

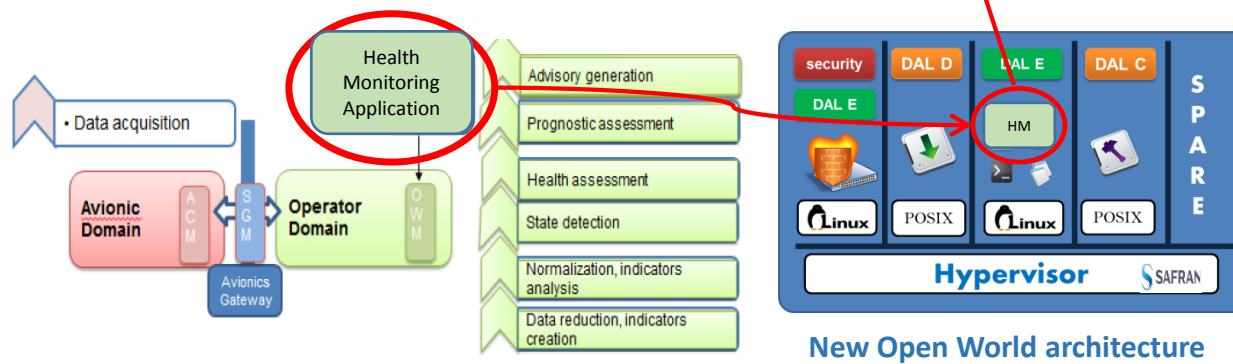
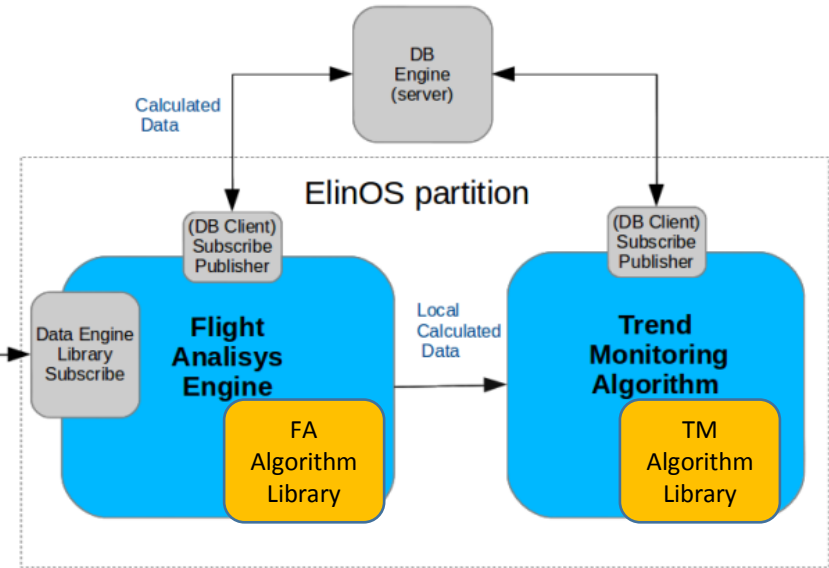
OPEN WORLD ARCHITECTURE HEALTH MONITORING APPLICATION

The **Health Monitoring Application** is designed:

- for the integration in the Open World Architecture
- to perform on-board diagnostics and prognostics of different equipment
- in order to anticipate maintenance operations, that allows moving to an on-condition maintenance approach.

Key characteristics

- Data exchange based on Publish/Subscribe Model
- Architecture based on PikeOS Operating System (Linux Personality ElinOS)
- Generic HM architecture to easily integrate the algorithms on board
- HM algorithms platform independent
- Plug & play algorithm/library



DATA Engine: component in charge of Data Acquisition function

Flight Analysis Engine: component in charge of Data Manipulation function and Calculated Data publication

Trend Monitoring Algorithm: component in charge of State Detection, Health Assessment and Prognostics Assessment functions

FA Algorithm Library

Algorithm/library in charge of data evaluation and out of range data calculation

TM Algorithm Library

Algorithm/library in charge of state detection, diagnosis and prognostic calculations