

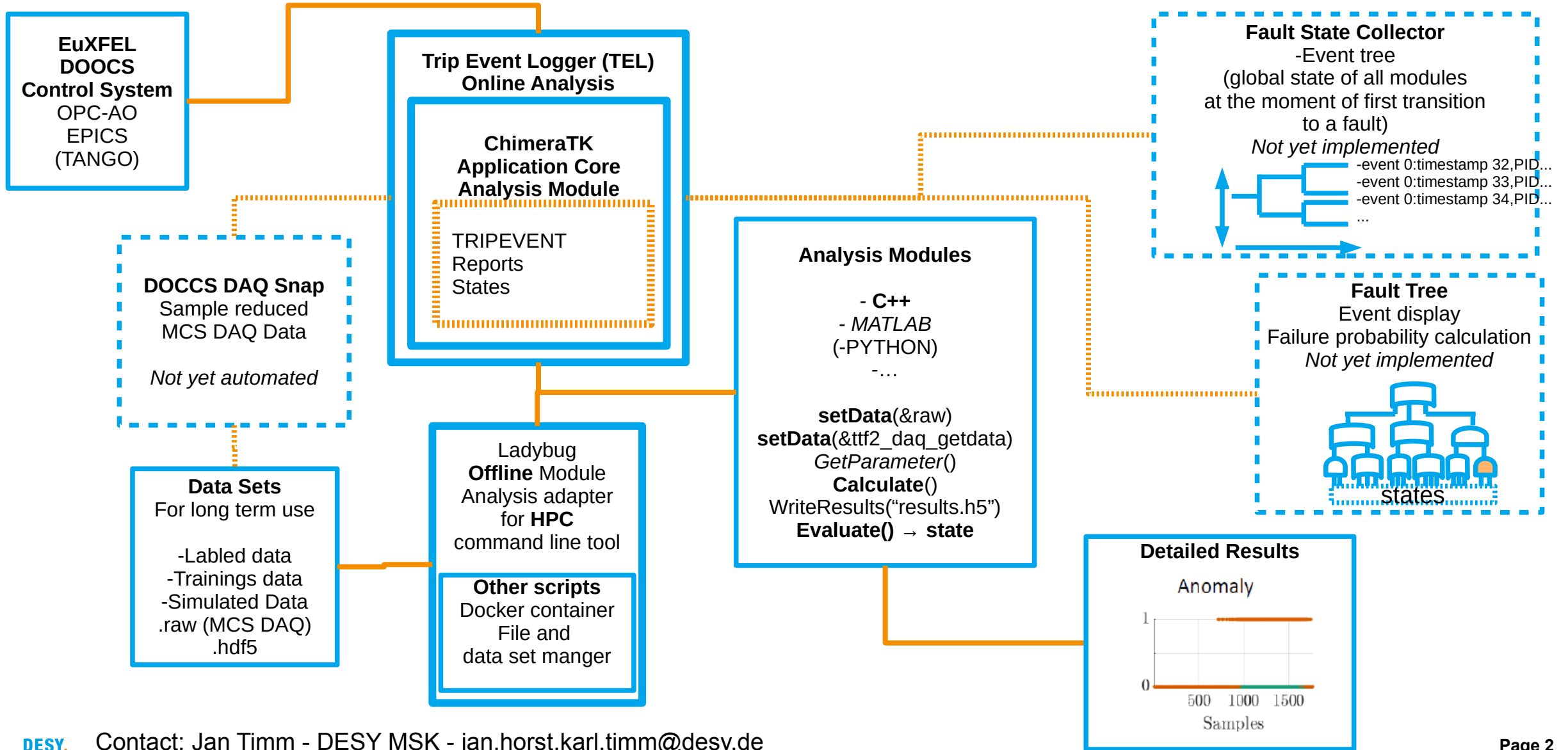
Trip Event Logger

Overview and Current Status

Dr. Jan Timm
Hamburg, 11.09.2020

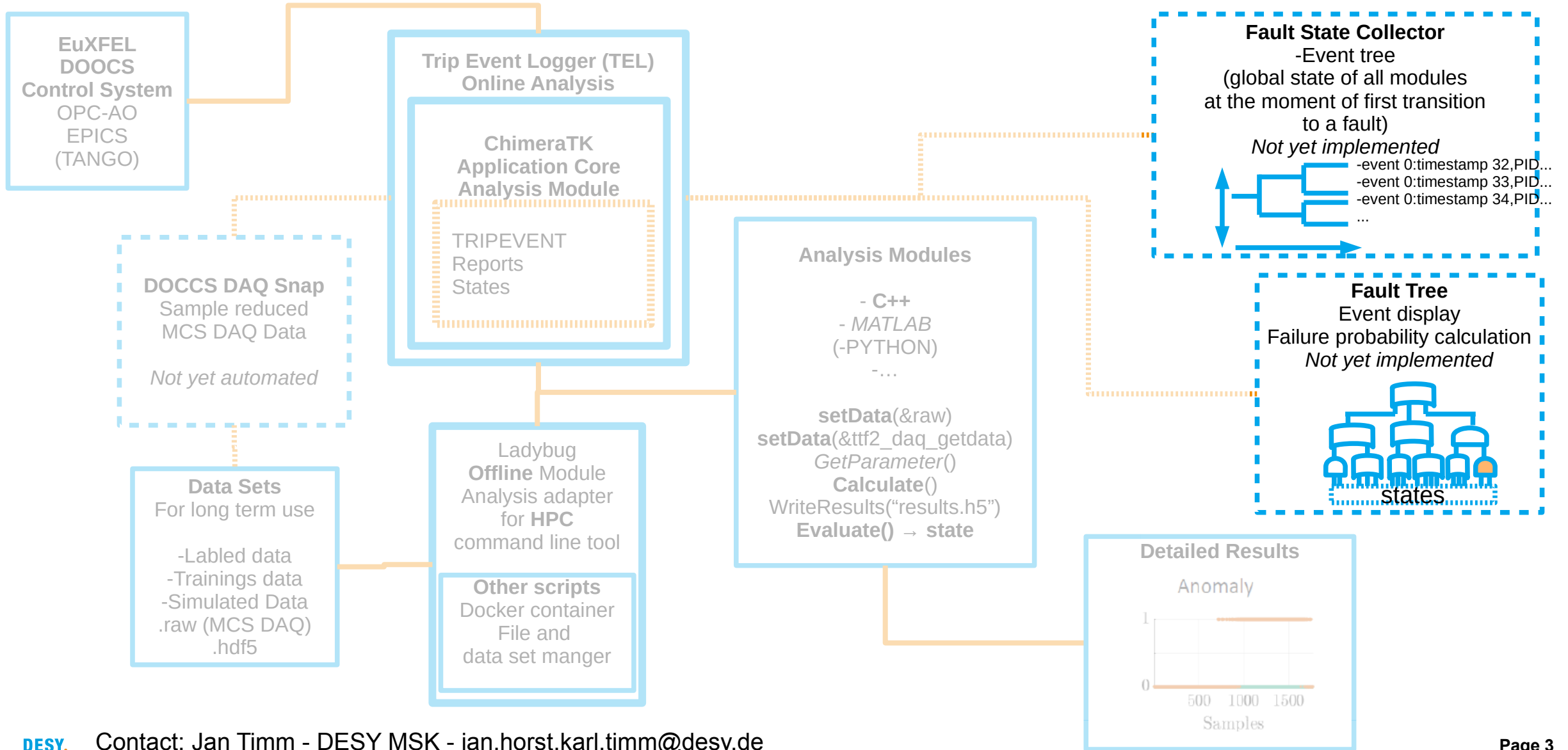
Trip Event Logger - EuXFEL – Maxwell HPC Cluster – AI

Connect a laser to a super computer and have it controlled by artificial intelligence.



