

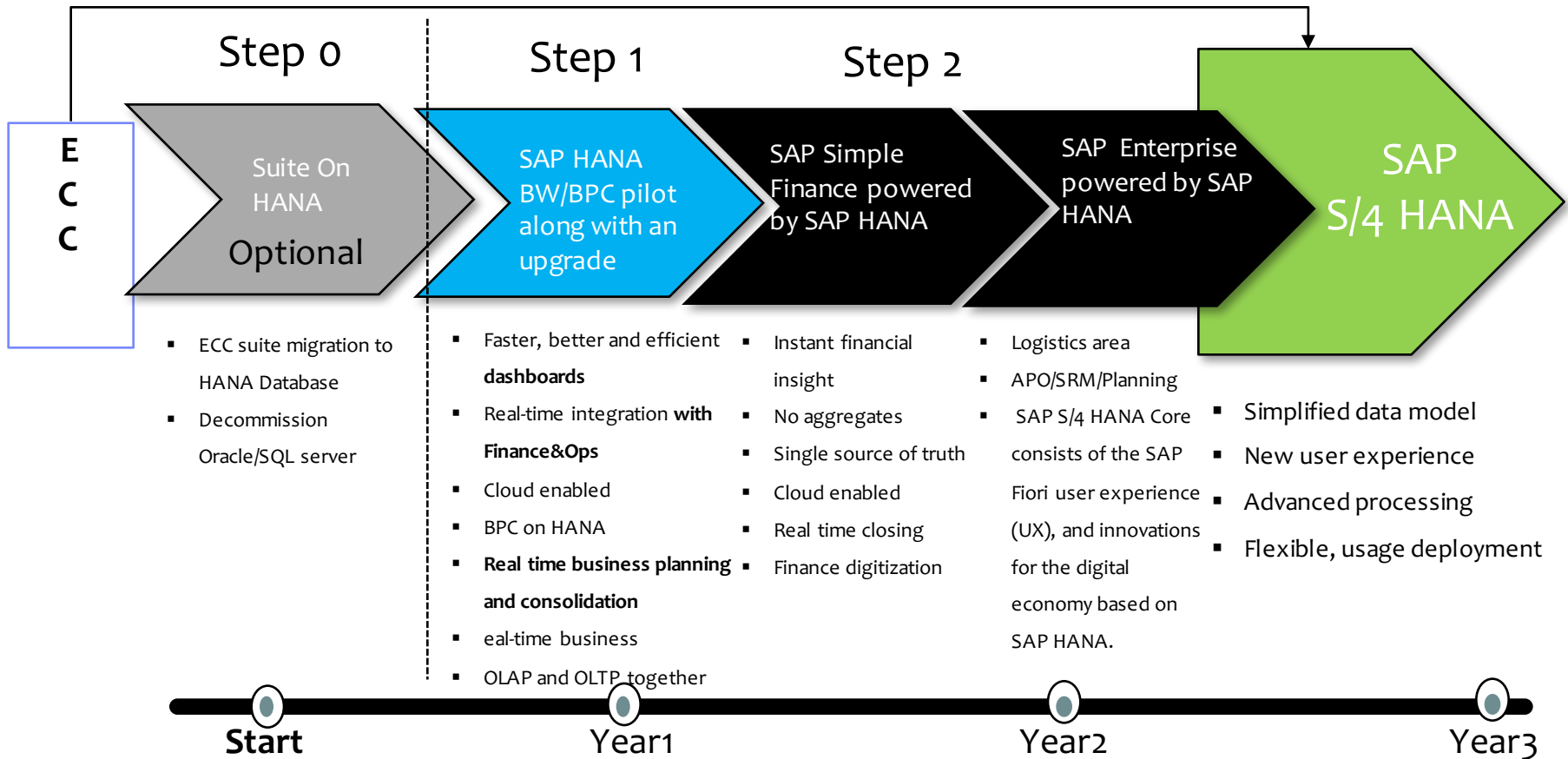


VisionSoft – HANEYA®
September 19, 2016



HANEYA®

Accelerator for S/4 HANA Migration



SAP S/4 HANA, the great simplifier of enterprise software

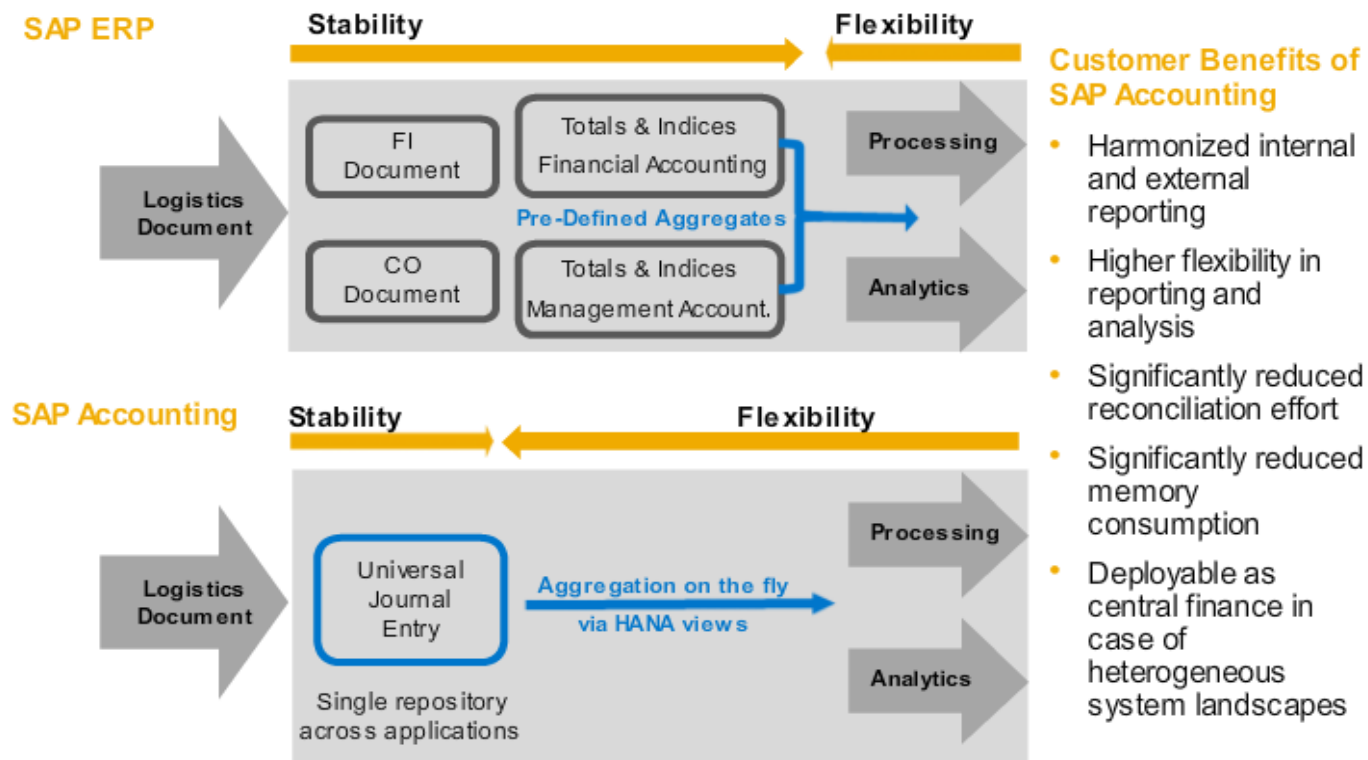
S/4 HANA POC

Illustration

Task	Weeks								
	1	2	3	4	5	6	7	8	
HANA Appliance Installation in cloud									
BPC on HANA Upgrade & Migration									
Unit Testing/UAT					X				
BPC HANA Pilot									
Task	System	Weeks							
		1	2	3	4	5	6	7	8
Validate HANA installation	HANA								
Install SLT	SLT								
Apply notes	ECC								
Configure BPC accelerator in ECC	ECC								
Configure data replication	HANA								
Load data	HANA		X						
Test BPC TCodes	ECC			X					
Final Demo	ECC				X				

SAP Simple Finance as an Instance of a New Application

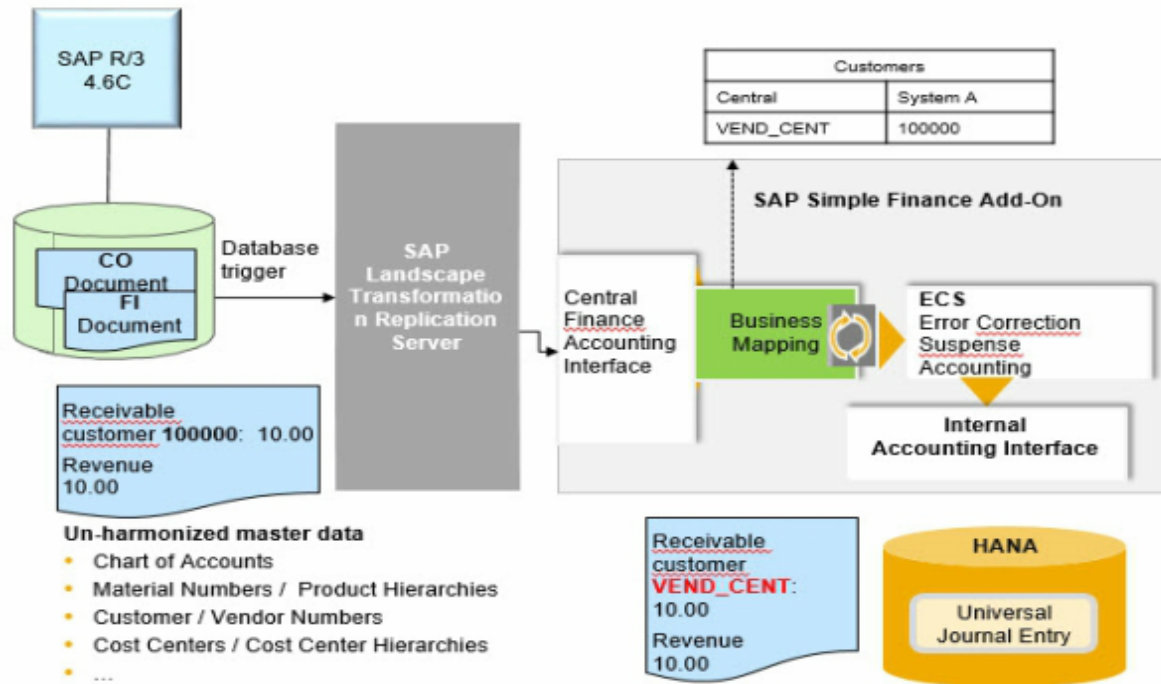
Summary: SAP Accounting versus SAP ERP



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SAP Simple Finance as an Instance of a New Application

Mapping - Central Finance Architecture

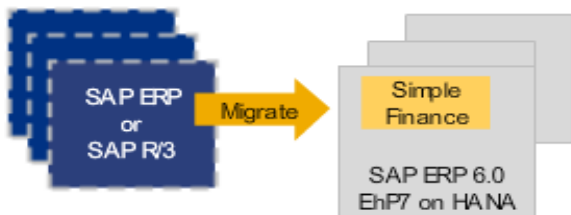


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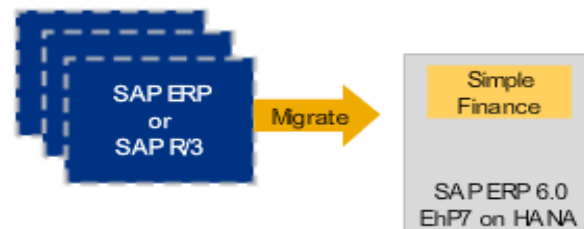
SAP Simple Finance as an Instance of a New Application

Deployment Scenarios for SAP Accounting / Simple Finance

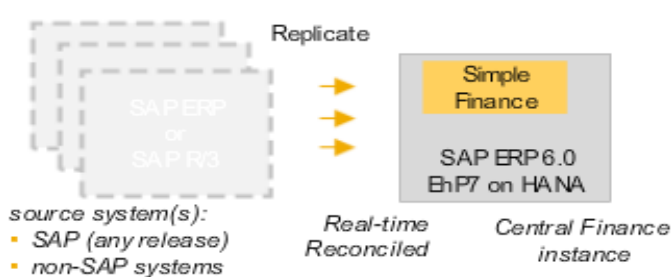
Option 1: Upgrade and Migrate
(all instances)



Option 2: Upgrade, Migrate and Consolidate
(reduce number of instances)



Option 3: Replicate into a Central Finance
(and optionally reduce number of instances over the time)



Option 4: Step by step scenario
(establish a central finance System step by step)



Consumer Products (CPG) Company

Objective:

- **Align technologies with the business needs and put forward innovation and new ideas to drive growth and efficiencies**
- **Process transformation is key**

S/4 HANA Capability Stack:

- **Suite on HANA has been implemented**
- **POC for S/4 Simple Finance and then, rolling out complete S/4 stack**

SAP Support Stack:

- **Run, support and Maintenance of SAP ECC**
- **TCO optimization**

Visionsoft offers unique products for S/4 HANA Migration

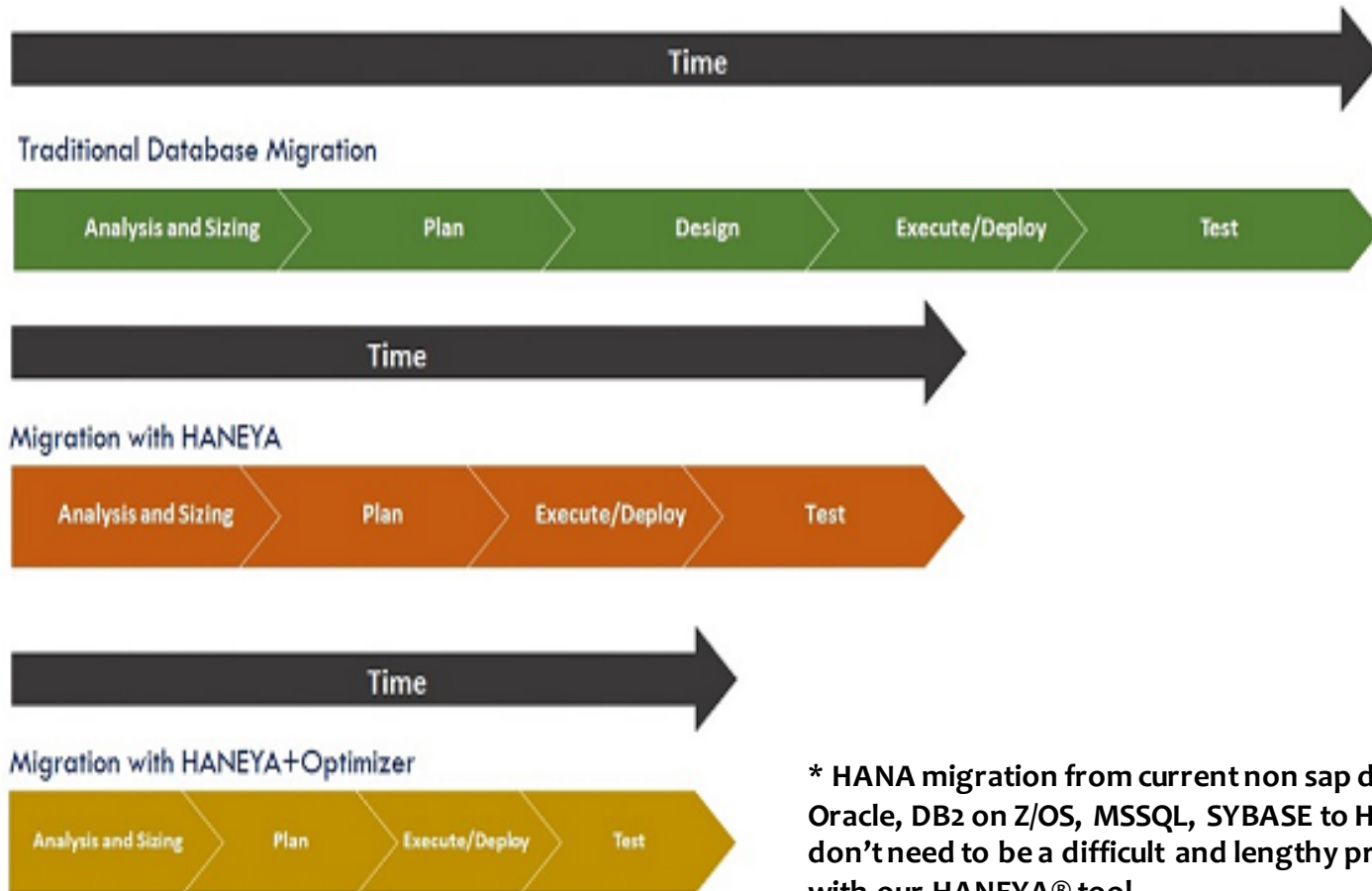
S.NO	Products	Description
1	HANEYA® - Accelerator for S/4 HANA deployment	<p>HANEYA, our pre-packaged migration solution encapsulates all migration activities together to handle the HANA migration in an automated fashion with minimal human interaction.</p> <p>HANEYA's proven methodologies, and capabilities of migration enable us to help our clients in their journey to SAP HANA and making the migration smooth, rapid, and easier for them, allows our clients to take advantage of SAP HANA's in-memory, column-oriented capabilities as early as possible by making implementation very fast with minimal downtime, saving the money, and improving return of investment.</p> <p>HANEYA will support single tenant and multi-tenant migrations and also supports migrations with acquisitions and divestitures.</p> <p>Addresses the key pain points and challenges in each industry leveraging S/4 HANA solution.</p> <p>The solution content varies by industry. HANEYA offers SAP S/4 HANA migration implementations across industry verticals: Retail, Consumer Products, Life Sciences, Insurance, Wholesale Distribution and Manufacturing.</p>
2	Migratum	<p>Migratum tool automates the data cleansing, data dialysis and data migration solution and make the data business ready. It will help with the data mapping, verification and auto validations esp. with GRC and HANA upgrades.</p>

Speed to implementation by 30-40%

Optimizes the down time (~Near ZDT)

Addresses the gaps with SLT2.0*
-OS/DB/Conflicts

Automated Data Migration & Conversion



* HANA migration from current non sap databases such as Oracle, DB2 on Z/OS, MSSQL, SYBASE to HANA database don't need to be a difficult and lengthy process especially with our HANEYA® tool.

- **HANEYA, our pre-packaged migration** solution encapsulates all migration activities together to automate HANA migration – SLT2.0 extension
- **HANEYA's proven methodologies, and capabilities of migration** enable us to help our clients in their journey to SAP HANA and making the migration smooth, rapid, and easier for them, allows our clients to take advantage of SAP HANA's in-memory, column-oriented capabilities as early as possible by making implementation very fast with minimal downtime, saving the money, and improving return of investment.
- To help **our clients to speed up their migration process** we have developed an extension to HANEYA called HANEYA Optimizer which identifies custom objects, reports and scan for conflicts or obsoletes in the current SAP system and replaces the conflicts automatically to make the custom objects compatible with SAP HANA and this will reduce the human interaction needed during migration tremendously and speeds up the migration process by almost 30-50%.
- **HANEYA will support single tenant and multi-tenant migrations** and also supports migrations with acquisitions and divestitures.

On -Prem

Cloud

Hybrid

- Assessment
- Upgrade - Ehp 4.0 to Ehp 7.0
- Migration
- Post Migration

Migration assessment

One of the top built-in features of HANEYA is the migration assessment.

- HANEYA tool identifies and generates the report of the number of custom objects, custom programs, custom reports, and, custom tables found in the source database.
- Lists out all the custom objects found by module.
- HANEYA computes the effort needed for Migration based on the number custom reports/custom programs identified.
- HANEYA estimates the complexity of the custom reports/programs found.
- HANEYA also estimates the effort needed based the number of custom tables/views found and on the total number custom objects identified.
- The effort estimated by HANEYA is a high level initial estimate

Migration from ECC to S/4 Enterprise Management

Migration From ECC to S4 HANA Enterprise Management



Migration From ECC to S4 HANA Enterprise Management



Scenario 1

Migration From ECC to S/4 HANA Enterprise Management

- Custom Object Evaluation
- Functionality Conflicts
- Unicode Conversions
- ECC to EHP7 Upgrade
- EHP7 to S/4 HANA Enterprise

Scenario 2

Migration From SOH to S/4 HANA Enterprise Management

- Custom Object Evaluation
- Functionality Conflicts
- Unicode Conversions
- EHP7 to S/4 HANA Enterprise

Assessment - Custom Objects Evaluation

Custom Objects Evaluation

CUSTOMER EVALUATION REPORT

The Number of Total Custom Object: 713
 Total Efforts for S4/HANA Migration 584 Days
 The Objects are as below

Object	Object Name	Package	Object Description
PROG	ZCUSTOME1	⌘TMP	Program
PROG	ZMENU_BAR	⌘TMP	Program
PROG	ZCUSTOM_OBJ_SR	⌘TMP	Program
PROG	ZCUSTOM_DISPLAY_SR	⌘TMP	Program
PROG	ZSAMPLE	⌘TMP	Program
TABL	Y2TCOPY	⌘TMP	Table
PROG	ZHANAYA_SR	⌘TMP	Program
PROG	ZCUSTOME_OBJECT_TOTALS	⌘TMP	Program
PROG	ZHANAYA_SCREEN_DESIGN	⌘TMP	Program
PROG	ZTEZT_SR	⌘TMP	Program
PROG	ZSMAPLE1	⌘TMP	Program
PROG	ZCUSTOM_OBJECT_LIST	⌘TMP	Program
PROG	ZREPO	⌘TMP	Program

Upgrade

- HANEYA will identify if there are any conflicts to perform upgrade from ECC EHP4 to EHP7.
- If there are any conflicts HANEYA will provide the conflicts report.
- HANEYA will be able to identify and segregate the conflicts by object type.
- HANEYA Optimizer will automatically resolve these conflicts by upgrading or making changing to these conflicts.
- HANEYA will reduce the upgrade times by more than 50%.
- HANEYA will also reduce the human resources needed for the system upgrade.

Upgrade – Non Standard Functional Conflicts Report - Excel

Excel interface showing a report titled "HANEYA - Excel". The formula bar displays the error message: "Access to single record buffered table ... cannot use buffer".

Priority	Check Title	Check Message	Object name	Object Ty	Contact Person	Package			
2	2 SELECT Statements That Bypass the Table Buffer	Access to single record buffered table ... cannot use buffer	ZCUSTOME1	PROG	RREVATHI	\$TMP			
3	3 Extended Program Check (SLIN)	Text element missing in a character string	ZCUSTOME1	PROG	RREVATHI	\$TMP			
4	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
5	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
6	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
7	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
8	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
9	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
10	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
11	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
12	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
13	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
14	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
15	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
16	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
17	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
18	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
19	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
20	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
21	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
22	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
23	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
24	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
25	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
26	3 Extended Program Check (SLIN)	Text element missing in a character string	ZSALES_ORDER	PROG	BASHOK	ZSD			
27	3 Extended Program Check (SLIN)	Text element missing in a character string	ZMATERIAL_DETAILS_SR	PROG	NSWAROOPA	ZMM			

Upgrade – Non Standard Conflicts Resolution

System Info

System Id

Standard Selections

Development Class to

Tool-object Type to

Category to

Object Name to

Extended Selections

Module

Reference Object

Usage Index

Error Selections

Error Type

Upgrade Error Count

BDC Error Count

Warning (Upgrade) Selections

Primary Warnings

Secondary Warnings

Project Management

Owner Info

Package	Category	Object Name	Line Number	Impact	Upgrade Rule	Error Line
Y16903_TEST	OTHR	YHPORDATD	81	E	226	SELECT-OPTIONS:S_CORR FOR YHPA0THEAD-YHPCORR MATCHCODE OBJECT YHPCORR.
Y16903_TEST	OTHR	YNTTULITE0_08	4339	E	5	_CALL FUNCTION 'SEO_METHOD_GET_INCLUDE_BY_NAME'
Y16903_TEST	OTHR	ZFIX_BAPI_INSPCHAR_SETRESULT1	17	E	5	CALL FUNCTION 'BAPI_INSPCHAR_SETRESULT'
Y16903_TEST	OTHR	ZIFIX_ADDRESS_COM_CS1_OLD	16	E	5	CALL FUNCTION 'ADDRESS_COM_CS1'
Y16903_TEST	OTHR	ZIFIX_ADDRESS_COM_CS1_OLD1	17	E	5	CALL FUNCTION 'ADDRESS_COM_CS1'
Y16903_TEST	OTHR	ZIFIX_TABLE_DECOMPRESS1	29	E	5	CALL FUNCTION 'TABLE_DECOMPRESS'
Y16903_TEST	OTHR	ZTC_RULE1	20	E	77	Formal argument 'OTHERS' must be at the end of the exception list
Y16903_TEST	OTHR	ZTC_RULE112	19	E	77	COLLECT ... SORTED BY ... is obsolete. Use APPEND ... SORTED BY ... inst
Y16903_TEST	OTHR	ZTC_RULE115	13	E	77	P_TYPE must be a character-like data object (data type C, N, D, T, or
Y16903_TEST	OTHR	ZTC_RULE116	19	E	77	Names in the form "TEXT-xxx" like "TEXT-002" are reserved for text eleme

Migration approach – Migration vs Greenfield vs Sidecar

Migration of an existing **SAP Business Suite system** on any DB to SAP Business Suite powered by SAP HANA. This is normally a project combining the upgrade of the release and the migration of the database from any DB to SAP HANA.

Greenfield installation refers to migration from the existing system into a completely new SAP HANA environment and reusing the existing system hardware while only replacing the database hardware.

Sidecar or Brownfield migration refers to migration from existing systems, upgrading and reusing existing system applications and modules selectively.

Migration Activities

From ECC to SoH, HANEYA will identify the conflicts for the programs/ fields at the database level

During migration HANEYA will also make changes Database table settings to make them compatible with S/4 HANA system.

HANEYA will identify T-code changes and list output of T-codes for Functional reconciliation

HANEYA will identify any conflicts for migration from EHP7(Suite On HANA) to S/4 HANA Enterprise Management for validation and testing

During migration HANEYA will resolve these conflicts by updating the conflicts or replacing conflicting statements in programs, reports and interface with S/4 HANA compatible statements.

The conflict resolution process for migration will be performed by HANEYA in the background.

HANEYA® - Migration from ECC to SOH

Program Edit Goto System Help

ECC to SOH

Selection Criteria for ECC to SoH

System ID

Object Name

Object Type

Download File Path

	A	B	C	D	E	F	G	H
1	Package	Category	Object Name	Line Number	Impact	Upgrad	Error Line	Replace Statement
2	ZSD	OTHR	YHPORDATD	81	E	226	Field "L_TEXT" is unknown. It is neither in on	Declare the variable
3	ZSD	OTHR	YNTTULITE0_08	4339	E	5	CALL FUNCTION 'WS_DOWNLOAD'	Replace With GUI_DOWNLOAD
4	ZSD	OTHR	ZFIX_BAPI_INSPCHAR	17	E	5	CALL FUNCTION 'WS_UPLOAD'	Replace With GUI_UPLOAD
5	ZSD	OTHR	ZIFIX_ADDRESS_COM	16	E	5	CALL FUNCTION 'ADDRESS_COM_CS1'	Replace with suitable function Module
6	ZSD	OTHR	ZIFIX_ADDRESS_COM	17	E	5	CALL FUNCTION 'ADDRESS_COM_CS1'	Replace with suitable function Module
7	ZSD	OTHR	ZIFIX_TABLE_DECOMI	29	E	5	CALL FUNCTION 'TABLE_DECOMPRESS'	Replace with suitable function Module
8	ZSD	OTHR	ZTC_RULE1	20	E	77	Formal argument 'OTHERS' must be at the e	OTHERS EXCEPTION SHOULD BE THE LAST
9	ZSD	OTHR	ZTC_RULE112	19	E	77	COLLECT ... SORTED BY ... is obsolete.	Use APPEND ... SORTED BY ... inst
10	ZMM	OTHR	ZTC_RULE115	13	E	77	P_TYPE must be a character-like data object	Declare the object like P_TYPE must be a character-like data
11	ZMM	OTHR	ZTC_RULE116	19	E	77	Names in the form "TEXT-xxx" like "TEXT-002	Names in the form "TEXT-xxx" like "TEXT-002" are reserved
12	ZMM	OTHR	ZTC_RULE185	14	E	77	The databae view "TRDIR" is write-protected, so it cannot be changed.	
13	ZMM	OTHR	ZTC_RULE201	12	E	77	You can only use line components or the pseudo-component "TABLE_LINE". Y	
14	ZMM	OTHR	ZTC_RULE204	11	E	77	Do not assign the name "SCREEN" to a data object of the internal table t	
15	ZMM	OTHR	ZTC_RULE5	11	E	5	CALL FUNCTION 'POPUP_TO_DECIDE'	

HANEYA® - Migration from SOH to Simple Finance

Program Edit Goto System Help

ECC to SOH With Simple Finance

Selection Criteria for ECC to SoH

System ID:

Object Name:

Object Type:

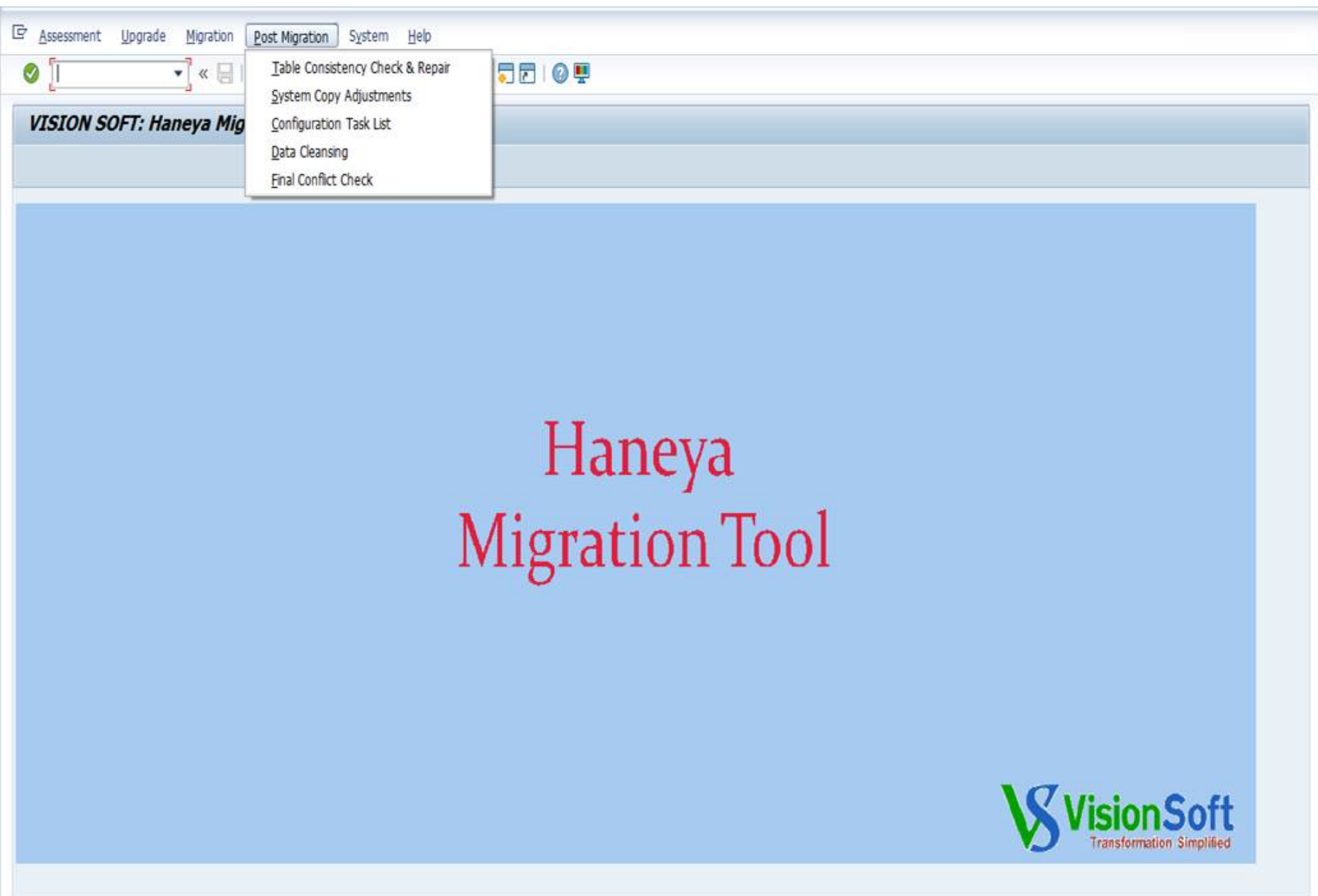
Download File Path:

Upgrade_ecc_to_soh [Compatibility Mode] - Excel

Package	Category	Object Name	Line Number	Impact	Upgrad	Error Line	Replace Statement
ZFI	OTHR	ZTC_RULE115	13	E	77	P_TYPE must be a character-like data object	Declare the object like P_TYPE must be a character-like d
ZFI	OTHR	ZTC_RULE116	19	E	77	Names in the form "TEXT-xxx" like "TEXT-002	Names in the form "TEXT-xxx" like "TEXT-002" are reserv
ZFI	OTHR	ZTC_RULE185	14	E	77	The databae view "TRDIR" is write-protected, so it cannot be changed.	
ZFI	OTHR	ZTC_RULE201	12	E	77	You can only use line components or the pseudo-component "TABLE_LINE". Y	
ZFI	OTHR	ZTC_RULE204	11	E	77	Do not assign the name "SCREEN" to a data object of the internal table t	
ZFI	OTHR	ZTC_RULE5	11	E	5	CALL FUNCTION 'POPUP_TO_DECIDE'	
ZFI	REPT	Y16903_ASSIGNMEN	66	E	77	Field "P_OBJECT" is unknown. It is neither in	Declare Parameter in selection screen
ZFI	REPT	Y16903_ASSIGNMEN	70	E	U21	Statement is not accessible	Wirte the suitable event name
ZFI	REPT	Y16903_ASSIGNMEN	72	E	U21	The field "P_LIFNR" is unknown, but there is	Declare the variable
ZFI	REPT	Y16903_ASSIGNMEN	72	E	U21	FORM "FELD" does not exist	Declare Subroutine Defination
ZFI	REPT	Y16903_ASSIGNMEN	72	E	U21	Field "L_TXT" is unknown. It is neither in any of the specified tables	

Post Migration

- After Migration is completed HANEYA will perform table consistency checks.
- If there are any inconsistencies HANEYA will repair the inconsistencies.
- Post migration HANEYA will perform adjustments to system copy including database specific ABAP data dictionary entries.
- HANEYA will also perform the data cleansing post migration by deleting temporary objects from specific LRU buffers.
- HANEYA will complete the migration process by running BW basic copy initial config task list on the target system.
- HANEYA will provide report of S/4 HANA migration result including final conflict check report.
- HANEYA will also facilitates landscape transformation – Plant / BU set up





Migration and Deployment Options with HANEYA®

HANEYA supports both On-premise and On cloud migrations of SAP HANA

HANEYA supports both On-premise and On cloud migrations of SAP HANA. If you are not sure which deployment option will suits you best, talk to our team of experts and they will advise you what is the best solution for you.

As one of the SAP's leading partners, we will bring you the best and latest knowledge, experience, skills and tools to enable the most efficient and effective migration approach. We also offer a range of unique set of proprietary tools and accelerators that can help our clients to accelerate and get most out of SAP HANA implementations.

SYSTEM REQUIREMENTS

SYSTEM Requirements

- SAP Landscape for Business Suite is on ECC6 Ehp 4/5/6/7 (As-is)
- Migration is from SAP ECC Ehp 7 to SAP Suite on HANA or S/4 HANA (To-be)
- Data migration is from Oracle, DB2, MS-SQL, MYSQL, or, Any Non-SAP database to SAP HANA database (To-be)

Application Environment	Component/Version
SAP ECC 6	EHP 4/5/6/7
SOURCE OS	LINUX, WINDOWS, Z/OS
TARGET OS	LINUX, WINDOWS
SOURCE DATABASE	ORACLE, DB2, MS-SQL, MYSQL, ANY NON-SAP
TARGET DATABASE	SAP HANA

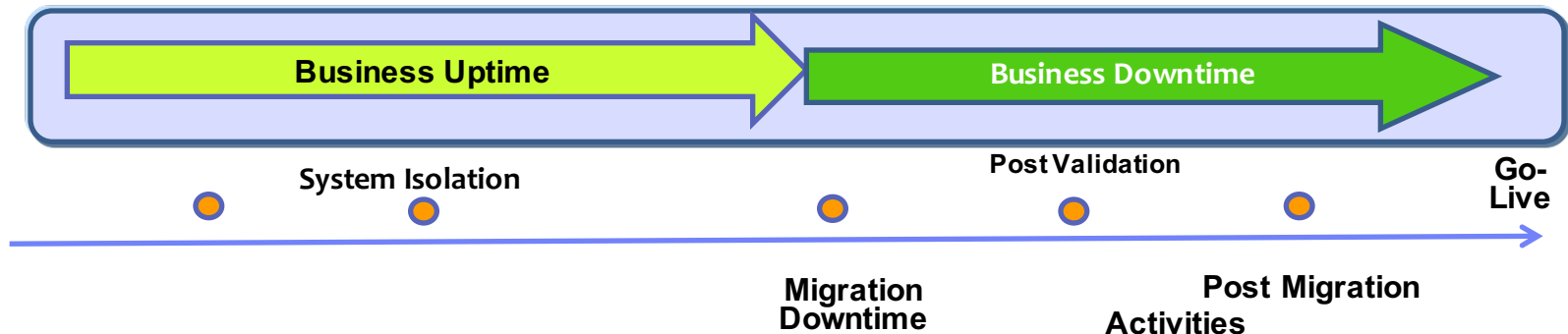
System downtime for S/4 HANA Cutover

SYSTEM Downtime

Total downtime/cutover outage will be as follows:

- Best practice solutions will be used for minimizing the downtime during entire migration process.
- 50% of migration tasks will be completed during uptime phase of system.
- Estimated downtime will be analyzed during sandbox and quality assurance phases, best estimates of downtime will be provided during QA phase.
- Actual downtime estimate can be calculated during mock run.

Business outage final timelines will be estimated after using best practice methodologies available from downtime minimized option from SUM tool. The exact timelines will be determined based on the mock runs on production equivalent hardware.



Q&A

Visionsoft offers following solutions:

S.NO	Solution	Description
1	SAP GRC (Governance, Risk& Compliance)	VisionSoft helps its clients with implementation and upgrade of SAP GRC system through implementing GRC version 10.1 and deploying CUP module to automate access request management and Process Controls. Our focus is on upgrading GRC system and deploying SAP Access Control GRC 10.1 version. We will help with end to end access control services, namely the access control modules such as ARA(Access Risk Assessment), EAM (Emergency Access Management) and ARM (Access Risk Management). Implementing ARM involves deploying work flows for access Request, user access review and SOD review. Our GRC specialists have mastered in deploying GRC in 3-tiered environment (DEV, QAS and PRD).
2	S/4 HANA Migration	VisionSoft SAP S/4 HANA Migration / Implementation Projects make use of its unique products such as Haneya, VSoft for S/4 HANA and Migratum to address the critical gaps in the standard SAP solution. The solution content varies by industry. VisionSoft offers SAP S/4 HANA migration implementations across industry verticals: Retail, Consumer Products, Life Sciences, Insurance, Wholesale Distribution and Manufacturing.
3	SAP AMS (Application Managed Services)	VisionSoft's SAP Application Managed Services (AMS) is designed to help companies optimize their investments, integrate IT infrastructures and facilitate business process adaptation to unlock hidden value. Our comprehensive set of frameworks coupled with deep domain and SAP expertise, innovative, reliable, scalable and flexible delivery support models, proven methodologies, secured infrastructure and quality compliant processes help enable our customers to achieve their business goals.
4	Master Data Services (MDS)	Our Master Data Migration Solution focuses on getting data business ready for SAP upgrade or implementation. It comprises of processes, tools and accelerators to cleanse, migrate, validate the legacy data and go-live with perfect data. We have a strong bench strength in the data services space, and our leadership team has ~15 years of experience in the master data management and data migrations. Our comprehensive offerings include Data Audit, Data Quality as a service, legacy Data Archiving solution, and Data Governance. We are specialized in Data Migrations, Monitoring Data Quality, composing and conduct migrations to make the data business ready before SAP go-live.
5	Oracle Identity Mgt. Solution	VisionSoft is an Oracle partner and Service Provider in the USA and global Enterprise market. VSoft, Its Eco System and Oracle have been deeply invested in each other for more than 10 years, consistently delivering superior ROI through thousands of successful consulting, implementation, and ongoing maintenance engagements. VSoft has a long standing track record of Oracle leadership. As a part of our preferred relationship with Oracle, we have practice leaders/advisors who have worked with Oracle team and designed Oracle Identity Governance product and they have over a decade of Identity Access Management solutions experience.