

SAP Readiness Check for SAP S/4HANA



Typographic Conventions

Type Style	Description
<i>Example</i>	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Textual cross-references to other documents.
Example	Emphasized words or expressions.
EXAMPLE	Technical names of system objects. These include report names, program names, transaction codes, table names, and key concepts of a programming language when they are surrounded by body text, for example, SELECT and INCLUDE.
Example	Output on the screen. This includes file and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
Example	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
<Example>	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
EXAMPLE	Keys on the keyboard, for example, F2 or ENTER.

Document History

Version	Date	Change
1.0	2017-05-28	First version published
1.1	2017-06-27	Minor changes

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1 Introduction

1.1 General Introduction

SAP S/4HANA is SAP's next-generation business suite. It is not the legal successor of any SAP Business Suite product. SAP S/4HANA is a new product completely built on SAP HANA, which is one of the most advanced in-memory platforms today. In addition, SAP S/4HANA reflects modern design principles based on the SAP Fiori user experience.

In an approach to build SAP S/4HANA, SAP has re-imagined solutions for modern business processes in an increasingly mobile and digitized world. SAP S/4HANA delivers massive simplifications and innovations, deliverable on one data structure and architecture moving forward.

Converting a typical SAP ERP 6.x system to SAP S/4HANA requires a database migration to SAP HANA (if not currently running on SAP HANA), and the installation of new simplified code and adaptations.

A comprehensive overview of all simplifications for SAP S/4HANA, compared to SAP Business Suite products, are captured in the simplification list at https://help.sap.com/viewer/p/SAP_S4HANA_ON-PREMISE. For a given customer, only a limited number of simplification items from this extensive list are applicable.

To provide customers a better view of the results for their system landscapes when converting to SAP S/4HANA, SAP offers SAP Readiness Check for SAP S/4HANA.

1.2 Disclaimer

SAP does not guarantee the completeness of SAP Readiness Check for SAP S/4HANA. The readiness check is designed as a first check in system conversion planning.

The simplification list for SAP S/4HANA and its related restrictions continue to evolve, meaning some restrictions may be temporary. Also, a customer may expand the solution. The readiness check's results reflect a specific point in time for the system in scope.

While a customer might not use some installed functions, the SAP Readiness Check for SAP S/4HANA does not in every case differentiate between used and installed components.

SAP recommends that customers carefully read the simplification list's introduction on https://help.sap.com/viewer/p/SAP_S4HANA_ON-PREMISE. The introduction contains important information on how to interpret the simplification items.

SAP also recommends that customers always check the latest release restriction notes which might contain additional restrictions not maintained in the simplification list.

SAP Readiness Check for SAP S/4HANA's custom code analysis identifies mandatory change areas due to the simplified application architecture of SAP S/4HANA. Custom code analysis does not contain a list of all adaptations necessary to support SAP HANA as a database. In addition, the analysis does not include general prerequisite adaptations for SAP HANA database migration. Lastly, the analysis does not include requisite adaptations for future add-ons or for custom code unrelated to SAP S/4HANA.

1.3 How Does the SAP Readiness Check for SAP S/4HANA Support You?

SAP Readiness Check for SAP S/4HANA supports customers who plan to convert existing SAP ERP 6.x systems to SAP S/4HANA. It checks both your production systems (or copies thereof) and your development systems for SAP S/4HANA conversion compatibility and necessary conversion preparation steps. The results are consolidated in an interactive dashboard for internal or for SAP communication.

SAP Readiness Check for SAP S/4HANA provides a pre-conversion overview, useful for identifying current system landscape preparation steps, well in advance of your SAP S/4HANA system conversion project start date.

1.4 What Information Do You Get?

The SAP Readiness Check for SAP S/4HANA evaluates specific areas and provides detailed information about the results.

