

# The Optimized Journey of Space Access

To win the space race with successful satellite launches, companies must close the gap between the real and virtual worlds.

This enables them to manage a complex system of systems through effective collaboration, innovation and program execution. Here's how the optimized journey through the whole project lifecycle looks like:



## Mission Engineering

Use a digital mission engineering approach to model, design, analyze and integrate the system of systems comprising launch, satellite orbit and ground operations. This ensures the right program set-up with all requirements to begin the design phase.



## Design and Analysis

Integrate form, fit and function on a single digital platform to satisfy the full spectrum of requirements. This helps you mitigate risks, lower costs and compress schedules.



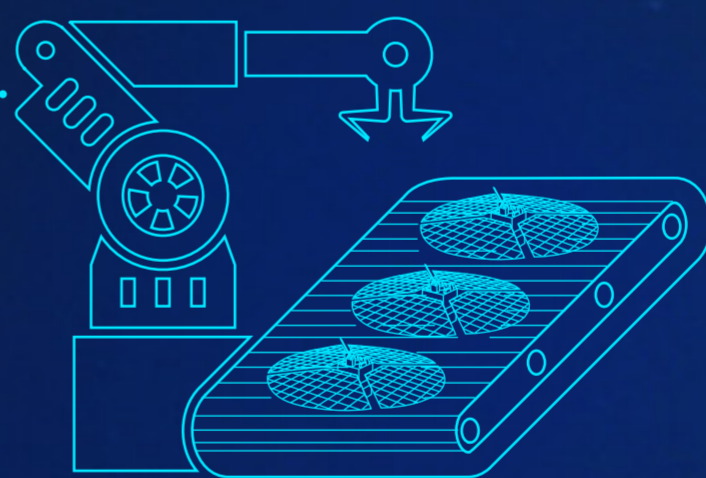
## Test and Validation

Rely on accurate multi-scale and multi-physics virtual simulation to reduce costly physical testing while shortening rocketry and satellite development time.



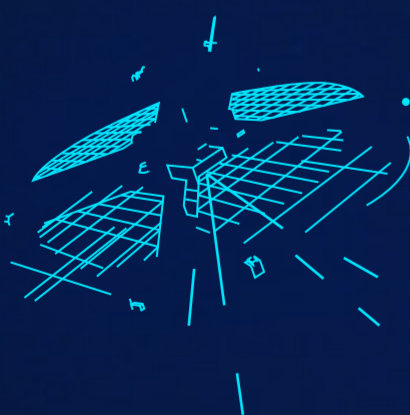
## Production

Digitally optimize the factory, supply chain and workflows for efficient operation of the physical factory and supply chain network. It guarantees flexible production capabilities and first-time-right quality.



## Post-Mission

Create a sustainable ecosystem in space and on Earth by deploying reusable launch assets and limiting space debris through on-orbit "roadside" assistance service and optimized deorbit plans.



## Operations

Ensure satellite operational excellence with minimized quality issues and launch risks by using a virtual twin and processes that are flexible, automated and robust.

