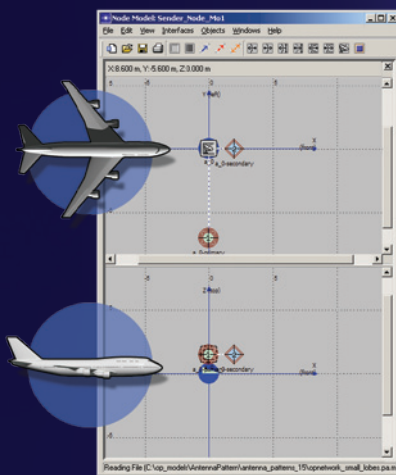




# Advanced Antenna Modeling and Visualization with OPNET Modeler®

OPNET Modeler is the de facto industry standard for network modeling and simulation. Modeler offers a scalable simulation environment for designing protocols and technologies, and for testing and demonstrating designs in realistic scenarios prior to production. The world's leading network R&D organizations have relied on Modeler to accelerate their research and reduce time-to-market.

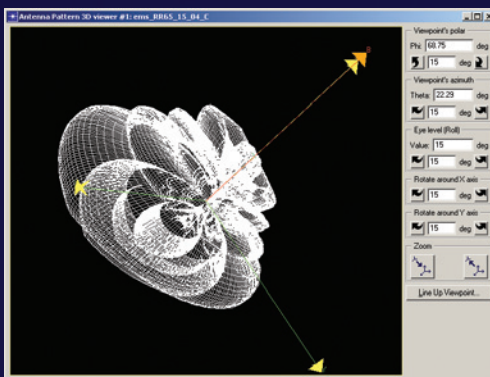
Understanding antenna-based communication scenarios demands accurate and flexible modeling capabilities coupled with clear visualization of antenna coverage. OPNET Modeler provides an advanced antenna modeling interface enabling users to accurately specify antenna orientation and clearly understand how antennas are positioned relative to the bodies to which they are attached. Modeler allows users to incorporate custom antenna patterns into network scenarios and visualize antenna location, orientation, and coverage in a rich, 3D environment.



*Understand and specify the positioning of antennas relative to the bodies to which they are attached*

Defense organizations, equipment manufacturers, and network service providers leverage these capabilities for important studies:

- Evaluate the performance of proprietary or customized antenna patterns
- Model multiple-antenna systems with distinct functions
- Visualize the signal strength from cellular base stations in a geographical area
- Determine the variation in antenna gain due to terrain impairments
- Optimize antenna deployment in a theater of operations to ensure communications



*View antenna lobes in three dimensions*



*Visualize the signal strength in and around cell-sites*

Advanced antenna modeling capabilities are included with OPNET Modeler® Wireless Suite and OPNET Modeler® Wireless Suite for Defense. The 3D Network Visualizer module (3DNV™) is required to visualize antenna coverage in 3D.