The areas are as follows:

Functional changes	Simplifications in SAP S/4HANA relevant for your specific system installation. Their impact is described in the corresponding SAP Notes
	Installed SAP add-ons and 3rd-party add-ons, and their compliance with SAP S/4HANA
	Activated business functions and their release statuses in SAP S/4HANA
System statistics	Technical system information
System requirements	Estimated SAP S/4HANA system size and recommendations to reduce the size before the conversion
Custom code requirements	SAP S/4HANA related custom code analysis grouped by application area
	SAP Custom Development projects
Business Process Analytics	Analysis of 10 strategic KPIs via the business process analytics engine
Recommended SAP Fiori Apps	Recommended SAP Fiori Apps based on which transactions are currently used in the system

1.5 Intended Audience

This guide is intended for technology consultants, system administrators, and IT architects who plan to execute the SAP Readiness Check for SAP S/4HANA on their SAP ERP 6.x system.

2 Preparing SAP Readiness Check for SAP S/4HANA

Prerequisites

- Ensure that you have an S-user for the SAP Support Portal
- Your user in SAP Solution Manager must be assigned to your S-user for the SAP Support Portal.
For more information, see SAP Note [1822202](#).
- You are using one of the following releases:
 - SAP Solution Manager **7.1** SPS 12 or higher
 - SAP Solution Manager **7.2** SPS 3 or higher.
- **Minimal transaction history of 4-6 weeks (transaction ST03)** in the production system or the system in which you want to execute the application analysis. Otherwise, SAP Readiness Check for SAP S/4HANA can return inaccurate results.
- Follow the configuration instructions of SAP Note [2290622](#).
- Implement the following SAP Notes:
 - **In the development System** (or the system in which you want to analyze the custom code): SAP Note [2185390](#) and [2310438](#) (in this sequence).
 - **In the production system (recommended)**, or the system in which you want to execute the application and sizing analysis:
 - SAP Note [2262129](#)
 - SAP Note [2367595](#)
 - SAP Note [2399707](#)
 - SAP Note [2443236](#) (for business process analysis)
 - **In the SAP Solution Manager system:** SAP Note [2290622](#)

Procedure

1. In your SAP Solution Manager system, use transaction SE38 to execute report AGSRC_START_ANALYSIS. The report triggers the SAP Readiness Check for SAP S/4HANA. It requires the following system information:
 - **For the custom code analysis:**
Managed system and its client that you want to analyze.
We recommend entering the system ID (SID) of the SAP ERP development system here. You have the option to enter the custom code namespace and package. If you do not specify a custom code namespace, the analysis will be done on all objects in Z and Y packages.
 - **For other analysis checks:**
Enter the SID and the client that you want to analyze. The report analyzes usage data such as UPL, SAP HANA sizing, and transaction usage.
We recommend entering the name of SAP ERP 6.x production system here. If you enter a system that

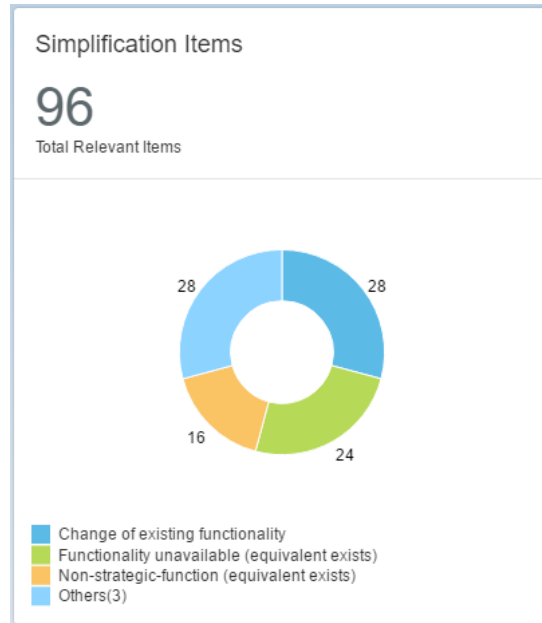
does not contain at least a transaction history of 4-6 weeks, SAP Readiness Check for SAP S/4HANA can return inaccurate results.

Once the analysis is finished, you will get an e-mail with a link to the SAP Support Portal.

2. Click the link in the e-mail to display the analysis in your web browser.

3 Checking the Results

3.1 SAP S/4HANA Simplification Items



SAP S/4HANA provides new and updated data structures and architectures for ongoing business processes spanning the past 25 years. Therefore, solutions reflect increased simplicity and faster innovation cycles.

