Collaboration Enablers in Aircraft Design

Institute of System Architectures in Aeronautics - DLR

1. Standardized Aircraft Data Format
CPACS
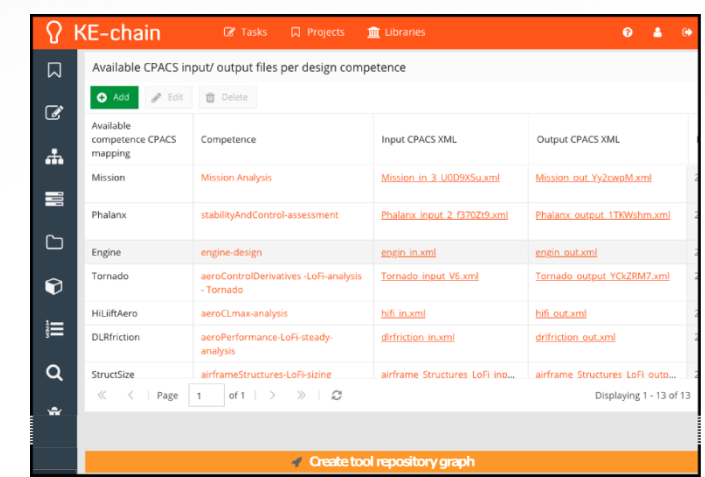
▶ More info at **cpacs.de**

▶ **Parameterization** of aircraft & related data

▶ **Reduced** number of data interfaces

▶ Used extensively by European research centers and academia

2. Collaborative PDP
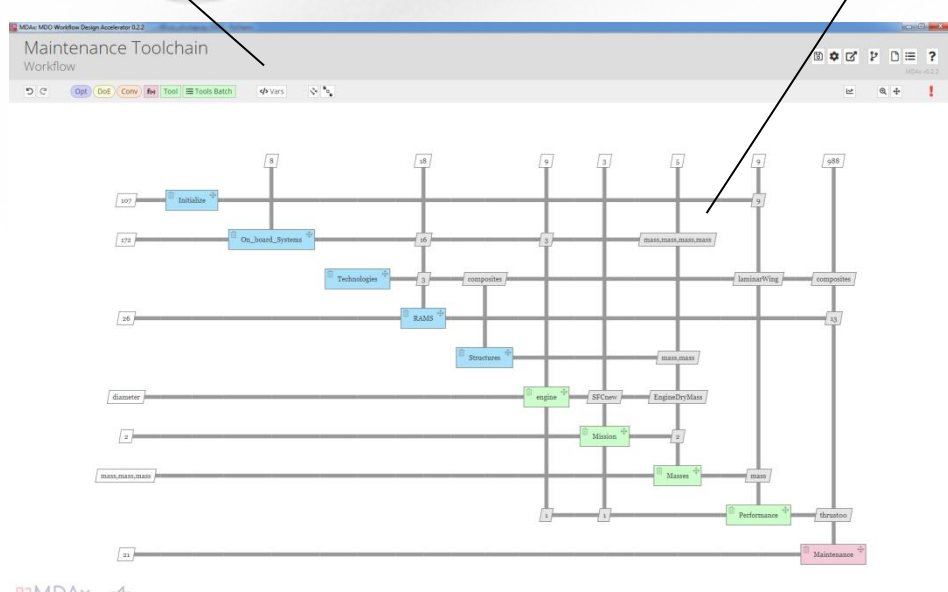### KE-chain

▶ **Online platform** for access to project data

▶ Connection to workflow generator and export to integration environment

3. MDO Workflow Generator
MDAx

▶ Interactive definition of MDAO method

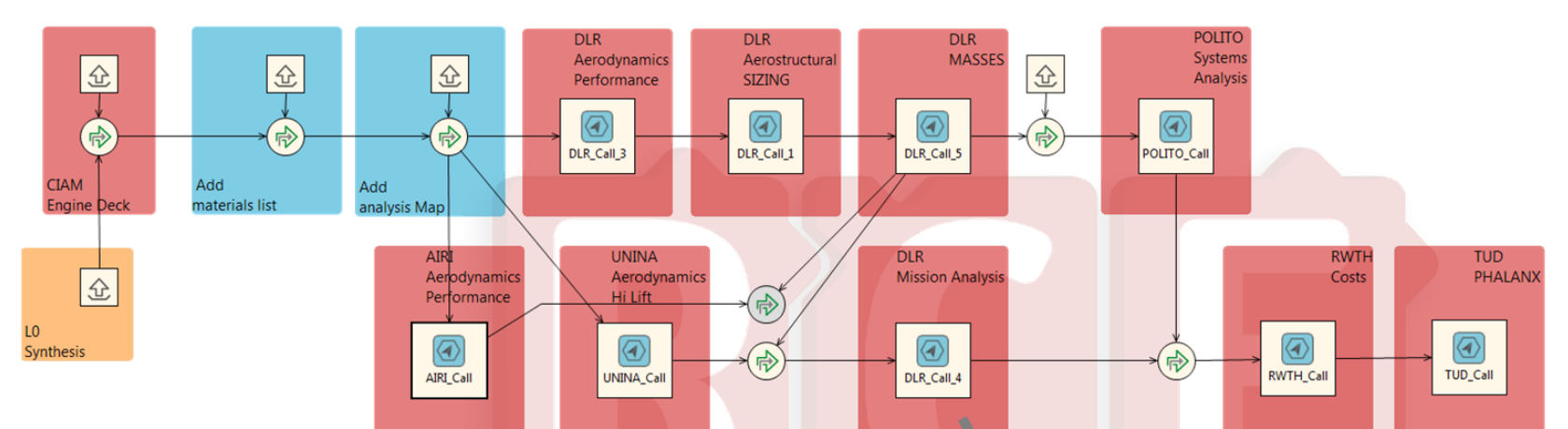▶ **Automated coupling** of tools based on specified I/O

