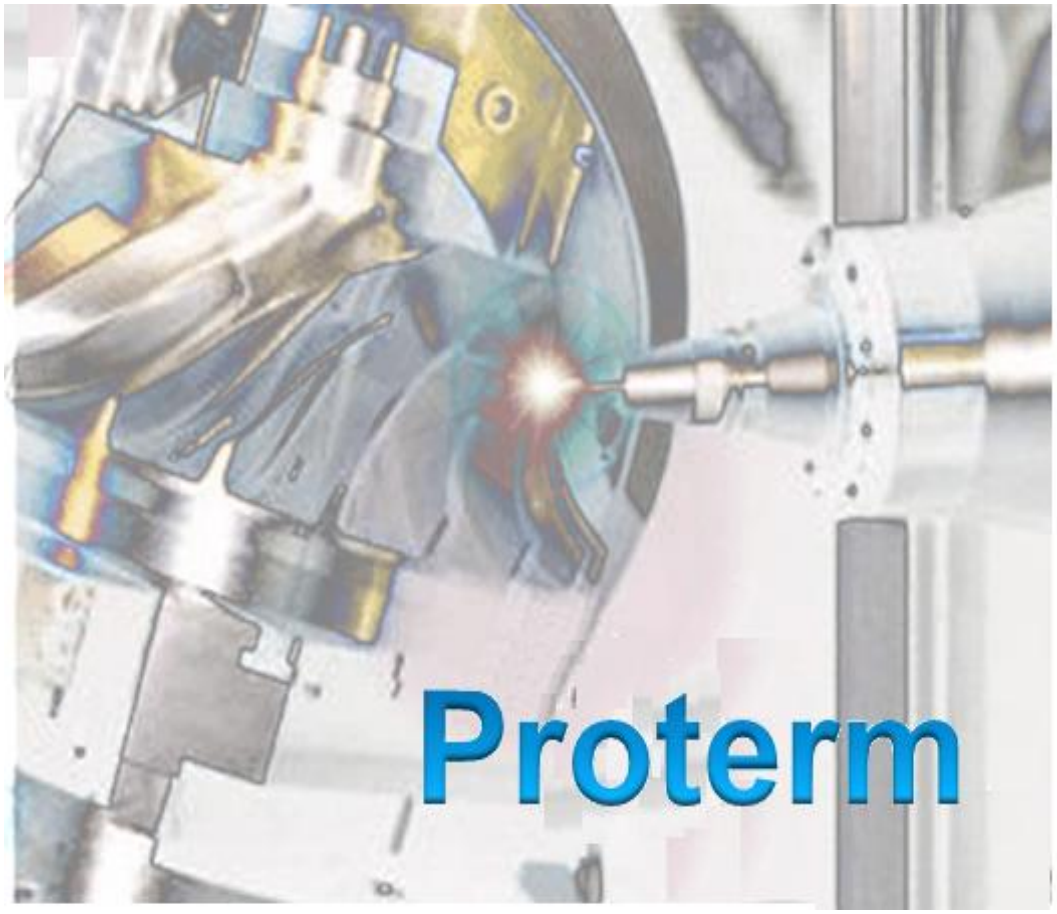
Proterm Overview

Bharath Kumar Janardhana

Mercedes-Benz Research and Development India

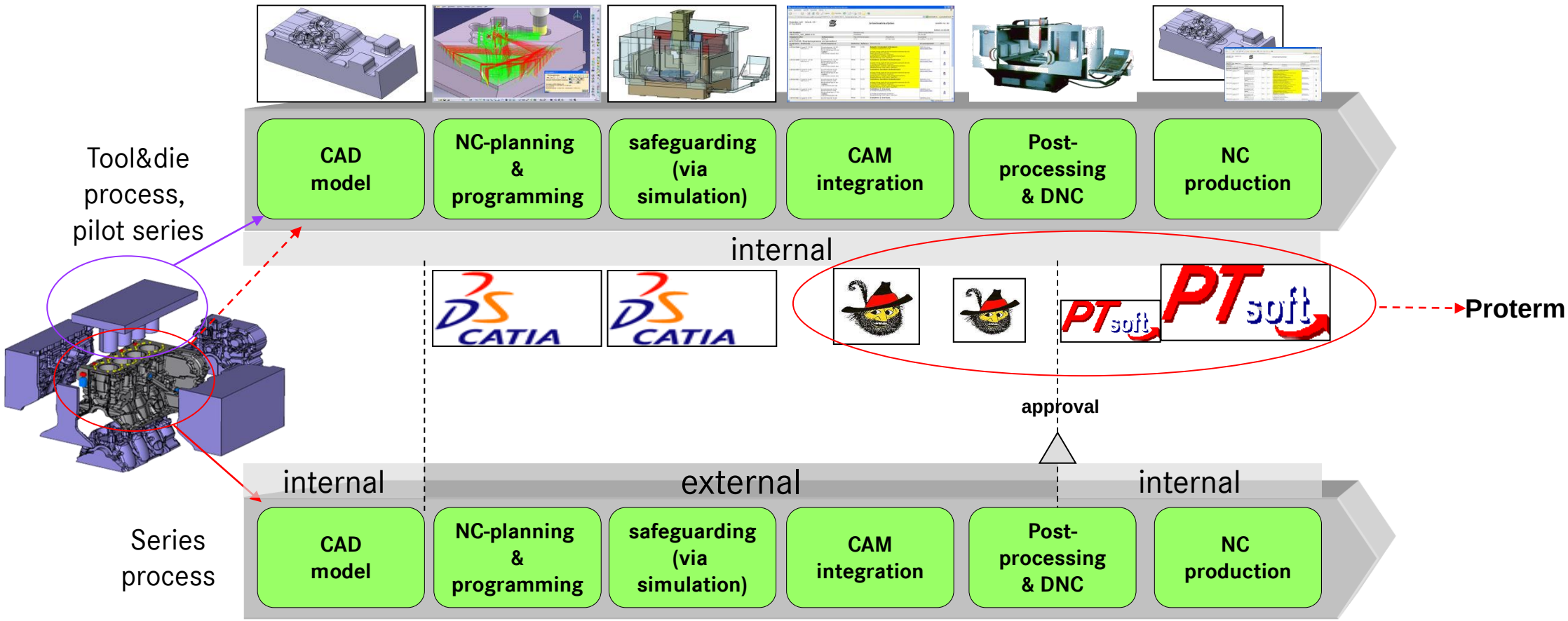
Mercedes-Benz

Proterm

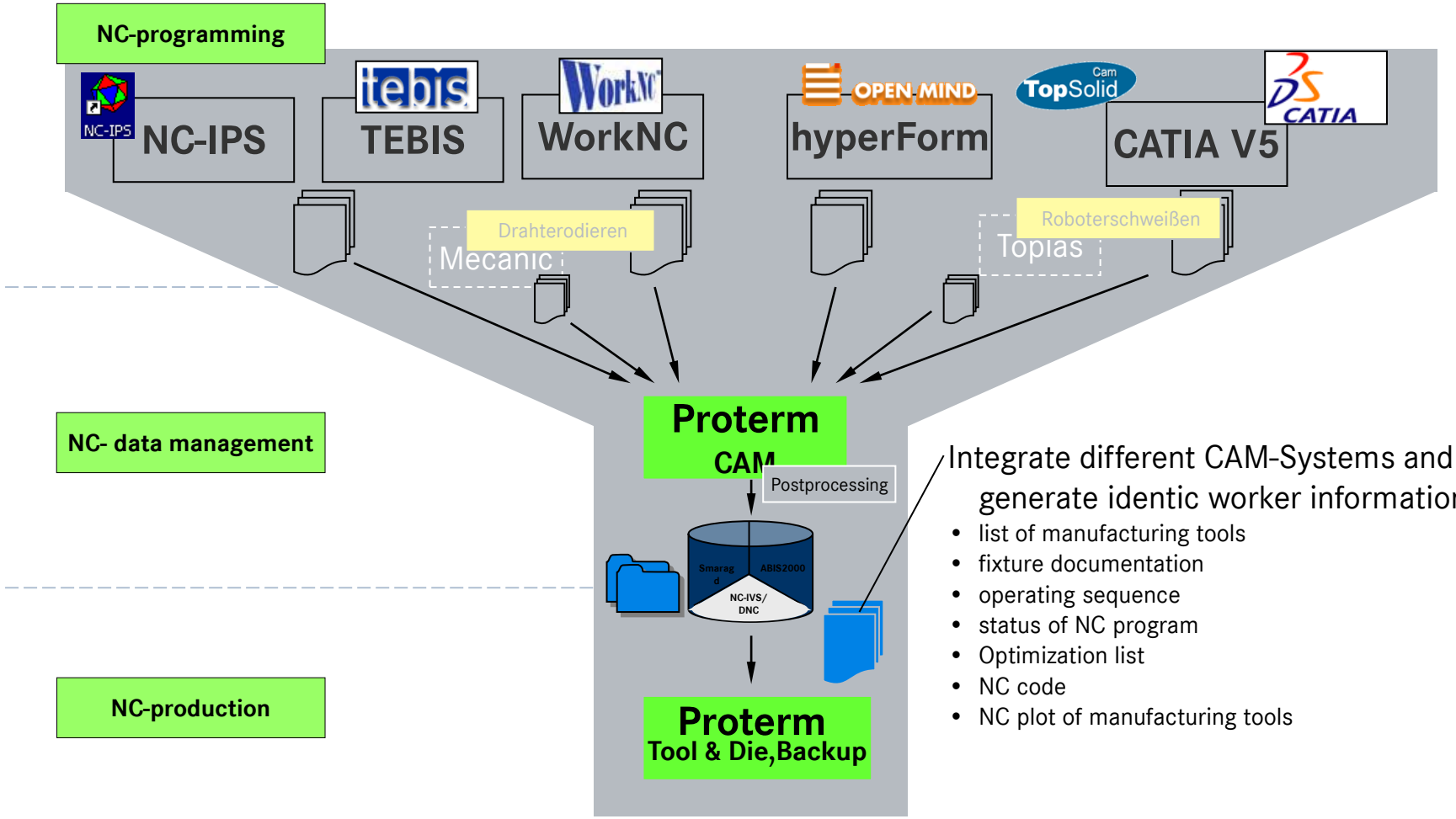


- **Brief Description:** Proterm tool manages NC data from various cam sources. It generates, modifies, persists NC programs and upload them to servers, download to machines in powertrain production plants.
- **Scope of work at MBRDI:** Architecture**,** Development and Testing
- **Technologies used:** Java/JEE , Eclipse RCP, REST, Hibernate, OIDC with GEMS, JBoss, DHC.
- **Domain:** MBC powertrain production and assembly, Tubebending for Cars and Trucks.

