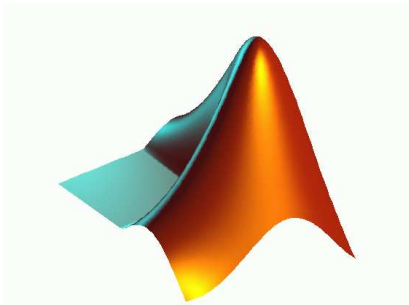


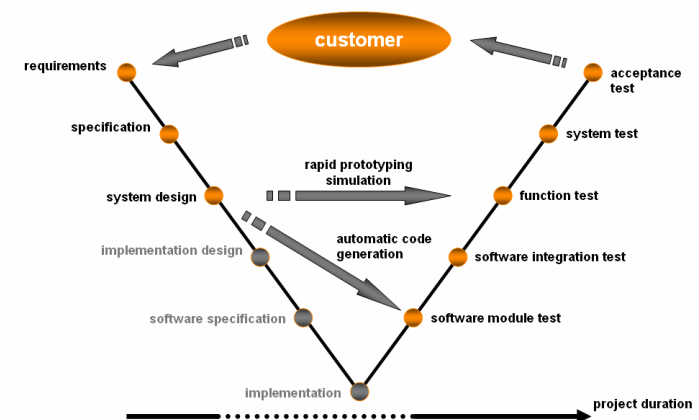
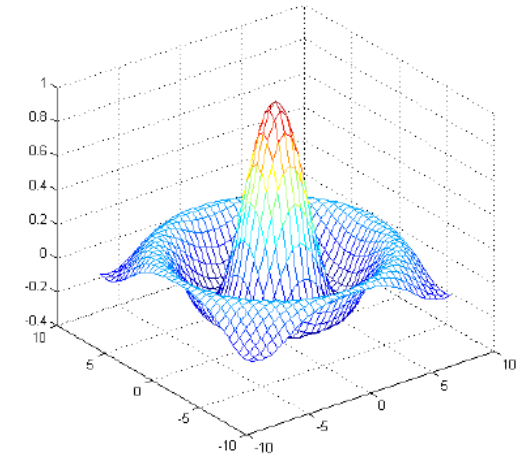
B&R Automation Studio Target for Simulink



Intentions



- Increasing demands in industrial automation
 - Presuppose simulation routines in advance
- Sophisticated control algorithms
 - Require advanced development tools
- Well-educated specialists
 - Want to concentrate on their core competences
- Automatic Code Generation
 - Reduces time-to-market
 - Minimizes the risk of coding errors
 - Helps saving costs

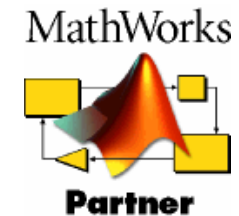


The MathWorks



- MATLAB and Simulink

- Basis for B&R's Automatic Code Generation
- Powerful development tool
- Wide-spread all over the world

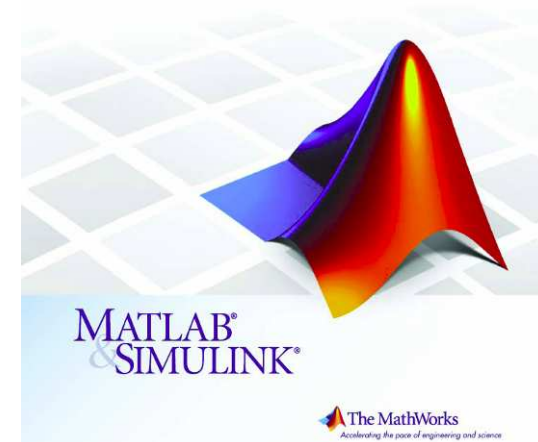


- Real-Time Workshop and Real-Time Workshop Embedded Coder

- Automatic Code Generation from Simulink models
- Translation into PLC language
- Well-proven over many years

