CEON
Business Systems & Marketing Pty. Ltd.

# CEON – ABAP™ Eclipse Editor

**White Paper**

# 1. Introduction

ABAP™ Eclipse Editor is an external ABAP™ editor for SAP®. It is an easy to use development tool, which successfully extends the ABAP™ development capabilities of SAP® to the Eclipse development environment (including the SAP® NetWeaver Developer Studio environment). It accelerates time-to-market for developers building ABAP™ services/applications. The plug-in connects to SAP® like the SAP's SAPGUI® using the same user authentication methods. Because of this, ABAP™ Eclipse Editor users must be registered in the SAP system as a SAP developer, like when they are developing with SAPGUI® itself.

SAP customers use ABAP™ (Advanced Business Application Programming) for their own developments. Such developments can be important for adapting SAP ERP standard solutions to specific problems. The ABAP™ Development Workbench contains all the tools you need to create and maintain ABAP™ programs, however, the standard SAP ABAP™ editor does not have the features the ABAP™ Eclipse Editor holds, which enables developers to significantly improve efficiency of their development work.

**Why did we develop the ABAP Eclipse editor?**

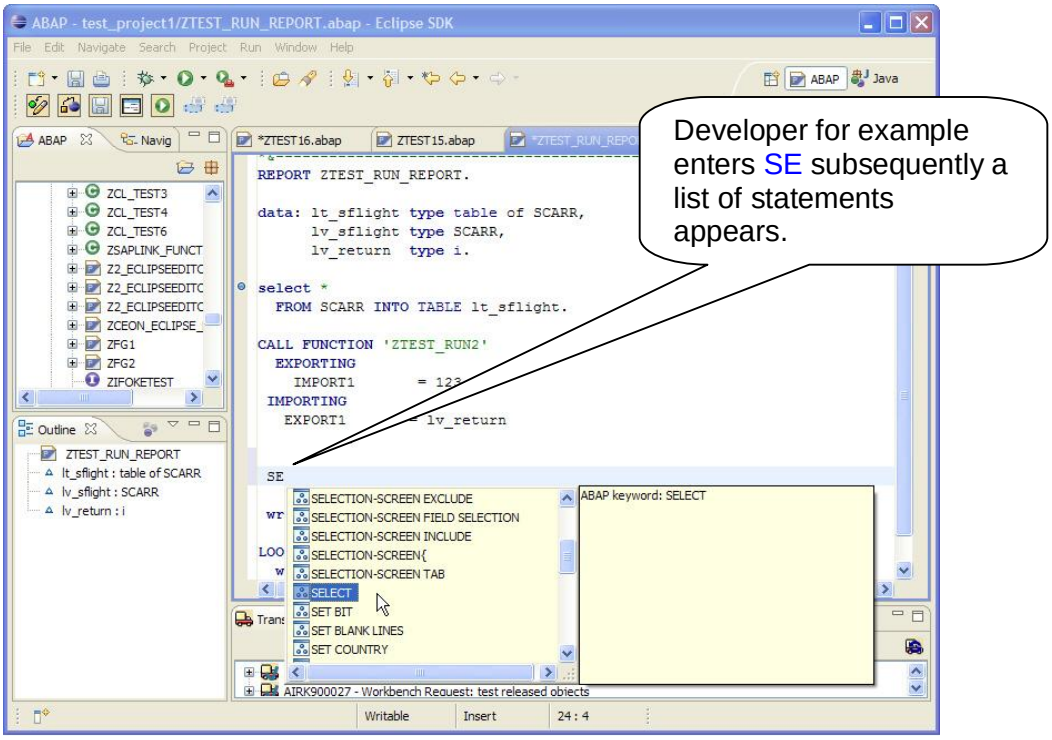
Main reason is that ABAP™ development resources are scarce and expensive. Therefore we wanted to increase efficiency of development work by improving tools that support developers in carrying out development work. We focused on development processes that take time and are prone to errors and thus achieved to significantly increase efficiency of development effort.

**The best of two worlds...**
We have combined the power of the well known Eclipse™ IDE with the proven functionality of the SAP® ABAP™ Workbench to develop an innovative new ABAP Editor.