CAM Process Overview



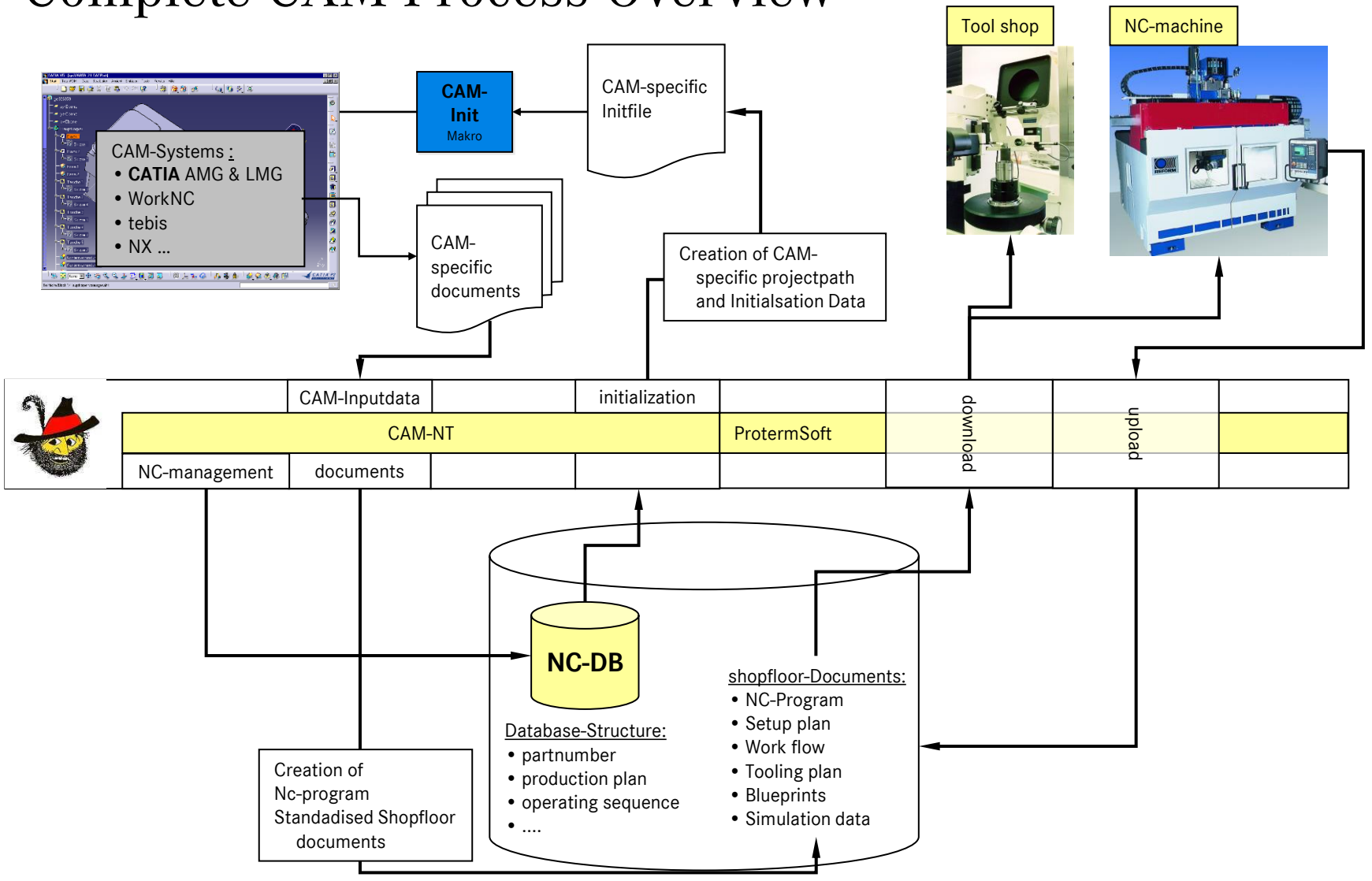
Proterm (CAM-NT & ProtermSoft)



Integrate different CAM-Systems and generate identic worker information:

- list of manufacturing tools
- fixture documentation
- operating sequence
- status of NC program
- Optimization list
- NC code
- NC plot of manufacturing tools

Complete CAM Process Overview



Proterm Projects

Tool & Die Production

- Manufacturing of Tools, Dies and Pilot parts in house.
- In Production since 2015
- Used across more than 15 manufacturing plants in Germany
- MBRDI team was involved in Rollouts on the shopfloor.
- Also used in Tube Bending Plants for Trucks and Cars (Woerth and Sindelfingen)

Series Production

- Manufacturing of actual Car parts
- In Production since 2019
- Background Jobs performing scheduled Automatic Backup of Machine Data

2021 and Future Plan

2021

- EDC movement to Frankfurt
- Technology Upgrade from EJBs to REST APIs
- Upgrade to Hibernate
- Replacement of PAI clientcontainer
- Replacement of PAI RIAD Component
- Preparation for Daimler Hybrid Cloud (DHC) migration
- EU Data Protection Topics – Part 1
- New Tube Bending Process implementation
- RUN : Production support for Tool & Die and Series production

2022

- EU Data Protection Topics – Part 2
- Migration to Daimler Hybrid Cloud
- Proterm Mobile App
- RUN : Production support for Tool & Die and Series production

Proterm Team

MBRDI

Sanjay Kamat
(Program Manager)

Bharath Janardhana
(Architecture, Tech-Lead)

Ananya Naik
(Senior Developer)

Apurv Jain (Ext)
(Developer)

Shravya Palamasi
(Ext)
(QA)

Darshan Madihalli

ITO/CE

Gerold Winz
(E4)

Dieter Engelfried
(Product Owner)

Thank You