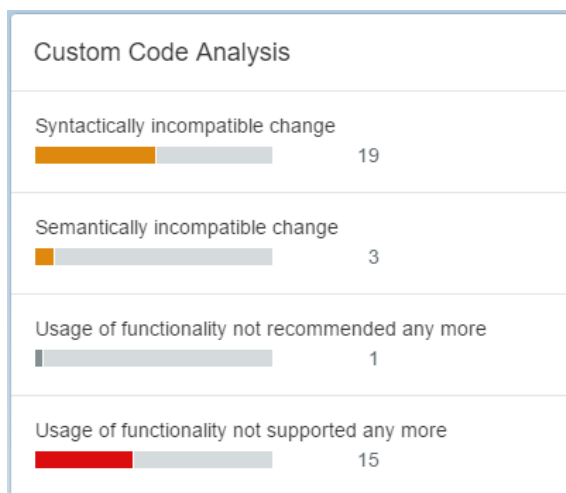
The total list of more than 470 simplifications for SAP S/4HANA 1610 may appear quite long. For a given customer, only a limited number of simplification items from this extensive list are applicable. The list covers all system capabilities, to include industry solutions

The SAP Readiness Check for SAP S/4HANA displays the simplification items that are relevant for your specific SAP ERP 6.x system installation. The simplification items are identified according to factors such as transactions used and table contents. That's why it is important to execute the SAP Readiness Check for SAP S/4HANA on an SAP ERP 6.x production system where a minimal transaction history of 4-6 weeks is available.

Item	Application Area	Category	SAP Note Number	Application Component	Relevance
SI1: FIN_MISC_CR S4TWL - Credit Management	Financials - Miscellaneous	Functionality unavailable (equivalent exists)	2270544	FI-AR-CR, FIN-FSCM-CR	■■
SI6: FIN_MISC_ML S4TWL - Conversion to S/4HANA 1610 Material Ledger and Actual Costing	Financials - Miscellaneous	Change of existing functionality	2352383	FIN-MIG-ML	■■
SI1: FIN_TRM S4TWL - Correspondence Functionality	Financials - Treasury and Risk Management	Functionality unavailable (equivalent exists)	2270450	FIN-FSCM-TRM-TM	■■

In the detailed view, you see the simplification items for your SAP ERP 6.x system, ranked by assessed relevance. The detailed view also includes a reference to each simplification item's application area, category, and SAP Note where you can find additional information.

3.2 Custom Code



High-level custom code analysis is based on the SAP simplification database. This database describes the impact of the custom code per simplification item. Navigate to Packages with Customer Objects to view your applicable development packages.

The packages involved (Z-/Y-namespace or specified namespaces, modified SAP packages) are listed as well as the category and the corresponding SAP Note. The database's Estimated Impact column shows how simplification items affect your custom code.

You can see which of your custom code refers to SAP objects that have undergone changes or have been removed in SAP S/4HANA. These changes may refer to business processes or may be technical changes.

PLEASE NOTE: Custom code analysis does not contain necessary adjustment information to use SAP HANA as a database. Custom code analysis offers a high-level overview on the key aspects in this topic area. Your IP/actual code is not transferred for this high-level overview.

For a deep-dive analysis and an evaluation of necessary adjustment information, please run SAP S/4HANA checks on a locally-installed NetWeaver 7.51 (or higher) system. For more information on this topic, reference our comprehensive [custom code adaption process blog](#).

Status	Meaning
Usage of functionality not supported anymore	This SAP object must be removed from the custom code.
Usage of functionality not recommended anymore	SAP recommends to remove usages of this SAP object from the custom code.
Syntactically incompatible change	Custom code needs to be adapted as described in the related SAP Note.
Semantically incompatible change	Custom code needs to be adapted to the new semantics as described in the related SAP Note.
Change with performance impact	Usages of this SAP object might have impact on your custom code.

Click the tile to get detailed information that helps with your planning and custom code estimation efforts.

