Aligning IT with Business Goals Through SAP® Landscape Transformation 2.0
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Quick Facts

Summary
SAP® Landscape Transformation software helps accelerate business and IT transformation by turning complex business requirements into a highly standardized set of transformation solutions. This enables you to plan, analyze, sequence, and realize your own transformation projects to address common business scenarios. These scenarios include mergers and acquisitions, divestitures, internal reorganizations, harmonization of business processes, and the transition and migration of data to SAP S/4HANA®.

Objectives
• Manage mergers and acquisitions, carve-out projects, and internal reorganizations
• Align IT with business goals
• Adapt organizational structures to recurring business transformation challenges
• Update and optimize processes with a solid, reliable IT foundation for support
• Reduce total cost of operations through system consolidation and data centralization

Solution
• Road maps and integrated knowledge ware for project guidance
• Support for company-built transformation functions, use of in-house resources, and system landscape monitoring
• Analysis platform for assessing project scope, feasibility, and approach
• Consistent data transfer across SAP solutions
• Unicode conversion during a single downtime period

Benefits
• System integration and data consistency through preconfigured execution steps
• Faster project execution with minimal-downtime approach
• Improved system landscape monitoring and change implementation
• Lower project costs through proven conversion and migration technologies

Learn more
For more information about SAP Landscape Transformation, call your SAP representative, or visit us online.

We have designed SAP Landscape Transformation software to help you adapt organizational structures, unify and simplify existing business processes, or realize consolidations through a structured approach.
The Business Case for Landscape Transformation

Transformation becomes a necessity when shifting market conditions and expanding consumer expectations result in the need to update and change corporate structures and product portfolios. Regional disparities, internal disconnects, and complex business processes or system landscapes call for reorganization and technological simplification. Therefore, companies should be prepared to transform their IT landscapes quickly and efficiently.

**TRANSFORMATION AS A VALUE DRIVER**
To help companies stimulate and sustain value by keeping pace with global market changes, retaining business flexibility, and realizing their goals on the IT level, SAP offers SAP® Landscape Transformation software. SAP has designed the software to help you adapt organizational structures, unify and simplify existing business processes, or realize consolidations through a structured approach. With functionality based on knowledge and expertise gained from its use in more than 20,000 successful transformation projects over two decades, this standard software can help you reduce total cost of operations, ensure data quality, and achieve data consistency. Proven methodologies, support for best practices, and standardized technologies help secure your envisioned transformation scenario. The software also supports efforts to consolidate system landscapes, optimize existing processes, and adapt new business and technical requirements that can increase business value. (See Figure 1.)

**Figure 1: The Role of Landscape Transformation in Driving Value**

- **Introduce**: Introduction of SAP® applications
- **Operate**: Operation of an increasingly fragmented SAP software landscape
- **Simplify**: Initial simplification by standardization of processes, harmonization of systems, and consolidation of data
- **Remodel**: Ongoing adaptation to changing business and technical requirements
Reducing Complexity Through Transformation

As companies constantly update and optimize business processes to support the new reality of ever-changing market conditions, they need to maintain a solid and reliable IT foundation. However, many SAP customers manage diversified landscapes that they have built around numerous SAP software systems and multiple solutions based on SAP Business Suite applications. These landscapes include, for example, the SAP ERP, SAP Customer Relationship Management (SAP CRM), and SAP Supplier Relationship Management (SAP SRM) applications, as well as SAP business intelligence and industry solutions. These companies also need to handle regional demands and disparate legal requirements that can further compound the complexity of such a system landscape.

Over time, the established processes grow, become extensively complicated and expensive, and lack transparency. Key factors that contribute to complexity include:

- Multiple instances and different release levels and platforms
- Redundant and inconsistent master and transaction data
- Different process designs and incomplete business processes requiring manual reentry
- Numerous interfaces spanning both SAP and non-SAP systems
- Incompatible systems

Enterprises respond to these recurring transformation needs with IT-based initiatives that can vary considerably in scope. Options include, for example, reorganizing the company’s internal structure on the system level, simplifying processes, or harmonizing master and transactional data. Regardless of the requested new setup, reliable software and expertise are required to realize the envisioned transformation scenario efficiently and cost-effectively.

Aligning IT Infrastructure with Business Goals

When the need for IT landscape transformation arises, SAP Landscape Transformation can help you realize your envisioned business setup. The software is fully embedded in release 7.0 and higher of SAP Solution Manager and fulfills all technical and business requirements while maintaining data consistency and taking into consideration system integration factors.

In addition, the software extends the SAP portfolio of solutions for enterprise information management and supports master data management, data integration, and data quality management.
Supported Business Scenarios
SAP Landscape Transformation supports the following business scenarios:

- Managing mergers and acquisitions and carve-out projects
- Managing reorganizations
- Optimizing or simplifying business processes
- Harmonizing master data and preparing to introduce global templates
- Consolidating systems and centralizing data to reduce total cost of operations
- Performing a selective data migration to carve out single entities, business objects, or processes

The following (Figure 2) illustrates the drivers that typically trigger transformation scenarios carried out by organizations in an effort to keep their business and IT strategies aligned.

Road Maps for Success
To help you better conduct and ensure the success of your transformation project, SAP Landscape Transformation offers predefined, scenario-based road maps. The maps include accelerators that provide full guidance, support best practices, and include in-depth documentation and integrated knowledge ware.

