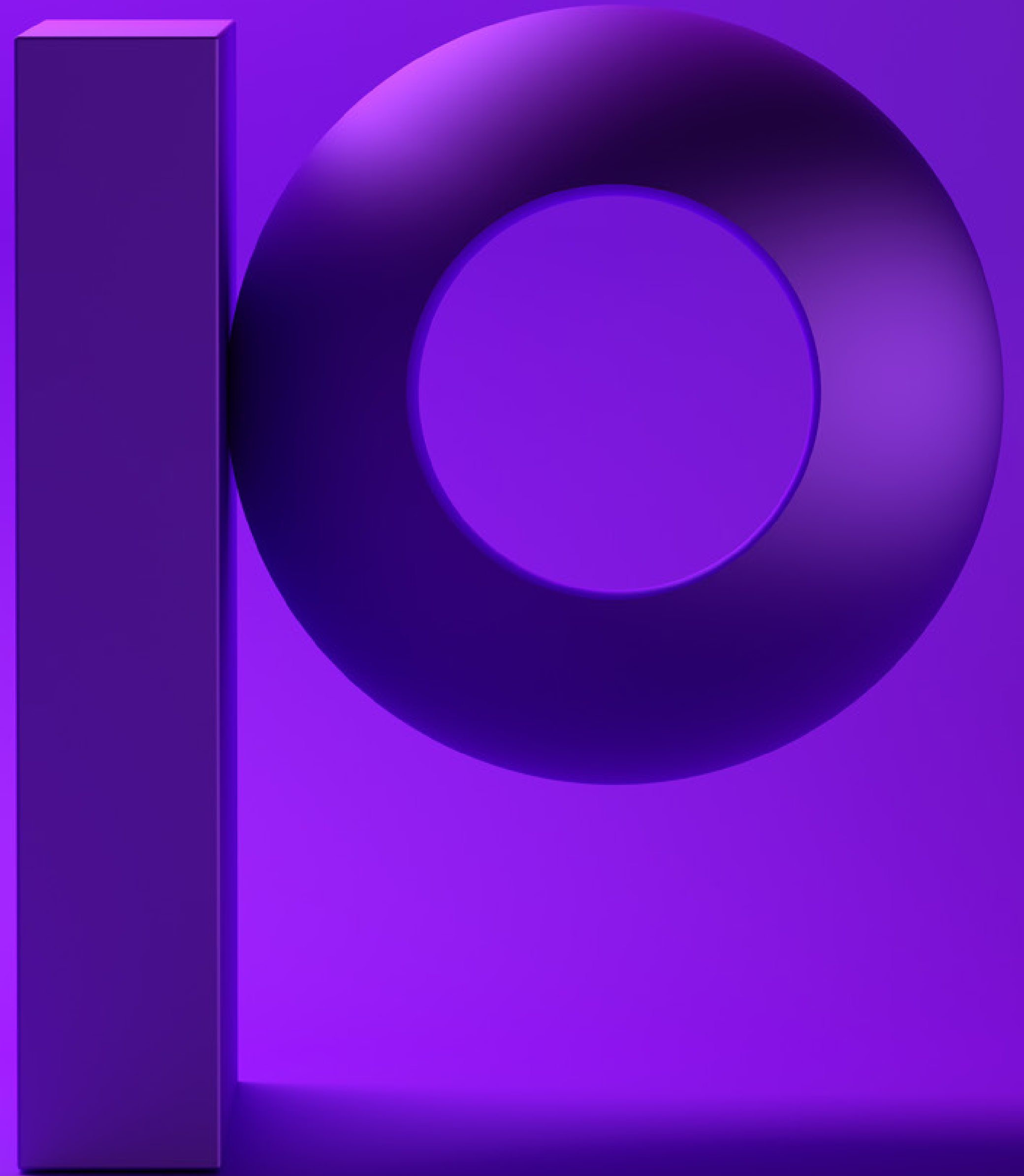


precisely

Overcoming 5 Key Automation Integration Challenges with Your SAP ERP Data





Introduction

Your SAP ERP systems are critical for streamlining operations, enhancing productivity, and driving growth, especially when the digital landscape is constantly evolving. However, integrating SAP data with other enterprise systems remains a significant challenge for many organizations.

Complexity arises from a number of factors, including:

- disparate data sources
- legacy systems
- real-time processing demands
- manual workflows
- stringent security requirements

If you've experienced any (or perhaps all) of these challenges, then you know that these integration hurdles not only affect your operational efficiency, but also impede decision-making, innovation, and scalability.

Fortunately, automation offers powerful solutions that enable seamless, reliable, and efficient integrations. Let's take a closer look at how you can use automation to overcome five key challenges:

- 1. Data Silos and Inconsistent Data Across Systems**
- 2. Complex datasets and Legacy ERP Systems**
- 3. Manual Data Management in Cross-Platform Workflows**
- 4. Attended vs. Unattended Automation**
- 5. Mass Data Upload from Another System to SAP ERP**

1. Data Silos and Inconsistent Data Across Systems

CHALLENGE:

SAP often operates alongside other enterprise systems such as CRM, SCM, and legacy databases, leading to data silos. Inconsistent data formats, duplicated records, and lack of synchronization create barriers to timely insights and operational efficiency.