- Stateflow and Stateflow Coder

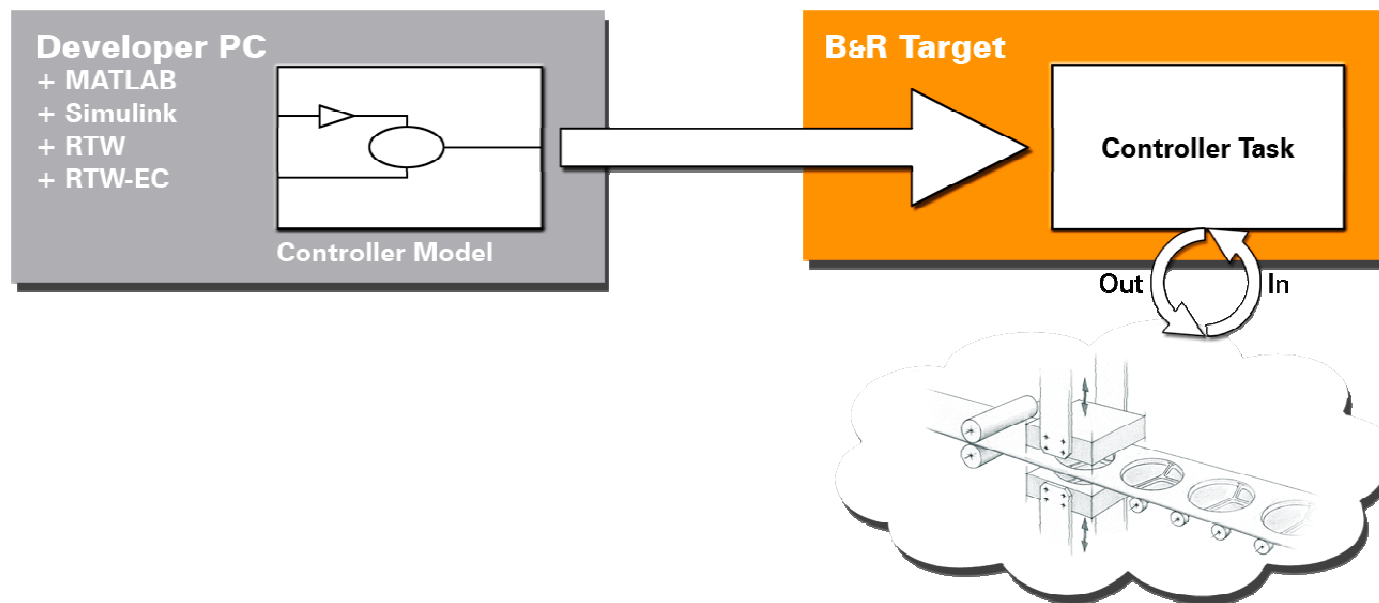
- Modeling of sequences
- Automatic Code Generation of step sequences
- Optional



