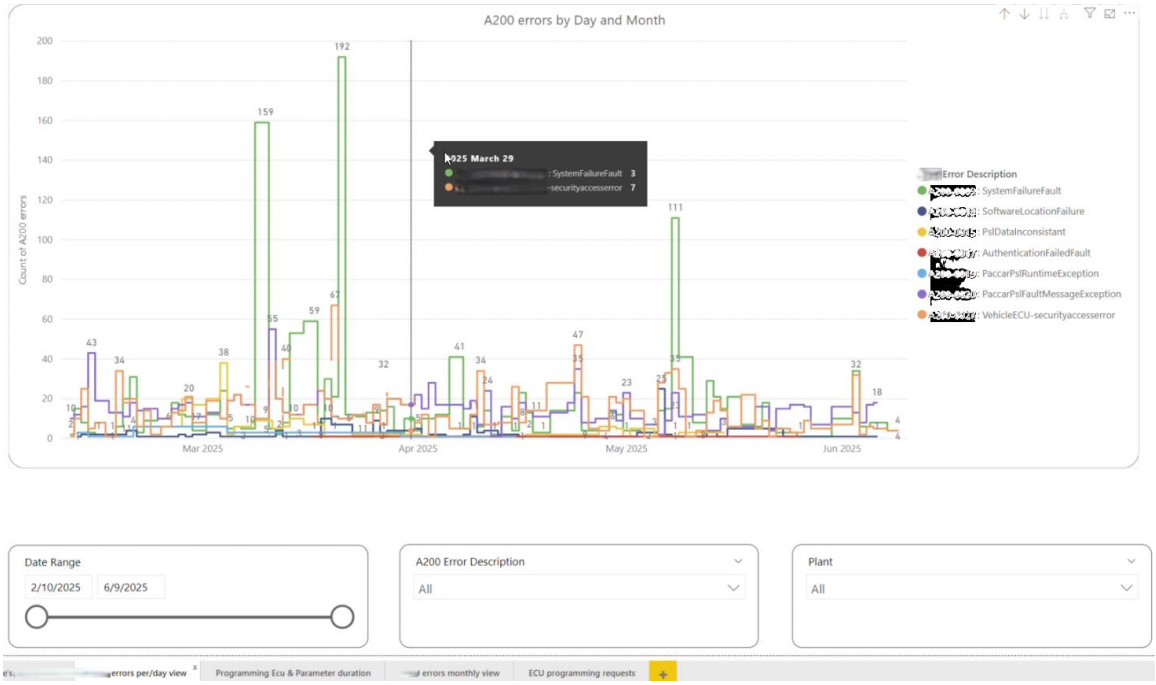
Purpose: Showcasing work completed during graduation internship (for portfolio/website)

1. Power BI Dashboard – VSC 2.0 KPIs

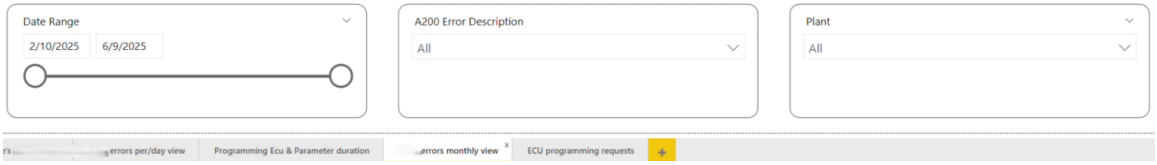
Description:
This dashboard was built in Power BI to visualize critical KPIs for the VSC 2.0 project at DAF Trucks. It includes programming time statistics, ECU & parameter error tracking, and certificate insights.

