



Security & Transparency in IT production

Solutions for Job Output Management in Customer Practice

Read this white paper to learn about the challenges & solutions in the area of conflict between IT production and compliance when using Automatic Workload Automation.

SECURITY & TRANSPARENCY IN THE IT PRODUCTION

Solutions for Job Output Management

This white paper is aimed at management, auditing and production planning managers.

Use Case: Audit by the auditor

Auditors expect a complete documentation of processes in IT production. For the audit, they want to be able to view various processes from the past.

*Storage
from reports*

In order to be able to follow the processes controlled and monitored by the Automation Engine or agents at any time and in detail, statistical data, logs and reports are stored in the Automic* database. Since the long-term storage of job reports is resource-intensive and has a negative impact on system performance, in practice these process logs are only stored for a limited time in the Automic database. For research purposes or for auditing reasons, it is recommended that the logs from process execution in the Automation Engine be kept available outside Automic. In practice, the file system is usually used or the data is stored in a storage system. For compliance reasons, the availability of the job reports must also be ensured over the entire archiving period. Restoring this data without suitable research software is in most cases extremely time-consuming or even impossible.

Should a review be necessary for these reasons, the laborious reconstruction of archived processes and the attestation will result in considerable additional costs. With the *Beta Systems Log & Audit solution package for Automic*, this tedious and time-consuming work is no longer necessary. Additional costs for the audit certificate are avoided. The inspector receives a proper documentation of the production processes with a fast Reportability.

Limited usability of Automic Workload Automation

*Problems with
Version upgrades*

From our consulting discussions and customer projects, we often learn from our customers that the usability of Automic's own functionality for archiving and reloading job reports presents users with considerable challenges. Problems arise, for example, during version upgrades. To reload the archived

* Automic is a product of Broadcom Inc.

reports, the Automic Browser valid at the time of archiving must be made available again. This requirement can only be implemented with a great deal of effort and expense if the system is regularly updated, and at the same time creates new problems in handling and operation.

Practice shows that for performance reasons, job reports are kept in the Automic database for a maximum of 12 months and then archived on a file system, for example. The access to the archived data and the complete reload process does not comply with the legal rules for safe handling of sensitive data.

Defective data governance

Size limitation of the reports

The problem of the readability of the data from the archive with the respective version browser, reveals another big weakness. Data governance cannot be ensured without a great expenditure of time and resources. It is also not guaranteed that archived reports can actually be restored after many years. Due to the size limitation within the job reports, there is a risk of losing log data in long-running automation engines with large reports. This is usually only occurs when the job logs are restored in Automic. When the maximum values are reached, the remaining information in the job log is truncated and not saved. This data is therefore incomplete! In this case, there is a violation of data governance and in critical cases, important information is missing.

Restoring archived reports

New legislation has increased the retention periods of log data to up to 15 years. As a result, the retention periods for job reports that have already been archived must be adjusted. Restoring archived job reports is also a challenge. For example, it must be researched exactly in which of the many archive files from the desired period the desired results are located. Only when the reports have been successfully restored from the archive can it be seen whether the correct archive has been selected and the desired job information is visible.

Beta Systems Log & Audit solution package for Automic

Who is responsible for the retention of application logs and takes care of the retention periods of the job reports that have been generated from the processes using the Automic Scheduler? This is always a point of friction between production planning and application operation.

This can be remedied by a common, company-wide archiving system that meets legal requirements and company specifications and provides a user-friendly interface for detailed data analysis.

Changes to the retention requirements

Using the example of the retention time of production logs from Automic, the *Beta Systems Log & Audit solution package for Automic* allows the complete data to be retained and very easily restored. Changes in the obligation to retain job reports, e.g. due to legal changes, can also be changed easily and specifically.

There is an obligation to provide proof of the complete process sequence in Data processing. It must be proven that what the departments have planned with the processing of data has actually been successfully implemented by the application company.

Added value through comprehensive Interrogation system

Our solution serves customers as a comprehensive and clear query system in combination with Automic Workload Automation. It answers questions on quality assurance and provides traceability of the process chains.

The user is provided with extensive statistical data in compressed form, such as

- when was the last time this job went down,
- which agents are no longer used,
- what jobs were canceled last night.

Even nested networks over several levels are displayed graphically and help the user to get a quick and comprehensive overview.

Advantages for production planning

In addition, the solution package provides immediate answers to everyday questions in production planning:

- How did my jobs go last week?
- Can I keep my online time slots?
- Where do problems keep occurring?
- Were the SLAs met?

*Irregularities in
production*

Every day, one or more errors can occur in batch production. Jobs stop for unknown reasons. With the Beta Systems solution, such irregularities (e.g. return code $\neq 0$) are detected and automatically analyzed in production. The production planner keeps all information necessary for troubleshooting centrally prepared in the user interface and can easily determine the cause of the error. The tedious and time-consuming collection of information for error analysis from various data sources is no longer necessary. The production planner can now proceed efficiently and rectify the fault in a targeted manner.

*Frontend
Information System*

Customers deliberately use our solution package as a front-end information system. This ensures that not too many users, e.g. from application development or the specialist areas in the Automic system, carry out their analyses directly and thus have a significant negative impact on system performance.

An intuitive user interface provides extensive detailed information on the jobs that have been run. The Automic Job Reports to be archived and their runtime information are read directly from the Automic database and archived in a separate database in an audit-proof manner.

Features & Functions

- Extensive evaluation options including queries of statistical data
- Visualized representation of networks over X levels
- Frontend for research and reports for the management
- Automated analysis of irregularities in production (e.g. return code dependent events like aborts etc.)
- Automic reports are stored completely and archived in an audit-proof manner
- Archived reports can be found quickly in case of an audit and restored back
- Archive periods for the retention of production data from Automic can be quickly and conveniently entered in case of legal changes
- Archive is connectable to 3rd level archive media like TSM, Centera etc.
- Granular access control down to line level via a security concept based on "RACF"
- Once set up, virtually no operational effort
- All important file formats can be saved and edited
- Comfortable research options with _beta view as web frontend

The Beta Systems Log & Audit solution package for Automic consists of the Beta Systems products

_beta log|x = Enterprise Log Management System

_beta view = Web-based log and document viewer

XINFO = Automated analysis and statistics about batch production

Get more information about the products used at <https://www.betasystems-dci.com/de/produkt-uebersicht.html>



About Beta Systems DCI Software AG

For over 35 years, Beta Systems has been developing high-quality infrastructure software products for the secure and efficient processing of large amounts of data to best meet all legal and business requirements. The multi-platform software solutions for z/OS, Unix, Linux and Windows environments automate, document and analyze business-related IT processes in the data centers of large corporations, IT service providers, public institutions and medium-sized businesses.

Beta Systems Software Aktiengesellschaft has been supporting companies with complex IT system landscapes and sophisticated IT processes in the financial services, manufacturing, trade and IT services sectors for more than 35 years. Rising transaction volumes, data volumes, compliance standards and the increasing complexity of IT networks place the highest demands on throughput, availability, traceability and security of the software products and solutions used. Beta Systems' data center intelligence portfolio focuses on the areas of output management & archiving, log/security information management, workload automation and job management.

Beta Systems DCI Software AG

Alt-Moabit 90 d
10559 Berlin

Phone +49 (0) 30 726 118-0
Fax: +49 (0) 30 726 118-800
info@betasystems.com