The software’s analysis functionality offers you a comprehensive overview of general system, database, and application characteristics. This overview enables you to evaluate and assess the effort, duration, technical feasibility, and application-specific requirements of the project at an early stage.

The software’s work center structure helps you to manage your project in an efficient manner, enabling you to navigate through the different project stages.

Figure 2: Drivers for Transformation Scenarios
THE SOFTWARE APPROACH TO SAP LANDSCAPE TRANSFORMATION

SAP Landscape Transformation offers a standardized, software-based solution for addressing transformation scenarios in a holistic fashion. This differs from traditional approaches, such as greenfield, where a system is built from scratch and a set of selected data is transferred from the source to the defined target system. The benefits of using SAP Landscape Transformation include:

- Support for customer-built transformation capabilities, use of in-house resources for realization of upcoming changes, and system landscape monitoring
- Consistent data transfer across all SAP solutions and consideration of the complete data history
- Smooth data transfer through continuous test cycles to help ensure all data is changed correctly
- Significant reduction in overall project duration and downtime of the productive systems through phased transformation
- Streamlined IT transformation process and significant reduction in overall project risk and costs
- General reuse of customizing settings
- Opportunity to incorporate a Unicode conversion or an upgrade during a single downtime period
- Reduced maintenance activities after client transfer

SAP offers standard maintenance and support for SAP Landscape Transformation software, but if your transformation needs are more complex, the Data Management & Landscape Transformation organization offers comprehensive services you can use for more customer-specific help. For example, these services can help you address scenarios that require further adjustment of other SAP applications such as SAP CRM and SAP SRM as well as business warehouse management and industry-specific solutions.

### Traditional Approaches Compared to SAP® Landscape Transformation

<table>
<thead>
<tr>
<th>Traditional approaches (for example, greenfield approach, archiving, legacy system migration)</th>
<th>Approach based on SAP® Landscape Transformation software</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Often lead to multiyear projects</td>
<td>• Operates on running systems, helping to ensure business continuity</td>
</tr>
<tr>
<td>• Ignore functional expertise embodied in existing enterprise resource planning (ERP) assets (applies to the greenfield approach)</td>
<td>• Starts with scenario analysis for choosing the best solution and target system</td>
</tr>
<tr>
<td>• Allow only the transformation of open processes</td>
<td>• Converts, migrates, and transforms the entire data history</td>
</tr>
<tr>
<td>• Can put your existing database at risk and may result in losing SAP software maintenance coverage if you perform non-SAP-certified conversions at the database level</td>
<td>• Helps guarantee preservation of historical data, running processes, and persistence of maintenance</td>
</tr>
<tr>
<td>• Offer an on-premise approach</td>
<td>• Offers a cloud-enabled approach</td>
</tr>
</tbody>
</table>
Specific Business Scenarios in Focus

OVERVIEW
SAP Landscape Transformation software consists of multiple end-to-end business transformation scenarios that are highly automated and standardized, and all are included in the software license.

The typical transformation requirements addressed through an end-to-end transformation solution (see Figure 3) are associated with sell, buy, and restructure activities. These activities are usually triggered by mergers and acquisitions; performance of company carve-outs; management of legally necessary divestitures of business units; and internal company reorganizations such as merging profit and cost centers.

Other transformation requirements are associated with unify and transform activities. These activities are triggered by the need to respond to new legal requirements for financial reporting, improve transparency in financial reporting and controlling, or harmonize master data after the acquisition of other companies or business units.

Requirements associated with consolidation and IT cost-reduction activities are normally triggered by the need to be more responsive to changing business requirements. This often involves simplifying complex SAP software landscapes or consolidating and retiring an existing system landscape to reduce total cost of operations.

SAP Landscape Transformation includes 28 transformation solutions.

Figure 3: End-to-End Transformation Solutions for Major Business Scenarios

<table>
<thead>
<tr>
<th>Analysis and technology platform</th>
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<tbody>
<tr>
<td>Analysis with SAP NetWeaver® technology platform</td>
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<tr>
<td>Analysis with SAP® ERP Central Component</td>
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<tr>
<td>Analysis of company code objects</td>
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<tr>
<td>Report variant analysis and coding scan</td>
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<tr>
<td>Repository and customizing comparison</td>
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<tr>
<td>Scenario-specific analyses</td>
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<table>
<thead>
<tr>
<th>Leverage sell, buy, and restructure</th>
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<tr>
<td><strong>Carve out:</strong></td>
</tr>
<tr>
<td>Company codes</td>
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<tr>
<td><strong>Reorganize:</strong></td>
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<tr>
<td>Profit centers</td>
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<tr>
<td>Segments</td>
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<tr>
<td><strong>Merge:</strong></td>
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<tr>
<td>Company codes</td>
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<tr>
<td>Controlling areas</td>
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<tr>
<td>Profit centers</td>
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<tr>
<td>Cost centers</td>
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<table>
<thead>
<tr>
<th>Unify and transform data</th>
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<tbody>
<tr>
<td><strong>Convert:</strong></td>
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<tr>
<td>Chart of accounts</td>
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<tr>
<td>Cost centers</td>
</tr>
<tr>
<td>Profit centers</td>
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<td>Asset classes</td>
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<td>Vendor numbers</td>
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<tr>
<td><strong>Rename:</strong></td>
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<tr>
<td>Controlling areas</td>
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<tr>
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<td>Material numbers</td>
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<tr>
<td>Personnel numbers</td>
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<table>
<thead>
<tr>
<th>Consolidate and reduce IT costs</th>
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<tbody>
<tr>
<td><strong>Transfer:</strong></td>
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<tr>
<td>Client transfer with different releases</td>
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<tr>
<td>Client transfer with matching releases</td>
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<tr>
<td><strong>Transform data from the SAP ERP Human Capital Management solution:</strong></td>
</tr>
<tr>
<td>Carve out</td>
</tr>
<tr>
<td>Merge</td>
</tr>
<tr>
<td>Split</td>
</tr>
<tr>
<td>Integrate</td>
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<tr>
<td>Delete</td>
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**Shell creation for SAP ERP**
SELLING, BUYING, AND Restructuring

