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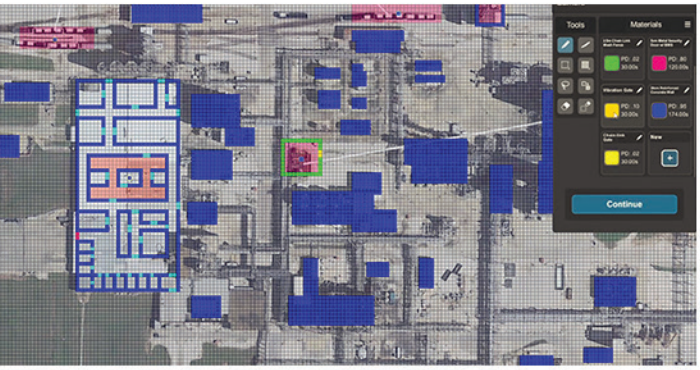
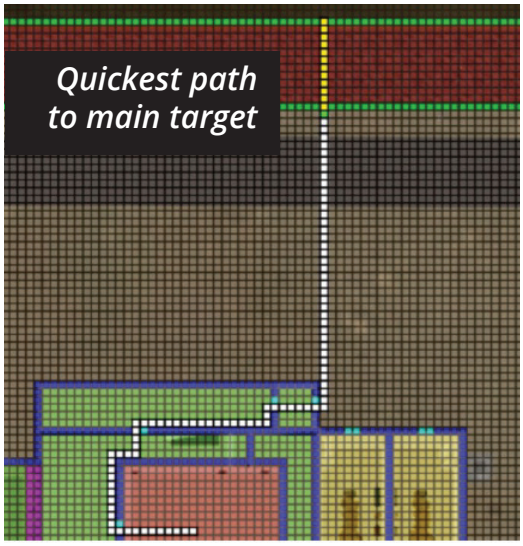
PATHTRACE©

PATHWAY ANALYSIS TOOL





Model and analyze site vulnerabilities

- Provides an easy-to-use visual footprint of any designated facility, its physical protection system layers, and targets.
- Allows users to quantitatively test the design and strength of their PPS to find the quickest, stealthiest, and most vulnerable pathways to target location and identify any gaps before adversaries do.
- Compares different adversary capabilities and attack scenarios; evaluates multiple pathways along various parameters; and generates accurate probabilities of detection, delay, and interruption across baseline and upgraded facility models using data from a specific facility.
- Unique multitarget analysis capability enables modeling of pathways to individual targets or multitarget sets.
- Based on data and algorithms developed by Sandia National Laboratories, a global leader in nuclear security for more than 70 years.

Create custom models

- Allows users to create models that incorporate physical protection delay barriers such as walls, doors, fences, and gates, as well as detection areas monitored by sensors, foot patrol, and CCTV, to help identify vulnerable attack pathways, response force timelines, and targets.

Gain actionable feedback

- Produces actionable feedback on the feasibility and potential impact of facility upgrades.
- Uses intuitive visuals to explain the relationships between detection, delay, and response timeline.
- Delivers accurate, quantitative data on the potential impact of improved detection and delay measures.

Free licensing and training

- Apply for free licensing, training, and online support at insetools.sandia.gov.
- Contact modsimteam@sandia.gov with questions.

Sandia National Laboratories

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