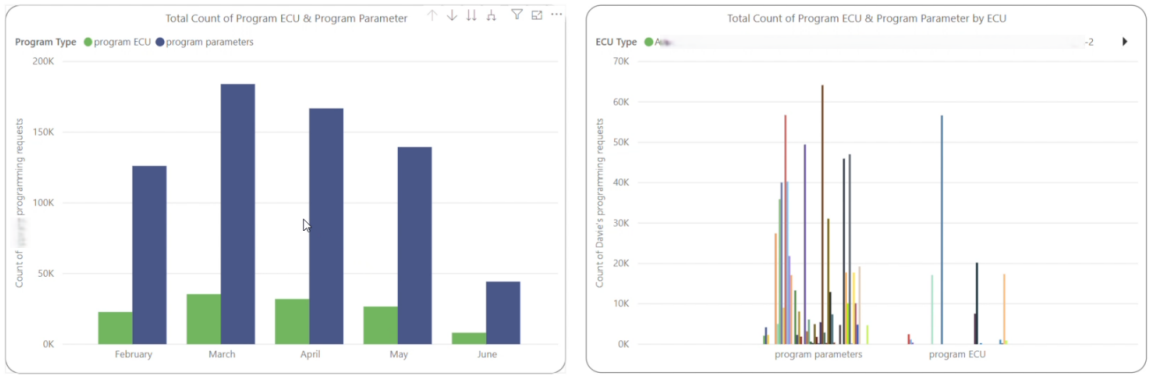
Highlights:
- Daily & monthly trend of A200 errors
- Average ECU programming time
- Parameter programming metrics
- Visuals filtered by Factory, ECU type, and time range

Screenshot(s):




Duration of ECU Programming
Average Duration
Median Duration
Min duration
Max of duration
Duration in seconds
Min & Max range in seconds
program ECU
Duration of Program Parameters
Average duration
Median duration
Min duration
Max of duration
Duration in seconds
Min & Max range in seconds
program parameters
Duration of ECU Programming per ECU
Average Duration
Median Duration
Min duration
Max of duration
Duration in seconds
Min & Max range in seconds
ECU Type
Duration of Parameter Programming per ECU
Average duration
Median duration
Min duration
Max of duration
Duration in seconds
Min & Max range in seconds
ECU Type
To filter out outliers, you can use the slider in the Outlier Filter to exclude ECU durations with unusually high values.
Outlier Filter
1
6597
ECU Selector
All
Date Range
2/10/2024
6/9/2025
Plant
All
A200 errors per/day view
Programming Ecu & Parameter duration
A200 errors monthly view
ECU programming requests





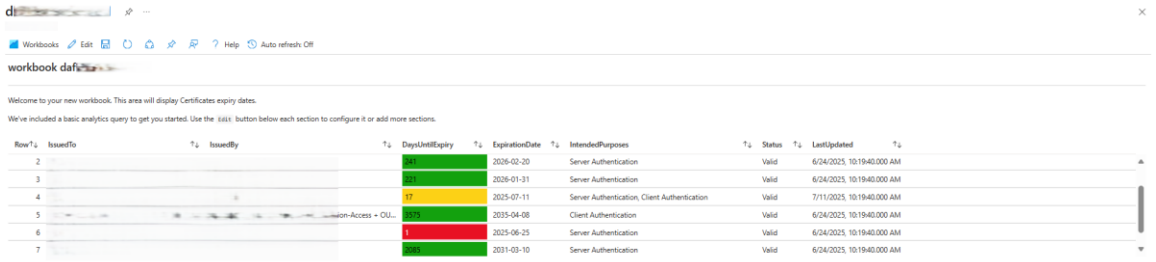
2. Azure Application Insights & Function App Integration