These scenarios address common business events, including mergers and acquisitions, spin-offs, and divestitures, as well as restructuring. SAP Landscape Transformation offers an integral approach to realizing transformation projects that enable you to be ready for future business opportunities.

Selling a Company or Business Unit

Decisions to sell or divest part of an organization are motivated mainly by objectives to:

- Focus on core business (for example, divest noncore assets, reduce complexity, and streamline your business)
- Raise cash
- Comply with legal requirements

When selling or divesting a part of your organization, you have to cleanse your company’s organizational structures of data elements associated with the divested entity in a way that maintains transactional integrity and meets legal requirements. Data security, legal compliance, and operational efficiency are critical success factors for changing business transactions. SAP Landscape Transformation covers the entire range of requirements arising from a divestiture.

Carving Out Company Codes

Your company may decide to spin off a subsidiary or business unit or create an independent entity within your group. As a result, your system landscape will need to mirror this structural change, and you may need to carve out the subsidiary’s company codes to reflect the new structure.

The carve-out scenario enables you to extract selected company codes from your existing systems and transfer them into the spin-off’s target environment to form a legally independent company. Additionally, the scenario allows you to accomplish this transformation without interrupting your day-to-day business. SAP Landscape Transformation also helps you maintain compliance with all legal requirements. The software guides you safely through the project through detailed instructions and predefined templates.

In short, using SAP Landscape Transformation for a divestiture or spin-off allows you to take maximum advantage of the following benefits:

- Thorough assessment of your IT landscape prior to the carve-out
- Evaluation of different carve-out options (project-based solution)
- Best practices and guidance in the project evaluation, preparation methodology, and project execution
- Preservation of a complete data history for share deals
- Minimum downtime and business interruption

“SAP Landscape Transformation was the perfect tool for us. We were able to fulfill business requirements very quickly and execute our project smoothly. With coaching from SAP experts, we were able to run the project using only internal resources.”

Vaclav Svub, Head of the ERP Center, ABB
Merging Company Codes
You may need to merge company codes to realize the integration requirements triggered by mergers and acquisitions or from the need to adequately reflect changed organizational structures at the system level. By merging company codes, you can support the realignment of corporate structures and help enhance reporting functionalities and transparency of business data.

Merging company codes can also be triggered by:
• Tax and legal requirements
• Objectives to enhance cost efficiency
• Enhancement of the corporate portfolio or its adaptation to changing market needs

The company code merge scenario (see Figure 4) is designed to merge codes that belong to the same system and client. From analysis functions that help you determine the prerequisites and best transformation approach, to a road map that guides you throughout the project, SAP Landscape Transformation provides everything you need for a smooth transition.

All master data, transaction data, and customizing will automatically be changed, including all historical data. The entire system will look after the successful company code merge, as it has never been transformed.

When integrated with SAP Solution Manager, the software provides a dedicated transformation road map for the company code merge. It guides you throughout the entire project and also contains in-depth background information to help you accelerate and streamline your project.

SAP Landscape Transformation also includes a range of important analysis functions. The analysis examines whether the prerequisites for a company code merge apply in your project, and it recommends the most suitable approach based on the analysis results. Additionally, it provides you with a list of objects that need to be harmonized before the company code merge.

Before you can execute a transformation project, you will need to check the prerequisites that all company codes to be merged:
• Belong to the same controlling area
• Use the same local currency, chart of accounts, and fiscal-year variant
• Apply valuation at the plant level

Figure 4: Example of a Merging Company Code Scenario
**Merging Controlling Areas**
Within transformation projects, a multitude of complex business requirements have to be mirrored at the system level. This includes, for example, the merging of two controlling areas into a new or existing one.

If you are planning to consolidate company codes belonging to different controlling areas, you need to view a controlling-area merge as an important preparatory step for that later consolidation. Additionally, if you decide to change from decentralized to centralized and unify controlling structures, then a controlling-area merge will also be relevant.

SAP Landscape Transformation software is designed to merge controlling areas that belong to the same system and client and that use the same chart of accounts, fiscal-year variants, operating concerns, and profit centers. At an early stage, the software analyzes whether your system meets all necessary requirements for the merge. A controlling-area merge covers master data, transactional data, and customizing data and includes the profit center merge and cost center merge.

Transformation requirements are typically associated with sell, buy, and restructure activities triggered by mergers, acquisitions, company carve-outs, divestitures, and internal reorganizations such the splitting of profit and cost centers.
Merging and Renaming Profit Centers and Cost Centers
The profit center and cost center merge enables you to change master, transaction, and customizing data. Profit centers can be changed differently in various controlling areas, and the names of the profit centers can be changed during the conversion.