Rapid Prototyping



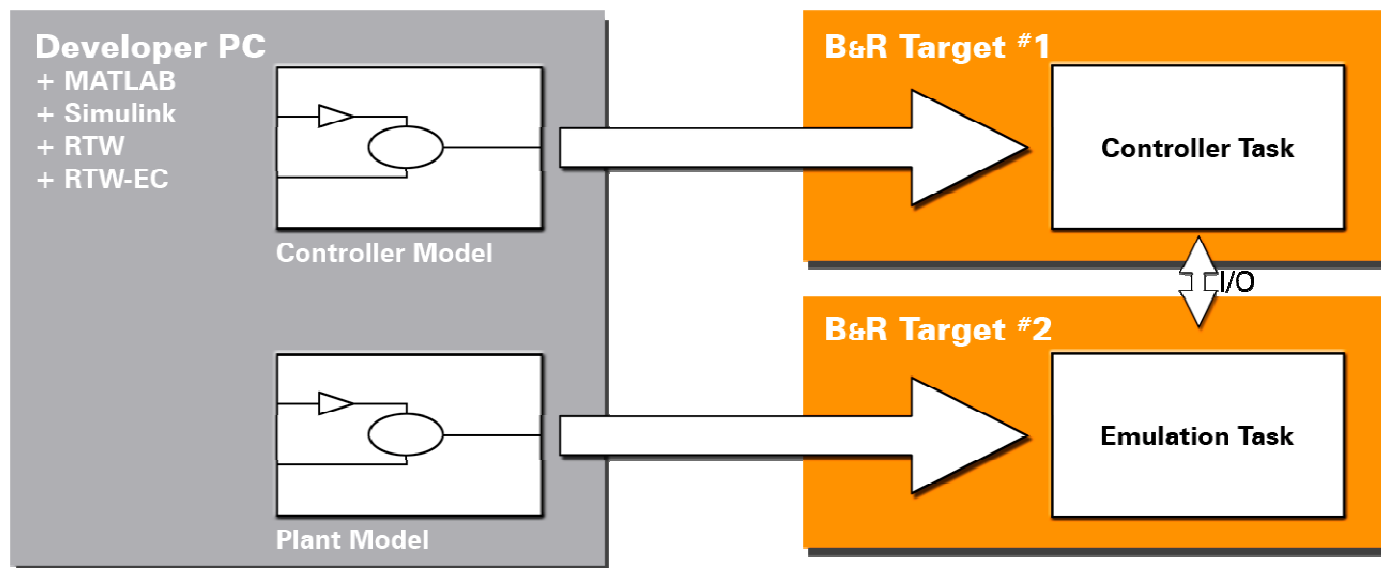
- Fast and flexible implementation of sophisticated models
- Economy of time and costs
- Avoidance of coding errors



