



RAISING INNOVATION TO THE CLOUD

OTIS MOBILITY IS TRANSFORMING THE WAY WE MOVE

About the Customer

Otis Mobility is the global leader in elevators and related equipment. It designs and manufactures mobility technology found in buildings all over the world. Founded in 1853, Otis has helped shape urban living after Elisha Otis, founder, developed the elevator safety brake. The company has been at the forefront of the modern city's transformation since its inception. Otis Mobility has achieved several industry firsts to drive elevator performance and passenger comfort upward.



We've greatly reduced the cost of expensive on-premises HPC resources with our cloud-only approach. On average, we have reduced computational time by 50% with Altair One.

Óscar Vila, head of the Analysis Department, Otis Mobility



Their Challenge

The analysis department at Otis Mobility is focused on two main challenges: product optimization — for safety, efficiency, and performance — and standardizing product research and development across all Otis engineering centers around the world. With its previous setup, the team was limited by a small on-premises high-performance computing (HPC) environment that powered the innovation necessary to move technology forward. The team also faced challenges in standardizing operations because of the difficulty in sharing simulations and calculations between teams. The analysis department decided to move operations to the cloud to expand **access to compute power while also creating an opportunity for shared collaboration across the organization** — and it needed an easy way to access its new cloud capabilities.

Our Solution

After careful consideration, the Otis analysis team selected the Altair One™ cloud innovation gateway for seamless access to software, scalable computing resources, and data from any device. It chose Altair One for its HPC cloud access, collaborative platform, and unique licensing system with access to every critical solver. On top of the easy scalability of cloud resources inherent in Altair One, the team could access the simulation solutions it already relied on for critical engineering innovation, powered by the patented and flexible Altair Units licensing system. Óscar Vila, head of the analysis department, said, “Before moving to the cloud, we ran all computing jobs on-premises with no resources to address big jobs. **Now, it’s easy to access the compute power we need to get results quickly and efficiently.**”

Whether the team was launching Altair® Radioss® for impact simulations or Altair® Flux® for engine design, it had access to everything in a central location: the cloud. **With Altair One, the Otis analysis team could easily scale cloud resources for faster results, better product optimization, and faster time-to-market.** The transition to Altair One was a smooth process for Otis thanks to close contact with Altair’s expert staff.

Results

Using Altair One, Otis Mobility experienced immense reductions in cost and time. “We’ve greatly reduced the cost of expensive on-premises HPC resources with our cloud-only approach,” says Vila. **“On average, we reduced computational time by 50% with Altair One.”** With cloud computing the Otis team can be more productive, accelerate the design process, and beat the competition by being first-to-market with the latest innovations in mobility solutions. Most critically, optimized solutions mean increased safety. The team plans to run more complex simulations using Altair One to take advantage of their HPC cloud resources. Otis Mobility is poised to move the industry forward with Altair One powering innovation at every step.

Every day, engineers and designers are innovating technology that moves billions of people around the world.