AGI Update: STK 12

What's new in STK version 12

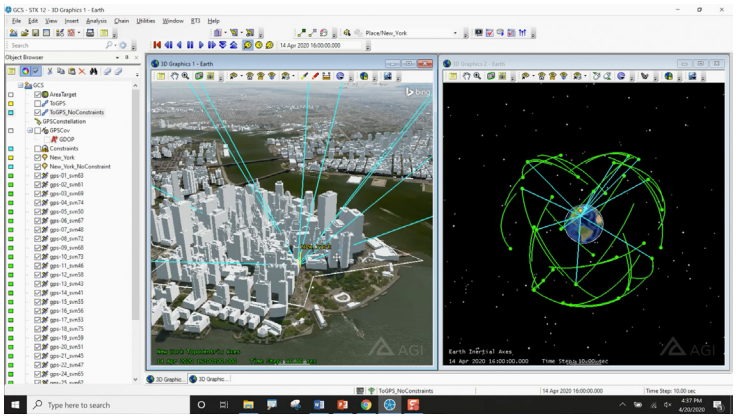
STK is an essential tool for analyzing and visualizing complex systems in the context of your mission. Swiftly interact with data from platforms across aerospace, defense, telecommunications, and other industries. Simulate your intended missions under non-homogenous conditions and communicate the results with reports, graphs, and stunning 3D animations.

STK 12 continues the evolution of AGI's mission simulation platform, which supports digital mission engineering and digital mission operations workflows.

Here are a few of the capabilities introduced in STK 12:

- **Aviator**. Basic Maneuvers now use a full 3D gravity model with oblate rotating Earth effects, including Coriolis terms. STK 12 also adds a Lambert midcourse guidance strategy for interceptor engagements. And, you can now automate Aviator with a rich API supported by the STK Object Model.

- **EOIR**. STK 12 introduces cloud modeling with a flexible, thin-layer approach. This capability supports inputs for multiple time-dynamic layers and cloud characteristics such as percent cloud cover, temperature, emissivity, and radiance. Meanwhile, under the hood, EOIR has been converted from a UI plugin architecture to become part of the core STK Engine.



- **3D Tiles and Lighting Analysis**. 3D Tiles are known for visualization in STK, but now you can use them in analysis to constrain line-of-sight access. Lighting analysis in STK has also been improved in STK 12. You can include the effects of terrain on vehicles and objects in lighting computations.

- **Communications**. You can now import antenna-gain patterns generated by Ansys HFSS in the .ffd file format. An individual .ffd file may include multiple gain patterns. Also new to STK 12, RCS contour lines – for antennas, transmitters, receivers, radars, and vehicles – now display atop 3D terrain when not displayed at altitude.

- **Parallel computing**. The number of default local cores for parallel computing in STK has been increased to eight. STK can use more cores with additional licensing. Also new to STK 12, the STK Parallel Computing Server SDK is available in Python. Finally, you can now save scenarios and VDFs in a binary format, which decreases loading time for the parallel workers.

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