Comprehensive Guide on SAP ECC to SAP S/4HANA Migration

SAP is pulling the plug on ECC support by 2027, and if you're still on it, it's time to think about making the jump to S/4HANA.

Many of you may still feel that 2027 is quite far off. This has happened before too – the initial deadline for discontinuing ECC was 2025, but it was extended by 2 years because not many organizations were making the shift to S/4HANA, so SAP had to delay their plans for 2 more years.

However, the 2027 deadline seems pretty solid so far, and it’s definitely not as far off as you may think. Migration from SAP ECC to SAP S/4HANA is an arduous task that takes considerable time and effort. For large enterprises, a complete system conversion can even take months due to the high volume of data and complex workflows. So, if you wait too long, you may need to rush the conversion process, which will not only increase the risk of errors but also disrupt core business processes.

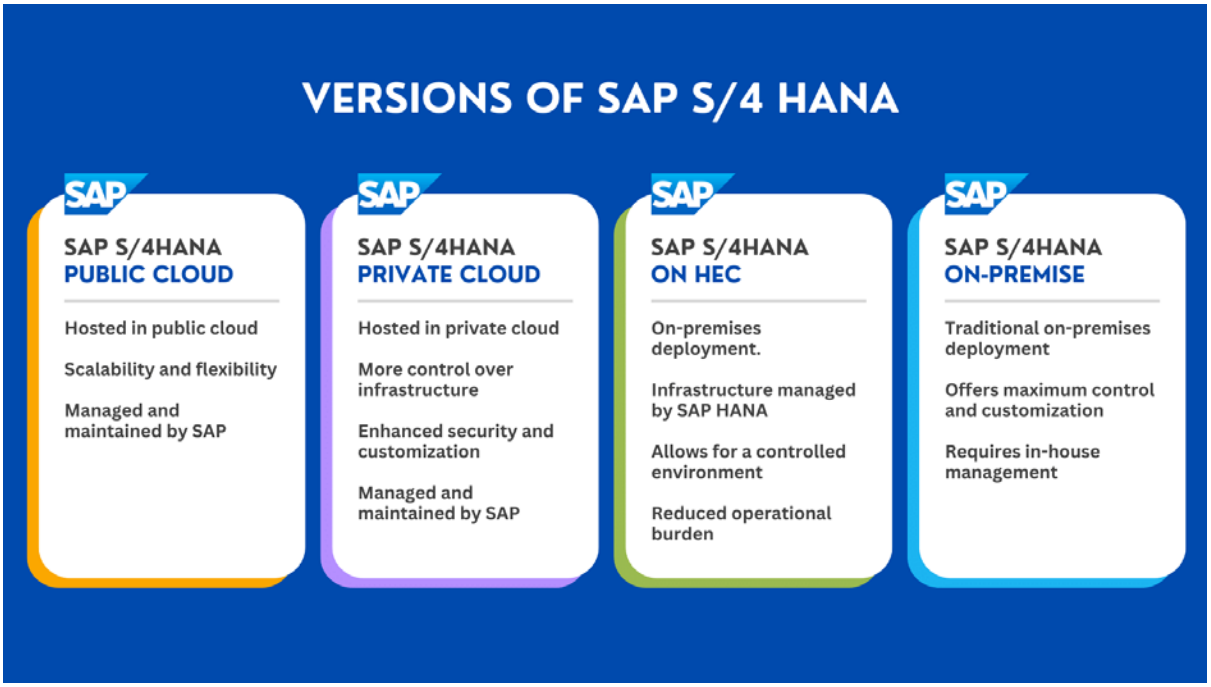
But even before the actual migration, a lot of planning and preparation is involved during the pre-conversion phase. In this post, I'll quickly run you through a step-by-step approach to efficiently prepare for ECC to S/4HANA migration. These steps are not just standard best practices, but the road to smooth and seamless migration.