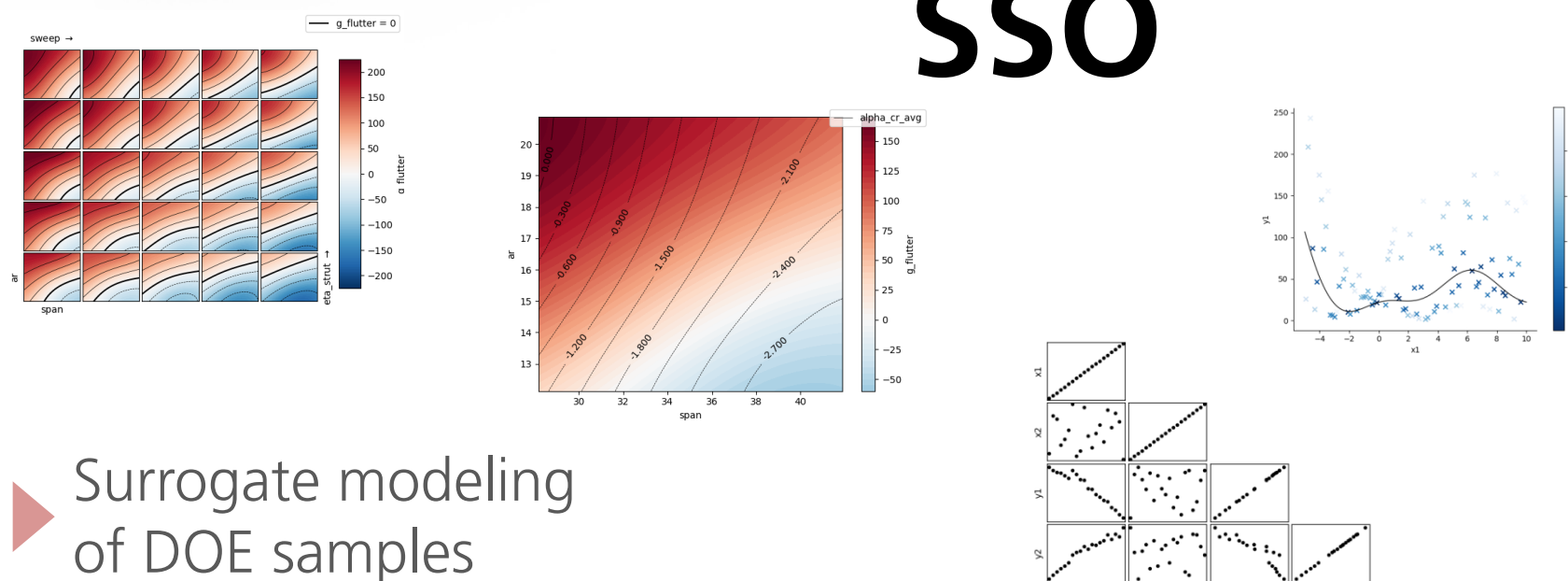▶ Enables **collaborative** exploration and inspection of workflow

▶ Export executable workflow to integration environment

4. Integration Environment
RCE

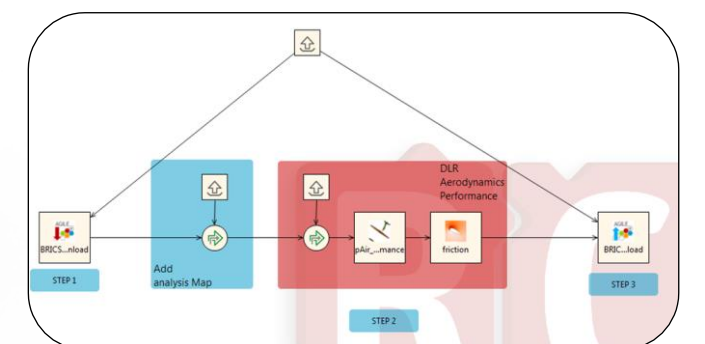▶ Executes tools locally or remotely and handles data transfer

▶ **Remote execution** of tools using Brics

5. Results Exploration
SSO

▶ Surrogate modeling of DOE samples

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