Custom Code Topic	SAP Note Number	Status	Estimated Impact
MB transactions: Limited maintenance/decommissioning	1804812	Syntactically incompatible change	Low
Information about adjusting customer-specific programs to the simplified data model in SAP Simple Finance	1976487	Syntactically incompatible change	Low
S4TC EA-GLTRADE - DB Field Changes within Global Trade Management	2198031	Syntactically incompatible change	Low
S4TC EA-GLTRADE - Checks for Condition			

3.3 SAP Custom Development Projects

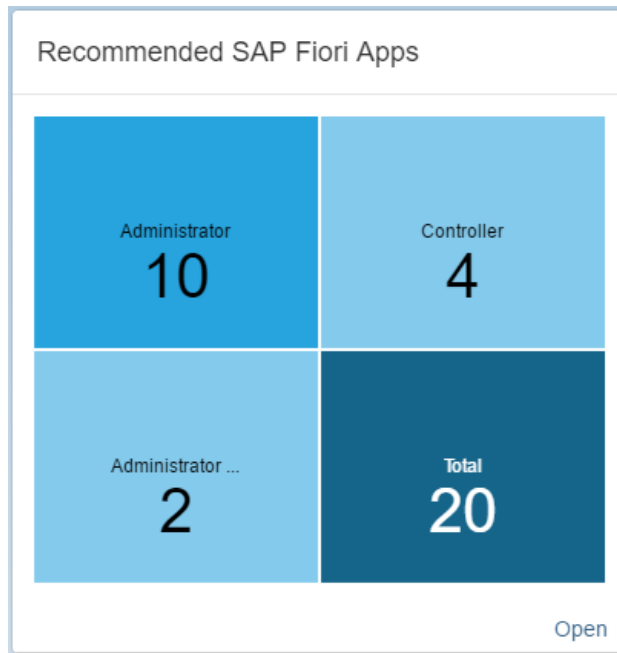
SAP Custom Development Projects	
Name	Size
ABS Development	Medium
Z Development	Medium
XY Supply Level 1	Large
Showing 3 of 11	

This section provides of a listing of solutions that have been built specifically for your business by SAP Custom Development. SAP is ready to help you to simplify by evaluating whether a solution is still needed in the SAP S/4HANA environment. We are also prepared to migrate, optimize, and enrich the capabilities and user experience of your individualized solution, whether on-premise or in the cloud.

PLEASE NOTE: You can view all SAP Custom Development projects that have been delivered to you based on the customer number under which this SAP Readiness Check was created. If you have multiple productive SAP ERP installations under this customer number, then all SAP Custom Development projects will be shown for all systems, even though some might be installed only in one of your productive SAP ERP installations.

If this tile contains information, please consult your SAP Account Executive or SAP Custom Development contact to ensure these solutions continue to best support your business, as you transition to SAP S/4HANA.

3.4 Recommended SAP Fiori Apps



Here you can identify the SAP Fiori apps that best fit your needs based on your transaction usage history. They are grouped per business role assigned to them.

When you click the tile, the analysis provides you with the following information:

- The name and description of the SAP Fiori apps**
 Clicking the SAP Fiori app name takes you directly to the SAP Fiori apps reference library, where you can find key information about that app.
- The role of the SAP Fiori apps and the estimated relevancy for you**
 This is based on the transactions codes and the application components you are using.

Relevance

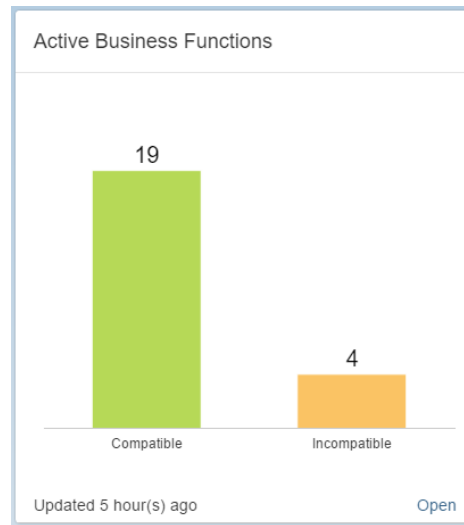
In the details, on the right, you see the relevance rating of the SAP Fiori app. The rating ranges from 1 to 3. The rating of 3 means that the app is highly relevant for your usage and 1 meaning that the app may be less relevant.

i Note

A high relevance rating doesn't mean that the matching SAP Fiori app fully replaces or covers the SAP GUI transaction.