SAP implementation is a complex process that demands specialized expertise, extensive resources, precise configuration, and strategic planning. Overcoming these challenges can be difficult, but each challenge encountered presents an opportunity to refine business processes and maximize the potential of this robust ERP system. If you’re striving to get more out of your SAP system, then it’s time to revise your current processes and follow the best practices for ERP implementation.

Step 1: Familiarization with SAP S/4HANA

To ensure a smooth transition from SAP ECC to S/4HANA, it's crucial for ECC users to become familiar with the new system. This involves hands-on exploration of S/4HANA's features, functionalities, modules, and workflows. Understanding the capabilities of S/4HANA is essential for

maximizing its benefits, and also helps you to choose the right deployment option among the different versions of S/4HANA.



1. **SAP S/4HANA Cloud, public edition:**

    - Hosted in a public cloud environment.
    - Offers scalability and flexibility.
    - Managed and maintained by SAP.

2. **SAP S/4HANA Cloud, private edition:**

    - Hosted in a private cloud, providing more control over infrastructure.
    - Offers enhanced security and customization.
    - Managed and maintained by SAP.

3. **SAP S/4HANA On-Premises managed by SAP (HEC):**

    - On-Premise deployment with SAP managing the infrastructure (HANA Enterprise Cloud).
    - Allows for a controlled environment.
    - Provides the benefits of On-Premise with reduced operational burden.

4. **SAP S/4HANA On-Premises:**

- Traditional On-Premise deployment.

- Offers maximum control and customization.

- Requires in-house management of the entire system.

Choosing the right deployment option depends on factors like business requirements, infrastructure preferences, and desired levels of control and customization.

Step 2: Data Analysis and Classification

The next step is to segregate data into categories of hot, warm, and cold. This is essential for optimizing the migration process, because not all data needs to be migrated. So, deciding how much data needs to be transferred from your ECC database to S/4HANA is a crucial step when preparing for system conversion.

Here's a quick guide on how to classify data:

Hot Data:

- Definition: Frequently accessed, critical data.

- Action: Should be transferred and store in the S/4HANA tenant database.

- Benefits: Ensures high-performance access to essential information.

Warm Data:

- Definition: Less frequently accessed but still relevant data.
- Action: Store in the S/4HANA system database.
- Benefits: Balances performance and storage efficiency.

Cold Data:

- Definition: Infrequently accessed or historical data.
- Action: Archive as legacy data, reducing the load on the live system.
- Benefits: Optimizes system resources and maintains compliance.

Why Classify Data?

1. **Efficiency:** Not all data needs to be migrated, preventing unnecessary strain on resources.
2. **Performance:** Ensures that crucial data is readily available in the live system for optimal performance.

3. **Cost-Effectiveness:** Reduces storage costs by archiving cold data rather than migrating it.

Step 3: Data Cleansing

After segregating data, the critical step of data cleansing comes into play. This process involves refining and enhancing the quality of data to ensure accuracy and reliability during migration. Here's a brief overview of the processes involved and the tools available from SAP:

Processes Involved in Data Cleansing:

1. **Duplicate Removal:** Identify and eliminate duplicate records to prevent redundancy and data inconsistency.

2. **Standardization:** Normalize data formats, units, and values for consistency across the dataset.

3. **Validation:** Verify data accuracy by validating against predefined rules and criteria.

4. **Enrichment:** Augment data with additional information to enhance its completeness and relevance.

5. **Correction of Errors:** Rectify any inaccuracies or errors in the data, ensuring it aligns with quality standards.

How Data Cleansing Works:

1. **Data Profiling:** Analyze the dataset to understand its structure, relationships, and potential issues.

2. **Automated Cleansing:** Employ automated tools to execute predefined cleansing rules and corrections.

3. **Manual Review:** Involve data experts to manually review and validate complex or critical data points.

SAP Tools for Data Cleansing:

SAP provides tools and solutions to facilitate efficient data cleansing as part of the migration journey. These tools include:

SAP Data Services: Offers comprehensive data integration and transformation capabilities.

