Working with SIMPACK 8.5 and Beyond

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Overview

• SIMPACK 8.5 in Numbers

• Key Features of SIMPACK 8.5

• SIMPACK 8.5 Hands On

• SIMPACK whats next
Working with SIMPACK 8.5 and Beyond

SIMPACK 8.5 in Numbers

• Strong Focus on Useability
• Over 400 Development Items
  • Customer Driven
  • Technology driven
• Bug Fixes
• Development Start April 2000
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SIMPACK 8.5 in Numbers

• Beta Phase since August 2001

• More than 400 Test Cases grouped in

  • Functionality

  • Solver

  • Customer Models

• First Release December 2002
Key Features for SIMPACK 8.5

• Freely Definable Unit System

• User Routines

• Substitution Variables

• Function Expressions

• Modelling Element Library expansions
Key Features for SIMPACK 8.5

• Track Module
• Linearization / Modal Analysis
• Static Equilibrium
• Data Import/Export with Altair Motion View
• Documentation
• Packaging / Dimensions
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SIMPACK 8.5 Hands On Part I

- File Open
- Treeview Selections
- Icons / Right Mouse Button
- Context Sensitive Parameter Lists
- Parametrization / Substitution Variables
- Input Functions / Input Function Arrays
SIMPACK 8.5 Hands On Part I

- New Elements
- Joint States Dependency Setting
- Units
- Function Expressions
- Animation
- Data Export to Motion View
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SIMPACK 8.5 Hands On Part II

- Linearization / Modal Analysis
- Static Equilibrium
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SIMPACK whats Next

• Immediate Developments

• Strategic Focus
SIMPACK whats Next: Immediate

• SIM BEAM

• MatSIM

• Modal Plot

• Tyres
SIMPACK next: SIMBEAM I

- Define Beam Structured FE Models directly in SIMPACK
- Solve Beam Structured FE Models directly in SIMPACK
- Leverage powerful Parametrization for FE Models
- Perform Parameter Variations including FE Models
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SIMPACK what's Next: SIMBEAM II
SIMPACK whats Next: Modal Plot I

- Plot Absolute Modal Results
- Select Modes of Interest
- Select Bodies of Interest
- View Phase and Magnitude Comparison Plot
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SIMPACK whats Next: Modal Plot II
SIMPACK what's Next: Strategic

• Realtime

• Solver 100 times faster

• Flexible Bodies

• Database / Substructures / Parametrization

• GUI and 3D Graphics