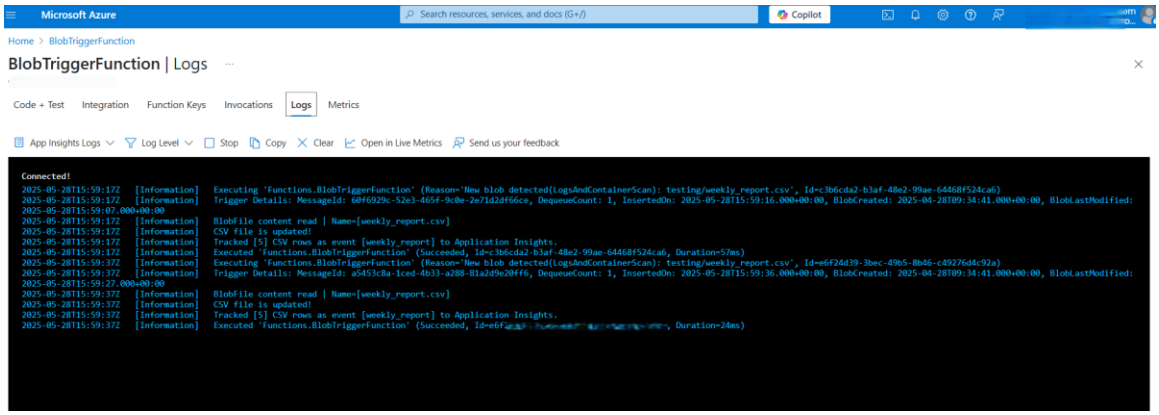
Description:

This solution uses an Azure Function App with a Blob Trigger to ingest CSV telemetry data and send it to Application Insights. The insights are visualized using a custom Workbook.

Highlights:
- Built a C# solution to display certificate expiry status in App Insights Workbook.
- CSV uploads trigger Azure telemetry updates
- Custom Workbooks created with KQL queries
- Displays expiration dates, status, and timestamps

Screenshot(s):



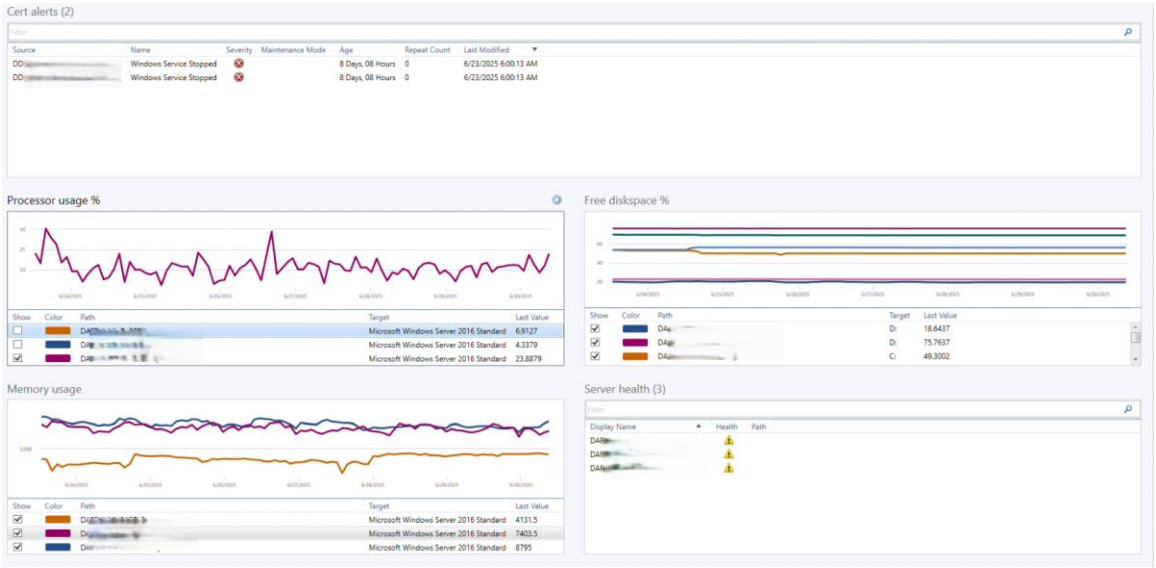


3. SCOM Dashboard – Infrastructure Monitoring

Description:
This dashboard was created using System Center Operations Manager (SCOM) to monitor critical infrastructure for server health.