EXAMPLE USE CASE: Master data management (MDM) integration for customer master data

Your business manages customer master data across multiple systems, which can lead to discrepancies and inefficiencies. Ensuring consistent, accurate, and up-to-date customer data across your enterprise is critical for effective business operations.

HOW TO OVERCOME THIS WITH AUTOMATION:

- **Automated data synchronization:** Automate data transfers between SAP and non-SAP systems using a master data management system to ensure consistency.
- **MDM automation:** Automate data validation, cleansing, and standardization to maintain a single source of truth.
- **AI-driven data quality:** Use AI algorithms to detect and reconcile data discrepancies automatically.

HOW PRECISELY AUTOMATE EVOLVE AND STUDIO MANAGER HELP:

Precisely Automate's ability to query and extract data from SAP and automate mass data posting to SAP ERP systems can significantly improve the quality and reliability of the master data you use in multiple systems.

When the data requires human intervention to enter, review, and approve, you can use the **Precisely Digital Access API** to kick off an **Automate Evolve** workflow before the trusted data is transferred to your SAP system or your MDM hub. In cases where you don't need to review the data being transferred (unattended automation), you can use **Automate Studio Manager** with its **SAP Data API** to quickly load clean data at scale.

Using either of these methods, you'll enhance the overall governance and quality of your master data by automating validation and synchronization tasks, reducing errors, and promoting data integrity.

2. Complex Datasets and Legacy ERP Systems

CHALLENGE:

Companies are making significant efforts to modernize their SAP infrastructure as part of their migration to SAP S/4HANA – but organizations often continue to rely on legacy systems that lack modern APIs, making SAP integration complex and error-prone.

Businesses also frequently need to run SAP ECC and SAP S/4HANA in parallel during modernization efforts or have multiple ERP systems that need to be used via automation, which adds to integration complexity.

EXAMPLE USE CASE: Dual system integration for ECC and S/4HANA

Your business may need to keep ECC and S/4HANA running throughout a phased migration – but in doing so, you face challenges in synchronizing data across these systems without causing operational disruptions.

HOW TO OVERCOME THIS WITH AUTOMATION:

- **Flexible data integration:** Automate data uploads in both legacy systems and SAP S/4HANA systems at the same time with quick-to-create and easy-to-modify scripts by citizen developers.
- **Data integrity support:** Ensure seamless data quality via easy-to-use, Excel-based, automated mass data cleansing by business data stewards. This synchronizes clean data between SAP ECC and SAP S/4HANA, supporting gradual migration.
- **API wrappers of automation scripts and no-code/low-code tools:** Simplify cross-system data management integration by using RPA bots with Automate APIs that involve no-code SAP automation scripts to load mass data at scale.

HOW PRECISELY AUTOMATE EVOLVE AND STUDIO MANAGER HELP:

The no-code/low-code Automate platform leverages Studio data automation scripts that are easily triggered using the Automate APIs for easier integration with SAP ECC and S/4HANA, allowing your data to flow seamlessly between systems. All this, without requiring RPA bot developers to understand the SAP data being queried or loaded in the ERP system.

Automate APIs reduce your total cost of ownership by:

- enabling your data stewards to act as no-code citizen developers
- freeing your technical RPA bot developers from needing expertise in SAP data or ERP system integration

3. Manual Data Management in Cross-Platform Workflows

CHALLENGE:

Many business processes span multiple systems, requiring manual interventions that lead to inefficiencies and poor data quality. Data teams often face this challenge when integrating data for planning, reporting, and analytics.

Often, a single person or small team is responsible for extracting data from multiple systems, including SAP, and consolidating it into an Excel spreadsheet. The data is then formatted and passed along to a data scientist or other data consumers. This manual management is both time-consuming and prone to human error.

EXAMPLE USE CASE: Preparing customer data for analysis and reporting

Your customer data resides in multiple SAP ERP systems and a Salesforce instance, which you need for analysis and reporting on trends and buying behavior. Traditionally, this data is manually collected from each system by an experienced business team member. They download it into multiple spreadsheets, reformat it, and then add it into a single common spreadsheet. This leads to issues around data quality, formatting, and governance, and increases overall operational costs.

HOW TO OVERCOME THIS WITH AUTOMATION:

- **End-to-end workflow automation:** Automate workflows across systems to eliminate manual data entry and reduce errors.
- **API integration for mass data processes:** Automate the extraction of large amounts of data from different systems into a single spreadsheet, including the data transformation, before loading it directly into the analytics and reporting tools.
- **Elimination of manual data collection:** Simplify the collection and consolidation of data from disparate systems into a single file – without human data manipulation or the risks associated with copying and pasting data from different source files.