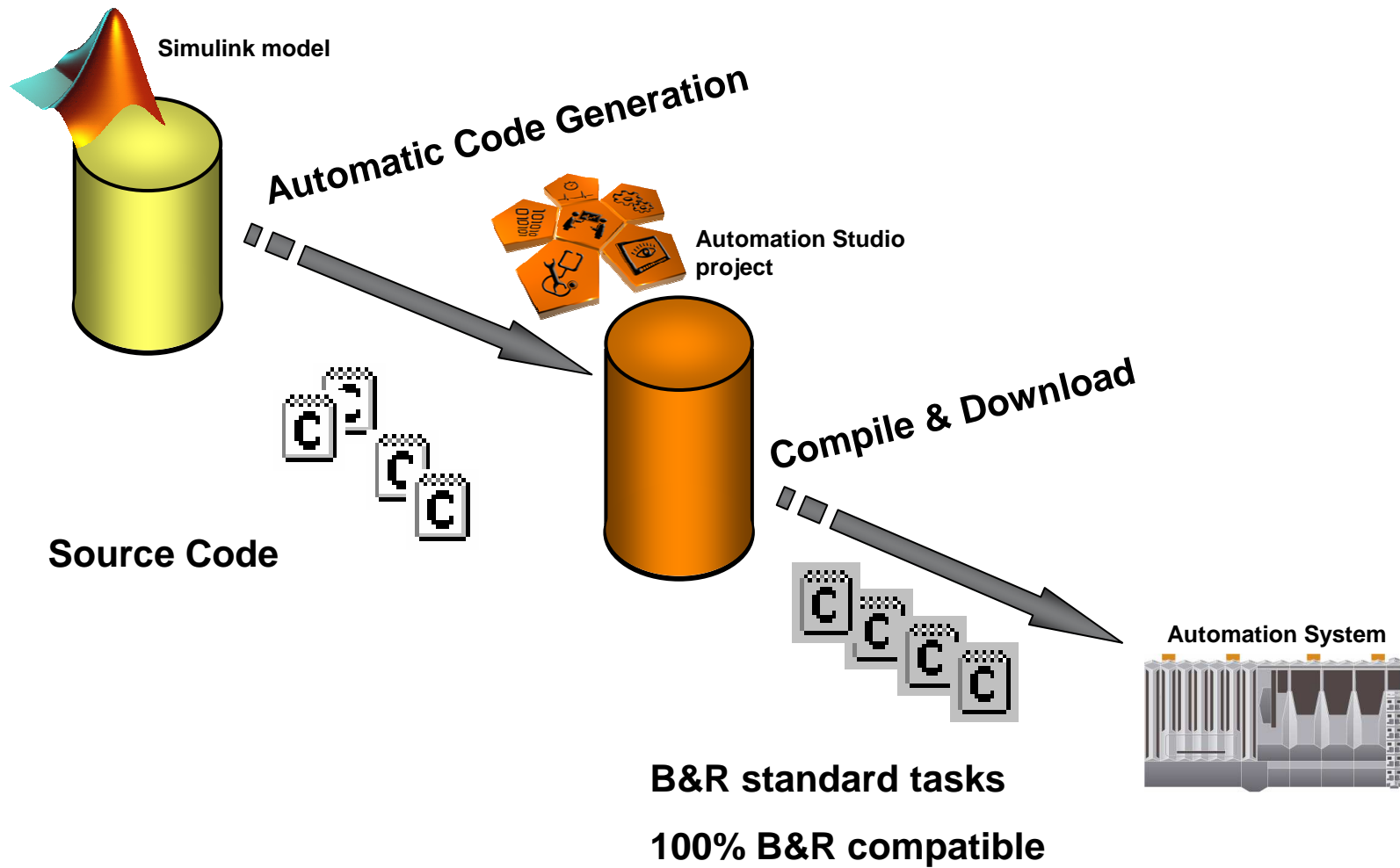
Hardware-in-the-Loop



- Riskless testing
- Emulation of critical plant components
- Significant results



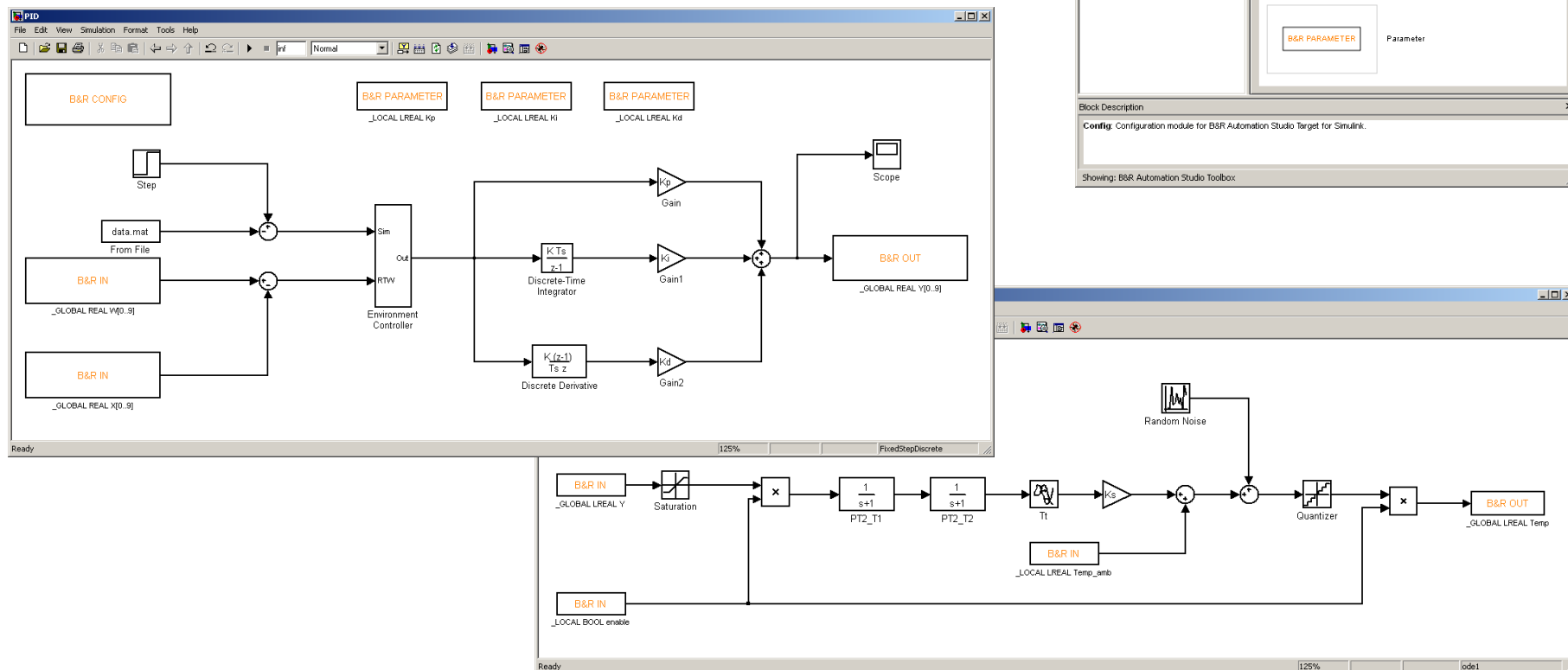
Integration & Workflow



B&R Toolbox for Simulink



- B&R Toolbox
 - B&R Config block
 - B&R Input and Output blocks
 - B&R Parameter block



Debugging



■ Automation Studio

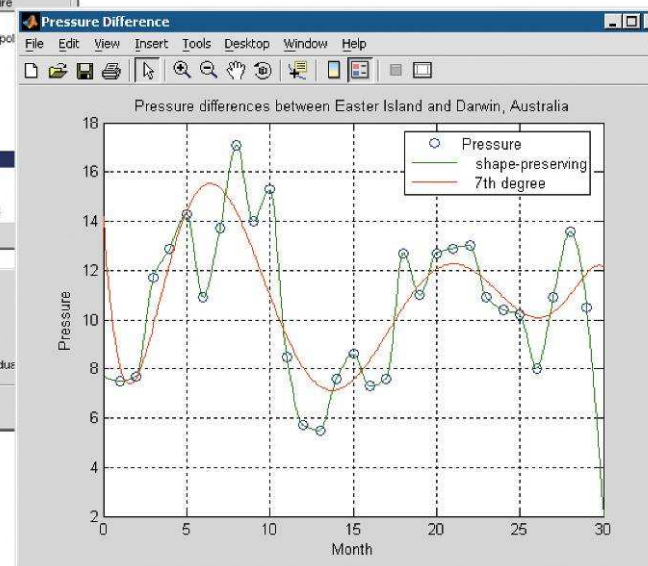
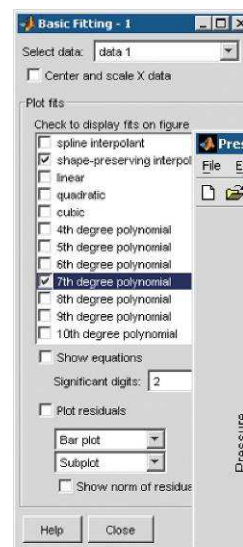
- Watch
- Trace
- Profiler

Name	Type	Scope	Force	Value
a	LREAL	local		1.0
b	INT	global		2
c	LREAL	local		30.0
k	LREAL	local		10.0

■ MATLAB/Simulink

- Workspace
- Plots
- Data analysis

Current Directory		Workspace		
		Stack: Base		
Name	Value	Min	Max	
IOblocklist	<5x3 cell>			
a	1	1	1	
b	2	2	2	
c	30	30	30	
k	10	10	10	



Requirements

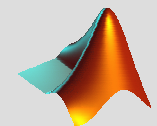


- B&R Automation Studio 3
- B&R Automation Runtime system
 - SG4 target system
- MATLAB Release 2007b or higher
 - MATLAB®
 - Simulink®
 - Real-Time Workshop®
 - Real-Time Workshop® Embedded Coder
 - Stateflow® (optional)
 - Stateflow® Coder (optional)

Further information:

www.mathworks.com

Sales
Support
Training





- Training module TM140
 - B&R Automation Studio Target for Simulink

- Integral component of Automation Studio 3
 - Easy installation in MATLAB
 - No additional costs concerning Automation Studio

- Simple examples
 - Documentation of B&R block set for Simulink
 - Tutorial
 - Further application examples



Your worldwide automation partner

