ABAP Course

Chapter 1: Introduction and first program

Content

The first chapter explains the main activities to create your first ABAP program "Hello world". Therefore you will get in touch with the integrated ABAP development environment in the SAP system.

Motivation

This chapter explains how to log in into the SAP system and how to start the integrated ABAP development environment. The aim of the chapter is to get the students familiar with the ABAP development workbench and to show the fundamental structure of an ABAP report. Moreover the chapter shows the main aspects of a team oriented ABAP development which is expressed by the usage of transports and packages.

Prerequisites

Before starting the exercises you should be familiar with navigation in a SAP system.

Lecture notes

Account for the students should include the role IDES_DEVELOP. As a lecturer it is recommended to use a student account too when explaining the exercises.

■ **Product**: All

■ **Level**: Beginner

■ **Focus**: Programming

■ **Version**: 1.0

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Task 1: Login into the SAP system

Short description: Use SAPGui to login into the SAP system with your username and password

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Start the SAPGui and login into the development system using the provided account and password. As your password is an initial password you have to change it. Please remember your account and password as you will use this account during the course. If you like you can write it down here:

Login

Logon data
Username: _
Password: _
SAP system: _
Client: _

Task 2: Create a new package

Short description: Creation of a new package that contains the first ABAP developments as well as a new transport request
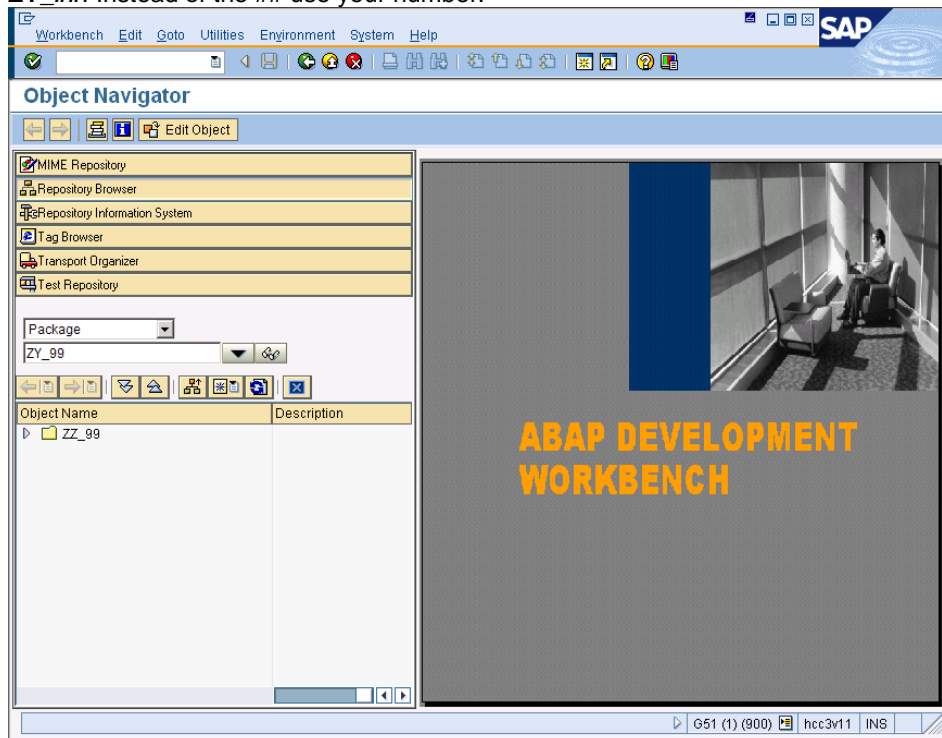

Please start the integrated ABAP development environment from the SAP Easy Access Menu by using the following path:
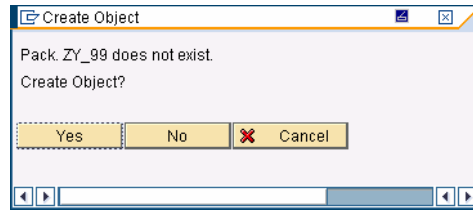
Tools • ABAP Workbench • Overview • Object Navigator.

Menu path

You may also use the transaction code **SE80** for direct access.

In the left section select the item "**Package**" from the dropdown menu and enter your package name in the input field. Package names should always start with **ZY_##**. Instead of the ## use your number.
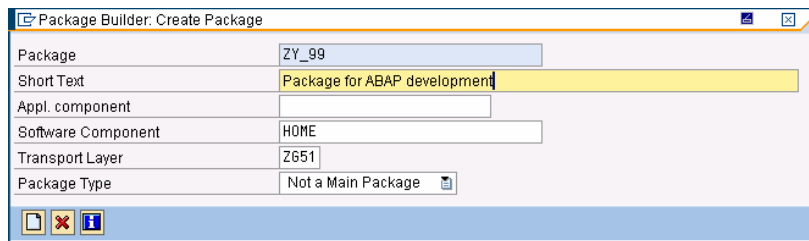
After you hit '**Enter'** the system will come up with a pop up asking you for a confirmation of the creation of the package. Please choose "**Yes**".
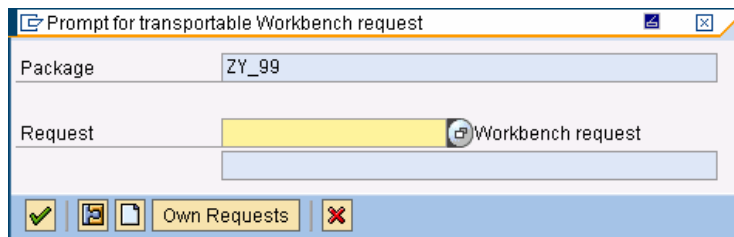

Choose YES

The SAP system is going to create the package now but it needs some further information e.g. short text etc. Please type in a **short text** and leave all other fields as they are. Please use the '**Create Package**' button to create the package finally.
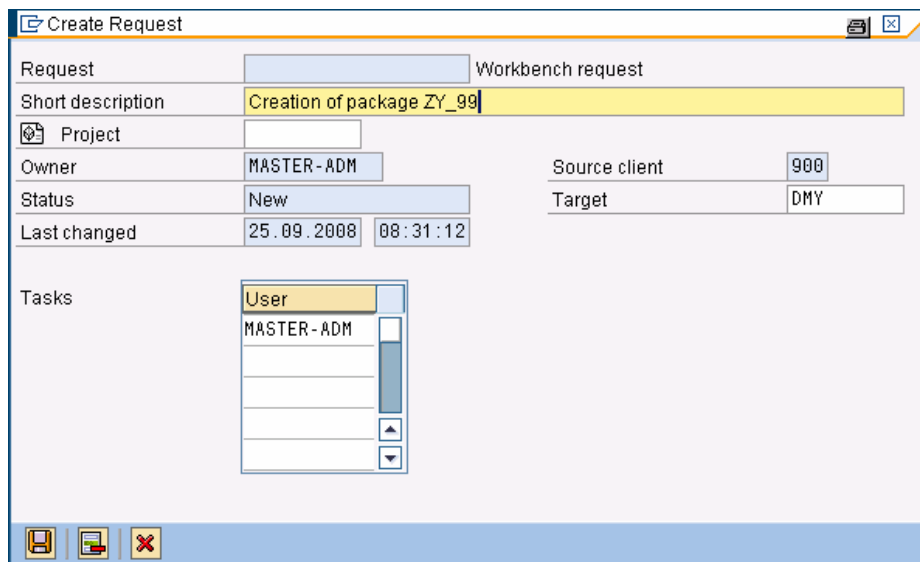

Enter a short text

The system has to assign the process of package creation to a new transport request and therefore it asks you for a request number. As you do not have a request number we are going to create a request now. Please use the '**Create Request'** button to create a new request.
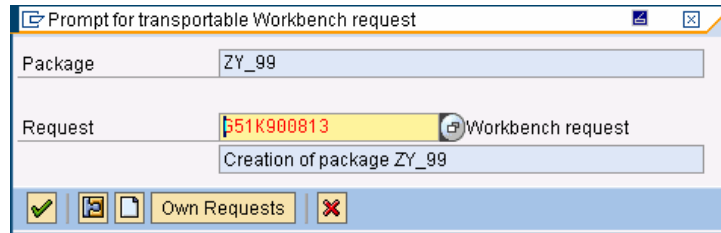

Create a new request

For the creation of the transport request the SAP system ask you again for a **short text**. Please type in a short text and leave all other fields as they are.

Enter a short text

After you hit the '**Save**' button you will see the number of your newly created transport request in the pop-up. The request number is assigned automatically by the system. You can go on by hitting the **green check mark**.

Choose green check mark

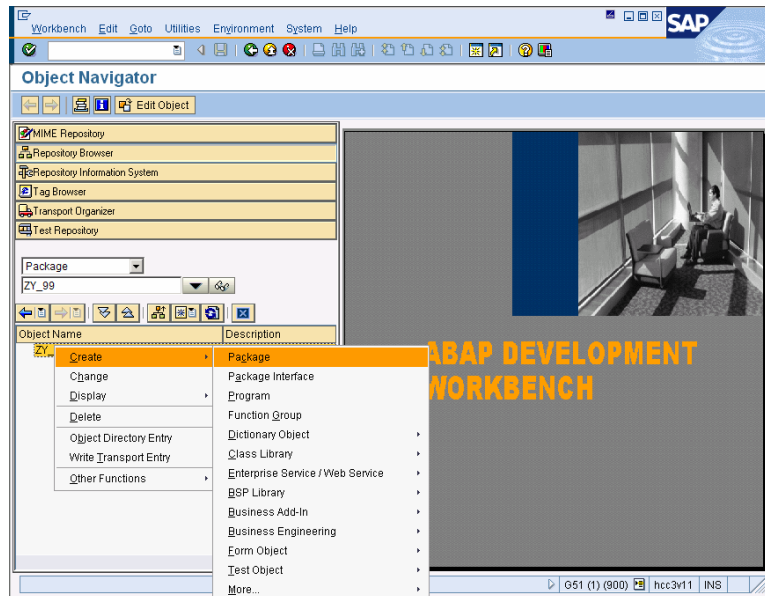Finally you have created a new package that can be used to hold your future ABAP developments.

Task 3: Create a new program ZY_##_HELLOWORLD

Short description: The aim of the task is to create your first ABAP program and to release your task and request
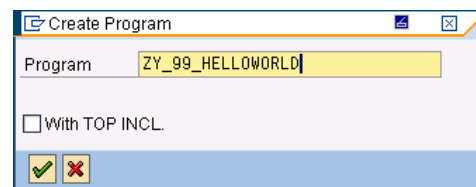

Use the right mouse button on the newly created package to create a program. From the context menu choose

Create • Program

Context Menu path

The system comes up with a pop-up asking you for a name of the new programs as well as if the program should be created with top include. We will come back later to the explanation of top include. Enter the name of the program '**ZY_##_HELLOWORLD**' and please deactivate top include.

As you are going to create a new program now and your user is not registered in the system as a developer user you will be asked for an access key. This key is provided by your lecturer. So please type in the access key and go on.
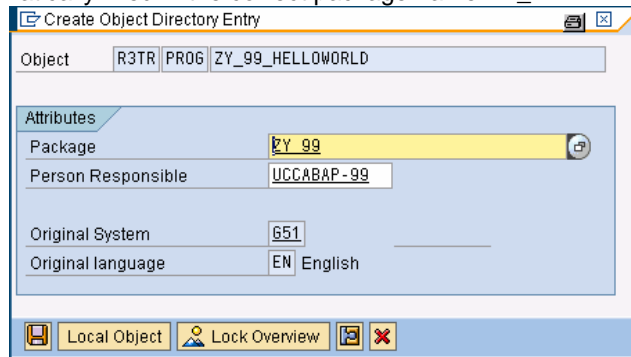
Access key

In the next step you have to define the program attributes. Please enter '**Test Program'** as the status of the program. The rest of the attributes can be left as they are. Use the button '**Save**' to go on.
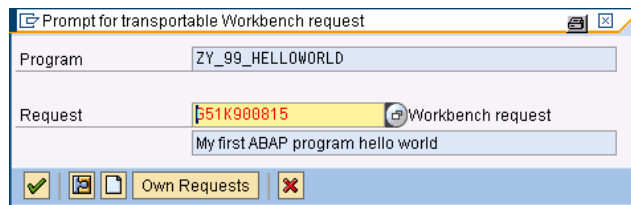
Test Program

In the next step the SAP system asks for a package. This absolutely makes sense as new developments always have to be assigned to a package. Usually the SAP system chooses a package which was created by you. So please check if the SAP system automatically filled in the correct package name **ZY_##.**
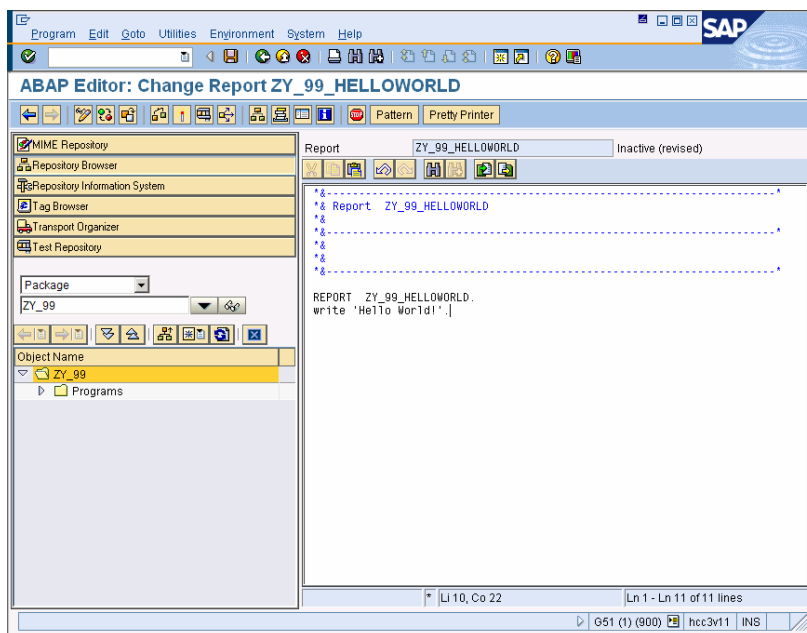
Package name ok?

The SAP system now asks for a transport request. Please create a new transport request. Consult Task 2 if you have questions regarding the request creation.

Create a new request

After you have created the transport request you can continue. As you can see the SAP system automatically created a new report and now you will fill up the report with some content. Add the new line: **write 'Hello World!'.** Please pay attention to the dot at the end of the line as this indicates the end of the current line. The dot in ABAP is similar to the semicolon in Java or C#.
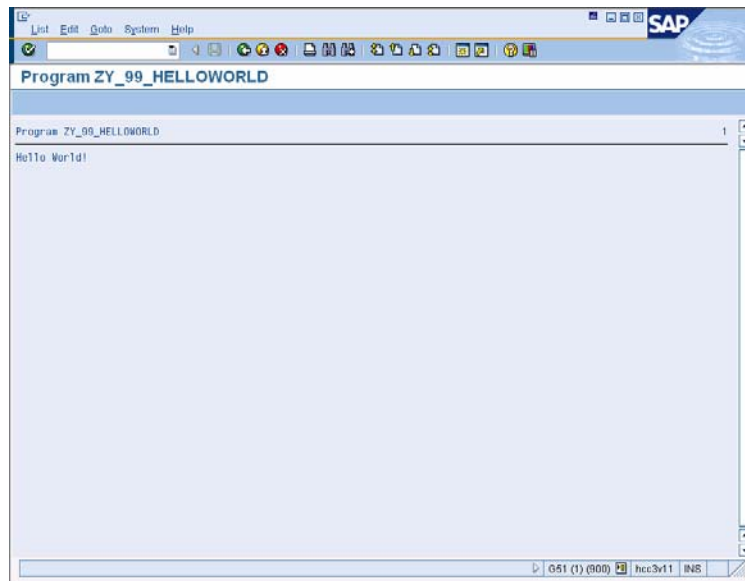
First statement

Save your new program using the menu path **Program • Save** and check your program for any syntax errors. Checking can be done via menu path **Program • Check • Syntax**. Before execution of the program is possible you have to activate the program. Activation in this context means updating the SAP repository and checking in the new version of the program. Please activate the program via **Program • Activate**.

Save, check and activate

To test your new program, please use the menu path **Program • Test • Direct Processing (for Inactive display)**. The result should show your first program ZY_##_HELLOWORLD. To get back to the ABAP Development Workbench, use the '**Back**' button.

Test new program

Now in the last step of the task we want to release our first program for transportation to other SAP systems. Therefore we create a new session via menu path **System • Create Session**. In the new created session you call the Transport Organizer using the SAP Easy Access Menu path:

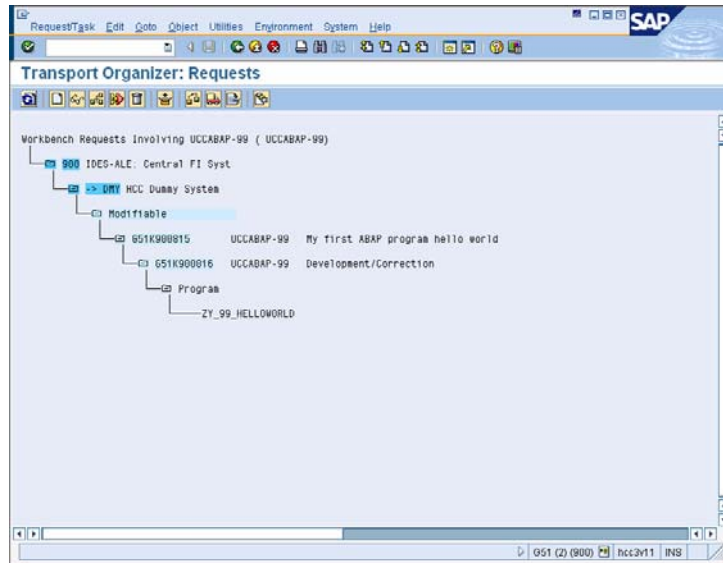**Tools • ABAP Workbench • Overview • Transport Organizer**

Menu path

You may also use the transaction code **SE09** for direct access.

Please type in your username into the **User input field** (if it is not already) and **deselect the Customizing Request checkbox**. Now hit **Enter**.

The Transport Organizer shows all of your transport requests. You should see the request for your new package as well as the request for your first program. Expand the request node for your program by pressing the '**Plus'** symbol on the left side. The request contains the development of one program which is named ZY_##_HELLOWORLD. The development of the program is assigned to a task. The task itself is assigned to the request. A request may contain many tasks for different developers.
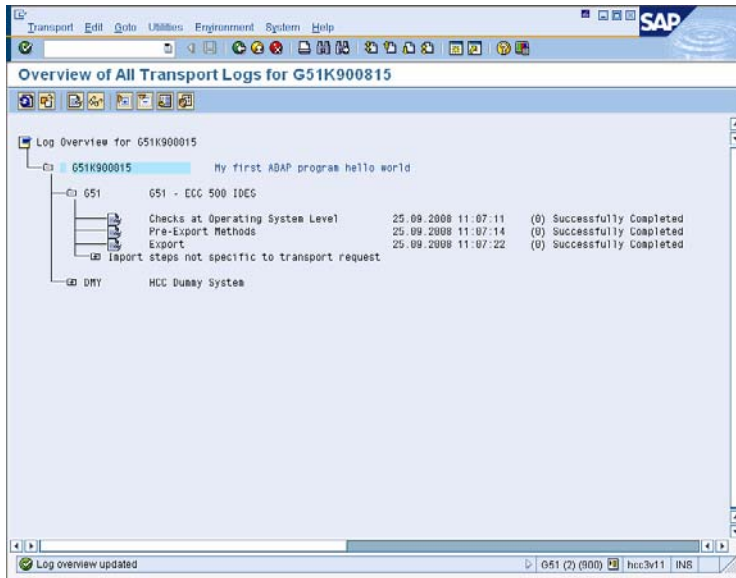
Expand request

In the last step you will release your request now. Therefore in a first step the task has to be released. To do so, use your right mouse button and click on the task (Development/Correction Brach level). Select '**Release Directly'** from the context menu. After the task is released you can go on and release the request. Click with the right mouse button on the request and select '**Release Directly'** from the context menu.

Release task and request

The SAP system now creates the export of the transport request so that the developments are available to other SAP systems. This may take a few seconds. It is necessary to refresh the display. To refresh the display please use menu path **Edit • Refresh**. After successful completion your screen should look similar to this:

In the Transport Organizer you may have a look on your transport requests again and you will notify that your request and your task are released now. A released request as well as a released task cannot be edited or changed anymore. So if you want further developments to your new programs you will have to create another transport request.

Request and task released