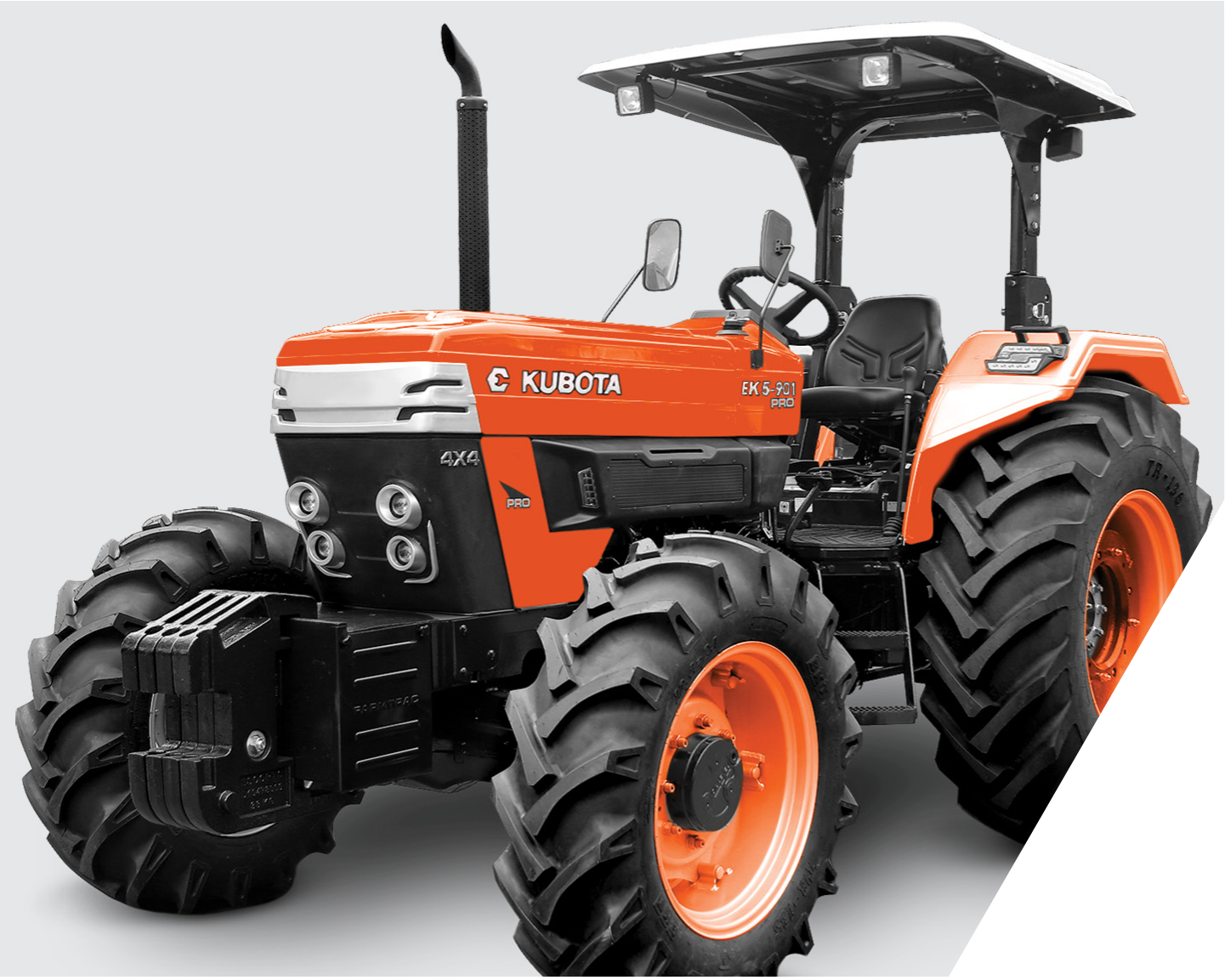



# SPEEDING UP CAE FOR AGRICULTURE

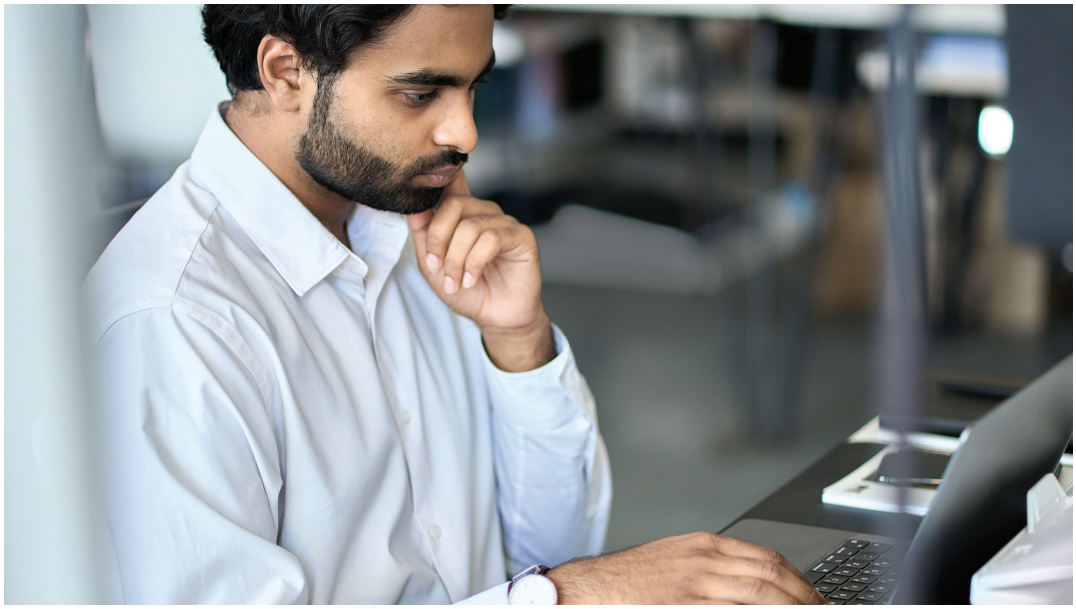
## INDIA'S ESCORTS KUBOTA GIVES ENGINEERS EASY ACCESS TO HPC TECHNOLOGY

**About the Customer**

Escorts Kubota is a renowned engineering conglomerate with a history that spans more than seven decades. The company specializes in agri-machinery, construction and material handling equipment, and railway equipment. Its agri-machinery division has enabled a revolution in India's agriculture sector by mechanizing farms and enhancing agricultural productivity. Escorts Kubota offers a one-stop, holistic solution for India's farming community. Internationally, it provides tractors and crop solutions across 70 countries and manufactures tractors across Europe and Asia.

> "Features like drag-and-drop options make it easy for users to select files from their local system or from the Altair Access environment. They can take advantage of the power of HPC servers without needing to be experts in Linux.
>
> Vibhay Kumar, GM, CAE, Escorts Kubota Ltd.



Escorts Kubota uses the Altair Access portal to bridge the gap between Linux and CAE users

### Their Challenge

To accelerate design and development, Escorts Kubota needed to give their engineers easier access to the tools of computer-aided engineering (CAE), an essential framework that transforms the repetitive "design, prototype, test" cycle into a streamlined process where prototypes are only used for final design verification. By using CAE, Escorts Kubota shifts design iterations from physical prototyping and testing to virtual, computer-based simulations, resulting in **reduced cycle time and cost savings**. CAE simulation jobs require significant amounts of memory and processing power, so high-performance computing (HPC) is required for these resource-intensive CAE calculations. Because **data security is critical**, Escorts Kubota relies on the robust Red Hat® Enterprise Linux® operating system for unparalleled data protection — but it's not always easy to learn for CAE engineers. The Escorts Kubota team needed to make it easy for their CAE engineers to work with essential tools.

### Our Solution

Altair bridges the gap between Linux and CAE users with an **intuitive, secure interface and drag-and-drop options** via Altair® Access™. Access provides a simple, powerful, and consistent interface for submitting and monitoring jobs on remote clusters and in the cloud, allowing engineers to focus on core activities and spend less time learning how to run applications and move data around. The Access web portal enables users to easily schedule and monitor CAE jobs, and each user can create a profile to save frequently used settings. Customized filters help with better visualization, and engineers can access everything they need via web, desktop, or mobile.

The Escorts Kubota team prioritizes and schedules CAE jobs based on each job's specific resource requirements. By doing so, they ensure computing resources are being used efficiently and CAE simulations are completed quickly and effectively. They use Altair® PBS Professional® to orchestrate job and memory management, as well as queuing and job prioritization, to **optimize resource utilization and reduce server breakdowns**. License-based scheduling allows users to run executables based on license availability. Altair® Control® enables easy job management and monitoring for Escorts Kubota's HPC administrators, and it delivers usage analytics that enable them to make informed predictions and budget for future requirements.

### Results

As technology advances, the demands placed on the team's resources continue to grow. With Altair solutions, Escorts Kubota's CAE engineers can **take advantage of the power of HPC without needing to be experts in Linux** and be more productive without worrying about potential IT headaches. Fast CAE with easy user access accelerates the design cycle with simulation-driven innovation that will keep Escorts Kubota ahead of the competition, leading to more efficient agriculture in India and around the world — and **ultimately benefiting everyone on the planet**.