

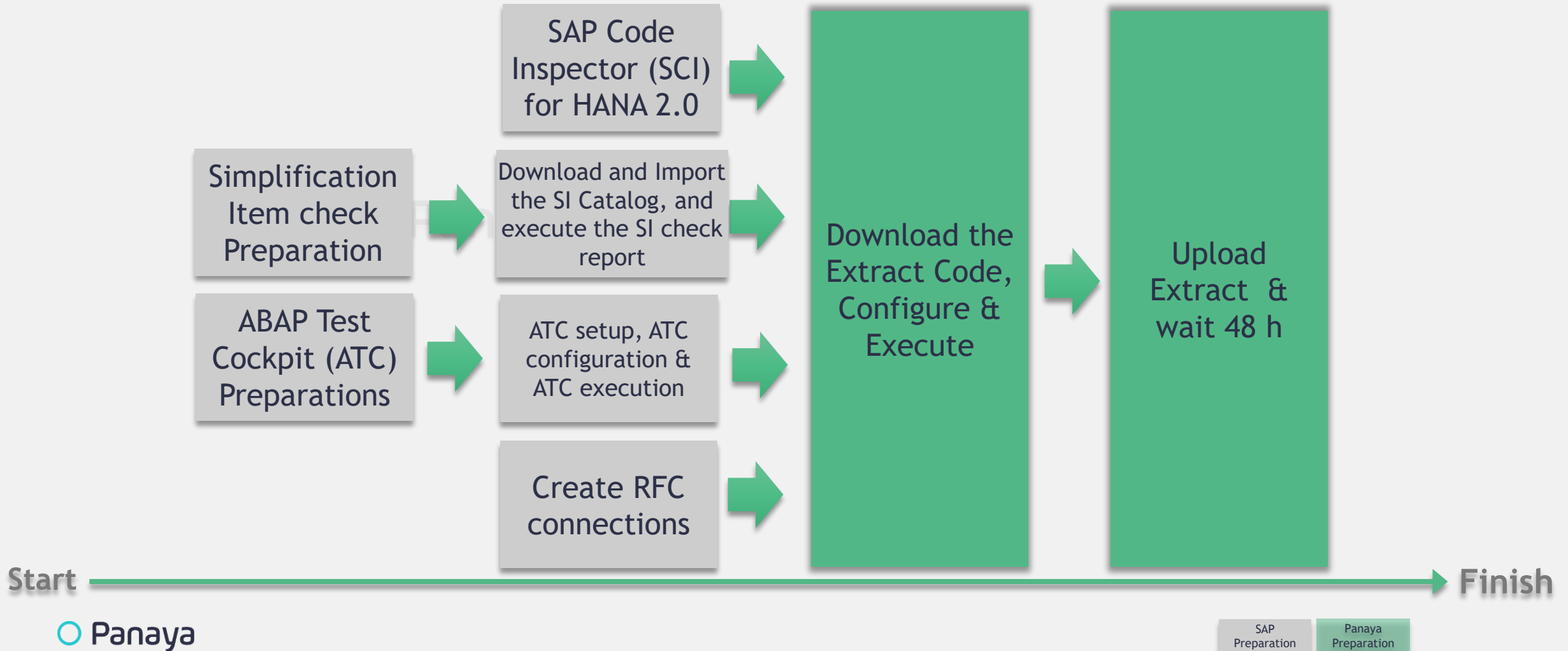
 Panaya

Panaya S/4 HANA Cookbook

Steps for preparing an S4 HANA Analysis (incl. S/4 Accelerate)



S/4 HANA Preparation Process



Simplification Item Check Preparation

The SI should be installed and run on the Production* or the SBX System**. Versions of the installed SI check DB need to align in between systems.

Prerequisites: SAP ERP 6.0 or higher

Implement the last version of Notes:

- [2399707](#) - Simplification Item Check
- [2187425](#) - Information about SAP Note Transport based Correction Instructions (TCI) -> Prerequisite for S4TC
- [2502552](#) - S4TC - SAP S/4HANA Conversion & Upgrade new Simplification Item Checks
- [2943919](#) - Simplification Item Check: Duplicates check for INOB

Additional Notes to implement in case of issues:

- [2678215](#) - Poor Performance in RUN_S4H_SIF_CHECK_INIT using Oracle DB (**with manual post imp. step**)
- [2646649](#) - Performance improvements of generated methods of class CLS4SIC_MM_IM_SI1 (if KALNR check is slow)
- [2753888](#) - Increase Precheck performance: skip KALNR-check (class CLS4SIC_MM_IM_SI1) (**with manual post imp. step**)

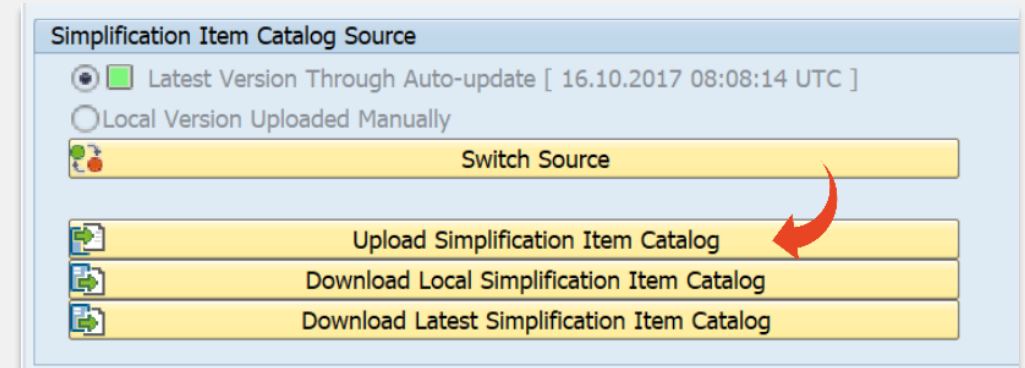
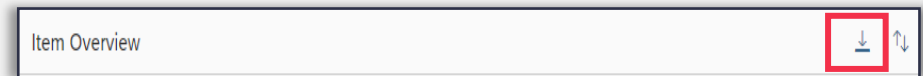
Tips on how to:

1. [Simplification Item Check - Do it Right](#)
2. [Readiness Check](#)



Download and Import the SI DB, and execute the SI check Report

- Navigate to <https://launchpad.support.sap.com/#sic>
- Select S/4 HANA target version
- Click on right side of the Item Overview menu bar to download the Simplification Item Catalog <today's date>.zip.
- Start **SE38 (use Client 000) in PRD**
- Execute program **/SDF/RC_START_CHECK**
- Choose “Upload Simplification Item Catalog” and select the ZIP file downloaded in the previous step (make sure to save the zip and reuse same version in other systems).
- Execute (F8) to run the SI check (this step is not required on the ATC)
- Link to recording showing the exact step can be found [here](#)



Abap Test Cockpit (ATC) Preparations

Where to start:

- Setup of Central Check System with SAP NetWeaver 7.51, 7.52 or later (SAP_BASIS). The ATC runs here. Please read this [Article](#) first. For Alternatives using remote or cloud systems advise with your CSM.
- Prod/ Sandbox to be checked can be on SAP NetWeaver 7.00, 7.01, 7.02, 7.31, 7.40, 7.50, 7.51 or 7.52

Implement SAP Notes for the Central check System:

- [2436688](#) - Recommended SAP Notes for using SAP S/4HANA custom code checks in ATC (with manual post imp. step)
- [2364916](#) - Recommended SAP Notes for using ATC to perform remote analysis
- [2423013](#) - Code Inspector test checksum infrastructure
- [2527903](#) - Remote analysis (for check system)
- [2505671](#) - Uniform saving of navigation information
- [2518335](#) - ATC or Code Inspector incorrectly displays findings
- [2524014](#) - ATC: Problems When Checking Modified SAP Code (with manual post imp. step)
- [2503289](#) - ATC: The display of ATC results is extremely slow
- [2546419](#) - ASSERTION_FAILED in get_message_text
- [2659194](#) - Check variant for SAP S/4HANA 1809 custom code checks (with manual post imp. step) if Target version is S/4HANA 1809 only
- [2812556](#) - Check variant for SAP S/4HANA 1909 custom code checks (with manual post imp. step) if Target version is S/4HANA 1909 only
- [2959341](#) - Check variant for SAP S/4HANA 2020 custom code checks (with manual post imp. step) if Target version is S/4HANA 2020 only
- [2942419](#) - Include ATC check 'S/4HANA: Readiness Check for SAP Queries' to the SAP S/4HANA custom code checks

Make sure to address manual post implementation steps

Abap Test Cockpit (ATC) Preparations (cont.)

- Additional Notes to implement in case of issues:
 - [2546419](#) - ASSERTION_FAILED in get_message_text
 - [2250196](#) - Update of Report MFLE_CLS4H_CHECKS_CC (based on 2216958)
 - [2423931](#) - MFLE_CLS4H_CHECKS_CC dumps with SAPSQL_LIKE_PATTERN_TOO_LONG
 - [2794505](#) - ATC reports finding for in SAP includes belonging to USER-EXITS function groups (if ATC includes User exits)
 - [2973326](#) - Short dump during check of programs with dynpro logic by CL_CI_TEST_ANALYZE_SELECT_HANA

Implement SAP Notes for the Prod / Sandbox:

- [2485231](#) - Remote ATC Checks of Modifications and Enhancements
- [2270689](#) - RFC Extractor for performing static checks
- [2190065](#) - ATC/CI: Remote Code Analysis - Object Provider Stub
- [2196792](#) - RFC-Stub for CVA/SLIN-Remote

The ATC uses the SCI and runs the following predefined SCI variants:

SLIN_SEC: Consists of checks for security analysis in Extended Program Check (SLIN)

S4HANA_READINESS: Provides checks for SAP S/4HANA readiness (search for DB operations, field length extensions, and so on)

FUNCTIONAL_DB: Provides functional checks for optimizing database access

Make sure to address manual
post implementation steps

ATC setup, ATC configuration & ATC execution

In both the Central Check System and in PROD/SBX

1. Set up a ATC Administrator User with Role `SAP_SATC_ADMIN` (Description: Authorization for setting up ABAP Test Cockpit (ATC) for central quality checking)

Add the following authorization Objects to enable import of the simulation DB:

Authorization Object	Authorization Field	Value of Authorization Field
S_YCM	SYCM_AREA	SDB
S_YCM	ACTVT	UL

2. SET up an RFC to the PRD as described in section “Create RFC Connection”. The user running the RFC need the following authorization Objects to be granted by the PRD/SBX:

Authorization Object	Activity	Type of RFC Object	Name of RFC Object
S_RFC	16 (Execute)	FUGR	SABP_COMP_PROCS_E, SCA_REMOTE_DATA_ACCESS
S_RFC	16 (Execute)	FUNC	REPOSITORY_ENVIRONMENT_ALL, FC_GET_NAMETAB, FUNCTION_EXISTS, RFCPING
S_DEVELOP	03 (Display)	*	*

3. Run transaction ATC in the central check system and configure the remote ATC Checks as described [here](#).

Alternatively, a recording showing the exact step can be found [here](#).

SAP Code Inspector (SCI) for HANA 2.0

For HANA 2.0 Migration prep. and performance results , the SAP Code Inspector needs to be run and its results uploaded in the extract process.

1. Prerequisites for SCI:

- a) Unicode is activated (see prerequisites [here](#)) or Note [2614006](#) is implemented
- b) SAP NetWeaver 7.02 as of SAP_BASIS SP14 or
SAP NetWeaver 7.31 as of SAP_BASIS SP09 or
SAP NetWeaver 7.40 as of SAP_BASIS SP02
- c) SCI has 'HANA check variants' enabled (follow Note [1912445](#) - ABAP custom code migration for SAP HANA - recommendations and Code Inspector variants for SAP HANA migration).

2. In case the above can not be met, the SCI can be run on a different System (see details [here](#)).

3. Run the SCI for the 2 variants FUNCTIONAL_ADDITION_DB and PERFORMANCE_DB (How? see [here](#)) creating 2 inspections as following:

Inspection name	Corresponding check variant
ZPANAYA_FUNCTIONAL_ADDITION_DB	FUNCTIONAL_DB_ADDITION
ZPANAYA_PERFORMANCE_DB	PERFORMANCE_DB

4. A link to a recording showing this step can be found [here](#).

Create RFC Connections

- Identify a User for the RFC to use on each system to be accessed (Not a personal user).
- Set Authorizations required for the code extraction RFC user as explained [here](#).
- Use SM59 to create RFCs as following (how? go [here](#)). 1 RFC per Application server per direction is required.*

	RFC Destination	Connection Type	Description 1
From ATC system to PROD	ATC_RFC	3 (ABAP connection)	ATC_RFC
From SBX to PROD	PANAYA_PRD	3 (ABAP connection)	PANAYA_PRD
From SBX to ATC system	PANAYA_ATC	3 (ABAP connection)	PANAYA_ATC

Additional RFC's to enrich the Analysis Results (validation can be disabled if required):

From SBX to SOLMAN	PANAYA_SM	3 (ABAP connection)	PANAYA_SM
From SBX to BW	PANAYA_BW	3 (ABAP connection)	PANAYA_BW



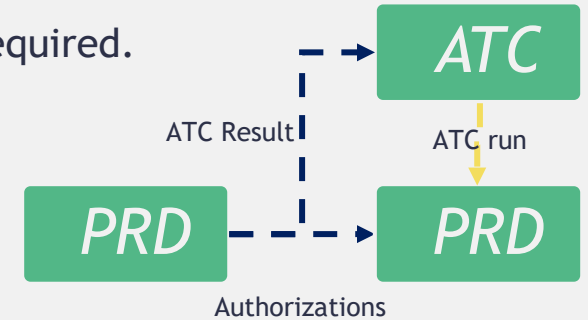
RFC Connections - Examples

Example 1: First extract occurring on PRD. The SI runs locally. In this scenario 3 RFC's will be required.

From the ATC to the PRD to do the ATC run based on the custom code in PRD.

From PRD to the ATC to pull the ATC results.

From PRD to PRD for Authorizations (system default).

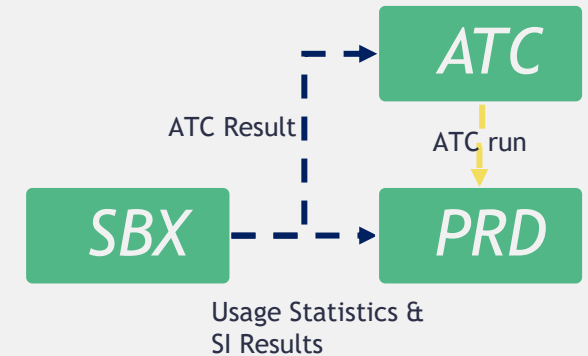


Example 2: Extract from SBX. The SI runs on PRD. In this scenario 3 RFC's will be required.

From the ATC to the PRD to do the ATC run based on the custom code in PRD.

From the SBX to the ATC to pull the ATC results.

From the SBX to PRD for usage statistics and SI results.



RFC Connections – Examples (cont.)

Example 3: Extract from DEV. The SI runs on PRD. In this scenario 3 RFC's will be required.

From the ATC to the PRD to do the ATC run based on the custom code in PRD.

From DEV to the ATC to pull the ATC results.

From DEV to PRD for usage statistics and SI results.

Example 4: Extract from DEV. The SI runs locally on DEV. In this scenario 3 RFC's will be required.

From the ATC to the PRD to do the ATC run based on the custom code in PRD.

From DEV to the ATC to pull the ATC results.

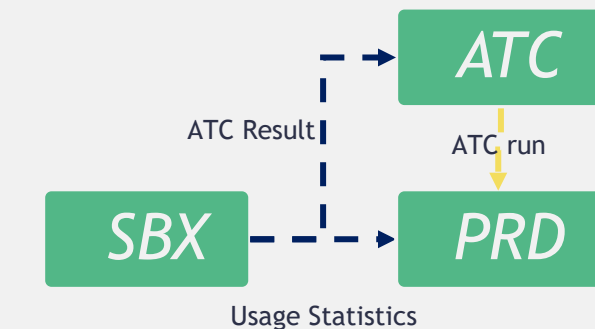
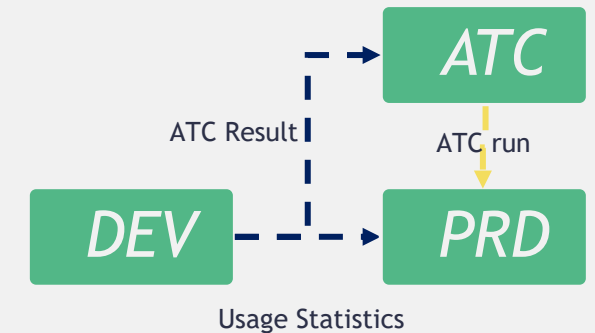
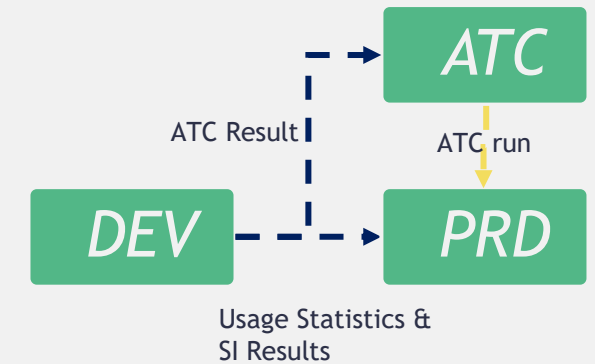
From DEV to PRD for usage statistics.

Example 5: Extract from SBX. The SI runs locally on SBX. In this scenario 3 RFC's will be required.


From the ATC to the PRD to do the ATC run based on the custom code in PRD.

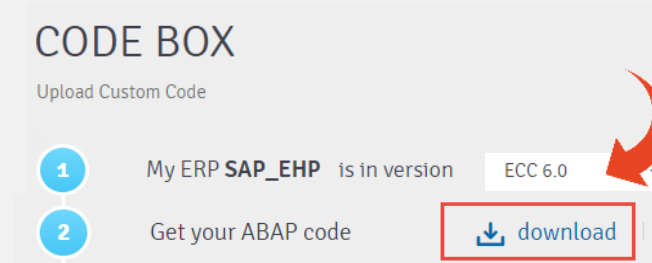
From the SBX to the ATC to pull the ATC results.

From the SBX to PRD for usage statistics.



Download the Extract Code, Configure & Execute

- In Panaya go to the Settings Menu  .
In it select the Code Box tab and download the extraction code.



- Create an executable program named ZPANAYA_EXTRACT_PROG_LIB and import or paste the ABAP code (help [here](#)).
- Start transaction SE38 and type the program name ZPANAYA_EXTRACT_PROG_LIB and press the execute button.
- Select Background mode and enter the Background Directory path (e.g. \tmp) on the SAP application server.
- For Target system under RFC destination, type - PANAYA_PRD
- Select to Run Simplification Item Check on remote system (PROD) . If extracting the Production system, select "Run Simplification Item Check locally".
Use client 000 when running SI checks (results in reporting all errors for all other clients).
- If you have previously extracted & uploaded SI results, these can be reused by checking Use previous SI (needs to be enabled by CSM).

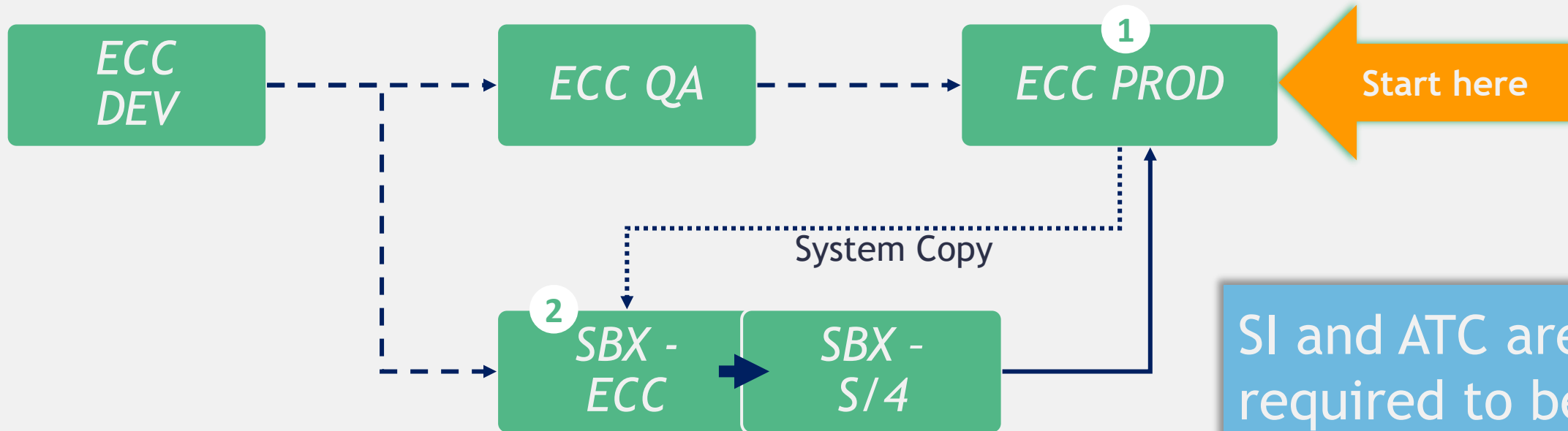
Download the Extract Code, Configure & Execute

- For the HANA SAP Code Inspector execution mode: choose option “...previously executed list.” or read [here](#) for more options.
- Execute in Background mode.
- Help on these steps can be found [here](#) and a link to a recording showing this step [here](#).
- Gzip the resulting Report (do not edit or transfer before) and upload in the same screen the executable code was downloaded from.
- A confirmation mail will follow shortly.
- Your CSM will contact you in case any issues arise.
- After 48 hours your Analysis will be ready

The screenshot shows the configuration interface for the HANA SAP Code Inspector. It includes several sections for setting up the execution environment:

- Usage mode:** Radio buttons for "Usage only", "Background mode (Recommended)", and "Foreground mode". The "Background mode" is selected. Text boxes for "Directory" are provided for each mode.
- Target system for Authorization Roles and Usage extraction:** An information icon and a note stating "Please note that the RFC destination must always point to your Production system." Below is a text box for "RFC destination" containing "PANAYA_PRD".
- Solution Manager target system for Systems extraction:** A text box for "RFC Destination" containing "PANAYA_SM".
- BW target system for BW extraction:** A text box for "RFC Destination" containing "PANAYA_BW".
- Simplification Item Checks:** Radio buttons for "Run Simplification Item Check locally:E8B" (selected) and "Run Simplification Item Check on remote system". Two status indicators show "Required version of SAP Note 0002399707 is 136 Implemented ve" and "Required version of SAP Note 0002502552 is 79 Implemented ver".
- ATC For S/4 HANA Conversions:** A text box for "RFC Destination" containing "PANAYA_ATC". Below is a "Choose" button and the text "E8B: Sunday, CW25 2019".
- HANA SAP Code Inspector execution mode:** Radio buttons for "Choose from previously executed list" (selected and circled in red), "Choose from files", and "Execute". Below are text boxes for "Person Responsible" (PANAYA), "Inspection Name for FUNCTIONAL_DB_ADDITION" (ZPANAYA_FUNCTIONAL_DB_ADDITION 092), and "Inspection Name for PERFORMANCE_DB" (ZPANAYA_PERFORMANCE_DE 7).

Extract management during S/4 conversion project



SI and ATC are required to be run on (or against) the PROD system.

Skipping these extracts might compromise the analysis results accuracy. Please advise with your CSM.