You may need to merge cost centers when the company:
• Plans to simplify the existing cost center structure that has grown and developed over time
• Changes its intracompany structures, resulting in the need to change cost-center names
• Wants to establish a naming convention for cost centers across the company’s group
• Has acquired another company, resulting in the need to adapt the names used by the acquired company to the naming conventions that are valid for the acquiring company

When the conversion is realized:
• Master data, transaction data, and customizing data is covered
• Standard as well as customer-specific tables are converted
• The relevant data, including the entire history, is changed at the database level
• The system after conversion looks as if it has always been in the new state
• Profit centers and cost centers can be merged in an n:1 relationship or renamed in a 1:1 relationship

Reorganizing Profit Centers and Segments
The reorganization of profit centers can be triggered by various external and internal requirements. For example, a changed corporate structure causing a shift of responsibilities requires companies to precisely adapt their controlling processes and adjust profit centers. Also, internally driven objectives such as the simplification of the existing profit center structure, the unification of the overall reporting structures, or a change from a cost-center-based to a profit-center-based reporting structure may require reorganization.

Whatever the scope, a change to the profit center structure requires you to reassign all affected objects, such as materials, purchase orders, and sales orders, to the respective profit center. This often entails changing thousands of objects and making corresponding adjustment postings.

Moreover, restructuring profit centers can affect not only the profit center assignments in your general ledger, but also all data that feeds into the general ledger. Companies facing such a reorganization project are often hampered by manual calculations and transfers, multiple transactions, manual reconciliation, and unstructured audit trails.

Segment reorganization is analogous to profit center reorganization. It follows the same principles and key data-driven approach, and the structure of customer projects is the same as for profit center reorganization.

Transformation requirements associated with unify and transform activities can be triggered by the need to respond to new legal requirements for financial reporting or to improve transparency in financial reporting and controlling.
SAP Landscape Transformation offers you a proven solution for reorganizing (splitting, merging, and changing) profit centers and segments, reassigning master and transaction data, and changing the profit center and segment assignment on a key date. The reorganization functionality of the software provides you with a unique and complete view of your reorganization process as well as a plan that gives you a detailed view of all reorganization measures. The functionality enables your company to flexibly adapt its organizational structures and also helps to increase data quality for reporting.

UNIFYING AND TRANSFORMING DATA
In today’s global economy, businesses must be able to handle multiple languages, comply with state- and country-specific tax regulations, and implement corporate templates.

Regional and local disparities have a significant impact on a company’s overall business operations. These disparities provide a compelling argument for introducing more widely accepted standards such as generally accepted accounting principles (GAAP) and International Financial Reporting Standards (IFRS).

Because high-quality, consistent data forms the basis for running reliable and efficient business processes, many companies today want to increase the transparency of their financial processes and envision using a company-wide unification approach to do so.

Unifying Financials
Unifying your financial and controlling structures can give you the chance to redefine your existing business setup. Because regionally organized structures may increase administrative complexity and result in alignment efforts, establishing a centralized SAP ERP application can help you streamline business operations, improve cost efficiency, and speed up IT responsiveness for business users.

The following objectives, in particular, motivate companies to initiate transformation projects to unify financials:
- Improve financial and operational transparency and reporting accuracy by setting up, changing, or extending account or organizational structures
- Accelerate a period-end close by simplifying and streamlining accounting processes
- Comply with legal requirements by adjusting processes and structures to support adoption of dedicated accounting standards
- Implement corporate requirements that require harmonization of accounting structures
- Reduce operating costs

Converting Charts of Accounts
SAP Landscape Transformation supports the introduction of standard financial guidelines by helping you to harmonize your chart of accounts.

For example, as part of your efforts to streamline internal financial processes, you may decide that all legal entities in your group should use the same chart of accounts. You may also want to introduce more detailed account structures by adding one or more digits. With SAP Landscape Transformation, you can replace local or regional charts of accounts with a new, single, and unified chart of accounts.
Prior to the project, you can use the financials and controlling analysis functionality in SAP Landscape Transformation to establish an overall project path that complies with the company’s future accounting standards. The analysis functionality helps you assess the feasibility and scope of your planned chart of accounts conversion and set up your transformation project appropriately.

In the conversion phases that follow, you can opt to either rename or merge your accounts and cost elements using a detailed, predefined methodology. The software guides you safely through all steps of the conversion process. Because data quality is critical to the success of a unification project, it is essential for the project to meet all organizational and operational requirements and optimally support the new business processes.

To summarize, the benefits you achieve by using SAP Landscape Transformation to unify and harmonize your financial structures include:

• Preservation of assets (processes, data, and systems)
• Transparency of your business processes
• Efficient execution of accounting and period-closing procedures
• Fulfillment of legal and corporate requirements
• Safeguarding of your historical data

Convert Asset Classes
You may want to convert asset classes in the following cases:

• You have just completed a charts of accounts conversion.

• Your enterprise is implementing IFRS guidelines, resulting in the need to align and standardize existing conventions and IDs.
• You want to merge asset classes to have the same meaning but have them defined separately.
• You want to assign asset classes to specific assets or assign asset classes to an asset class that already exists.

SAP Landscape Transformation enables you to:

• Change the numbers of asset classes in a 1:1 conversion
• Merge asset classes by renaming several asset classes with the same number
• Change the text descriptions of asset classes during conversion

Because asset classes are client dependent, changes can only be realized to all company codes belonging to the same client.