Highlights:
- CPU and RAM usage per server
- Critical alerts and disk space overview
- Free drive space
- Clear visual breakdown of server health

Screenshot(s):



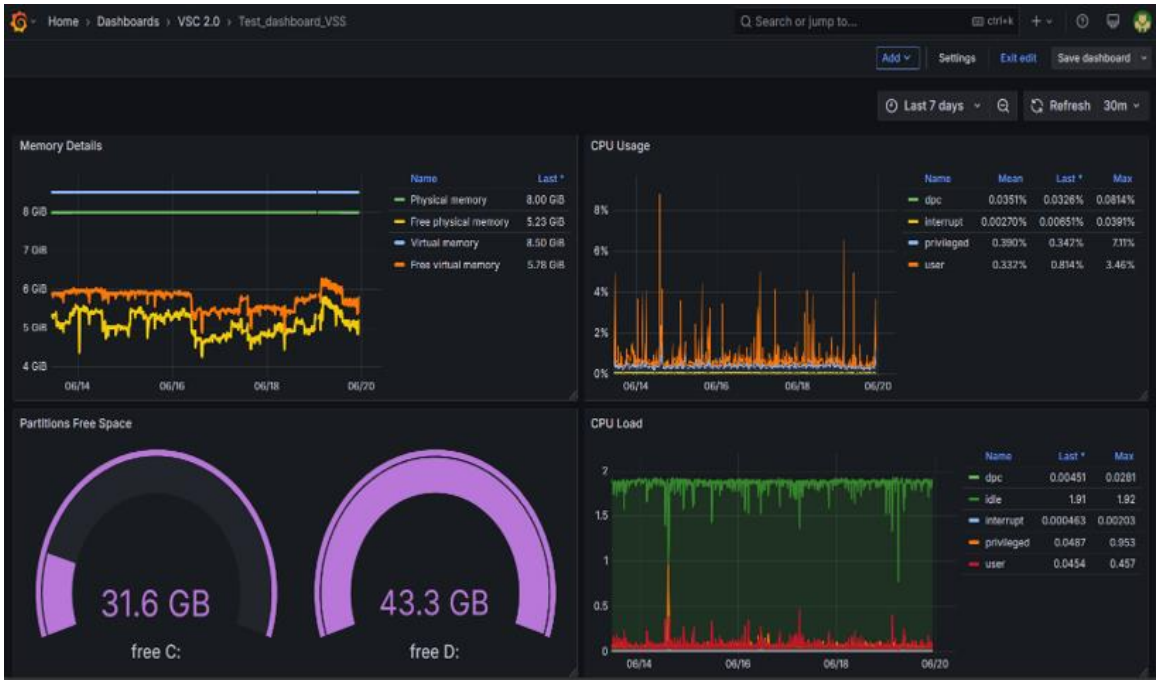
4. Grafana Dashboard – Real-Time Server Monitoring (Collaboration with Data Science Team)

Description:
Besides my graduation project. I collaborated with the Data Science team, I contributed to developing a Docker-based Grafana dashboard for real-time server monitoring. The setup collected live performance metrics from DAF's on-premises servers using **Windows Exporter** deployed across multiple machines.

Highlights:

- Configured Docker containers to host Grafana and Prometheus
- Integrated Windows Exporter to capture server metrics (CPU load, memory usage, free disk space)
- Streamed live telemetry from DAF's internal infrastructure
- Delivered real-time visualization and health insights for proactive monitoring

Screenshot(s):



Summary

These demonstrations highlight my ability to design and integrate monitoring and data visualization solutions across both cloud and on-premises environments. During my internship at DAF Trucks, I combined development, automation, and system monitoring—building dashboards in Power BI, SCOM, Azure DevOps, and Grafana. Through collaboration with data science teams, I also deployed Docker-based monitoring stacks with Windows Exporter for real-time infrastructure insights. Altogether, these projects reflect a strong blend of technical depth, teamwork, and a hands-on approach to improving visibility and performance in enterprise systems.