HOW PRECISELY AUTOMATE EVOLVE AND STUDIO MANAGER HELP:

The **Precisely Automate platform** can significantly simplify these complex data coordination tasks depending on the use case.

Using APIs to query and extract data from multiple systems, **Automate Evolve** simplifies the process of gathering data through form and workflow automation. For large-scale data extraction and coordination from disparate systems – like in the use case above – combining **Automate Studio Manager** and an RPA bot allows you to efficiently extract data from multiple systems, including your SAP ERP, into a standard Excel file. This approach significantly streamlines and governs an otherwise complex and often daunting process.

These direct connections give you confidence in your automated solution's performance, scalability, and stability.

4. Attended vs. Unattended Automation

CHALLENGE:

Some processes require human intervention, while others can operate autonomously without data manipulation. In SAP ERP systems, many unattended automation solutions rely on RPA bots that use surface automation technologies and screen-scraping techniques.

These methods can be fragile, require significant maintenance, and struggle with performance when handling mass data uploads.

EXAMPLE USE CASE: Automated invoice processing with attended and unattended workflows

Your organization needs a secure way to automate its SAP invoice processing system. Some invoices require manual review (attended automation), while others could be processed automatically (unattended automation) without human intervention.

As your business grows and the number of invoices increases, simply adding more staff to manage the process isn't going to be a scalable solution.

HOW TO OVERCOME THIS WITH AUTOMATION:

- **API-driven automation:** Achieve both attended and unattended automation through API integrations.
- **Workflow-triggered automation:** Automate processes securely with workflows that initiate form- or Excel-based tasks using defined event triggers.
- **Unattended processing:** Enable secure, monitorable, automated operations without needing manual intervention.

HOW PRECISELY AUTOMATE EVOLVE AND STUDIO MANAGER HELP:

The **Precisely Automate platform** supports both attended and unattended automation scenarios, so you can tailor workflows to your specific needs:

- **Automate Evolve** is designed to simplify complex, data-intensive SAP processes for business users – providing simple-to-use forms with powerful workflow capabilities for data entry, review, and approval.
- **Automate Studio Manager** ensures secure, unattended process execution, whether scheduled or running autonomously via API invocation.

With the Automate platform, unattended or attended scenarios can be triggered by APIs using integration-as-a-service providers or other automation technologies like RPA bots.

5. Mass Data Upload from Another System to SAP ERP

CHALLENGE:

Uploading large volumes of data from external systems into SAP can be time-consuming and error-prone, especially for time-critical functions like pricing updates or journal entry processing.

EXAMPLE USE CASE: Journal entry data upload

Financial operations require accurate and timely journal entries, which can be challenging when handling mass data uploads from different systems.

HOW TO OVERCOME THIS WITH AUTOMATION:

- **Bulk data processing automation:** Automate the extraction, transformation, and loading (ETL) of large datasets into SAP to streamline end-to-end business processes.
- **Validation and error handling:** Automate data validation and error notifications to ensure accuracy.
- **Scheduled data movement:** Optimize system utilization by scheduling large data transfers between systems

HOW PRECISELY AUTOMATE EVOLVE AND STUDIO MANAGER HELP:

With the recent updates to the Automate APIs, you can now integrate mass data management in both attended and unattended scenarios.

- **Automate Studio Manager** is perfect for streamlining unattended processes, when you need to move large amounts of trusted data between SAP and other systems.
- **Automate Evolve** supports more complex workflow processes. It's ideal for larger datasets that require data enrichment, cleaning, review, and approval – providing you with an easy-to-use form-based user experience where the data originates, or is destined for your SAP ERP system.



Tackle Your Integration Challenges Today

Integration challenges within your SAP ERP systems create complexities that can significantly hinder your business agility, efficiency, and time to value.

However, your organization can overcome these hurdles by leveraging no-code/low-code automation platforms that enable seamless data flow, secure operations, and scalable workflows.

Using the power of **Precisely Automate's Evolve** and **Studio Manager**, you'll be able to:

- simplify the complexity of SAP integrations and processes
- drive operational efficiency
- support digital transformation for sustained business success

To learn more about how **Precisely Automate** can help you simplify and streamline the complexities associated with SAP ERP systems and integration, visit our [SAP Automation Resources Hub](#) – filled with all of the actionable insights you need to achieve your goals and stay competitive.



About Precisely

As a global leader in data integrity, Precisely ensures that your data is accurate, consistent, and contextual. Our portfolio, including the Precisely Data Integrity Suite, helps integrate your data, improve data quality, govern data usage, geocode and analyze location data, and enrich it with complementary datasets for confident business decisions. Over 12,000 organizations in more than 100 countries, including 93 of the Fortune 100, trust Precisely software, data, and strategy services to power AI, automation, and analytics initiatives. Learn more at www.precisely.com.

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