Converting the Asset Account Determination
The conversion of the account determination for financial assets often occurs in correlation with a charts-of-accounts conversion. This is especially true if you need to meet new requirements regarding either account determination or the assignment of general ledger accounts to fixed-asset accounts.

SAP Landscape Transformation enables you to:

• Rename account determination in a 1:1 relationship
• Merge account determination in an n:1 relationship
• Modify text descriptions
Converting the Fiscal Year
Your enterprise may want to convert its fiscal year as a result of tax and legal requirements, data harmonization initiatives, or a merger or acquisition. A merger or acquisition, for example, may require your company to introduce a shortened fiscal year. As a result, the fiscal year defined in your financial system may precede the actual calendar year and consequently interfere with company-wide business activities and cross-company code processes.

SAP Landscape Transformation enables you to:
• Adapt the fiscal year
• Eliminate discrepancies across all SAP software
• Convert all company codes belonging to a single fiscal-year variant

Renaming Company Codes and Controlling Areas
You may need to rename company codes or controlling areas when, for example:
• Your business transformation scenario is focused on merging clients or controlling areas, in which case you might need to adapt the existing company code keys.
• Your company wants to introduce a centralized naming convention for all controlling areas within the company.
• Your company wants to unify all enterprise data due to an acquisition or corporate restructuring.

In all cases, SAP Landscape Transformation helps ensure full data consistency across all applications. In addition, it enables you to:
• Rename company codes in a 1:1 relationship
• Swap codes

UNIFYING LOGISTICS AND SALES
Having solid and reliable data is a crucial factor in handling your daily business processes. For example, to handle complex and cross-application processes such as demand and production planning, order processing, and sales activities, your enterprise depends on transparent and valid data for customers, suppliers, inventory, and sales figures. However, activities such as migrating data from different source systems can result in redundant entries for customers and suppliers.

SAP Landscape Transformation can help you address these issues and in doing so, help increase system-wide data transparency and improve data access and management.

Converting Customer and Vendor Numbers
SAP Landscape Transformation enables you to adapt customer and supplier numbers and eliminate double entries according to company-specific requirements. You may need to convert customer or vendor numbers when, for example, you want to:
• Group customers and vendors according to company-specific criteria
• Eliminate duplicate data in your SAP software system
• Prepare to implement customer relationship management or master data management

Transformation requirements associated with consolidation and IT cost-reduction activities are normally triggered by the need to be more responsive to changing business requirements.
SAP Landscape Transformation includes all transaction, master, and customizing data in the conversion. In addition, the software enables you to:

- Rename customer and vendor numbers in a 1:1 relationship
- Merge customer and vendor numbers in an n:1 relationship and modify text descriptions
- Use predefined rules and also combine them with individual mapping assignments

Figure 5 illustrates a typical conversion scenario

**Renaming Material Numbers**
You may need to rename material numbers when, for example, you want to:

- Replace an existing material number with a new unified one
- Adapt to a new naming convention
- Introduce master data management
- Change the number of digits

SAP Landscape Transformation includes all transaction, master, and customizing data in the conversion. In addition, the software enables you to:

- Rename material numbers in a 1:1 relationship
- Change descriptive text
- Move a complete set of material numbers from one number range to another

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**Figure 5: Example of a Typical Customer and Vendor Number Conversion**

<table>
<thead>
<tr>
<th>Customer (old)</th>
<th>Customer (new)</th>
<th>Priority</th>
<th>Account group (old)</th>
<th>Account group</th>
<th>Merge group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>1100</td>
<td></td>
<td>CUS 1</td>
<td>CUS 1</td>
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<tr>
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<td>2200</td>
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<td>CUS 1</td>
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<td>CUS 4</td>
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<table>
<thead>
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<th>Supplier (old)</th>
<th>Supplier (new)</th>
<th>Priority</th>
<th>Account group (old)</th>
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<tr>
<td>1000</td>
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<td>4000</td>
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<td></td>
<td>SUP 4</td>
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<td></td>
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</table>
Renaming Personnel Numbers
You may want to rename personnel numbers maintained in the SAP ERP Human Capital Management (SAP ERP HCM) solution in order, for example, to:
- Ensure their uniformity and uniqueness
- Align personnel numbers in your travel management system with the numbers in SAP ERP HCM that were changed due to a merge

SAP Landscape Transformation includes all transaction, master, and customizing data in the conversion. In addition, the software enables you to:
- Rename personnel numbers based on rules (for example, map all personnel numbers of interval 01 to interval 02 with an offset of 10,000)
- Rename personnel numbers based on custom mapping (for example, map personnel number 90001 to the new number 100001)
- Use a combination of rules-based and custom mapping

CONSOLIDATING SYSTEMS AND REDUCING IT COSTS
Many international companies operate a widely distributed system landscape with data centers spread across the world. This often leads to disparate systems that increase operating expenses and maintenance efforts. Hence, the need to rationalize the capabilities of strategic data centers is a top concern for corporations. Moreover, a lean and clean data system is essential for transparent data management and is a prerequisite for quick and sustainable business decisions.

System consolidation can be your first step in designing a more rational, efficient, and resilient IT infrastructure that can support your targeted business model. For example, establishing a single-system instance with standardized processes, add-ons, programs, and business data can significantly reduce system complexity. In addition, this centralization can significantly lower your overall costs and reduce the effort required for maintenance and administration.