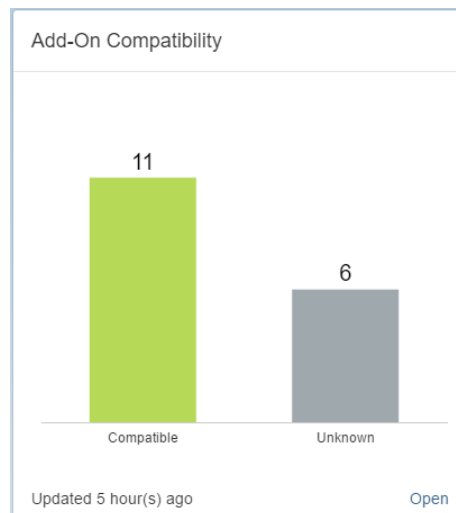
Rating	Meaning
	This SAP Fiori app is highly relevant for you because it directly matches a transaction code you are already using.
	This SAP Fiori app is relevant for you because you are using transactions from the application area that the SAP Fiori app belongs to.
	The level of this rating (1 or 2 boxes) depends on how close the transaction is to the application area in the application component hierarchy.

3.5 Active Business Functions



Here you can find out how many business functions are active in your system and whether they are still compatible with SAP S/4HANA. In the details, you find a list of the business function names and the relevant software components.

3.6 Add-On Compatibility

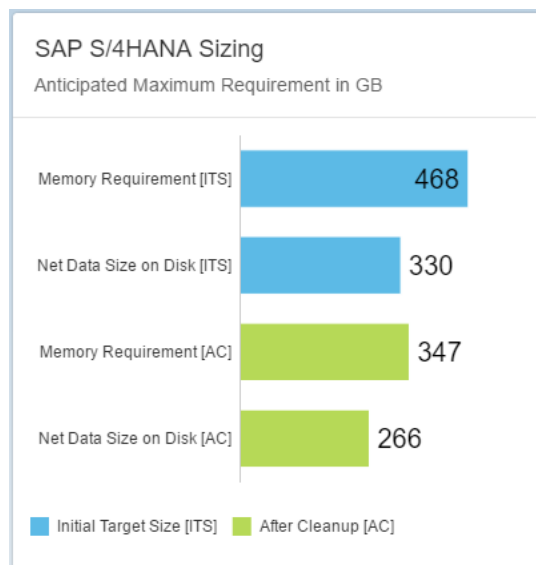


Here you see how many add-ons are installed in your system, and whether they are still compatible with SAP S/4HANA. In the detail view, you find the names of the add-ons, the vendor (SAP, 3rd Party on SAP pricelist, 3rd party unknown), and the compatibility status.

This helps you to figure out whether you need to follow up with SAP or 3rd party vendors to ensure the add-on's SAP S/4HANA compatibility. Please note that SAP cannot provide information about the compatibility of 3rd

party add-ons that are not on SAP's pricelist. For information on these add-ons and their SAP S/4HANA compatibility, please contact the vendor directly.

3.7 SAP S/4HANA Sizing



Here you find information about the total sizing estimation for SAP S/4HANA. The values on the tile reflect the estimated size requirements for the initial installation (Initial target size, ITS) of SAP S/4HANA, based on the data in your system. You can also see how the sizing requirements will change after a data cleanup (sizing after cleanup, AC).

i Note

Be aware that the results are estimations and not an exact projection. Do not consider the estimated anticipated maximum requirement as the final memory sizing result. You must still take into account the following aspects:

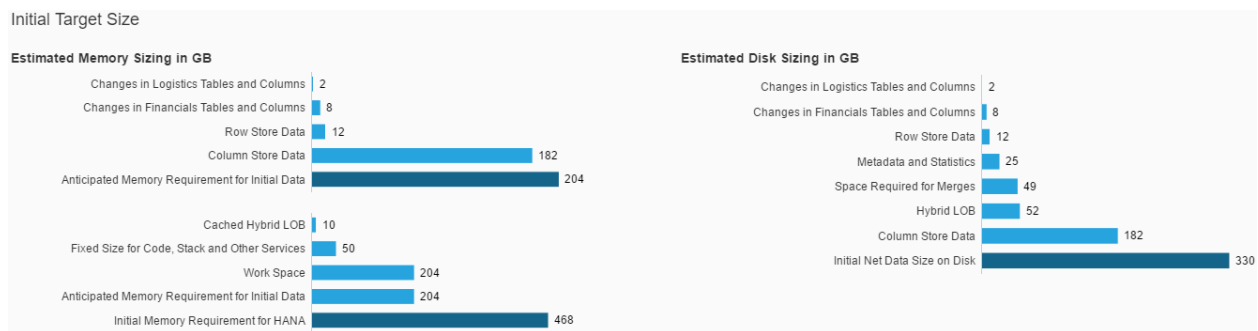
- Not all the server memory is available for SAP HANA. Some memory needs to be reserved for the operation system and other running applications (if applicable).
- There must be enough space left for future data growth, other planned acquisitions, and new functionality that you plan to introduce within your SAP S/4HANA project.

For a more detailed analysis of the sizing report results, as well as a description of the results, please see SAP Note [1872170](#).

3.7.1 General

In the *General* section of the detailed screen, you find information about the database size, type, number of tables, and other information.

3.7.2 Initial Target Size



Here you find detailed information regarding the estimated memory and disk size.

The *Estimated Memory Size* considers required space in key aspects, including:

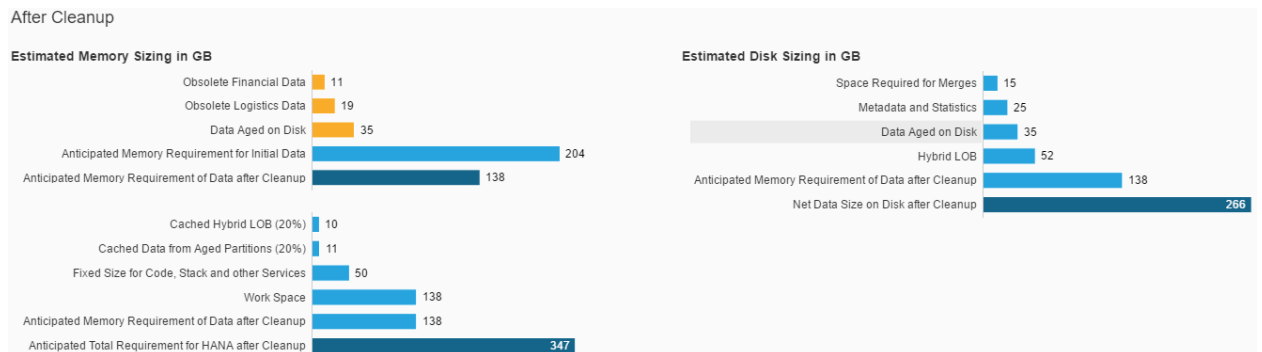
- Row store data
- Column store data

The *Estimated Disk Size* considers required space in key aspects, including:

- The net data size on disk refers to the size of all database tables including indexes
- The space required for merges refers to the additional disk space required during SAP HANA's delta merge processes. During a delta merge, the affected tables temporarily are duplicated on the disk for a short period of time.

For a more detailed analysis of the sizing report results, as well as a description of the results, please see [SAP Note 1872170](#)

3.7.3 After Cleanup



Before and after the conversion to SAP S/4HANA, you have some options to reduce your data footprint. The sections *Estimated Memory Size after Cleanup* and *Estimated Disk Size after Cleanup* show the memory consumption that can be achieved with more aggressive house-keeping activities on basis tables, removing obsolete tables from memory, and some application adjustments.

For a more detailed analysis of the sizing report results, as well as a description of the results, please see [SAP Note 1872170](#)

3.7.4 Top Database Tables

Top Database Tables

Name	Store Type	Data Size in GB	Data Size after Clean-Up in GB	Estimated Record Count
D010TAB	Row Store	4	4	33363428
WBCROSSGT	Column Store	3	3	61819832
SNAP	Row Store	3	3	1183500
D010INC	Row Store	2	2	12276094
DD03L	Row Store	2	2	6887991
DOKTI	Column Store	1	1	29506729

This section lists the top size database tables including their row counts. Based on this information, you get one of many aspects that determine the downtime during the conversion process.

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Material Number:

