Graphical fire modeling built around the Fire Dynamics Simulator (FDS) from the National Institute of Standards and Technology (NIST)
Create large, complex fire models quickly and easily with PyroSim. You can develop advanced simulation models in a small fraction of the time required to manually create FDS input files.
Draw Using Floor Plan Guides

Accurately sketch model geometry using background images. You can quickly create fire model geometry directly from floor plan data without repetitive coordinate entry.
Import CAD Geometry

Import geometry from AutoCAD DXF files. PyroSim can import 2D and 3D geometry files. Geometry can be used as a background guide and extruded to create walls.

Extrude 2D Objects

PyroSim

Import 3D Geometry
Represent Complex Objects

Import arbitrary geometry and convert into blocks for FDS input.
Interactive Drawing Tools

Graphical tools for drawing geometry in 2D and 3D let you quickly create objects with the help of instant visual feedback. A variety of different tools are available for fast creation and editing of geometry with full undo/redo capability.
Move and Copy Objects

Save time by moving and copying objects to new locations. You can move, copy, scale, and replicate all geometry in your model to quickly accomplish repetitive tasks and leverage existing models.
You can also rotate geometry in PyroSim to quickly arrange geometry and create circular shapes.
PyroSim automatically breaks up complex diagonal and curved geometry into the grid-aligned blocks required for FDS input.
Model Organization

Save time and simplify edits to your large models with tools to group similar geometry and manage multiple floors.
Simplified FDS Input

Organized input forms simplify the specification of fire and material properties and significantly reduce errors.

PyroSim
Automatic FDS File Creation

All FDS input records are automatically generated from the PyroSim model, so you don't have to remember FDS input file syntax or spend time entering hundreds or thousands of lines of text.
Integration with FDS

Run FDS seamlessly from within the PyroSim user interface and quickly interpret results using PyroSim and Smokeview.
High Quality Graphics

Create realistic presentation graphics with support for textures, advanced shading, and fly-through modes.
International Versions

PyroSim
Simulation Software for Performance-Based Design

PyroSim
Graphical User Interface for FDS

PathFinder
Next-Generation Evacuation Simulator

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