



stonebranch



Success Story

Herrenknecht

Increased IT efficiency with the
Stonebranch SAP job scheduling
solution



By replacing SAP's standard scheduler (SM36/SM37) with the Stonebranch SAP job scheduling solution, Herrenknecht successfully optimized SAP-driven IT processes, reduced manual effort, and improved process reliability.



Background

Herrenknecht AG is a global leader in mechanized tunnelling for underground infrastructure. The company manufactures tunnel boring machines for all geologies, with diameters ranging from 0.10 meters for microtunnelling to 19 meters for large-scale transportation tunnels, along with customized machines for traffic and utility tunnels, pipeline-laying technologies, and drilling rigs for shafts and deep drilling.

An independent, family-owned company with around 5,000 employees and approximately 70 subsidiaries worldwide, Herrenknecht supports its global operations with tightly controlled IT systems that keep critical SAP-driven processes running reliably.

Challenges

Herrenknecht faced significant limitations using the SAP standard job scheduler (SM36, SM37) for background processing, especially when planning recurring tasks. For example, material and parts lists are generated in an external system, transferred to SAP, and then enriched through SAP background processing. The results need to be available in SAP as quickly as possible, but the jobs must not run in parallel, and any leftover objects must be reprocessed within 15 minutes.

With the standard SAP scheduler, these requirements could only be met through workarounds and manual interventions, which repeatedly led to errors and gaps in visibility, such as missed system notifications.

"The solution even exceeded our requirements. Many nice little things are included on top, e.g., job change history and comprehensive job reporting. Job operation runs so reliably that you can clear your head again for productive work."

Christian Berlage,
Corporate IT-Services,
Herrenknecht

Results

- Centralized, cross-system control
- Full integration in SAP
- Easy to maintain and highly stable — a favorite among administrators
- Visualization and modelling thanks to a no-code platform
- Centralized monitoring and alerting
- Reliable consulting and support

The Search

The search for an efficient, flexible, and user-friendly SAP automation solution led Herrenknecht to the Stonebranch SAP job scheduling solution, a platform that stood out for its practical design and continuous development.

The decisive advantage over alternative solutions was its user-friendliness, extensive evaluation options, and the fully SAP-integrated interface. Stonebranch readily met Herrenknecht's requirements for centralized, cross-system control and beyond.

The Solution

The project started with a hands-on workshop to quickly and efficiently install the Stonebranch solution on Herrenknecht's test system. During the session, the team also implemented the company's operational requirements, allowing Herrenknecht to make further adjustments on their own.

A key milestone was the successful migration of the initial jobs, which enabled Herrenknecht to transfer additional jobs independently. Technical support was available quickly and competently when needed, but was rarely necessary as the Stonebranch solution was stable and reliable.

The Results

The step-by-step migration and flexible mixed operation ensured a high level of system stability while optimizing process efficiency at the same time. Herrenknecht did not require a job migration project due to the low effort involved.

The introduction of the Stonebranch solution enabled Herrenknecht to significantly optimize its IT processes, reduce manual effort, and achieve greater process reliability. This underlines Herrenknecht's commitment to continuously improve the efficiency of its operations using advanced technologies.



ABOUT STONEBRANCH

Stonebranch builds IT orchestration and automation solutions that transform business IT environments from simple IT task automation into sophisticated, real-time business service automation. No matter the degree of automation, Stonebranch Universal Automation Center is simple, modern, and secure.

For SAP-centric organizations, the Stonebranch SAP job scheduler delivers SAP-native automation, enabling teams to centrally orchestrate background jobs across SAP ECC, SAP S/4HANA, and RISE with SAP. It also triggers SAP BTP processes and extends workflows beyond SAP when needed.

Key Scheduling Requirements — and How Stonebranch Delivered

Flexible Time Windows for Job Execution

The need to schedule jobs within specific time slots, for example every hour between 06:00 a.m. and 5:00 p.m., proved to be cumbersome with the standard SAP scheduler, as separate jobs had to be scheduled for each hour.

- By introducing the Stonebranch solution, Herrenknecht was able to significantly **reduce the number of processing steps, in some cases by up to 90%**. This also reduced the risk of errors when maintaining redundant jobs in the SAP system.

Complex Schedules with Less Manual Handling

Herrenknecht needed the ability to run jobs according to complex schedules. Previously, if the first day of the month was a Wednesday, the specialist departments had to start the job manually to prevent it from being executed multiple times

- By mapping complex rules in the Stonebranch solution within a job, Herrenknecht was also able to **schedule special rules without risking duplicate executions**, such as every Wednesday plus the first of the month.

Avoidance of Overlaps with Long-Running Jobs

The SAP standard scheduler (SM36, SM37) could not guarantee freedom from overlaps, which required additional programming effort to control job execution.

- The Stonebranch SAP job scheduling solution offered a **simple checkbox to indicate whether parallel execution should be granted** or not. This meant that overlaps without manual activities can be avoided as early as the job planning stage.

Exclusive Use of Resources for Parallel Versions

For jobs that required the same resources exclusively, lock objects would have had to be set up and maintained manually in each job to avoid conflicts.

- The Stonebranch solution allowed Herrenknecht **various options for parallel execution, already including locking mechanisms, allowing parallel scheduling across different jobs and processes** without problems.

Flexible and Frequent Program Execution

A specific program, which had variable processing times, was to be executed as often as possible within a defined time frame, which was only possible to a limited extent with the SAP standard scheduler and led to overtaking.

- The **seamless, sequential planning** of the Stonebranch solution enabled Herrenknecht to execute the programs as often as required and to avoid overtaking during job planning.

Prompt Alerting in the Event of an Aborted Job

The monitoring and notification of job aborts proved to be too complex with the Solution Manager. As a result, cancellations had to be checked manually for the previous day at Herrenknecht.

- Stonebranch provided **easy alerting that integrated seamlessly into SAP**. Herrenknecht thus fully automated this process.



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