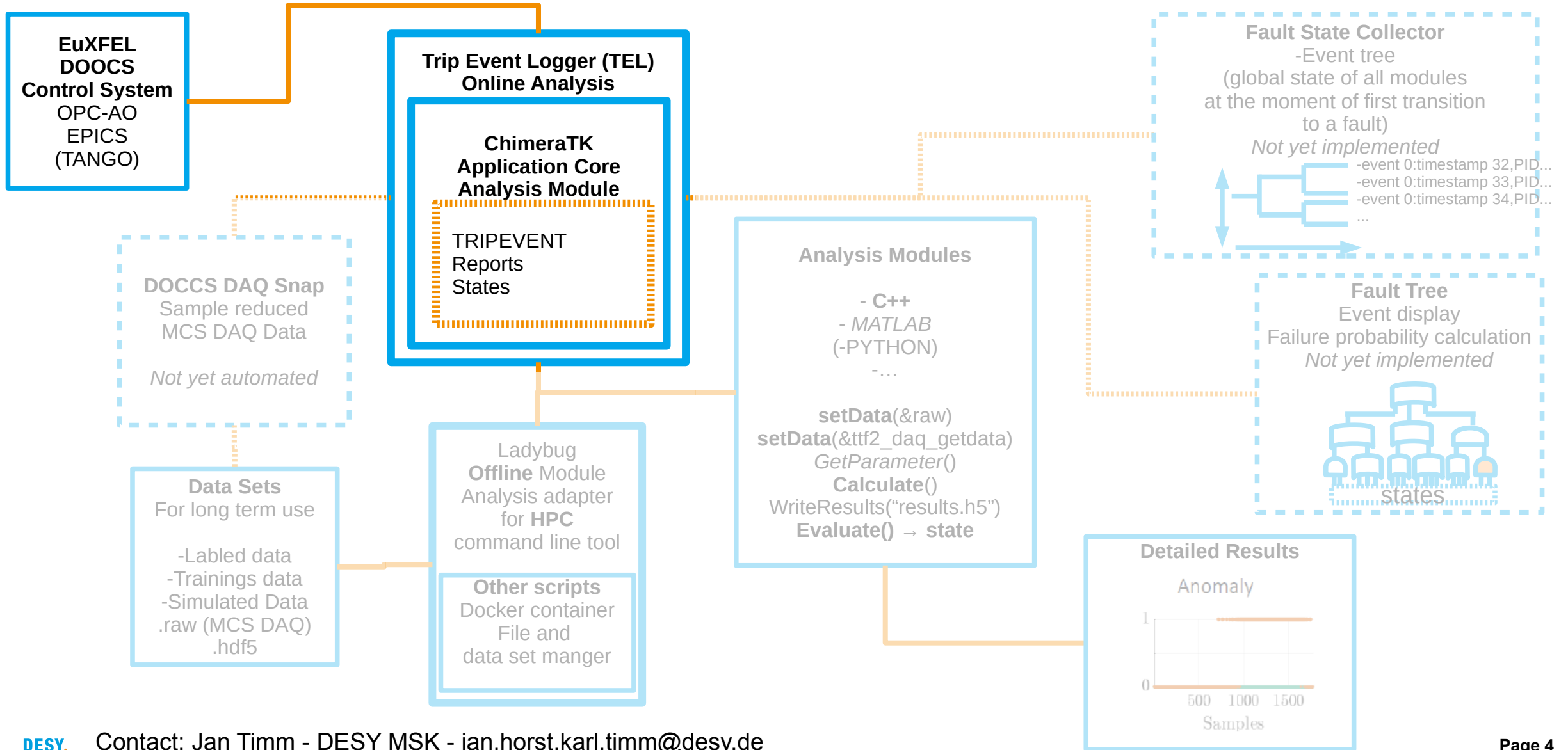
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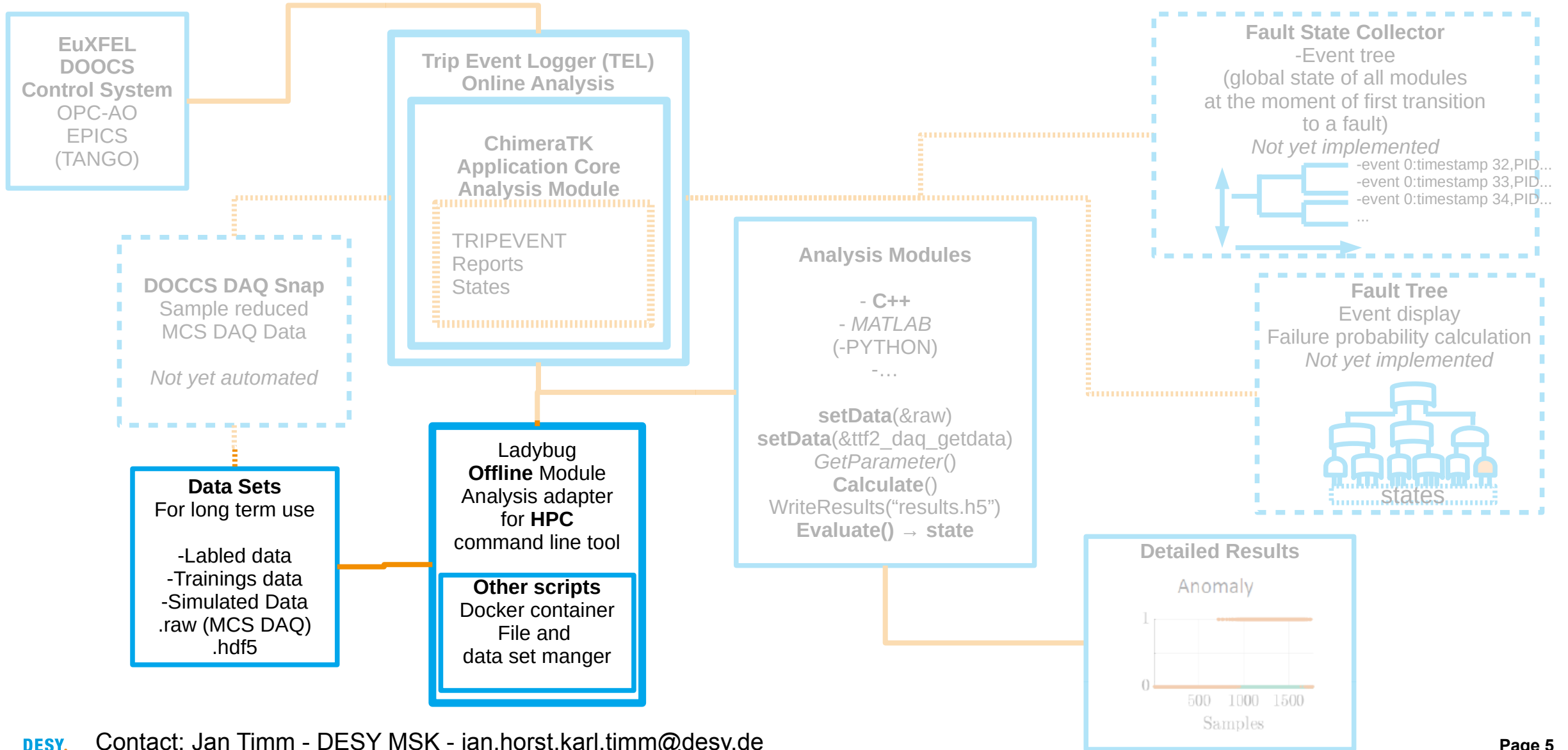
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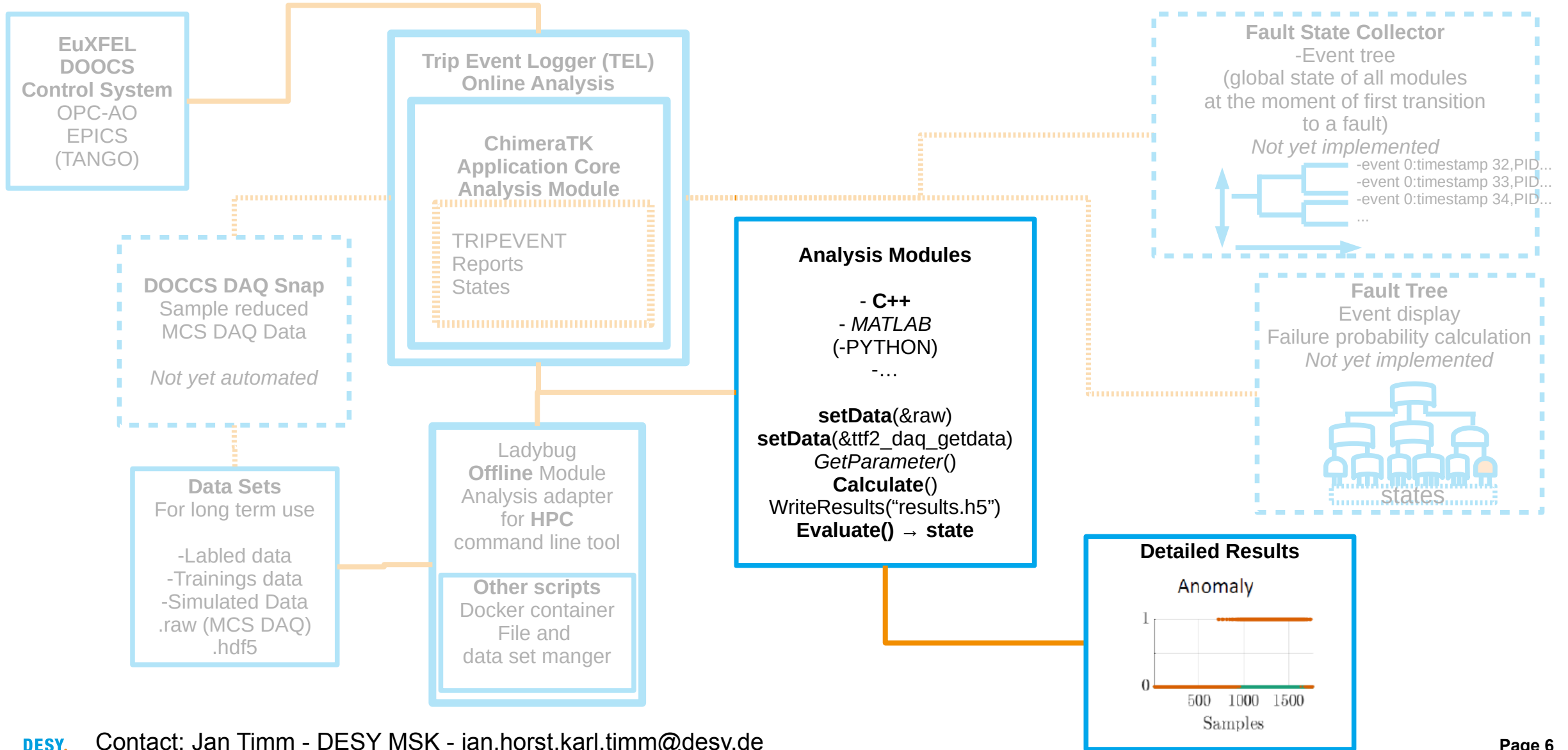
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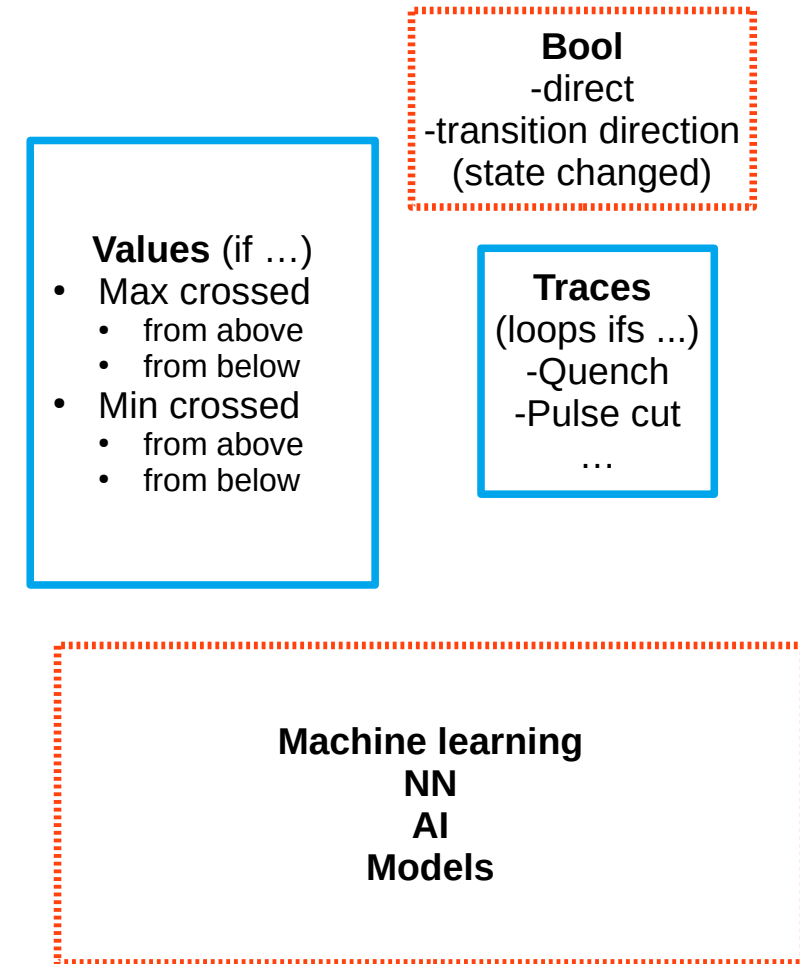
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Analysis modules

C++ written analysis libraries. Each represents an event / component in the Fault/Event Tree

- Input in our case are the 6 cavity signals for cavities (for other components this could also be traces, scalar or bools).
 - But also meta data and parameter about the operation mode of the machine if necessary.
- The output could also be a traces, scalars etc.
 - e.g. written in hdf5 for further investigation, especially in the case of offline analysis,
 - but you must also evaluate the output for the TEL and break it down to at least 3 **states**: off, normal, (warning1 .. warningN), failure for **Fault/Event Tree Analysis**.
- Each module must know its location, time stamp.
- For offline and online analysis.



Thank you

Contact

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