INTEGRATING DESIGN

Organisations with existing solutions that partly fulfil their design and engineering needs can still take advantage of the J2 Universal Tool-Kit's unique design capabilities – without abandoning their own simulations. That's where the J2 Active plug-in comes in.

J2 Active integrates the power of the J2 Universal Tool-Kit into your current design capabilities and establishes an effective interface with both MATLAB® and Simulink® software models. As a result, you can link configurations managed, high fidelity aircraft models seamlessly into any Simulink® model or efficiently embed libraries straight into any software package.

Key Features and Benefits

1. MATLAB®/ Simulink® Blockset

- Build models quickly with the J2 Builder plug-in and then analyse results with MATLAB® models

2. Connect the J2 Universal Tool-Kit to your Current Solutions

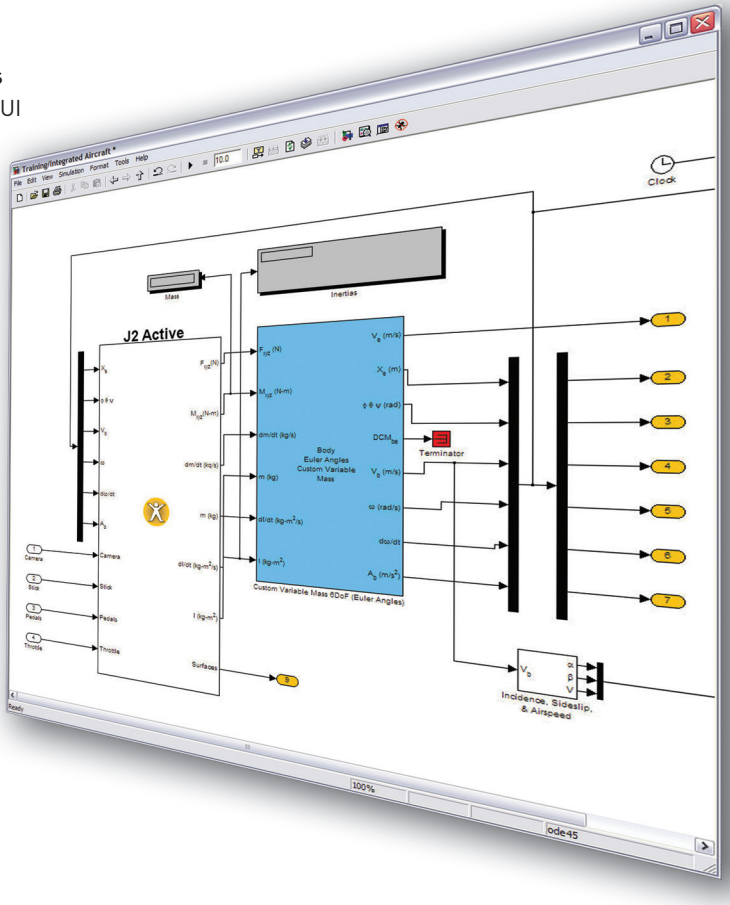
- Instantly integrate your existing design packages with the with the power of the J2 Universal Tool-Kit

3. Easy-to-use interface for Building Simulink® Models

- Map input and output signals straight through the GUI

4. Monitor all Aircraft States, Loads and Internal Conditions

- All signals can be output from the model for data recording purposes



SIMULINK® Enabled

MathWorks Partner

AIRCRAFT DYNAMICS

Predicting Performance

J2 ACTIVE DELIVERS

Features	Advantages and Benefits
Easy-to-use Graphical Interface	Aircraft models can be selected straight from the database and connected quickly and easily
Embed Detailed Models into Existing Simulations	Users no longer need to create extensive text files defining aircraft dynamics or look at simplifying data models for convenience. Complex models can be constructed and connected straight in to the existing solution
Integrated Configuration Management	No need for the simulation to be out of step with the aerodynamics. Always work with the latest version; changes to the aircraft model are automatically applied
Data Centric Database	Flight mechanics get to concentrate on their own area of expertise, knowing they will always have the correct aircraft model. Aircraft data models can be developed by aerodynamics personnel, while flight mechanics perform simulations
User Defined Model Structure	Quickly build models using the hierarchy available in J2 Builder and simply connect up inputs and outputs to the appropriate signals within your simulation in a single step
Update and Run	Change the aircraft model without having to update the simulation. Simply run the new version
Work with Variants of the Same Aircraft	Optimise the aircraft and add robustness into the Flight Control System – create deltas and run parallel simulation, investigating 'what-if' cases and how design changes affect the FCS
Output any of the Aircraft Signals	Quickly map internal values from the aircraft model to monitor loads, coefficients and internal user defined values for a more detailed insight
Define and Name the Data Ports	Create easily readable Simulink® models by structuring the ports in a way that will give you the clearest insight

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