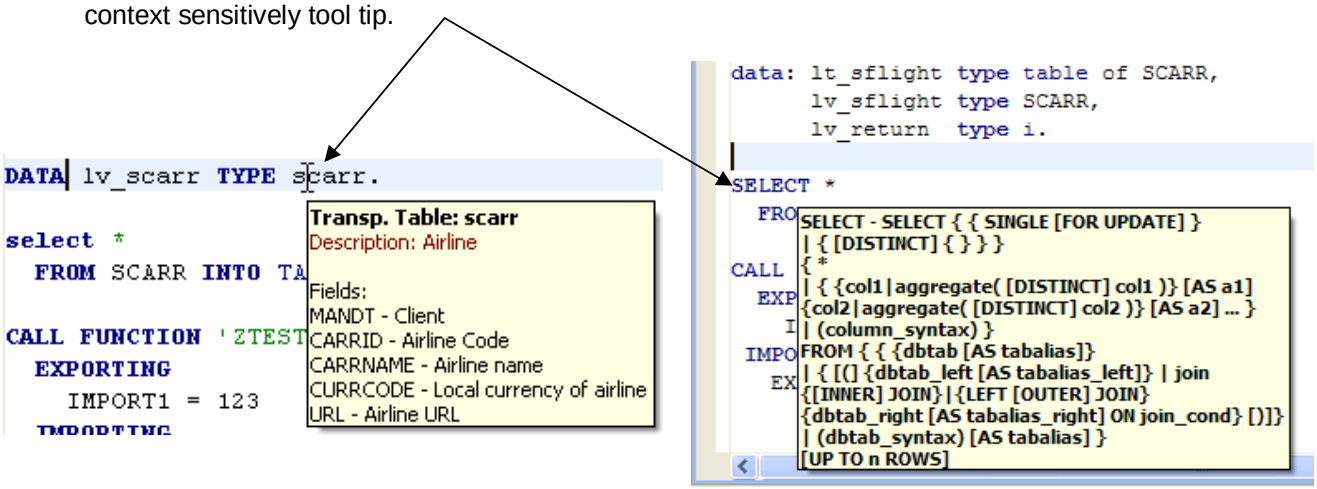
Hereafter we explain and demonstrate a couple of features that are available in the ABAP Eclipse editor.

# 2. Code Assistant

***Writing of source code.***
Writing of source code will be easier and more effective using the Eclipse editor. While typing the first few letters of variable names, statements etc. the editor suggests the most likely variable names/statements etc. you intend to use. This saves a significant amount of effort.




While writing source code, you frequently need information about different program objects (global/local variables, method parameter, FIELD-SYMBOLS, INCLUDE etc.).
Simply move the mouse cursor onto an object name (as shown below with the SELECT statement and transparent table SCARR). The Editor informs you about the program object via a context sensitively tool tip.

