

# NX Motion Simulation Roadmap

Gilles Dubourg – Product Manager  
Che-Wei Chang – Development Manager

May 2006



# NX Motion Simulation Roadmap Topics



- ▶ NX Motion and benefits
- ▶ NX Motion Direction & Roadmap
- ▶ NX5 Planning



# NX Motion Simulation Roadmap Topics



- ▶ NX Motion and benefits
- ▶ NX Motion Direction & Roadmap
- ▶ NX5 Planning

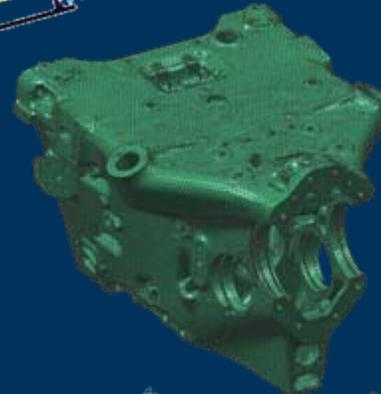
# Reminder: UGS Digital Simulation



## ...A Clear Focus on Customer Value

### UGS customer value means:

- ▶ **Integration and Scalability**
  - ▶ Knowledge-enabled
  - ▶ Supports multiple user Profiles
  - ▶ Fully integrated with design geometry
- ▶ **Managed within the PLM Environment**
  - ▶ CAE models, reports and "Best Practice" processes
- ▶ **Robust, World-Class CAE Technology**
  - ▶ Geometry abstraction, automated batch meshing
  - ▶ Multi-Physics Solvers with Scalable Performance
    - ▶ Linear, Nonlinear, Thermal, Optimization, Coupled Flow/Thermal...
- ▶ **Open**
  - ▶ Multi-CAD, Multi-Solver Environment (FEA and MBD)
  - ▶ Standards based- JT, Parasolid, STEP, IGES, XML...



### NX Simulation discipline coverage:

Linear static, **Non-linear static**, Steady state thermal, **Transient thermal**, Normal modes, **Dynamic response**, Sensitivity & optimization, **Statistical dimensional variance analysis**, knowledge based simulation, **Kinematic and Static & Dynamic motion**, Frequency & transient response, **Durability & fatigue**, H & P element solutions, **Super elements**, Adaptivity, Buckling analysis, Contact analysis, **Fluid flow interaction**, Laminate simulation, **Aero-elasticity**, Crush/Rollover, **Explicit Nonlinear**, Robust Design, **Drop Test**, **Compositional injection**

## Complete Portfolio for Digital Simulation Leadership

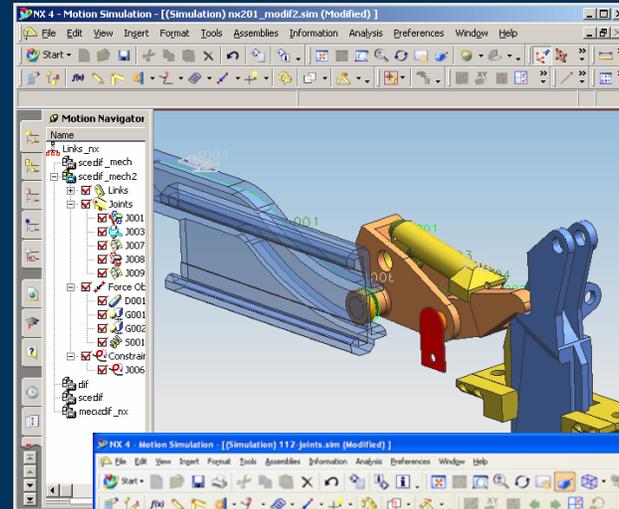


# What are NX Motion benefits? Speed, efficiency and quality



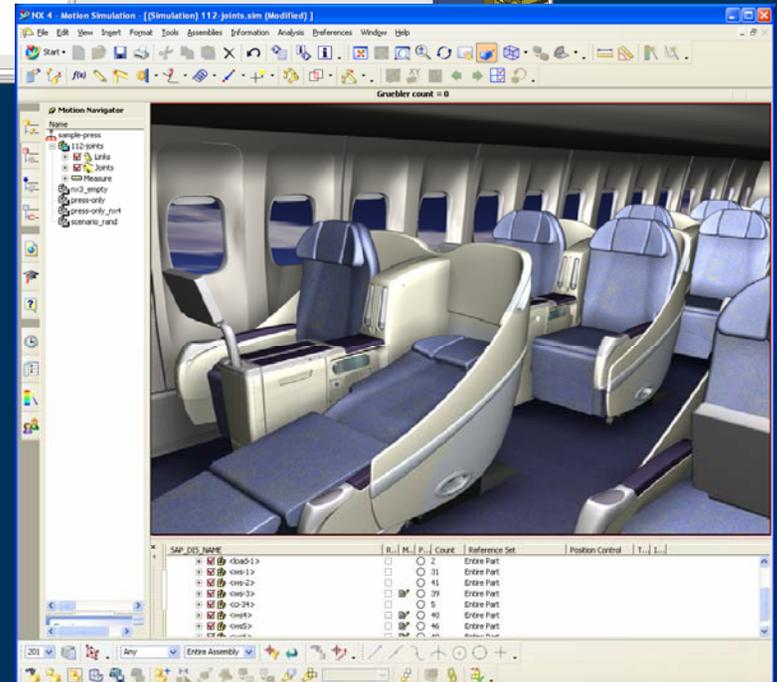
## Simulation Studies:

- ▶ From Concept to Product Definition
- ▶ Beyond Assembly mating conditions
- ▶ Kinematics and Dynamic
- ▶ Proven technology:
  - ▶ MSC/Adams or FunctionBay/RecurDyn
- ▶ Load Transfer to FEA



## CAD & PLM integration:

- ▶ Motion in synch with the Design data
- ▶ Packaging
- ▶ Management in Teamcenter
- ▶ Distribution to Teamcenter-Visualization
- ▶ Automation





# NX Motion Simulation Roadmap Topics



- ▶ NX Motion and benefits
- ▶ NX Motion Direction & Roadmap
- ▶ NX5 Planning



# - NX Motion Direction & Roadmap

## - NX5 Planning



- ▶ To be presented at the conference



[www.ugs.com](http://www.ugs.com)

**THANK YOU**