SAP Information Steward: Enables data profiling, quality monitoring, and cleansing.

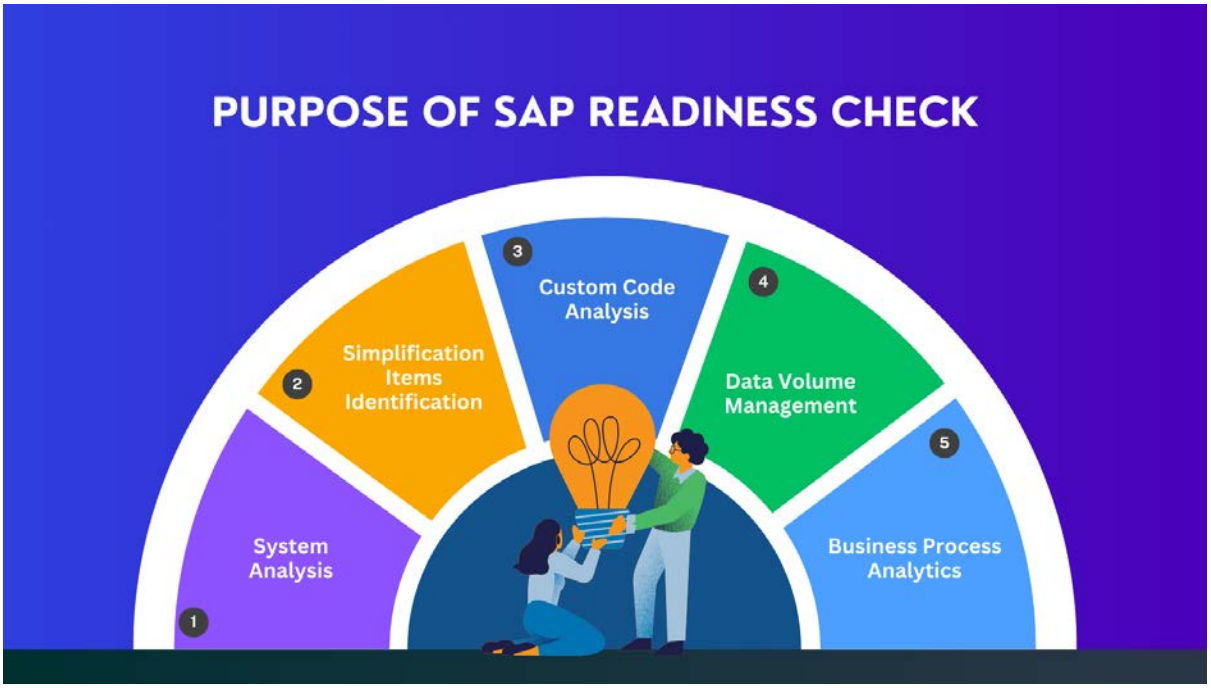
By undergoing thorough data cleansing, organizations ensure that the migrated data is accurate, consistent, and aligned with business requirements, laying a solid foundation for a successful transition to SAP S/4HANA.

SAP and APPSeCONNECT's strategic partnership dates to 2022 when we participated in the **SAP SMB Innovation Summit** held in Manila. The event brought together SAP partners and customers to discuss the latest trends and developments in the industry. We showcased our integration platform, APPSeCONNECT, and demonstrated how it helps businesses streamline their operations by connecting their SAP systems with other applications.

Step 4: Readiness Check

SAP Readiness Check is a tool designed to assess the compatibility and readiness of a system for specific SAP upgrades or migrations. It provides an overview of how well the current system aligns with the target applications, helping organizations plan and execute digital transformation effectively. The tool is used for various SAP solutions, including SAP ERP and SAP S/4HANA upgrades.

Purpose of SAP Readiness Check:



1. **System Analysis:** Analyzes the existing SAP ECC system to evaluate its readiness for migration.