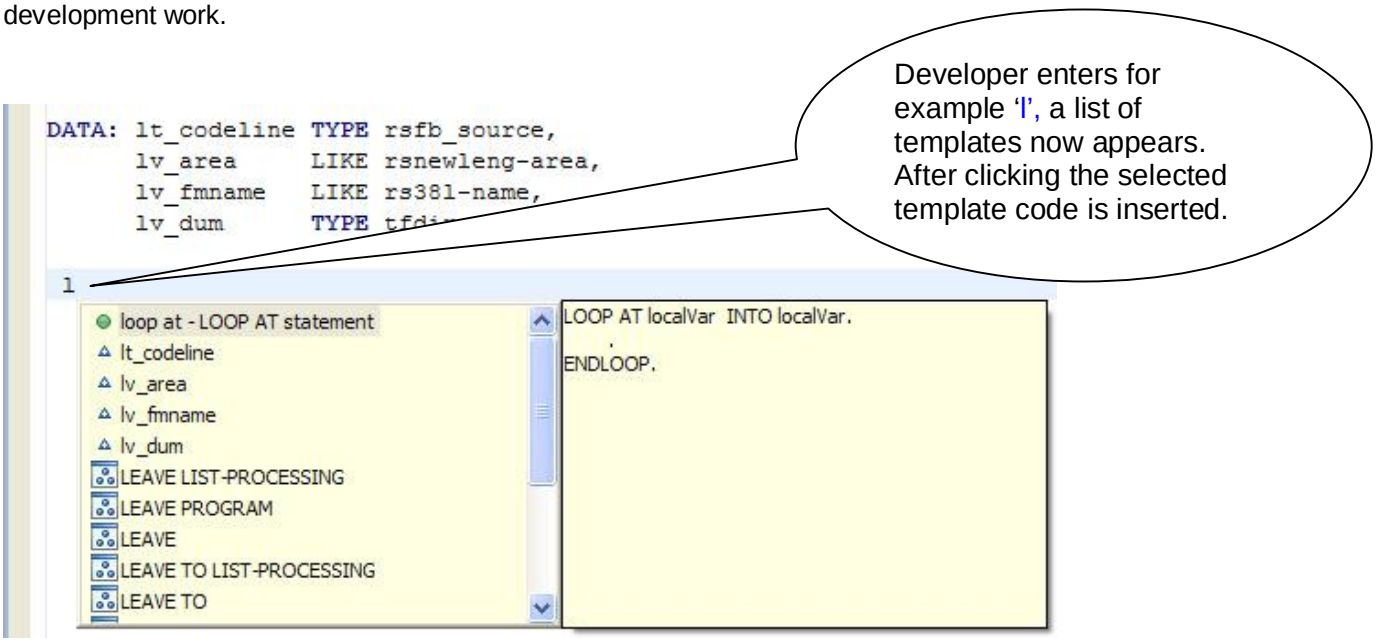


Data/ABAP™ Dictionary information can also be retrieved via the Data Dictionary view. The Data dictionary will be displayed next to the source code so no screen navigation is needed.
Smart navigation between is reports, function modules, objects, interfaces, data dictionary objects etc. is easily been done by holding the ctrl key and pressing the object.

## *Code Template.*

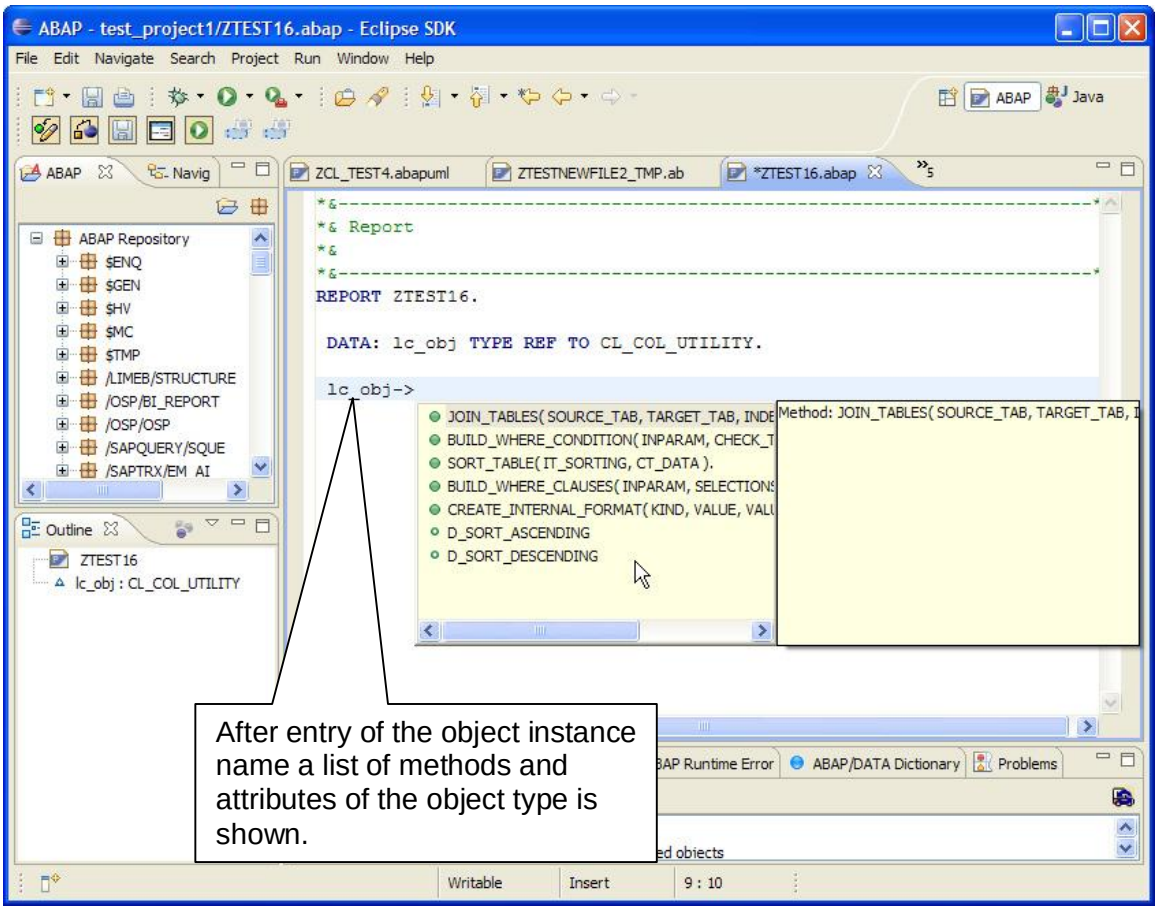
Why would you want to type in frequently used lines of code again and again?
Frequently used templates (written by experts) containing hundreds of lines of code are available.
You can also build your own templates.

Predefined statements and combinations of statements are in the background available which makes it easier to select when needed the respective coding thus improving the effectiveness of development work.



