

VisSim/OptimizePRO™

Constrained Parameter Optimization Software

Key Highlights

- Constrained optimization
- General linear and nonlinear optimization
- Multi-nonlinear constrained optimization
- Optimization with no constraints
- Optimization with upper and lower design variable bounds
- Minimum and maximum of objective function
- Optimization and diagnostics reporting

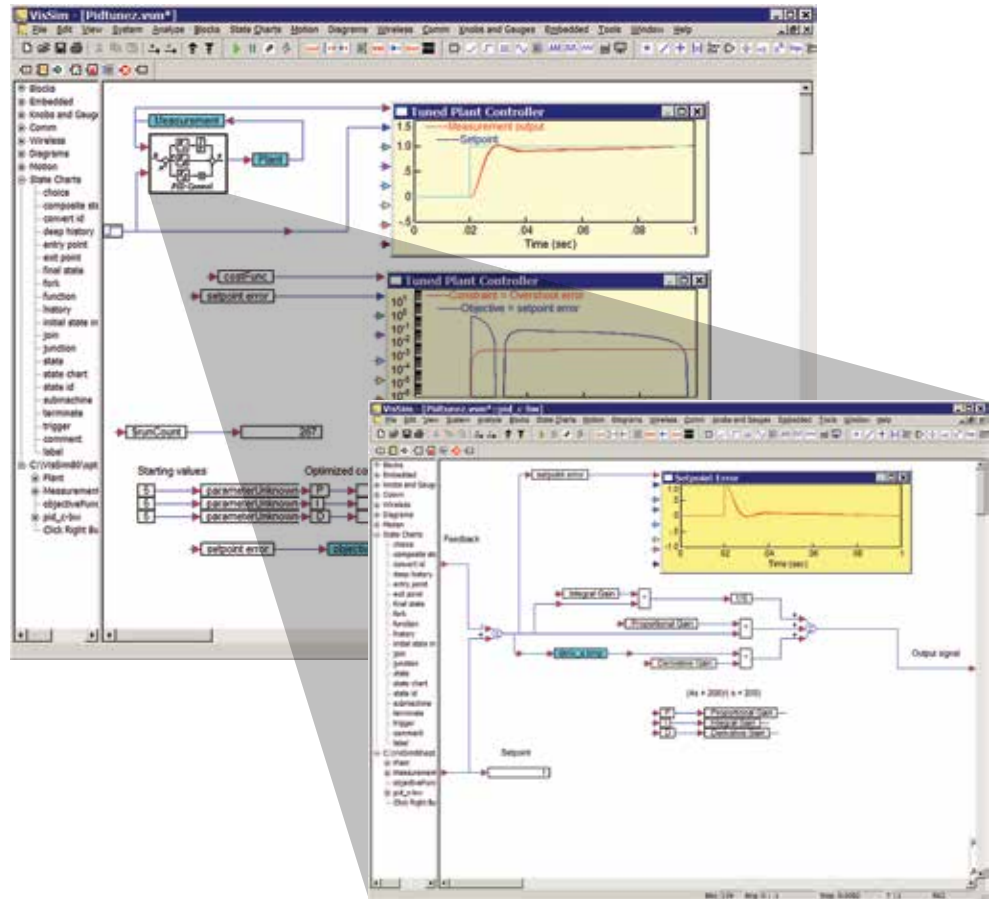
System Requirements

- Professional VisSim v9.0
- Windows XP, Vista, 7, or 8
- 128 MB RAM
- 125 MB hard disk space

Introduction

VisSim/OptimizePRO calculates optimal values for design variables subject to user-defined constraints starting from initial user guess values. For example, VisSim/OptimizePRO can automatically calculate optimal PID controller gains that give minimal time to setpoint, plus minimal overshoot. VisSim/OptimizePRO allows user-specified cost functions that can consider controller behavior such as steady-state error, overshoot, and rise and setting times.

VisSim/OptimizePRO also works with a physical system when used with VisSim/Real-TimePRO and VisSim Embedded.



Constrained optimization of controller gains of a PID controller (upper left). PID control structure is accessible by right clicking on the PID CONTROLLER compound block.