A centralized IT environment with independent clients can facilitate data management and global reporting. It can also make your company’s financial and sales data readily available throughout the enterprise and support the establishment of standardized, uniform business processes and procedures.

SAP Landscape Transformation can support your efforts to build up a centralized SAP ERP application, which reduces the effort required for system maintenance and upgrades. You can not only reduce the number of systems and interfaces, but you can also remove data redundancies and improve the quality of your business data.

“Thanks to successful implementation of the Bosch group – specific elements within our business division – we have taken a great step toward reaching the target of standardized structures and processes within financials at Bosch Packaging Technology.”
Sven Beck, Head of Finance, Bosch Packaging Technology
System consolidation projects are typically triggered by objectives to:
- Lower IT costs, including operating, infrastructure, and energy costs
- Reduce administrative overhead
- Reduce IT complexity by decreasing the number of system interfaces and redundancies
- Harmonize systems to better support business and to increase the efficiency of the shared service center
- Improve business agility

Transferring Clients
The client transfer approach offers you an easy way to move clients from one SAP software instance to another. It allows you to combine system consolidation, system upgrade, Unicode conversion, and database migration to SAP S/4HANA in one step.

By bundling your data center resources into one location, you can enhance your business performance and at the same time cut IT operating costs and reduce the communication efforts for your IT staff. System administration becomes significantly easier because there is only a single, centralized system landscape to support. Moreover, the new environment facilitates future implementations and upgrades, and going live can be scheduled for any weekend instead of a specific key date.

The database transformation is performed table by table and can be rolled back at any time if errors occur.

Based on our knowledge of modern project management and a wealth of information stemming from many years of experience in transformation projects, we have designed SAP Landscape Transformation to guide you through all the main project phases.
Human Capital Management (HCM) Scenarios
End-to-end transformation functions are integrated into SAP Landscape Transformation to address HCM-related business scenarios that require the migration of data from the system running the SAP ERP HCM solution (see Figure 7).

These functions support technical data migration for the following business scenarios:
• Carve-out – to reduce costs for upgrade cycles or for security reasons
• Integration – to simplify your system landscape
• Split – to realize the setup of a legal entity after a divestiture
• Merge – to unify one or more systems initiated by a company takeover
• Delete – to delete SAP ERP HCM solution data from the sending system

Carve-Out
This function enables you to move your SAP ERP HCM solution from a central system running SAP ERP to an empty, stand-alone SAP software system. This results in a new system running SAP ERP HCM.

Figure 7: Integrated Transformation Functions for HCM-Related Scenarios
Typically, you move your SAP ERP HCM solution in order to:
• Reduce upgrade costs
• Address security concerns
• Gain additional functionality from a higher release
• Prepare for outsourcing

Integrated search capabilities for customer-specific tables are also included in the migration.

During the carve-out, you can also upgrade to a higher release, enabling you to achieve two outcomes with just one downtime.

Integration
This function enables you to integrate an existing SAP ERP HCM solution into a system running SAP ERP.

Typically, you use integration if you want to:
• Simplify the system landscape
• Reduce costs for hardware
• Simplify maintenance and administration

Both systems must be consistent with regard to release levels, add-ons, support packages, and HR support package levels.

Split
This function enables you to move part of your SAP ERP HCM solution to an empty system.

A split might be required in order to:
• Accommodate a divestiture
• Separate some parts of your organization to accommodate organizational or legal requirements (for example, to set up a new company-owned IT company)

During the split, you can also upgrade to a higher release, enabling you to achieve two outcomes with just one downtime.

Merge
This function enables you to merge one or more SAP ERP HCM solution systems into an existing system.

A merge might be required:
• After a company takeover, in which case you may need to also complete some conversions
• When you want to merge separate SAP ERP HCM clients into a single client (for example, you want to establish a shared service center, or you are an outsourcing partner and want to merge two separate clients)

Delete
This function enables you to delete SAP ERP HCM solution data from the sending system (for example, after a carve-out or a split)

Typically, you delete data for data security reasons and to lower hardware and maintenance costs. Also, deletion is typically performed as a separate project sometime after a transformation project for SAP ERP HCM.

This function includes deletion of obsolete HCM data. You can delete all the data tables that were migrated, or you can adjust the selection. Also, you select the HCM objects for deletion (for example, personnel numbers, organizational units, and positions) using the object IDs. You can derive this data from a previously executed transformation project for SAP ERP HCM.
General Features
The migration scenarios for SAP ERP HCM also include the following features:
• Transfer of HCM data from a sender system to a receiver system by selecting the relevant HCM tables
• An HCM knowledge base to identify HCM tables, plus a search for additional HCM tables

During the transformation, you select HCM objects (for example personnel numbers, organizational units, and positions) for transfer using the HCM object IDs.

Shell Creation for SAP ERP
You can use shell creation to do either of the following:
• Build up a new system that is a copy of a system that has the same metadata (repository and customizing data) but does not contain any application data
• Reduce the scope of a system copy by only transferring selected clients (with or without application data) from the source system to the target system

In this transformation scenario, you create a copy of a system that excludes application data and clients. This reduces the volume of data and, as a result, the system resources in the newly created system. The scenario is suitable for providing an empty receiver system for other scenarios supported by SAP Landscape Transformation.

The shell system is considerably smaller than the source system because it contains only the essential metadata required to operate it. It contains the same customizing and repository data as the source system. It does not contain any application data. From a technical perspective, a system shell only contains:
• Basis tables
• The complete repository such as reports and the table structures of all database tables
• The complete reference client 000 (You can select additional clients, including application data.)

The shell creation transformation is an enhancement to the standard process for copying an SAP software system with the software provisioning manager tool. Because shell creation enables you to exclude application data and clients, the copy process runs more quickly.

You can transfer data transfer from a non-Unicode system to a Unicode system, and you can also migrate the operating system and database.

“Using SAP Landscape Transformation, the functional team was able to reduce manual intervention by 90%, minimizing the risk of human error.”
Veronica Torelli, Functional Project Coordinator, ADP LLC
Phases of Tackling a Transformation Project

Based on our knowledge of modern project management and a wealth of information stemming from many years of experience in transformation projects, we have designed SAP Landscape Transformation to guide you through all the main project phases.

IDENTIFYING THE BEST TRANSFORMATION APPROACH
The analysis platform in SAP Landscape Transformation provides generic system analyses to help you assess the scope and technical feasibility of your transformation project. The advantage of a software-based analysis is that it uses existing system information to provide the basis for cost estimates, risk assessments, and feasibility studies. As a result, you can identify the approach that enables you to avoid incorrect conclusions due to missing or misleading information.

ANALYZING THE SYSTEM LANDSCAPE AND DESIGNING THE PROJECT
After selecting the most suitable approach for performing a transformation, you can create a project according to your organization’s individual requirements and include the desired business transformation components. This process results in a project template that comprises all relevant project steps and transformation requirements. The scenario-specific analyses provide you with key insights such as:

• A detailed overview on the respective system landscapes
• Database characteristics and scenario-specific information
• A comparison of essential system settings and data structures, such as repository objects and different customizing settings
• Identification of conflicts, missing information, and duplicate entries
• A full picture of existing discrepancies to be tackled throughout project realization and during data migration

With these insights, you can then design the target blueprint and set up a detailed transformation project plan. Also, after all analyses have been finalized, consultants can provide estimations of time, costs, and resources.

To help you avoid incorrect conclusions due to misinformation, the analysis platform in SAP Landscape Transformation uses existing system information to provide generic system analyses for assessing project scope, risk, and feasibility.
PLANNING AND DESIGNING THE TRANSFORMATION PROJECT

Supporting the application of best practices, SAP Landscape Transformation provides guidance and scenario-specific road maps that give you a detailed overview on all project phases. Figure 8 shows sample screen shots of the guided client transfer scenario and the associated road map.

REALIZING THE TRANSFORMATION PROJECT

SAP Landscape Transformation enables you to realize transformations in a cost-effective, timely, and efficient manner. Its proven conversion and migration technologies allow you to update or change all historical data. A phased transformation approach results in minimal system downtime.

To help ensure maximum data security and minimum system downtime during the conversion of the productive system, various test runs are carried out prior to the production conversion.

Depending on the project complexity, the testing phase involves one or more test cycles in a dedicated test system. After each test conversion, you can validate:
- Consistency of data structures
- Data access after conversion run
- Verification of test results
- Verification of changeover prerequisites

As soon as the test results are satisfactory, you can realize the conversion in the productive environment. You can carry out all project steps using a process tree similar to the implementation guide commonly used in an SAP software system environment.

After a successful cutover to the new system and business operations, your productive system will be up and running. SAP Landscape Transformation contributes to maintaining consistency and compliance for all system data – including open items, complete data history, and data archives.

<table>
<thead>
<tr>
<th>Client Transfer</th>
<th>Planning and System Consolidation Blueprint</th>
<th>Realization of Test Cycles</th>
<th>Final Preparation for Productive Migration</th>
<th>Productive Migration and Upgrade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation and Analysis</td>
<td>Work Package SAP LT</td>
<td>Planning and System Consolidation Blueprint</td>
<td>Realization of Test Cycles</td>
<td>Final Preparation for Productive Migration</td>
</tr>
<tr>
<td>Scope and Objectives</td>
<td>Client Transfer Work Package</td>
<td>Planning and System Consolidation Blueprint</td>
<td>Realization of Test Cycles</td>
<td>Final Preparation for Productive Migration</td>
</tr>
<tr>
<td>Correct IT Infrastructure</td>
<td>Client Transfer Infrastructure Development and Business Process Analysis</td>
<td>Planning and System Consolidation Blueprint</td>
<td>Realization of Test Cycles</td>
<td>Final Preparation for Productive Migration</td>
</tr>
<tr>
<td>Client Transfer Analysis and Business Process Analysis</td>
<td>Planning and System Consolidation Blueprint</td>
<td>Realization of Test Cycles</td>
<td>Final Preparation for Productive Migration</td>
<td>Productive Migration and Upgrade</td>
</tr>
<tr>
<td>Description of Changes to Business Processes of the System</td>
<td>Planning and System Consolidation Blueprint</td>
<td>Realization of Test Cycles</td>
<td>Final Preparation for Productive Migration</td>
<td>Productive Migration and Upgrade</td>
</tr>
<tr>
<td>Technical Evaluation</td>
<td>Planning and System Consolidation Blueprint</td>
<td>Realization of Test Cycles</td>
<td>Final Preparation for Productive Migration</td>
<td>Productive Migration and Upgrade</td>
</tr>
</tbody>
</table>

