



Acronis Improves Data Protection of a Leading European Automotive Manufacturer and Saves Thousands of IT Man-Hours

The automotive industry is the engine of Europe. The European auto industry is a global player, delivering 6.6 million 'Made in Europe' vehicles around the world, which generates a €95 billion trade surplus and employs 12.7 million people. R&D investments totaling €32 billion make the EU's automotive sector the largest investor in R&D, accounting for 25 percent of total spending.

Today, competition within the industry drives high expectations. Since automakers rely so heavily on sophisticated IT solutions and process automation, the ability to ensure both continuous availability of business data and minimal downtime of production systems creates a competitive advantage for a manufacturer.

When a major European automobile manufacturer wanted to improve its backup, recovery and data protection capabilities, they turned to Acronis' proven technologies.

Business challenge

The Automaker* recognized that the systems that operate the manufacturing line can malfunction like any other computer. If a control system stops, the entire production line stops as well, which would cost The Automaker tens of thousands of dollars per hour.

With their prior solution, The Automaker could restore the systems within 30-60 minutes following

* In order to protect their security and process concerns, the company wishes to remain anonymous. We will simply refer to the customer as The Automaker.

a malfunction, but that was a time-consuming process that involved a lot of manual operations. Since each plant has an average of 100 control systems, the team spent thousands of man-hours annually restoring those systems. Any improvement in the recovery time objective could lead to huge savings in avoided downtime and IT resources spent.

Compounding the challenge: time constraints in the production line's maintenance windows meant there were many times when system images were not created. As a result, The Automaker had to rely on image copies that were 12 to 18 months old. Using outdated images and potentially incompatible system configurations put the company at risk of prolonged downtime at critical production facilities, which could cost up to \$60 million per day in lost production.

In addition, ransomware became another threat to manufacturing business continuity. Process control computers became vulnerable to this modern danger, which evolves quickly and often slips past antivirus defense. The Automaker could not ignore this risk, and wanted a solution to guard their computers.

Based on advice of its process control equipment vendor and after a thorough review of available backup solutions, The Automaker decided to switch to Acronis Backup.

Solution

Upgrade to Acronis Backup

Instead of relying on manual backups, The Automaker installed an Acronis Backup agent on the Windows operating system of each process control system. Each plant has Acronis Management Server installed, enabling the automaker to centrally manage all of the agents in every piece of protected equipment. Acronis Backup Advanced makes it possible to create images of live systems without interrupting the production operations.

For most systems, the backups are now stored on a centralized Network Attached Storage (NAS), which

simplifies file searches and speeds up the recovery process. The backup files can also be stored on external USB Hard Disk Drive for additional security.

Backups are now scheduled to run periodically, with IT creating additional backups on an ad hoc basis based on updates to the process control software. Acronis Backup Advanced automatically notifies the IT department if anything goes wrong, monitors the status, and creates reports on backup results. Backups are now performed on live systems – without stopping the production line – which allows the IT team to create backups twice as frequently as they did before. These automated backups saved The Automaker thousands of hours of manual interventions, enabling the IT team to focus on other more important tasks.

If the process control system malfunctions, an IT specialist can quickly determine if the problem is a software or hardware issue. In case of software issues, the engineer simply:

- Restarts the system and boots it from Acronis Bootable Media
- Selects the image on the NAS with the easy-to-use Acronis Management Server (AMS) interface
- Follows a few simple steps and starts the recovery

The whole recovery process is now twice as fast because backup images are easy to access and Acronis' superior technologies require less time to restore an image. The Acronis Management Server has an intuitive, straightforward user interface, which means minimal training is required before IT staff members can use it. Within minutes, the specialist recovers the system, reboots it, and the production line's operations return to normal. Acronis' patented and optimized disk-imaging technology ensures fast and reliable recovery.

If the process control system is damaged beyond a quick repair, IT replaces the system with a spare, empty, "bare-metal" machine. The specialist follows the same simple steps and recovers the image to the new hardware.

In case the spare machine configuration is not exactly similar to the original, failed machine, the

IT specialist can enable Acronis Universal Restore, which tunes the operating system settings to match the new hardware, such as the CPU, motherboard, chipset, hard disk controllers, network interface cards, etc. This process ensures that the recovered system boots properly and reliably, despite the different hardware.

Benefits

Reduced labor costs and decreased IT involvement

With the transition to Acronis Backup Advanced, The Automaker saved thousands of hours annually that were previously spent on manually creating disk images with the old solution. Now, with images that are automatically created on schedule and on live machines, their team can invest more time on improving processes, ensuring quality, and optimizing the delivery of vehicles demanded by their customers around the world.

Increased resiliency of production with consistent backups

The IT team schedules the backups to run twice as often as before, providing more up-to-date backup images for each control system. If the system malfunctions, recovering the most recent image means there is no need to reapply and recheck updates and configuration changes. Using up-to-date backups reduces the risk of production equipment operating incorrectly based on outdated configurations, which could introduce quality issues in the final product.

Reduced downtime with greater efficiencies and cost savings

If the hardware malfunctions, the IT specialist quickly restores the system using Acronis Backup Advanced. Acronis' patented disk-imaging technology ensures fast and reliable recovery,

while Acronis Universal Restore eliminates failed recoveries caused by differences between the original and replacement hardware.

Improved reliability while avoiding downtime

With Acronis Active Protection guarding their computers, The Automaker now has peace of mind that a ransomware attack will not stop the production line, even if their systems are not running the latest patches to their operating systems.

Conclusion

Acronis Backup Advanced is now a critical component of the production process control systems for this leading auto manufacturer. Without it, The Automaker spent tens of thousands of man-hours manually creating disk images and risked botched recoveries, especially when the hardware was different. Today, the production plant systems are safe with periodic, automatic, live disk-imaging backups of all process control systems.

Acronis Backup Advanced ensures quick and reliable recovery, reduced downtime, and reduced production-line outages due to malfunctioning control equipment. In addition, Acronis Backup Advanced solves similar problems across other production facilities, including oil and gas exploration, transportation, and refining operations such as chemical production companies, consumer goods production, and utility companies. Acronis Backup Advanced offers reliable and fast protection for all process control systems, including Windows- and Linux based machines and provides centralized management, monitoring, reporting, and many other features to ensure the success of production facility operations.