INTERNAL - Authorized for Partners

Partner
Ecosystem
Success

Exercise 3 – Migrate Custom Code from S/4HANA

S/4HANA Cloud Developer Extensibility bootcamp

THE BEST RUN

TABLE OF CONTENTS

INTRODUCTION

This Hands-On workshop will guide you to enhance existing custom code on SAP S/4HANA on premise to be ready for SAP S/4HANA Cloud.

Custom Code which has been developed on SAP S/4HANA on premise shall be made cloud ready to support a migration from on premise to an SAP S/4HANA Cloud solution.

With the Cloud Readiness-Check on SAP S/4HANA we have the possibility to check existing code and make it ready to run also with SAP S/4HANA Cloud Developer Extensibility.

In this tutorial, wherever XXX appears, use a number (e.g. D01).

Exercise scope

In this exercise you will create a class with custom code, programmed in a classic style of SAP ECC programming. Afterwards you will check the code with the respective ATC check and correct it using only APIs which are available on S/4HANA Cloud.

Prerequisites

Make sure that you have a developer user in the S/4HANA and S/4HANA Cloud systems with necessary authorizations.

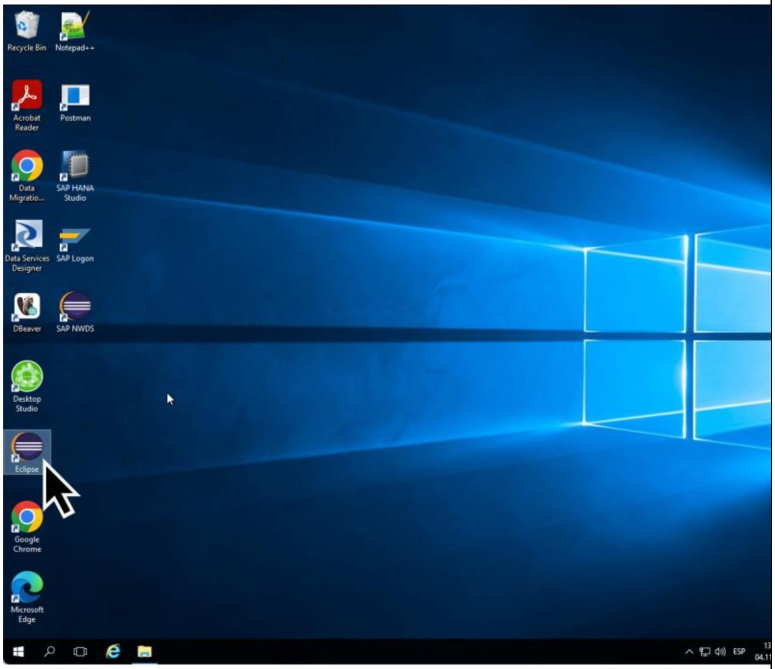
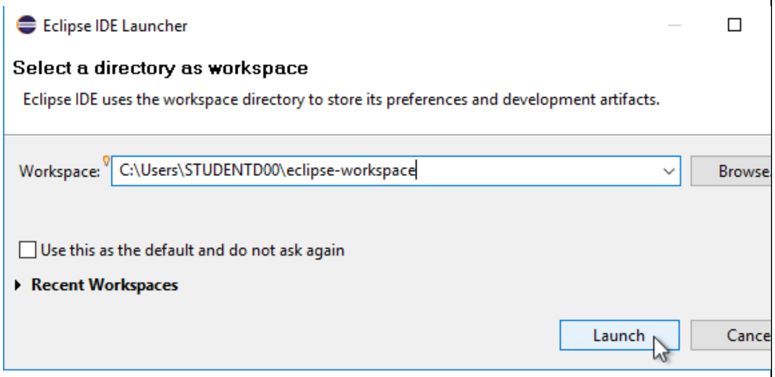
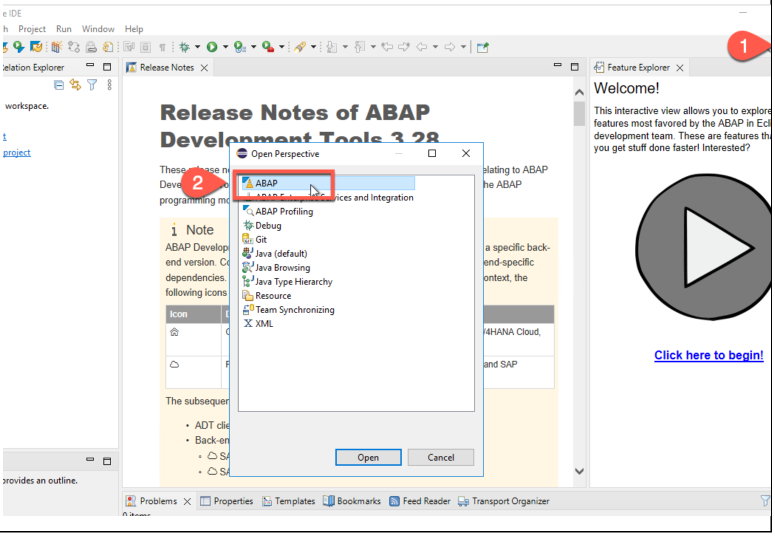
You have installed SAP ABAP Development Tools (ADT), version 3.16 or later, and have created an ABAP Cloud project for your SAP S/4HANA Cloud System in it.

Hints and Tips

Speed up the typing by making use of the Code Completion feature (shortcut: Ctrl+Space) or the prepared Code Snippets mentioned in the next section. You can easily open an object with the shortcut Ctrl+Shift+A. In this hands-on workshop, you will go through the following steps. You can open transactions in the on-premise systems with ADT using shortcut Alt+F8

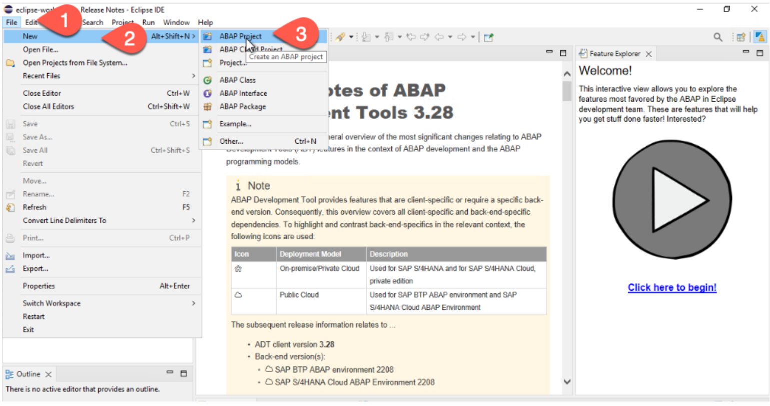
STEP 1 – CREATE AND CHECK AND MODIFY DEVELOPMENT OBJECTS

Step 1.1 – Create Custom ABAP Class

Description	Screenshot
Login to the S/4HANA system S4H with the provided username and password from your cheat sheet. To do this open Eclipse using the icon in the Remote Desktop.	 Recycle Bin Notepad++ Acrobat Reader Postman Data Migratio... SAP HANA Studio Data Services Designer SAP Logon DBeaver SAP NWDS Desktop Studio Eclipse Google Chrome Microsoft Edge
Create a new workspace and make sure you use your user folder. If the folder doesn't already exist, create a new one. Example: C:\Users\STUDENT<XXX>\eclipse-workspace where <XXX> is your ID (e.g. D01).	 Eclipse IDE Launcher Select a directory as workspace Eclipse IDE uses the workspace directory to store its preferences and development artifacts. Workspace: C:\Users\STUDENTD00\eclipse-workspace ☐ Use this as the default and do not ask again Recent Workspaces
Open the ABAP Perspective by clicking the "Open Perspective" icon on the top right and then selecting "ABAP" and finally pressing "Open".	 1 2 Release Notes of ABAP Development Tools 3.28 Open Perspective ABAP ABAP Profiling Debug Git Java (default) Java Browsing Java Type Hierarchy Resource Team Synchronizing XML Open Cancel Feature Explorer Welcome! Click here to begin! Problems Properties Templates Bookmarks Feed Reader Transport Organizer

Click on Create new ABAP project.

You can do this from File >> New >> ABAP Project.



otes of ABAP
nt Tools 3.28

eral overview of the most significant changes relating to ABAP Development Tools (ADT) features in the context of ABAP development and the ABAP programming models.

Note

ABAP Development Tool provides features that are client-specific or require a specific back-end version. Consequently, this overview covers all client-specific and back-end-specific dependencies. To highlight and contrast back-end-specifics in the relevant context, the following icons are used:

Icon	Deployment Model	Description
🏠	On-premise/Private Cloud	Used for SAP S/4HANA and for SAP S/4HANA Cloud, private edition
☁	Public Cloud	Used for SAP BTP ABAP environment and SAP S/4HANA Cloud ABAP Environment

The subsequent release information relates to ...

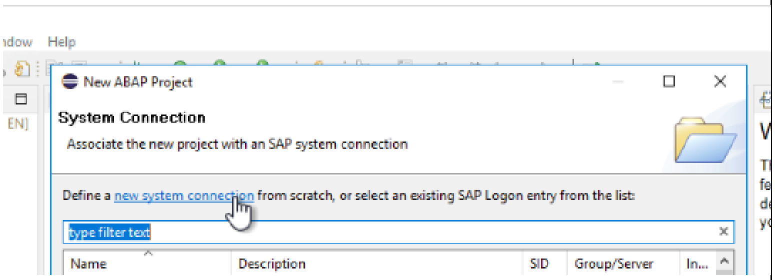
- ADT client version 3.28
- Back-end version(s):
  - ☁ SAP BTP ABAP environment 2208
  - ☁ SAP S/4HANA Cloud ABAP Environment 2208

Welcome!

This interactive view allows you to explore the features most favored by the ABAP in Eclipse development team. These are features that will help you get stuff done faster! Interested?

There is no active editor that provides an outline.

Click on “new system connection”.



System Connection

Associate the new project with an SAP system connection

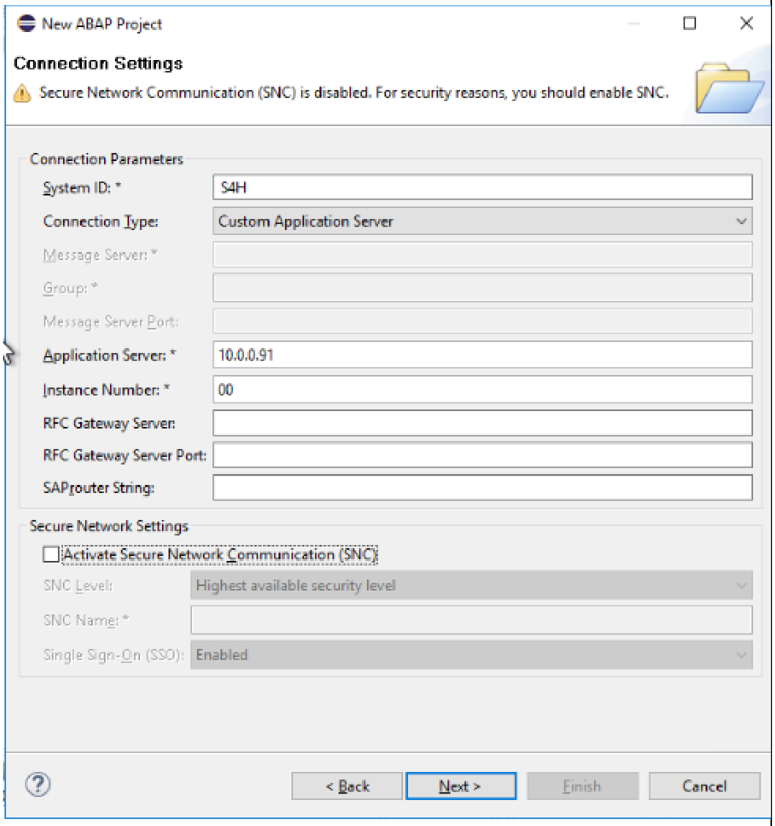
Define a new system connection from scratch, or select an existing SAP Logon entry from the list:

type filter text

Select the option “Custom Application Server” and provide the data as per your cheat sheet.

Please provide system ID (S4H), Application Server and Instance Number.

Disable the SNC communication since this will be internal.



Connection Settings

⚠ Secure Network Communication (SNC) is disabled. For security reasons, you should enable SNC.

Connection Parameters

System ID: * S4H

Connection Type: Custom Application Server

Message Server: *

Group: *

Message Server Port:

Application Server: * 10.0.0.91

Instance Number: * 00

RFC Gateway Server:

RFC Gateway Server Port:

SAProuter String:

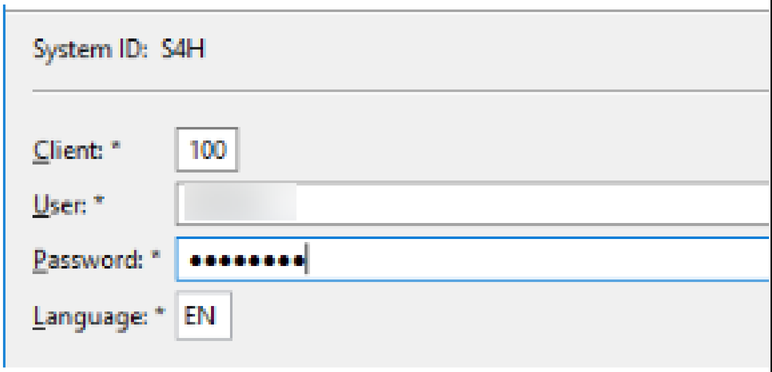
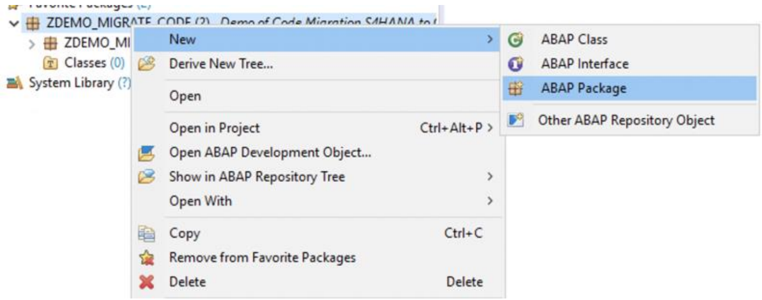
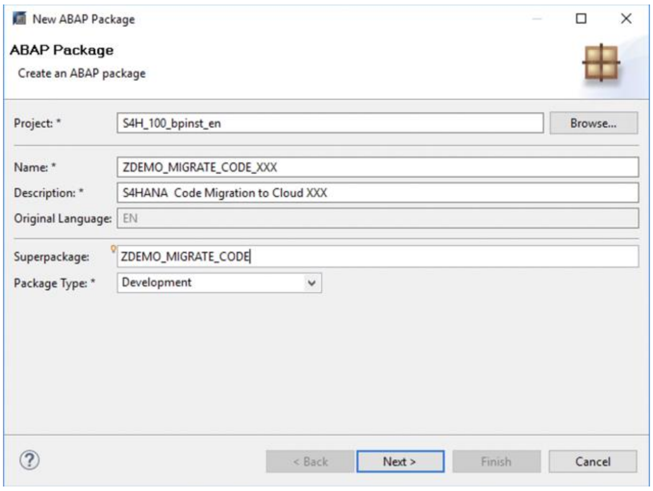
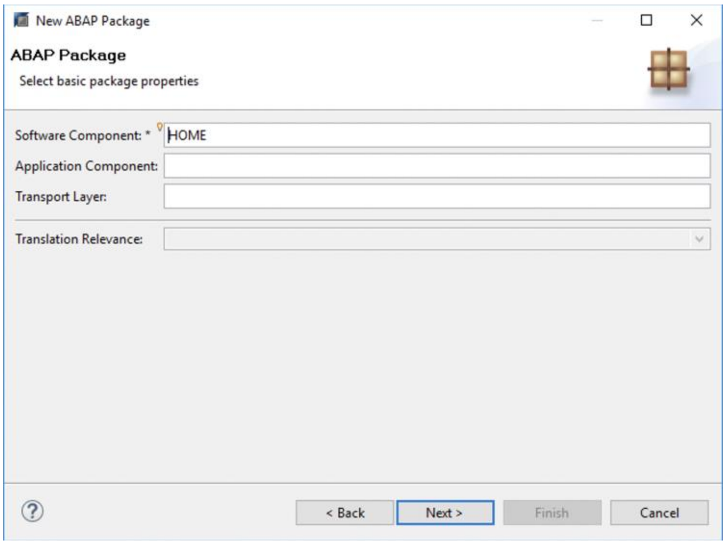
Secure Network Settings

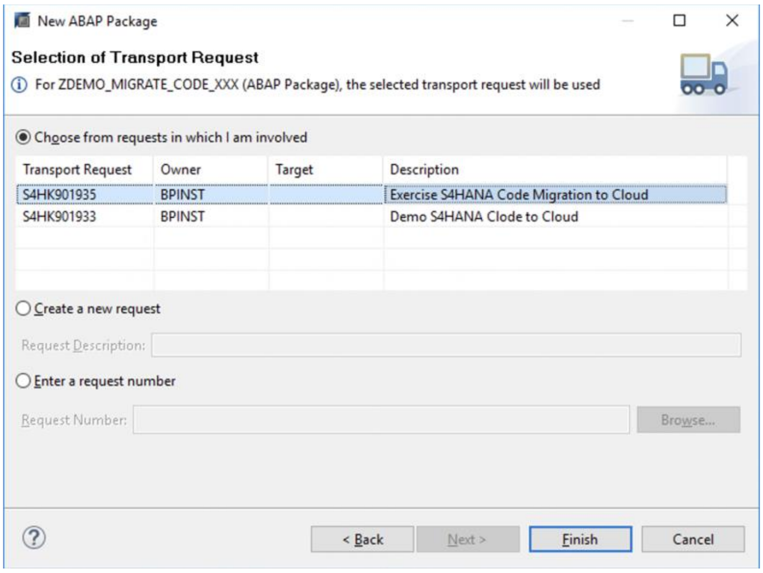
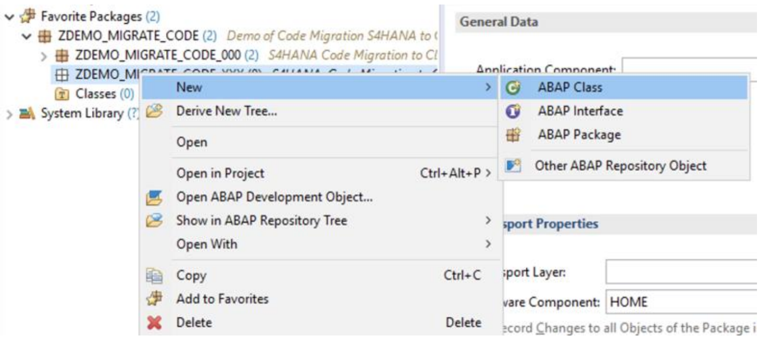
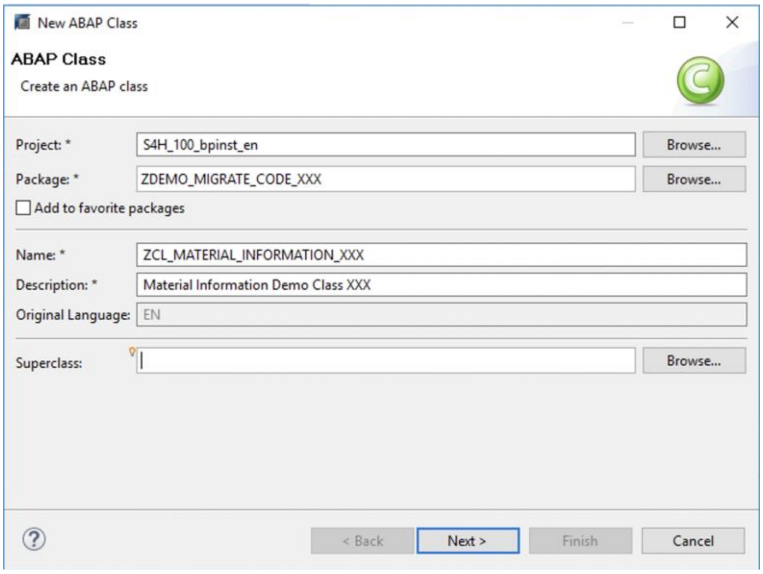
☐ Activate Secure Network Communication (SNC)

SNC Level: Highest available security level

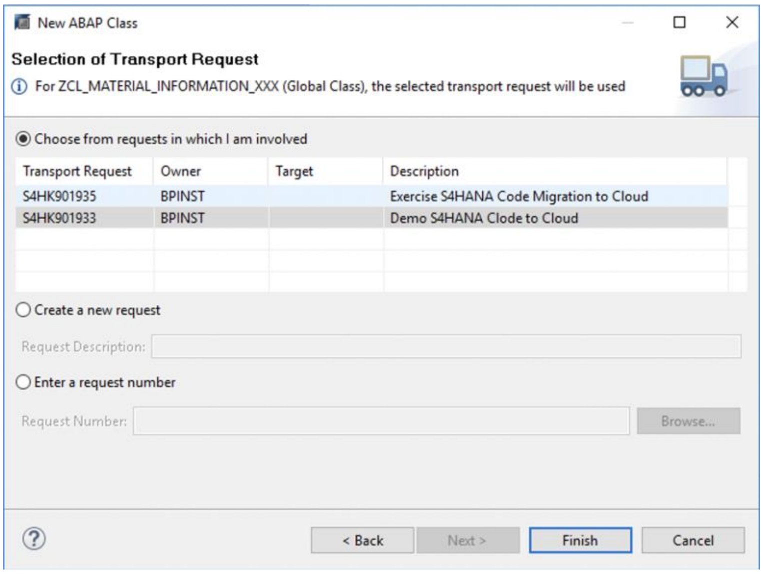
SNC Name: *

Single Sign-On (SSO): Enabled

Specify your user and password from the cheat sheet.	 System ID: S4H Client: * 100 User: * Password: * •••••••• Language: * EN
Navigate to Package ZDEMO_MIGRATE_CODE and choose “New” > “ABAP Package” to create your own package	 ZDEMO_MIGRATE_CODE (2) Demo of Code Migration S4HANA to ZDEMO_MI Classes (0) System Library (?) New Derive New Tree... Open Open in Project Ctrl+Alt+P Open ABAP Development Object... Show in ABAP Repository Tree Open With Copy Ctrl+C Remove from Favorite Packages Delete Delete ABAP Class ABAP Interface ABAP Package Other ABAP Repository Object
On the following dialog use - Name: ZDEMO_MIGRATE_CODE_XXX - Description: S4HANA Code Migration to Cloud XXX Make sure the right super-package is selected. Click “Next”	 New ABAP Package ABAP Package Create an ABAP package Project: * S4H_100_bpinst_en Name: * ZDEMO_MIGRATE_CODE_XXX Description: * S4HANA Code Migration to Cloud XXX Original Language: EN Superpackage: ZDEMO_MIGRATE_CODE Package Type: * Development
On the following dialog click “Next”	 New ABAP Package ABAP Package Select basic package properties Software Component: * HOME Application Component: Transport Layer: Translation Relevance:

Select the transport request you have been assigned to or create a new transport request if one does not exist already. Click “Finish” to write changes on the respective transport	 New ABAP Package **Selection of Transport Request** ⓘ For ZDEMO_MIGRATE_CODE_XXX (ABAP Package), the selected transport request will be used ● Choose from requests in which I am involved Transport Request – Owner – Target – Description S4HK901935 – BPINST – – Exercise S4HANA Code Migration to Cloud S4HK901933 – BPINST – – Demo S4HANA Clode to Cloud ○ Create a new request Request Description: ○ Enter a request number Request Number: Browse... < Back · Next > · Finish · Cancel
Right-Click on the newly created Package and select “New” > “ABAP Class”	 Favorite Packages (2) ZDEMO_MIGRATE_CODE (2) Demo of Code Migration S4HANA to (ZDEMO_MIGRATE_CODE_000 (2) S4HANA Code Migration to Cl ZDEMO_MI Classes (0) System Library (? New Derive New Tree... Open Open in Project Ctrl+Alt+P Open ABAP Development Object... Show in ABAP Repository Tree Open With Copy Ctrl+C Add to Favorites Delete Delete ABAP Class ABAP Interface ABAP Package Other ABAP Repository Object General Data Application Component: sport Properties sport Layer: vare Component: HOME ecord Changes to all Objects of the Package i
On the following dialog use • Name: ZCL_MATERIAL_INFORMATION_XXX • Description: Material Information Demo Class XXX “Project” and “Package” should be already filled in with values. Click “Next”	 New ABAP Class **ABAP Class** Create an ABAP class Project: * S4H_100_bpinst_en Browse... Package: * ZDEMO_MIGRATE_CODE_XXX Browse... □ Add to favorite packages Name: * ZCL_MATERIAL_INFORMATION_XXX Description: * Material Information Demo Class XXX Original Language: EN Superclass: Browse... < Back · Next > · Finish · Cancel

Select the transport request you have been assigned to and click “Finish”



New ABAP Class

Selection of Transport Request

ⓘ For ZCL_MATERIAL_INFORMATION_XXX (Global Class), the selected transport request will be used

● Choose from requests in which I am involved

Transport Request	Owner	Target	Description
S4HK901935	BPINST		Exercise S4HANA Code Migration to Cloud
S4HK901933	BPINST		Demo S4HANA Clode to Cloud

○ Create a new request

Request Description:

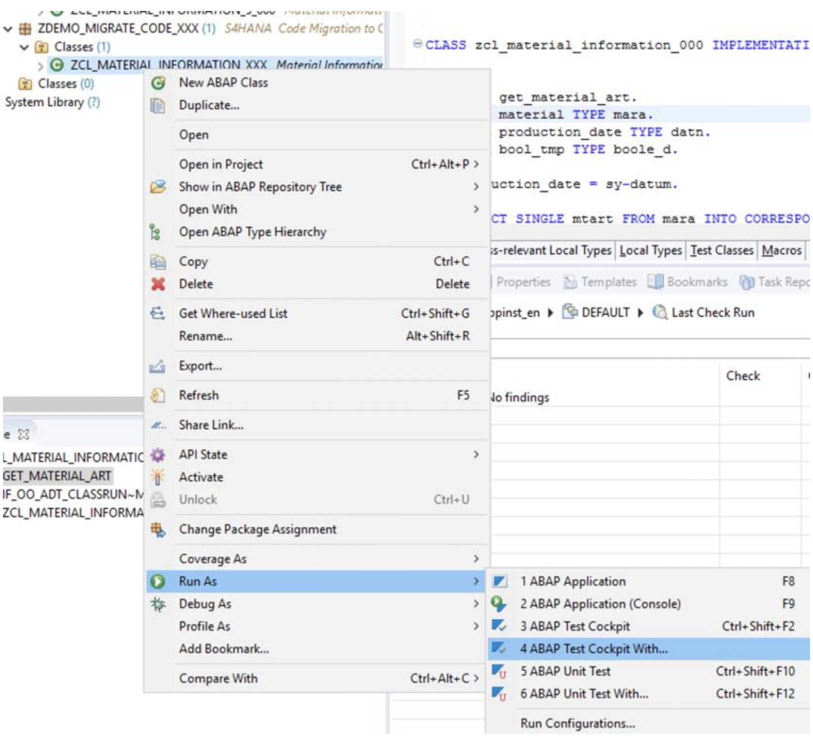
○ Enter a request number

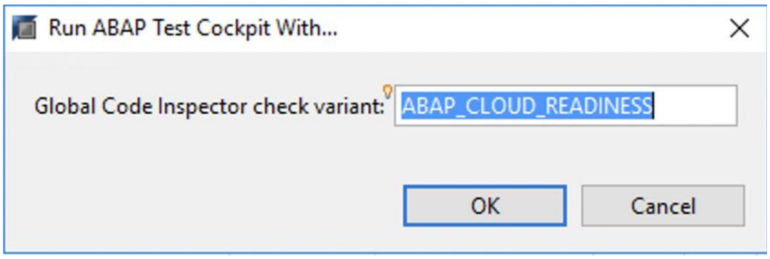
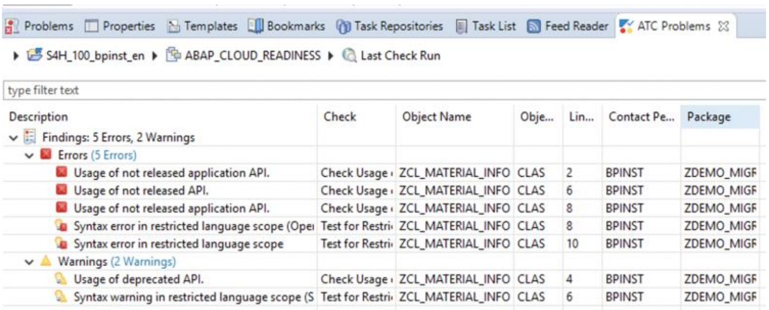
Request Number:

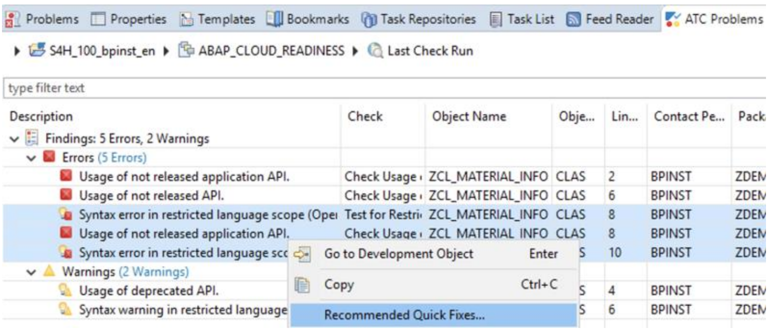
When the source code editor opens paste the following code.
This code is using APIs which are not available on S/4HANA Public Cloud.

```
CLASS zcl_material_information_XXX DEFINITION
  PUBLIC
  FINAL
  CREATE PUBLIC .

  PUBLIC SECTION.
    INTERFACES if_oo_adt_classrun.

  PROTECTED SECTION.
  PRIVATE SECTION.
    METHODS get_material_art
      IMPORTING
        matnr                 TYPE matnr
      RETURNING
        VALUE(material_art) TYPE mtart.
ENDCLASS.



CLASS zcl_material_information_XXX IMPLEMENTATION.


  METHOD get_material_art.
    DATA material TYPE mara.
    DATA production_date TYPE datn.
    DATA bool_tmp TYPE boole_d.

    production_date = sy-datum.

    SELECT SINGLE mtart FROM mara INTO CORRESPONDING
FIELDS OF material WHERE matnr = matnr.

    MOVE material-mtart TO material_art.

  ENDMETHOD.


  METHOD if_oo_adt_classrun~main.
    DATA material_info TYPE REF TO
zcl_material_information_000.
    material_info = NEW zcl_material_information_000(  ).
    DATA(material_art) = material_info->get_material_art(
'RM34' ).
    out->write( material_art ).
  ENDMETHOD.
ENDCLASS.
```

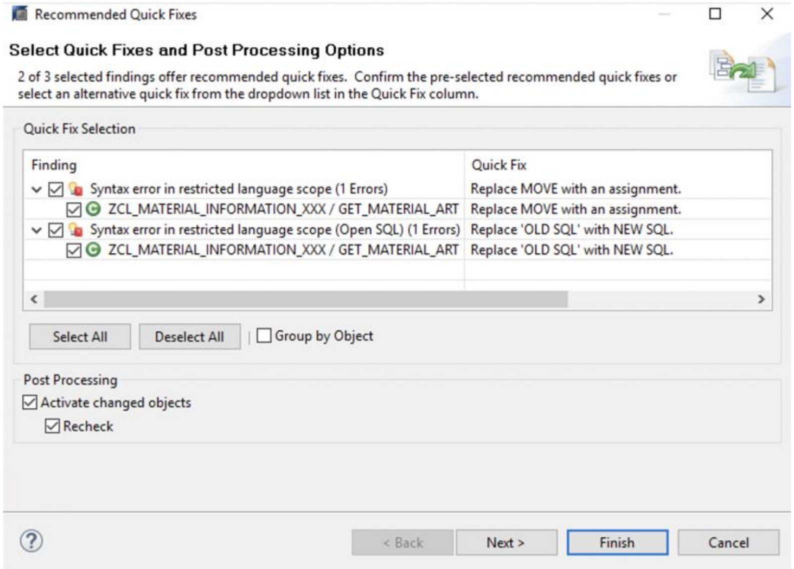
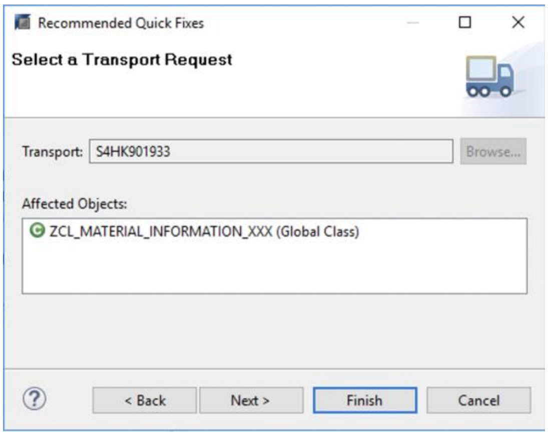
Step 1.2 – Run ABAP Test Cockpit and modify your code

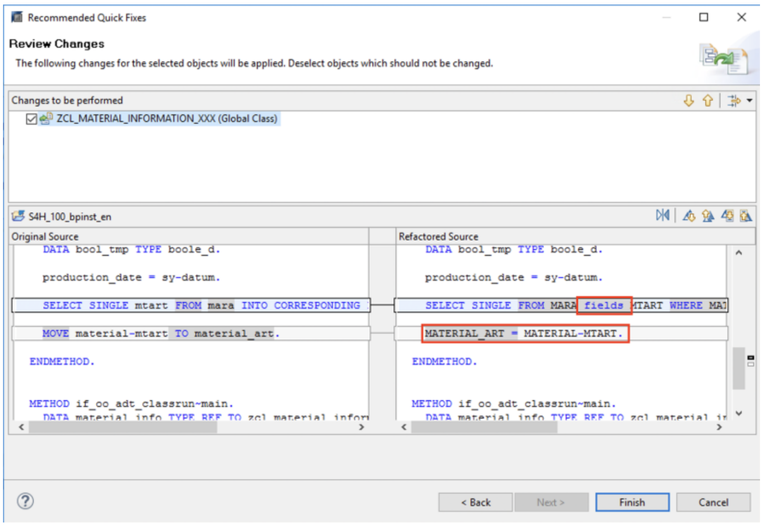
<table>
<tr><th>Description</th><th>Screenshot</th></tr>
<tr><td>Select the newly created class and choose “Run as” > “4 ABAP Test Cockpit With…” from the context menu</td><td>

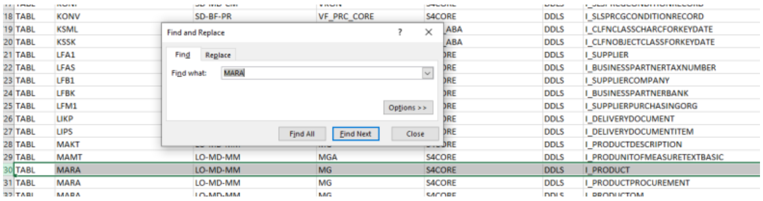
```
CLASS zcl_material_information_000 IMPLEMENTATI
get_material_art.
material TYPE mara.
production_date TYPE datn.
bool_tmp TYPE boole_d.
uction_date = sy-datum.
CT SINGLE mtart FROM mara INTO CORRESPO
```
</td></tr>
<tr><td>Insert Check variant “ABAP_CLOUD_READINESS”
Press “OK”
This ATC check variant tests for released APIs and ABAP language version 5 (ABAP for Cloud development)</td><td>
Run ABAP Test Cockpit With...
Global Code Inspector check variant: ABAP_CLOUD_READINESS
</td></tr>
<tr><td>The Tab “ATC Problems” shows syntax errors for statements which are not available for ABAP language version 5 and the use of non-released APIs.
The SELECT and MOVE statements are not compliant with ABAP language version 5.
The types “MARA” and “MTART” are not released.</td><td>

S4H_100_bpinst_en ▸ ABAP_CLOUD_READINESS ▸ Last Check Run
type filter text
<table>
<tr><th>Description</th><th>Check</th><th>Object Name</th><th>Obje...</th><th>Lin...</th><th>Contact Pe...</th><th>Package</th></tr>
<tr><td>Findings: 5 Errors, 2 Warnings</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Errors (5 Errors)</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Usage of not released application API.</td><td>Check Usage</td><td>ZCL_MATERIAL_INFO</td><td>CLAS</td><td>2</td><td>BPINST</td><td>ZDEMO_MIGF</td></tr>
<tr><td>Usage of not released API.</td><td>Check Usage</td><td>ZCL_MATERIAL_INFO</td><td>CLAS</td><td>6</td><td>BPINST</td><td>ZDEMO_MIGF</td></tr>
<tr><td>Usage of not released application API.</td><td>Check Usage</td><td>ZCL_MATERIAL_INFO</td><td>CLAS</td><td>8</td><td>BPINST</td><td>ZDEMO_MIGF</td></tr>
<tr><td>Syntax error in restricted language scope (Ope</td><td>Test for Restri</td><td>ZCL_MATERIAL_INFO</td><td>CLAS</td><td>8</td><td>BPINST</td><td>ZDEMO_MIGF</td></tr>
<tr><td>Syntax error in restricted language scope</td><td>Test for Restri</td><td>ZCL_MATERIAL_INFO</td><td>CLAS</td><td>10</td><td>BPINST</td><td>ZDEMO_MIGF</td></tr>
<tr><td>Warnings (2 Warnings)</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Usage of deprecated API.</td><td>Check Usage</td><td>ZCL_MATERIAL_INFO</td><td>CLAS</td><td>4</td><td>BPINST</td><td>ZDEMO_MIGF</td></tr>
<tr><td>Syntax warning in restricted language scope (S</td><td>Test for Restri</td><td>ZCL_MATERIAL_INFO</td><td>CLAS</td><td>6</td><td>BPINST</td><td>ZDEMO_MIGF</td></tr>
</table></td></tr>
<tr><td>Check the ABAP for cloud development documentation to make yourself familiar with the syntax. The MOVE-Statement is not allowed in ABAP for Cloud development. Select the respective lines and from the context menu choose “Recommended Quick Fixes”.</td><td>

S4H_100_bpinst_en ▸ ABAP_CLOUD_READINESS ▸ Last Check Run
type filter text
<table>
<tr><th>Description</th><th>Check</th><th>Object Name</th><th>Obje...</th><th>Lin...</th><th>Contact Pe...</th><th>Pack</th></tr>
<tr><td>Findings: 5 Errors, 2 Warnings</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Errors (5 Errors)</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Usage of not released application API.</td><td>Check Usage</td><td>ZCL_MATERIAL_INFO</td><td>CLAS</td><td>2</td><td>BPINST</td><td>ZDEM</td></tr>
<tr><td>Usage of not released API.</td><td>Check Usage</td><td>ZCL_MATERIAL_INFO</td><td>CLAS</td><td>6</td><td>BPINST</td><td>ZDEM</td></tr>
<tr><td>Syntax error in restricted language scope (Ope</td><td>Test for Restri</td><td>ZCL_MATERIAL_INFO</td><td>CLAS</td><td>8</td><td>BPINST</td><td>ZDEM</td></tr>
<tr><td>Usage of not released application API.</td><td>Check Usage</td><td>ZCL_MATERIAL_INFO</td><td>CLAS</td><td>8</td><td>BPINST</td><td>ZDEM</td></tr>
<tr><td>Syntax error in restricted language scc</td><td></td><td></td><td>S</td><td>10</td><td>BPINST</td><td>ZDEM</td></tr>
<tr><td>Warnings (2 Warnings)</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Usage of deprecated API.</td><td></td><td></td><td>S</td><td>4</td><td>BPINST</td><td>ZDEM</td></tr>
<tr><td>Syntax warning in restricted language</td><td></td><td></td><td>S</td><td>6</td><td>BPINST</td><td>ZDEM</td></tr>
</table></td></tr>
</table>

To examine the Quick Fixes proposals click "Next"	 Recommended Quick Fixes **Select Quick Fixes and Post Processing Options** 2 of 3 selected findings offer recommended quick fixes. Confirm the pre-selected recommended quick fixes or select an alternative quick fix from the dropdown list in the Quick Fix column. Quick Fix Selection Finding / Quick Fix ☑ Syntax error in restricted language scope (1 Errors) — Replace MOVE with an assignment. ☑ ZCL_MATERIAL_INFORMATION_XXX / GET_MATERIAL_ART — Replace MOVE with an assignment. ☑ Syntax error in restricted language scope (Open SQL) (1 Errors) — Replace 'OLD SQL' with NEW SQL. ☑ ZCL_MATERIAL_INFORMATION_XXX / GET_MATERIAL_ART — Replace 'OLD SQL' with NEW SQL. Select All | Deselect All | □ Group by Object Post Processing ☑ Activate changed objects ☑ Recheck < Back | Next > | Finish | Cancel
Click "Next" to confirm the transport request and affected objects.	 Recommended Quick Fixes **Select a Transport Request** Transport: S4HK901933 | Browse... Affected Objects: ZCL_MATERIAL_INFORMATION_XXX (Global Class) < Back | Next > | Finish | Cancel

Review and agree to the Quick Fix proposals (press "Finish" button)	
	Recommended Quick Fixes
	Review Changes
	The following changes for the selected objects will be applied. Deselect objects which should not be changed.
	Changes to be performed
	☑ ZCL_MATERIAL_INFORMATION_XXX (Global Class)
	S4H_100_bpinst_en
	Original Source:
	`DATA bool_tmp TYPE boole_d.`
	`production_date = sy-datum.`
	`SELECT SINGLE mtart FROM mara INTO CORRESPONDING`
	`MOVE material-mtart TO material_art.`
	`ENDMETHOD.`
	`METHOD if_oo_adt_classrun~main.`
	`DATA material_info TYPE REF TO zcl_material_infor`
	Refactored Source:
	`DATA bool_tmp TYPE boole_d.`
	`production_date = sy-datum.`
	`SELECT SINGLE FROM MARA fields MTART WHERE MA`
	`MATERIAL_ART = MATERIAL-MTART.`
	`ENDMETHOD.`
	`METHOD if_oo_adt_classrun~main.`
	`DATA material_info TYPE REF TO zcl_material_i`
	< Back | Next > | Finish | Cancel

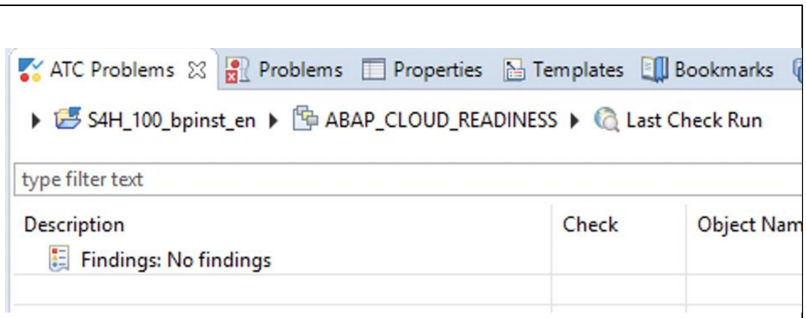
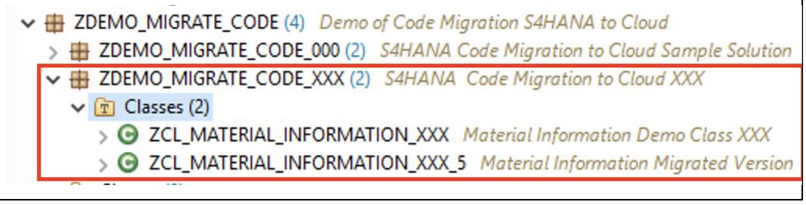
Look up in the SAP Note [3088062](3088062) the GitHub repository with information around the successor API. The latest object release information from the repository at the time of training could be used. For access to the MARA table (search for MARA → Successor is I_PRODUCT)	 Find and Replace Find | Replace Find what: MARA Options >> | Find All | Find Next | Close 18 TABL KONV SD-BF-PR VF_PRC_CORE S4CORE DDLS I_SLSPRCGCONDITIONRECORD 19 TABL KSML ABA DDLS I_CLFNCLASSCHARCFORKEYDATE 20 TABL KSSK ABA DDLS I_CLFNOBJECTCLASSFORKEYDATE 21 TABL LFA1 RE DDLS I_SUPPLIER 22 TABL LFAS RE DDLS I_BUSINESSPARTNERTAXNUMBER 23 TABL LFB1 RE DDLS I_SUPPLIERCOMPANY 24 TABL LFBK RE DDLS I_BUSINESSPARTNERBANK 25 TABL LFM1 RE DDLS I_SUPPLIERPURCHASINGORG 26 TABL LIKP RE DDLS I_DELIVERYDOCUMENT 27 TABL LIPS RE DDLS I_DELIVERYDOCUMENTITEM 28 TABL MAKT RE DDLS I_PRODUCTDESCRIPTION 29 TABL MAMT LO-MD-MM MGA S4CORE DDLS I_PRODUNITOFMEASURETEXTBASIC 30 TABL MARA LO-MD-MM MG S4CORE DDLS I_PRODUCT 31 TABL MARA LO-MD-MM MG S4CORE DDLS I_PRODUCTPROCUREMENT

Replace the occurrences of MARA with I_PRODUCT and the corresponding data elements:

- mtart → i_product-producttype
- matnr → i_product-producttype- product

The result code should look like this:

```
CLASS zcl_material_information_xxx DEFINITION
  PUBLIC
  FINAL
  CREATE PUBLIC .

  PUBLIC SECTION.
    INTERFACES if_oo_adt_classrun.

  PROTECTED SECTION.
  PRIVATE SECTION.
    METHODS get_material_art
      IMPORTING
        matnr               TYPE i_product-product
      RETURNING
        VALUE(material_art) TYPE i_product-producttype.
ENDCLASS.



CLASS zcl_material_information_xxx IMPLEMENTATION.


  METHOD get_material_art.
    DATA material TYPE i_product.
    DATA production_date TYPE datn.
    DATA bool_tmp TYPE boole_d.

    production_date = sy-datum.

    SELECT SINGLE FROM i_product FIELDS producttype WHERE product = @matnr INTO CORRESPONDING FIELDS OF @material .
    material_art = material-producttype.

  ENDMETHOD.


  METHOD if_oo_adt_classrun~main.
    DATA material_info TYPE REF TO zcl_material_information_xxx.
    material_info = NEW zcl_material_information_xxx(  ).
    DATA(material_art) = material_info->get_material_art( 'RM34' ).
    out->write( material_art ).
  ENDMETHOD.
ENDCLASS.
```

Run ATC with Check variant ABAP_CLOUD_READINESS again. The ATC run should finish with no findings.	 ATC Problems Problems Properties Templates Bookmarks S4H_100_bpinst_en ▸ ABAP_CLOUD_READINESS ▸ Last Check Run type filter text Description / Check / Object Nam Findings: No findings
Please find both initial and migrated version (ZCL_MATERIAL_INFORMATION_XXX_5) of the source code in package ZDEMO_MIGRATE_CODE_XXX	 ZDEMO_MIGRATE_CODE (4) *Demo of Code Migration S4HANA to Cloud* ZDEMO_MIGRATE_CODE_000 (2) *S4HANA Code Migration to Cloud Sample Solution* ZDEMO_MIGRATE_CODE_XXX (2) *S4HANA Code Migration to Cloud XXX* Classes (2) ZCL_MATERIAL_INFORMATION_XXX *Material Information Demo Class XXX* ZCL_MATERIAL_INFORMATION_XXX_5 *Material Information Migrated Version*

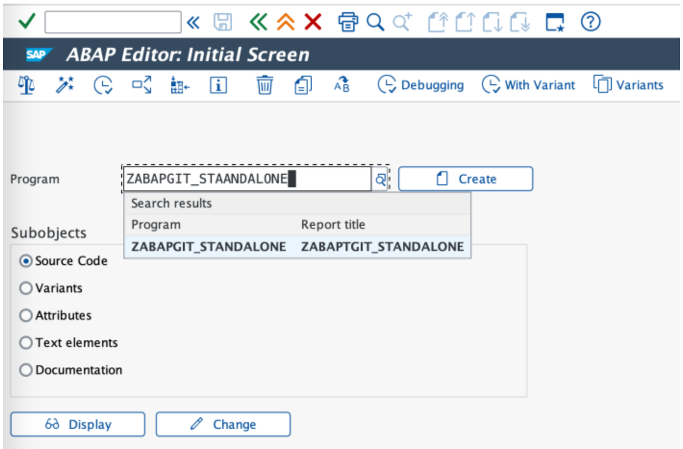
Step 2 – Optional: Export Code to S/4HANA Cloud

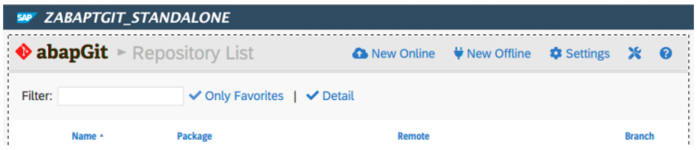
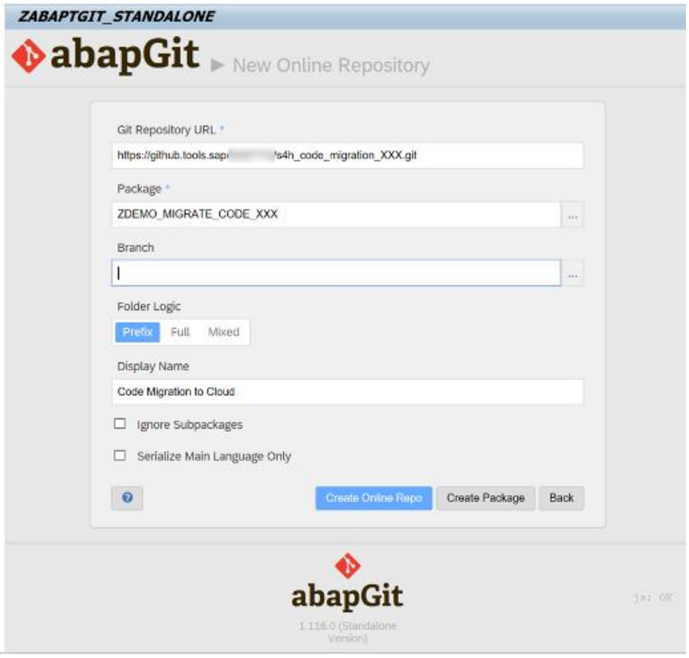
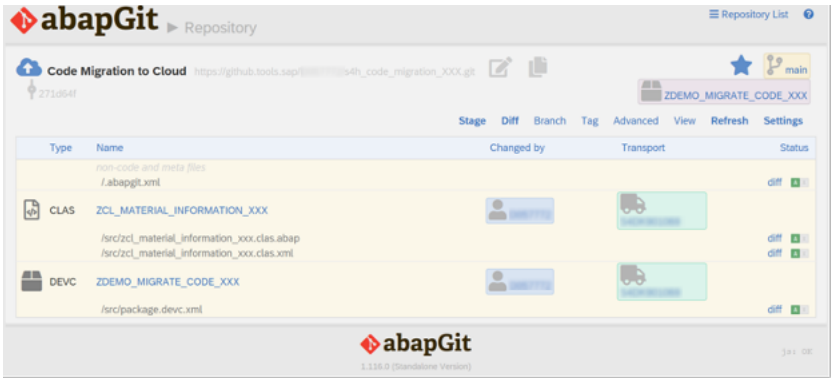
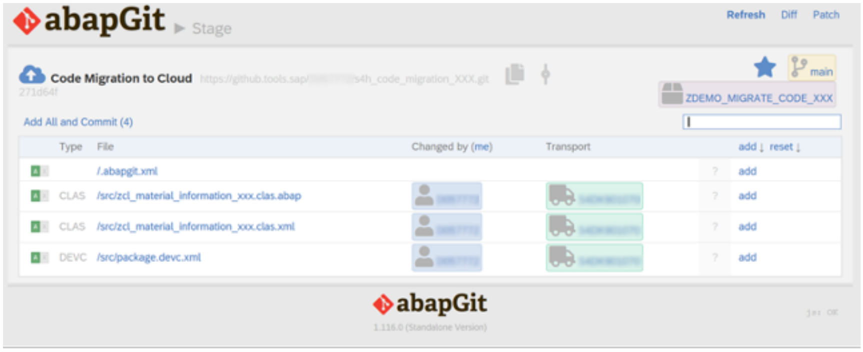
Step 2.1 – Export code from the on-premise system to an online git repository

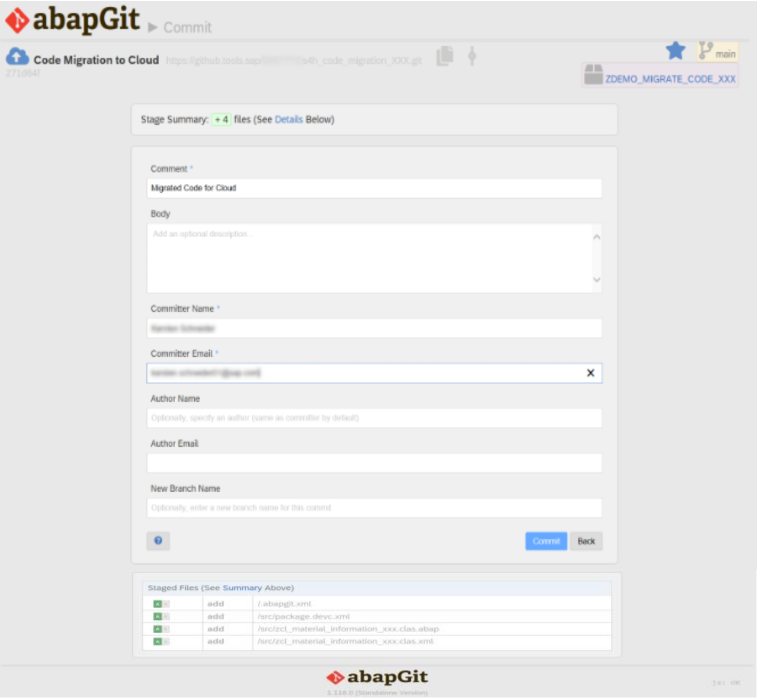
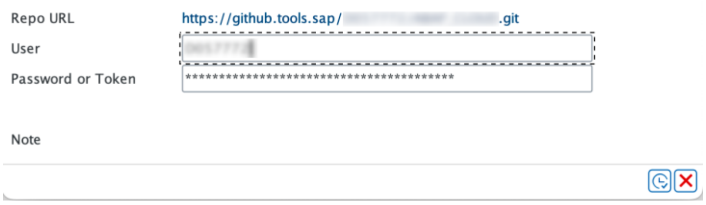
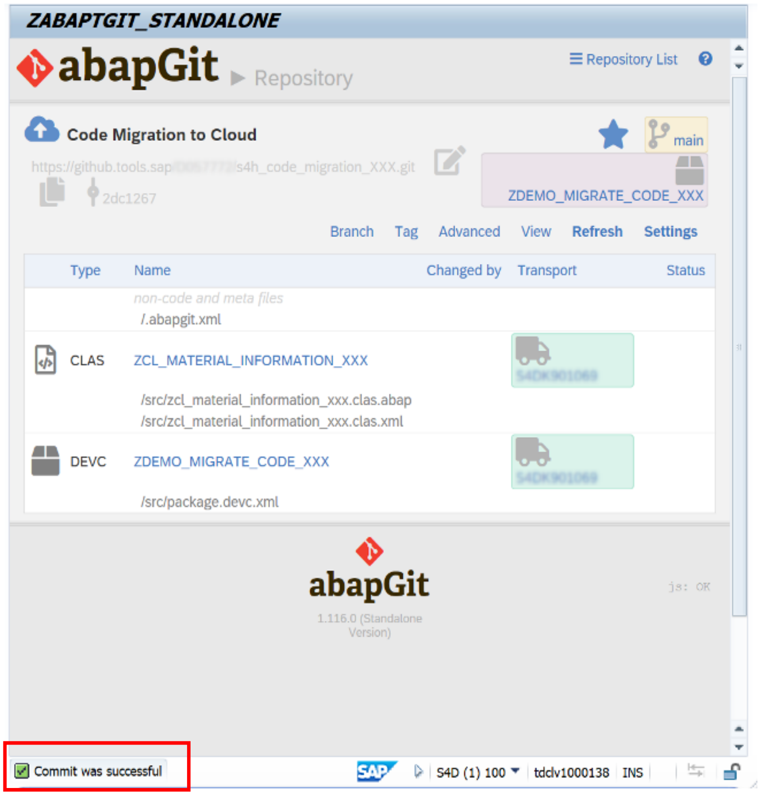
You can now export your coding using abapGit. This might be useful to a) get to know abapGit and b) have the example coding stored for later exploration.

Prerequisites:

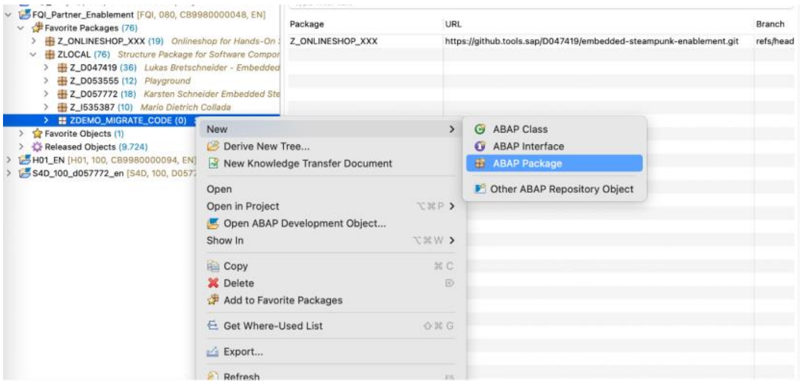
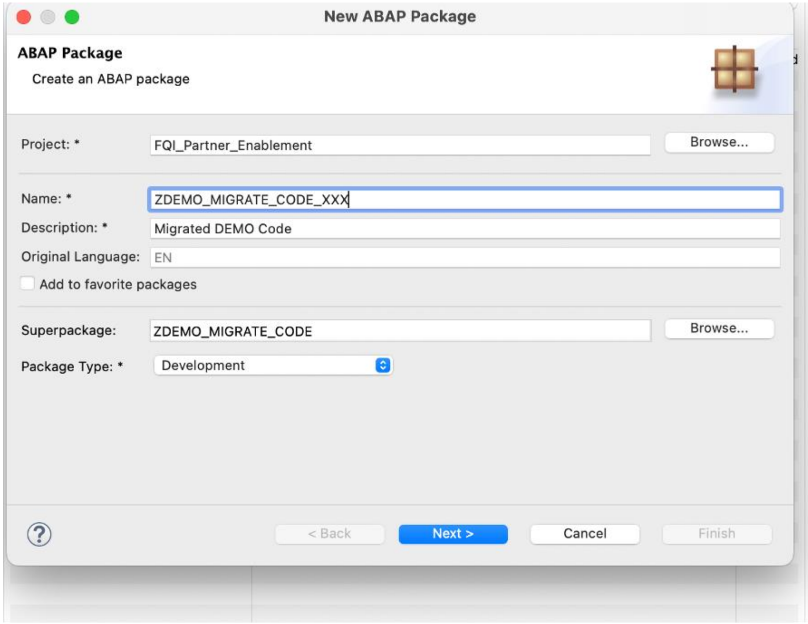
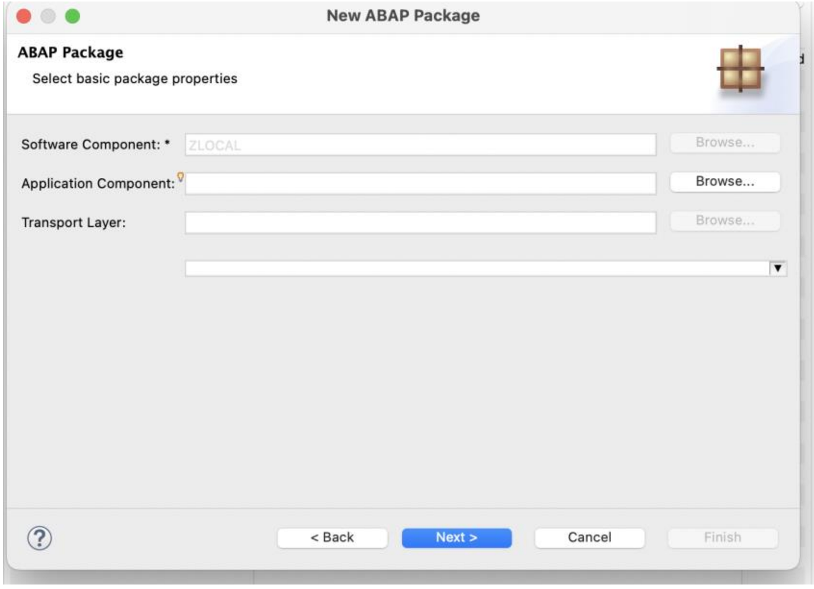
- You have a git repository (e.g. on github.com) prepared and available. If not you can register a new account from HERE. Make sure you have a personal access token with sufficient authorizations created under developer settings of GitHub.
- You have abapGit installed on your S/4HANA on-premise System. This is already done for our workshop.
- You have abapGit plugin integrated in your ABAP Development Tools installation. This is already installed in our system.

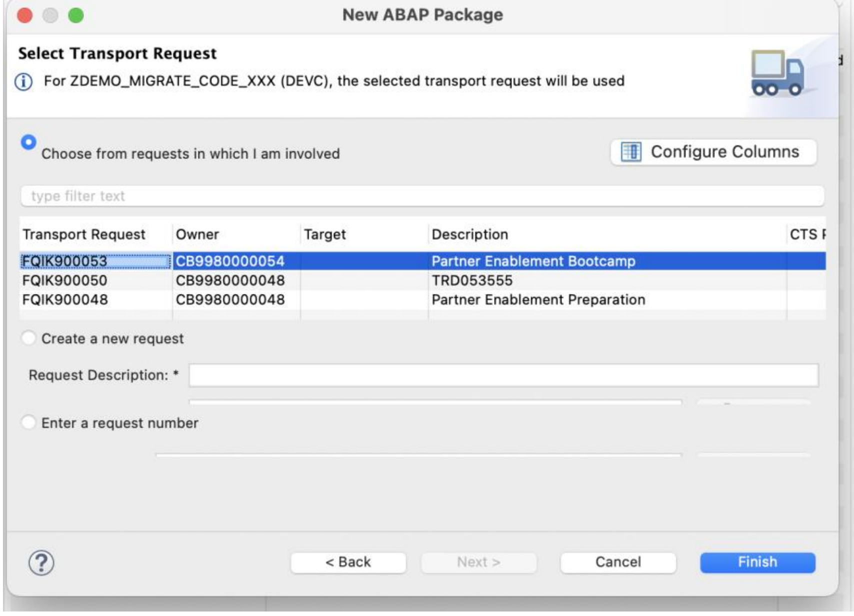
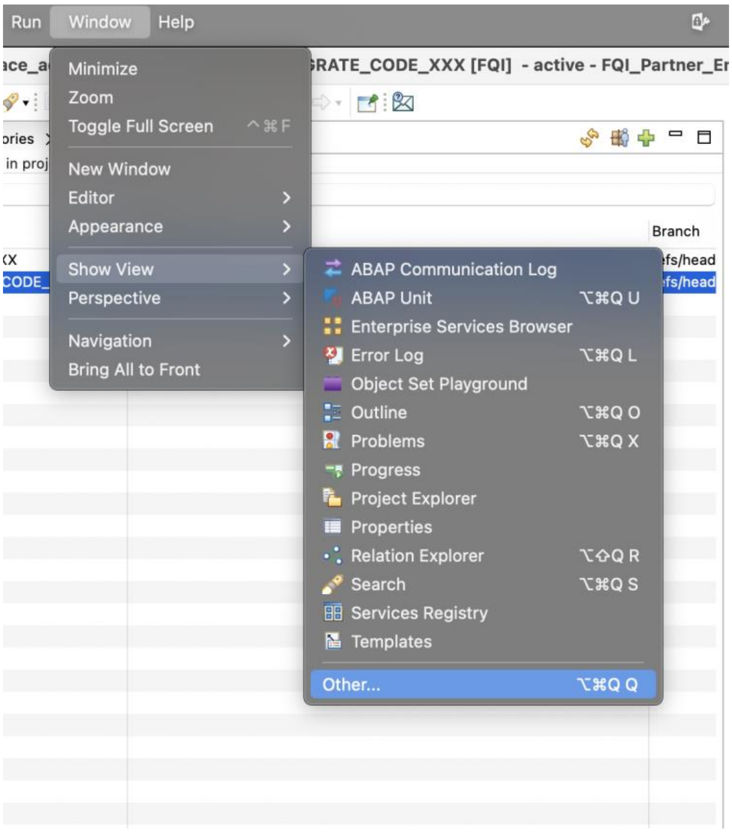
Description	Screenshot
Open Report ZABAPGIT_STANDALONE in transaction SE38. Press Alt+F8 to run the transaction	 ABAP Editor: Initial Screen Debugging With Variant Variants Create Display Change Program: ZABAPGIT_STAANDALONE Search results Program / Report title ZABAPGIT_STANDALONE / ZABAPTGIT_STANDALONE Subobjects ● Source Code ○ Variants ○ Attributes ○ Text elements ○ Documentation

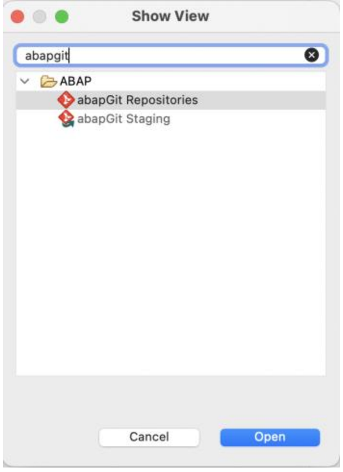
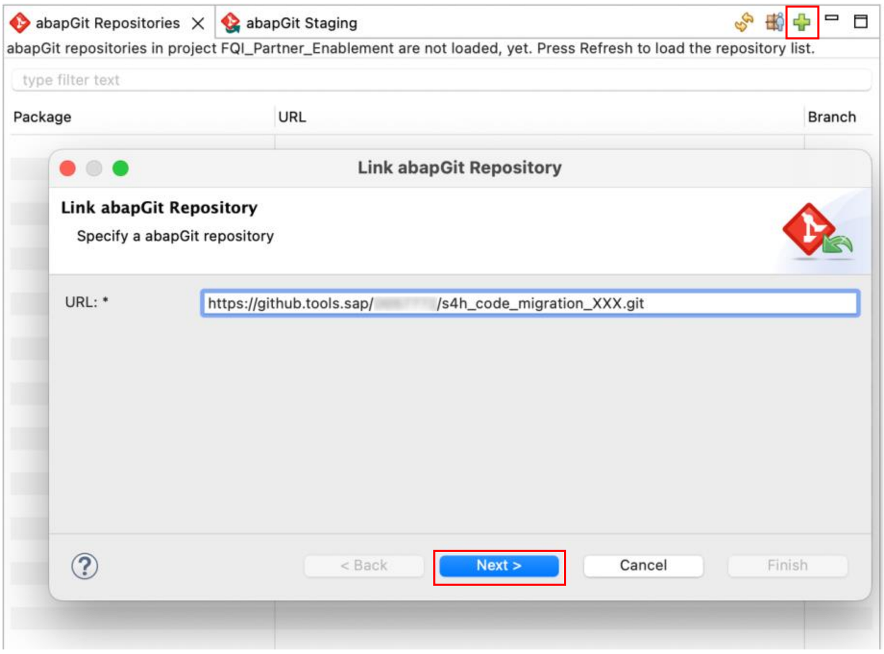
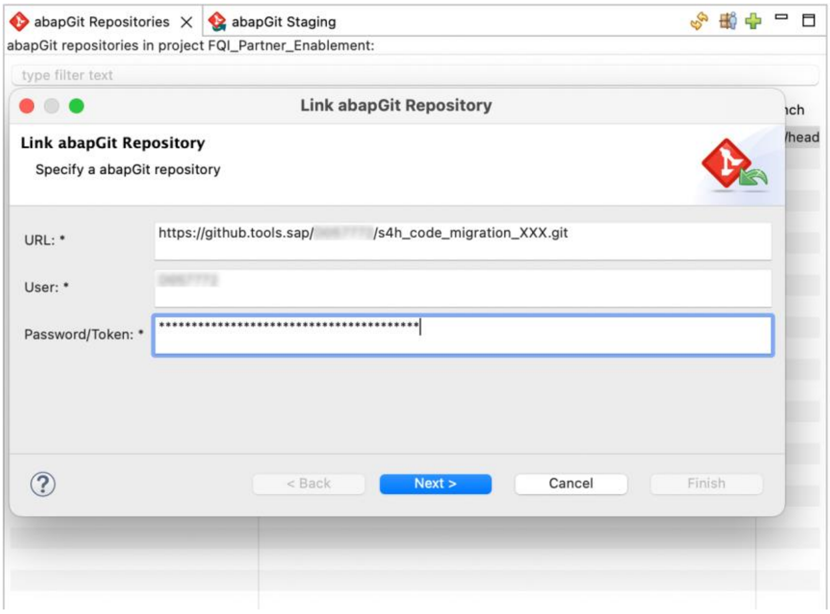
Description	Screenshot
On the entry screen (Repository List) click on “New Online”. Before you push changes to your online repository make sure to have at least one file in your repository, e.g. a README.md file.	 ZABAPTGIT_STANDALONE abapGit ▸ Repository List — New Online · New Offline · Settings Filter: ✓ Only Favorites | ✓ Detail Name · Package · Remote · Branch
Create a new Online Repository with the data from your formerly created git repository (e.g. on github.com, see prerequisites) and the in step 1 created package • Git Repository URL: <your-repository-url> • Package: “ZDEMO_MIGRATE_CODE_XXX” • Display Name “Code Migration to Cloud XXX” Click “Create Online Repo”	 ZABAPTGIT_STANDALONE abapGit ▸ New Online Repository Git Repository URL *: https://github.tools.sap/[redacted]/s4h_code_migration_XXX.git Package *: ZDEMO_MIGRATE_CODE_XXX Branch: Folder Logic: Prefix · Full · Mixed Display Name: Code Migration to Cloud □ Ignore Subpackages □ Serialize Main Language Only Create Online Repo · Create Package · Back abapGit 1.116.0 (Standalone Version)
Click “Stage”.	 abapGit ▸ Repository — Repository List Code Migration to Cloud https://github.tools.sap/[redacted]/s4h_code_migration_XXX.git 271d64f — main — ZDEMO_MIGRATE_CODE_XXX Stage · Diff · Branch · Tag · Advanced · View · Refresh · Settings Type · Name · Changed by · Transport · Status non-code and meta files: /.abapgit.xml — diff CLAS ZCL_MATERIAL_INFORMATION_XXX: /src/zcl_material_information_xxx.clas.abap — diff; /src/zcl_material_information_xxx.clas.xml — diff DEVC ZDEMO_MIGRATE_CODE_XXX: /src/package.devc.xml — diff abapGit 1.116.0 (Standalone Version)
Click on “Add All and Commit”.	 abapGit ▸ Stage — Refresh · Diff · Patch Code Migration to Cloud https://github.tools.sap/[redacted]/s4h_code_migration_XXX.git 271d64f — main — ZDEMO_MIGRATE_CODE_XXX Add All and Commit (4) Type · File · Changed by (me) · Transport · add ↓ reset ↓ /.abapgit.xml — add CLAS /src/zcl_material_information_xxx.clas.abap — add CLAS /src/zcl_material_information_xxx.clas.xml — add DEVC /src/package.devc.xml — add abapGit 1.116.0 (Standalone Version)

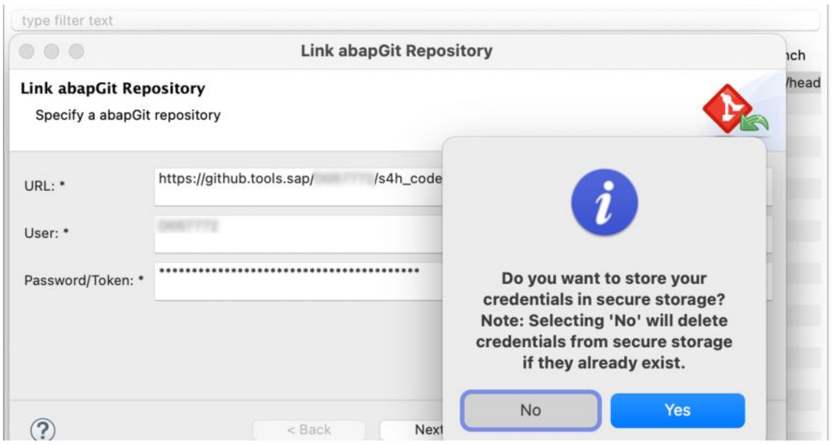
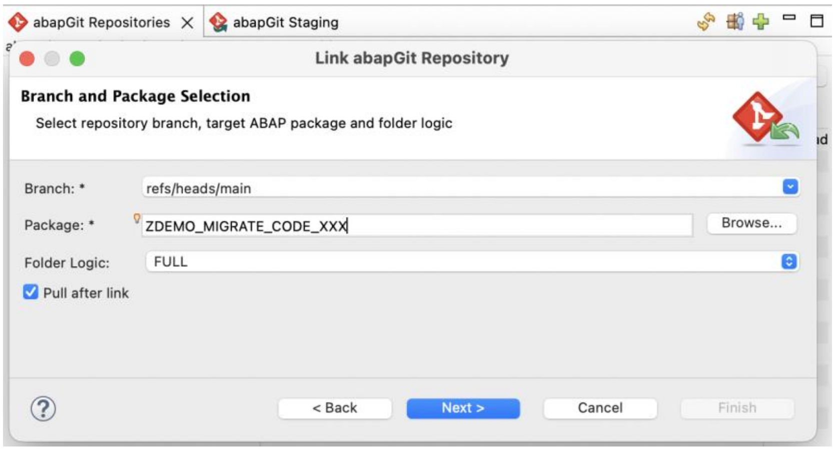
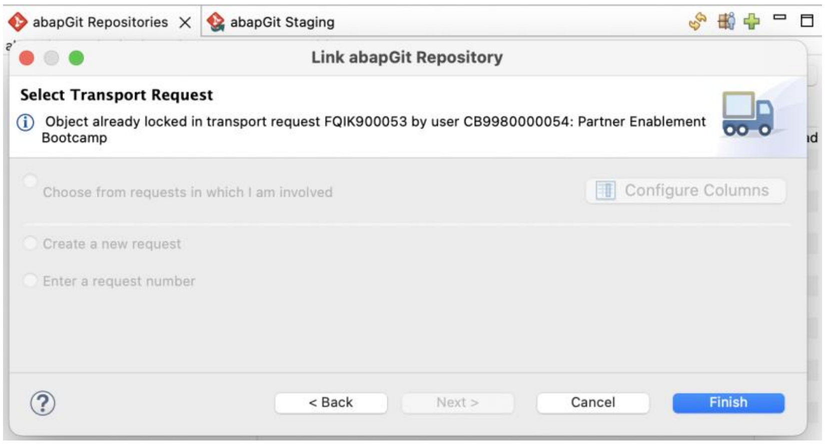
Description	Screenshot
Input a comment such as “Migrated Code to Cloud” as well as your username for the git repository and your E-mail address and press “Commit”.	 abapGit ▶ Commit Code Migration to Cloud https://github.tools.sap/[redacted]s4h_code_migration_XXX.git 271d64f main ZDEMO_MIGRATE_CODE_XXX Stage Summary: +4 files (See Details Below) Comment *: Migrated Code for Cloud Body: Add an optional description... Committer Name *: [redacted] Committer Email *: [redacted] Author Name: Optionally, specify an author (same as committer by default) Author Email: New Branch Name: Optionally, enter a new branch name for this commit Commit Back Staged Files (See Summary Above) add /.abapgit.xml add /src/package.devc.xml add /src/zcl_material_information_xxx.clas.abap add /src/zcl_material_information_xxx.clas.xml abapGit 1.116.0 (Standalone Version)
You will be prompted with a credentials popup. Enter your git repository server credentials and click the Execute button.	 Repo URL: https://github.tools.sap/[redacted].git User: [redacted] Password or Token: ** Note
Verify your code was committed by checking the status message “Commit was successful”.	 ZABAPTGIT_STANDALONE abapGit ▶ Repository Repository List Code Migration to Cloud https://github.tools.sap[redacted]s4h_code_migration_XXX.git 2dc1267 main ZDEMO_MIGRATE_CODE_XXX Branch Tag Advanced View Refresh Settings Type / Name / Changed by / Transport / Status non-code and meta files /.abapgit.xml CLAS ZCL_MATERIAL_INFORMATION_XXX [redacted] /src/zcl_material_information_xxx.clas.abap /src/zcl_material_information_xxx.clas.xml DEVC ZDEMO_MIGRATE_CODE_XXX [redacted] /src/package.devc.xml abapGit 1.116.0 (Standalone Version) js: OK ☑ Commit was successful S4D (1) 100 tdclv1000138 INS

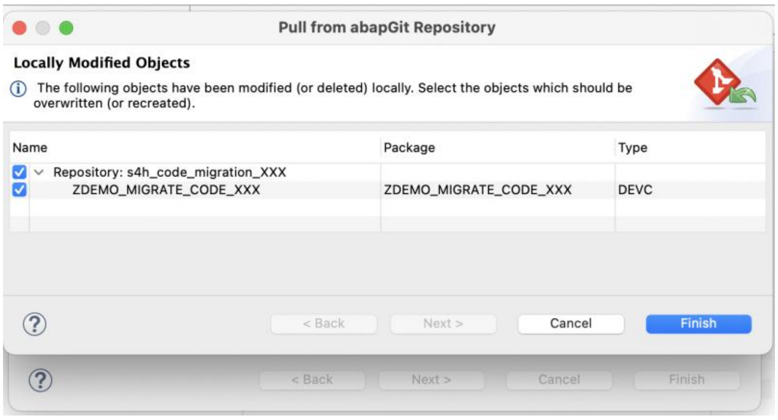
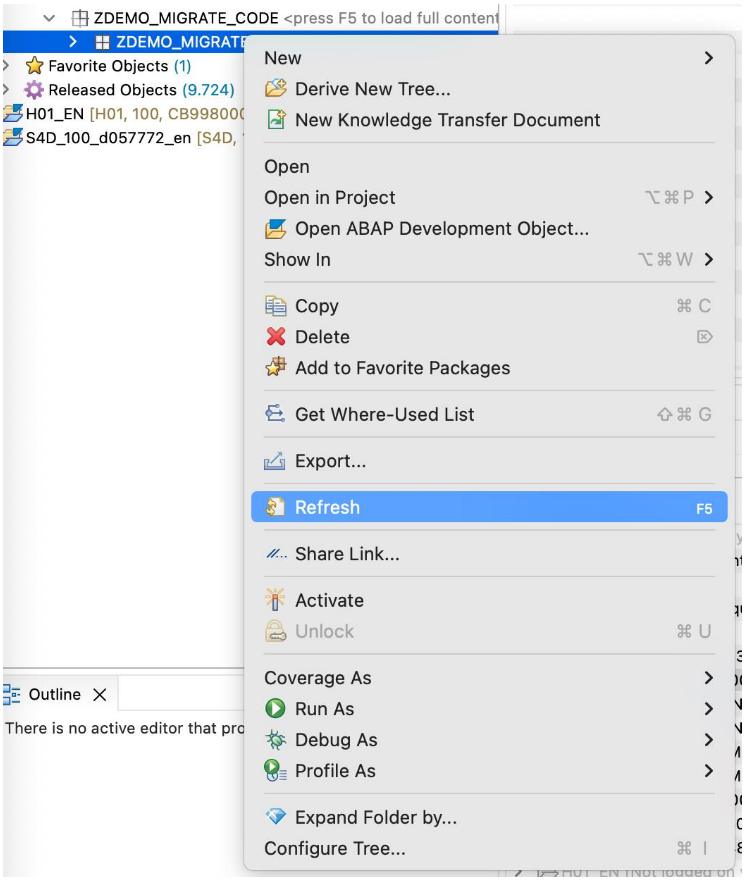
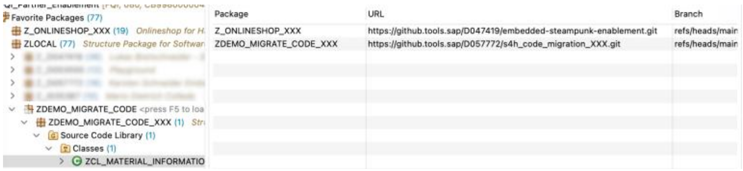
Step 2.1 – Import code from git repository to S/4HANA Cloud

Description	Screenshot
Create New package on your S/4HANA Cloud system where you can import the code from the git repository. To achieve this choose New → ABAP Package within the ZDEMO_MIGRATE_CODE package	 FQI_Partner_Enablement [FQI, 080, CB9980000048, EN] Favorite Packages (76) Z_ONLINESHOP_XXX (19) Onlineshop for Hands-On ZLOCAL (76) Structure Package for Software Compor Z_D047419 (36) Lukas Bretschneider - Embedded Z_D053555 (12) Playground Z_D057772 (18) Karsten Schneider Embedded Ste Z_I535387 (10) Mario Dietrich Collada ZDEMO_MIGRATE_CODE (0) Favorite Objects (1) Released Objects (9.724) H01_EN [H01, 100, CB9980000094, EN] S4D_100_d057772_en [S4D, 100, D057 New Derive New Tree... New Knowledge Transfer Document Open Open in Project ⌥⌘P Open ABAP Development Object... Show In ⌥⌘W Copy ⌘C Delete Add to Favorite Packages Get Where-Used List ⇧⌘G Export... Refresh F5 ABAP Class ABAP Interface ABAP Package Other ABAP Repository Object Package: Z_ONLINESHOP_XXX URL: https://github.tools.sap/D047419/embedded-steampunk-enablement.git Branch: refs/head
Create the new package with • Name: "ZDEMO_MIGRATE_CODE_XXX" • Description: "Migrated Demo Code XXX" And click "Next"	 New ABAP Package ABAP Package Create an ABAP package Project: * FQI_Partner_Enablement Name: * ZDEMO_MIGRATE_CODE_XXX Description: * Migrated DEMO Code Original Language: EN □ Add to favorite packages Superpackage: ZDEMO_MIGRATE_CODE Package Type: * Development Browse... Browse... < Back Next > Cancel Finish
On the following screen click "Next"	 New ABAP Package ABAP Package Select basic package properties Software Component: * ZLOCAL Application Component: Transport Layer: Browse... Browse... Browse... < Back Next > Cancel Finish

Description	Screenshot
Select the transport request you have been assigned to and click “Finish”	 New ABAP Package Select Transport Request For ZDEMO_MIGRATE_CODE_XXX (DEVC), the selected transport request will be used ● Choose from requests in which I am involved Configure Columns type filter text Transport Request / Owner / Target / Description / CTS P FQIK900053 / CB9980000054 / / Partner Enablement Bootcamp FQIK900050 / CB9980000048 / / TRD053555 FQIK900048 / CB9980000048 / / Partner Enablement Preparation ○ Create a new request Request Description: * ○ Enter a request number < Back / Next > / Cancel / Finish
If needed: Add abapGit-View to ADT Choose Window → Show View → Other	 Run Window Help RATE_CODE_XXX [FQI] - active - FQI_Partner_Er Minimize Zoom Toggle Full Screen ^⌘F New Window Editor Appearance Show View Perspective Navigation Bring All to Front ABAP Communication Log ABAP Unit ⌥⌘Q U Enterprise Services Browser Error Log ⌥⌘Q L Object Set Playground Outline ⌥⌘Q O Problems ⌥⌘Q X Progress Project Explorer Properties Relation Explorer ⌥⇧Q R Search ⌥⌘Q S Services Registry Templates Other... ⌥⌘Q Q Branch
Choose abapGit Staging and abapGit Repositories	

Description	Screenshot
	 Show View abapgit ABAP abapGit Repositories abapGit Staging Cancel Open
Add your Repository in view “abapGit Repositories”. Click the “+” sign on the abapGit Repositories Tab and enter the link of your repository in the dialog.	 abapGit Repositories abapGit Staging type filter text Package URL Branch Link abapGit Repository abapGit repositories in project FQI_Partner_Enablement are not loaded, yet. Press Refresh to load the repository list. Link abapGit Repository Specify a abapGit repository URL: * https://github.tools.sap/[redacted]/s4h_code_migration_XXX.git < Back Next > Cancel Finish
Enter valid authentication mechanism, e.g. user & password or user & token	 abapGit Repositories abapGit Staging type filter text Link abapGit Repository abapGit repositories in project FQI_Partner_Enablement: Link abapGit Repository Specify a abapGit repository URL: * https://github.tools.sap/[redacted]/s4h_code_migration_XXX.git User: * [redacted] Password/Token: * ** < Back Next > Cancel Finish

Description	Screenshot
If you are prompted to use secure storage make your choice to open the next screen.	 Link abapGit Repository **Link abapGit Repository** Specify a abapGit repository URL: * https://github.tools.sap/[redacted]/s4h_code User: * [redacted] Password/Token: * ** Do you want to store your credentials in secure storage? Note: Selecting 'No' will delete credentials from secure storage if they already exist.
Choose your package (ZDEMO_MIGRATE_CODE_XXX) and make sure to activate the “Pull after link” check box. Click “Next”	 Link abapGit Repository **Branch and Package Selection** Select repository branch, target ABAP package and folder logic Branch: * refs/heads/main Package: * ZDEMO_MIGRATE_CODE_XXX Folder Logic: FULL ☑ Pull after link abapGit Repositories abapGit Staging Browse... < Back Next > Cancel Finish
Click “Finish”	 Link abapGit Repository **Select Transport Request** ⓘ Object already locked in transport request FQIK900053 by user CB9980000054: Partner Enablement Bootcamp ○ Choose from requests in which I am involved ○ Create a new request ○ Enter a request number abapGit Repositories abapGit Staging Configure Columns < Back Next > Cancel Finish

Description	Screenshot
Select the newly created package and click “Finish”	 Pull from abapGit Repository **Locally Modified Objects** The following objects have been modified (or deleted) locally. Select the objects which should be overwritten (or recreated). Name | Package | Type ☑ Repository: s4h_code_migration_XXX ☑ ZDEMO_MIGRATE_CODE_XXX | ZDEMO_MIGRATE_CODE_XXX | DEVC
On the newly created package choose “Refresh” from the context menu to show the pulled code.	 ZDEMO_MIGRATE_CODE <press F5 to load full content ZDEMO_MIGRATE Favorite Objects (1) Released Objects (9.724) H01_EN [H01, 100, CB998000 S4D_100_d057772_en [S4D, Outline There is no active editor that pro New Derive New Tree... New Knowledge Transfer Document Open Open in Project ⌥⌘P Open ABAP Development Object... Show In ⌥⌘W Copy ⌘C Delete Add to Favorite Packages Get Where-Used List ⇧⌘G Export... Refresh F5 Share Link... Activate Unlock ⌘U Coverage As Run As Debug As Profile As Expand Folder by... Configure Tree... ⌘ I
Now you should be able to locate the imported code and see the linked repository in the abapGit Repositories tab.	 Favorite Packages (77) Z_ONLINESHOP_XXX (19) Onlineshop for H ZLOCAL (77) Structure Package for Softwar [redacted] ZDEMO_MIGRATE_CODE <press F5 to loa ZDEMO_MIGRATE_CODE_XXX (1) Str Source Code Library (1) Classes (1) ZCL_MATERIAL_INFORMATIO Package | URL | Branch Z_ONLINESHOP_XXX | https://github.tools.sap/D047419/embedded-steampunk-enablement.git | refs/heads/main ZDEMO_MIGRATE_CODE_XXX | https://github.tools.sap/D057772/s4h_code_migration_XXX.git | refs/heads/main

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