ABB Ability™ System Backup- & Recovery Management
Secure system backup and recovery

Computers used in a production environment set special challenges for data protection. Because of this, various factors must be taken into account when producing backups during operation. Regular and timely backups increase the availability of all process-relevant data and reduce costs in the event of a recovery scenario.

Quick reaction with secure backups
ABB has set itself the goal of meeting the requirements of production environments with a unified backup and recovery concept.

A central backup server makes it possible to produce automated cyclical backups and simplifies the handling of backup and recovery scenarios. This concept is managed and optimized throughout the entire life cycle of the system, including technical modifications and expansions. Using a monitored backup and recovery solution can pay off even after just one data crash. For our clients, this means: Regular backups and an easy recovery procedure to keep the downtime during production to a minimum.

General advantages that secure your production

Process
• Backing-up of client-specific data, independently of the control system

Complete
• All the data necessary for recovery are saved
• Files, databases and system images of the control system

Up-to-date
• Up-to-date backups with individually adjustable archiving cycles
• Status display of the backups on the backup server and in the control system

Easy
• Centralized production of backups and documented recovery scenarios enable easy processing
• Support with a graphical user interface

Automated
• High reliability with automated cyclic backups (e.g. daily, weekly, or quarterly)
• Production of system image backups in two clicks, following authorization

Secure
• High data integrity with offline saving of system image backups
• Improvements in security with automated processes and avoiding sources of errors
Integration in operation
ABB’s Backup and Recovery solution is easy to implement in a control system that is already in use. The individual structures and interfaces of the client’s system are used for this purpose.

Centralized processing and management
All backup data are made centrally available with the use of a backup server. An additional copy of the backup data can be stored, for example, on a NAS/network drive or tape drive.

No additional software for the control system
The subsequent installation and configuration of the backup server is significantly simplified with the use of the interfaces available. As a result, virtual machines, hardware machines and individual data can be backed up via the network using standard protocols. No additional installation of software on any computers of the control system is necessary.

Compatibility with various control system and operating system versions
Various plugins available for the backup software make it possible also to back up third-party applications, or entire computers. The supported operating systems include Microsoft Windows® and Linux. The broad selection of expansions enables backing up all kinds of client-specific data, as necessary.

Top priority: System availability
In order to maintain reliability in the control system, the backup-and-recovery solution uses an additional network. The backup or ESX network is intended for managing virtual servers and transmitting backup data. This ensures that the control system network remains unaffected by the backup procedure at all times.

Always up-to-date
When the control system undergoes a software update, only minor adjustments are necessary in the backup-and-recovery software. The up-to-date state of the backup software can be ensured via a service agreement.

Short recovery times in case of emergencies
Should a breakdown occur (e.g. in an operator client), the current backup can be recovered directly on the new hardware, using the bare-metal recovery feature. Adjustment of new hardware as part of the recovery process is reduced to a minimum.