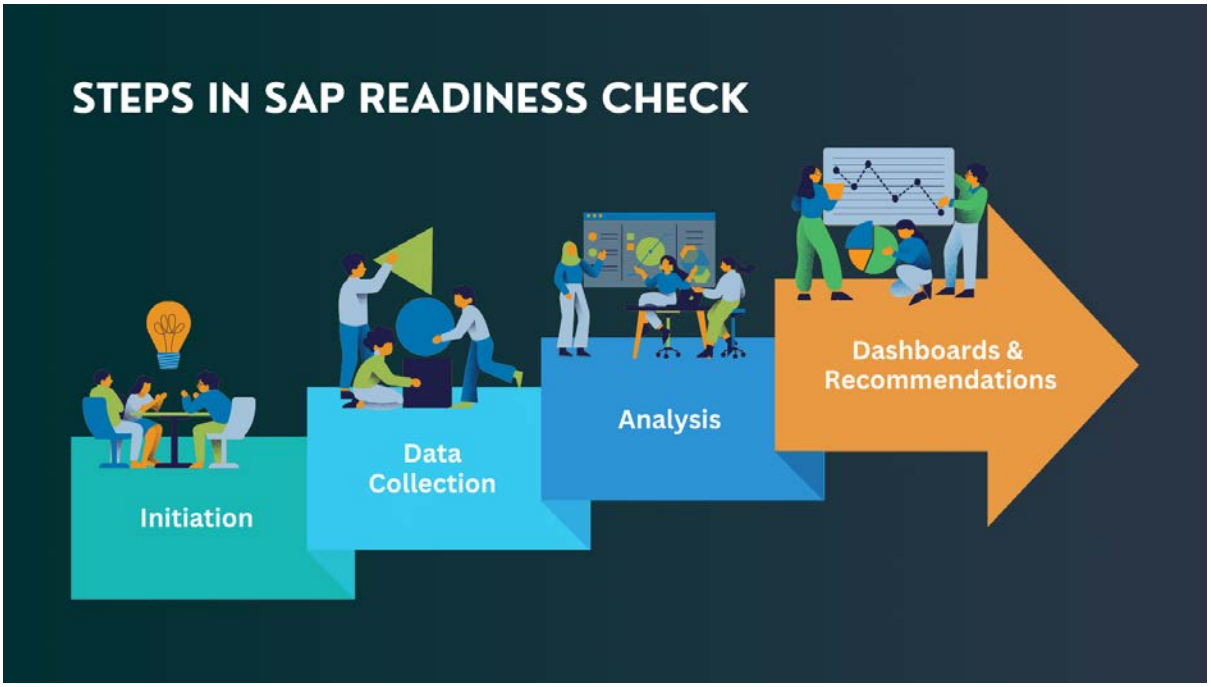
   Simplification Items Identification: Identifies simplification items specific to the S/4HANA version, helping businesses understand the impact on existing processes.

   Custom Code Analysis: Examines custom code to detect incompatibilities and provides insights into necessary adjustments for compatibility.

   Data Volume Management: Assesses data volumes to optimize storage and performance during migration.

   Business Process Analytics: Evaluates current business processes to align them with S/4HANA best practices.

Steps in SAP Readiness Check:



1. **Initiation:** Start the readiness check through SAP tools or cloud services.

2. **Data Collection:** Collect system data, including configurations, custom code, and usage statistics.

3. **Analysis:** Utilize the collected data to perform a comprehensive analysis, generating a detailed report.

4. **Dashboard and Recommendations:** Provides a user-friendly dashboard summarizing results and offering recommendations for a successful migration.

SAP Readiness Check offers self-service tools to facilitate efficient planning for the next steps in SAP ECC to SAP S/4HANA migration.

Follow these four steps thoroughly to prepare a solid foundation for your SAP S/4HANA conversion. Of course, this is only the pre-conversion phase, and there's still a lot of other phases involved in system conversion. If you want to learn more about essential factors involved in the migration, feel free to check out the resource below: