Part 2



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Programming with QuickField



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Practical example: thermostat control system

QuickField is a FEA for EM, heat transfer, stress and mutliphysics



QuickField Analysis Options

Magnetic analysis suite	
Magnetic Problems	Magnetostatics
	AC Magnetics
	Transient Magnetics
Electric analysis suite	
Electric Problems	Electrostatics and DC Conduction
	AC Conduction
	Transient Electric field
Thermostructural analysis suite	
Thermal and mechanical problems	Steady-State Heat transfer
	Transient Heat transfer
	Stress analysis



Open object interface



ActiveField API object model

ActiveField[™] help

Main QuickField Site Free Downloads Co

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ActiveField Technology Objects Overview Hierarchy Chart How to Start: Application Object How to work with Problems How to work with Model How to work with Data How to Analyze Results



QuickField Object Model



Previous webinar "Programming with QuickField"



Thermostat control system



Input data:

Water volume: 110 liters Heater power: 2 kV Initial temperature: +20°

Goal temperature: +70°

QuickField

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Heater



http://quickfield.com/advanced/water-heater_simulink.htm

Tools for creating the control system model

Simulink



Model-Based Design: From Concept to Code

LabVIEW