Figure 8: Client Transfer Entry Screen and Transformation Road Map
THE WORK CENTER FOR SAP LANDSCAPE TRANSFORMATION

You can access the work center for SAP Landscape Transformation (transaction: LTS) in SAP Solution Manager (see Figure 9). The work center provides a central place to control all relevant software functionality and contains the following sections:

- **Overview** – Quick access to your transformation projects, including analysis, test results, documentation, and road maps
- **Portfolio** – All transformation solutions structured according to typical transformation requirements. (You can flexibly compose all relevant transformation requirements for an SAP transformation project.)
- **Project templates** – Detailed scope description of a transformation project including the necessary transformation solutions from the portfolio. (You can use templates for more than one project.)
- **Projects** – All project activities for the technical execution to be managed centrally
- **Project status** – Quick overview of running projects, enabling direct access to a project’s execution plan
- **System landscapes** – System landscape definition for use in one or more transformation projects, including description of the extended solution

Figure 9: Work Center Entry Screen for SAP Landscape Transformation
SAP S/4HANA is our next-generation business suite offered exclusively on the SAP HANA® platform and designed with the personalized SAP Fiori® user experience (UX).

Whether used in the cloud or on premise, SAP S/4HANA can help you simplify your system landscape and lower your total operating costs.

**THE ROAD TO SAP S/4HANA**

The road map for getting to SAP S/4HANA will vary according to your specific business needs and IT drivers. For example, you may:

- Already be running SAP Business Suite powered by SAP HANA or using a hybrid scenario
- Be a new SAP customer or an existing customer with a mature SAP software landscape
- Want to roll out SAP S/4HANA as quickly as possible or try it in a specific geography or business unit first
- Implement the central finance foundation for SAP S/4HANA Finance solution as a shared service center
- Want to implement SAP S/4HANA or SAP S/4HANA Cloud

SAP can help you identify the business benefits and plan your road map according to your specific needs.

We support three different implementation options (see Figure 10) for customers who want to migrate to SAP S/4HANA:

- New implementation – for new SAP customers who want to move from legacy systems to SAP software systems
- System conversion – for existing customers of SAP Business Suite software who want to move to SAP S/4HANA
- Landscape transformation – for existing customers of SAP Business Suite who want to optimize their system landscapes and move to SAP S/4HANA

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**Figure 10: Migration Options Supported by Landscape Transformation Software**

<table>
<thead>
<tr>
<th>New implementation</th>
<th>ERP system</th>
<th>Third-party system</th>
<th>SAP S/4HANA®</th>
<th>SAP S/4HANA Cloud</th>
</tr>
</thead>
<tbody>
<tr>
<td>System conversion</td>
<td>ERP system</td>
<td>ERP system</td>
<td>SAP S/4HANA</td>
<td></td>
</tr>
<tr>
<td>Landscape transformation</td>
<td>ERP system – Region A</td>
<td>ERP system – Region B</td>
<td>ERP system – Region C</td>
<td>SAP S/4HANA</td>
</tr>
</tbody>
</table>

Example: New implementation of SAP S/4HANA (by new or existing SAP customer) with initial data load

Example: Complete conversion of an existing system running SAP® Business Suite to a new system running SAP S/4HANA

Example: Consolidation of current regional landscape running SAP Business Suite or selective data transformation into one global system running SAP S/4HANA
MOVING TO SAP S/4HANA AND OPTIMIZING THE SYSTEM LANDSCAPE

This migration option focuses on existing customers of SAP Business Suite software who want to change their current systems or system landscapes into systems or landscapes running on SAP S/4HANA and SAP S/4HANA Cloud.

A migration project typically consists of more than a single technical task to move the newest software architecture to a system. The project must usually deal with requirements to satisfy either of the following use cases:
- Merging multiple systems into one global system
- Migrating selected parts of a system (for example, line-of-business organizational units)

SAP Landscape Transformation can help address these migration requirements. The sections that follow offer further insight into system migration use cases.

Moving to SAP S/4HANA by Merging Multiple Systems into One

A transformation project to move to SAP S/4HANA while optimizing a system landscape might involve merging multiple systems into a single global system, as illustrated in Figure 11.
Moving to SAP S/4HANA by Migrating Selected Parts of a System
A transformation project to move to SAP S/4HANA while optimizing the system landscape might involve migrating selected parts of a system, as illustrated in Figure 12. Use cases such as reducing data volume through data cleanup and archiving during migration to SAP S/4HANA would also fit into this category.

Moving to SAP S/4HANA Cloud
SAP Landscape Transformation and the SAP Replication Server are the products used to migrate data to SAP S/4HANA Cloud.

Data is migrated from the source system (a system with SAP Business Suite or any legacy system) to a new target system running SAP S/4HANA Cloud. The data migration is integrated into the implementation cockpit in SAP S/4HANA to support the entire implementation process and offer an easy-to-use migration functionality.

MORE ON MIGRATION TECHNOLOGY AND SERVICES
For more information about migration using SAP Landscape Transformation, see these resources:
- SAP Help Portal site
- SAP Community
- Online Course LT100

Figure 12: Company-Code-Wise Move to SAP S/4HANA

Supporting the application of best practices, SAP Landscape Transformation provides guidance and scenario-specific road maps that give you a detailed overview on all phases of your transformation project.