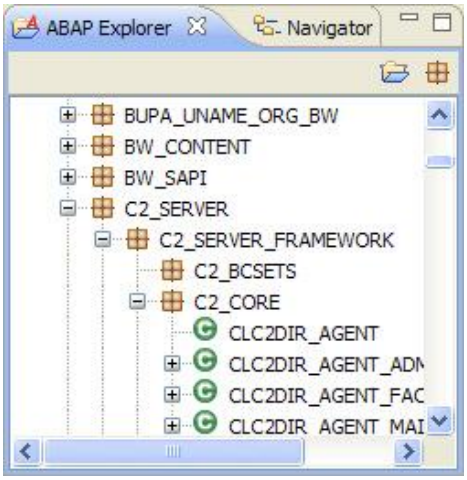
### *Retrieve methods and attributes from objects.*

Methods and attributes from objects can be quickly searched from the selected object and interface.
This saves costly development effort.




### *Package Inheritance*

Package inheritance enables to drop down from module level to the lowest possible level in order to retrieve/select module components required for understanding the module as shown below. Thus it allows to get a quick overview of the program's package structure.

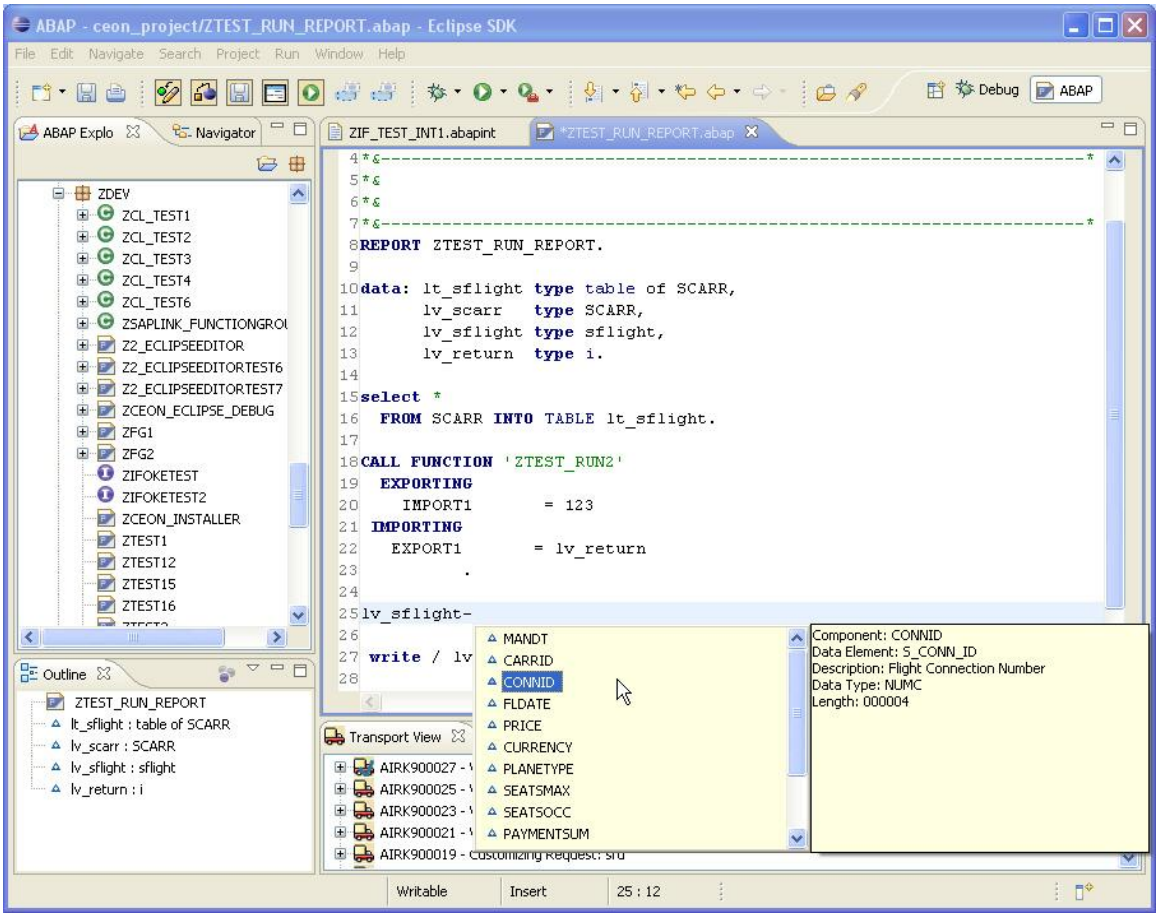


## *Retrieve components/fields from structures.*

Fields of a table or type structures are often used during daily programming tasks.

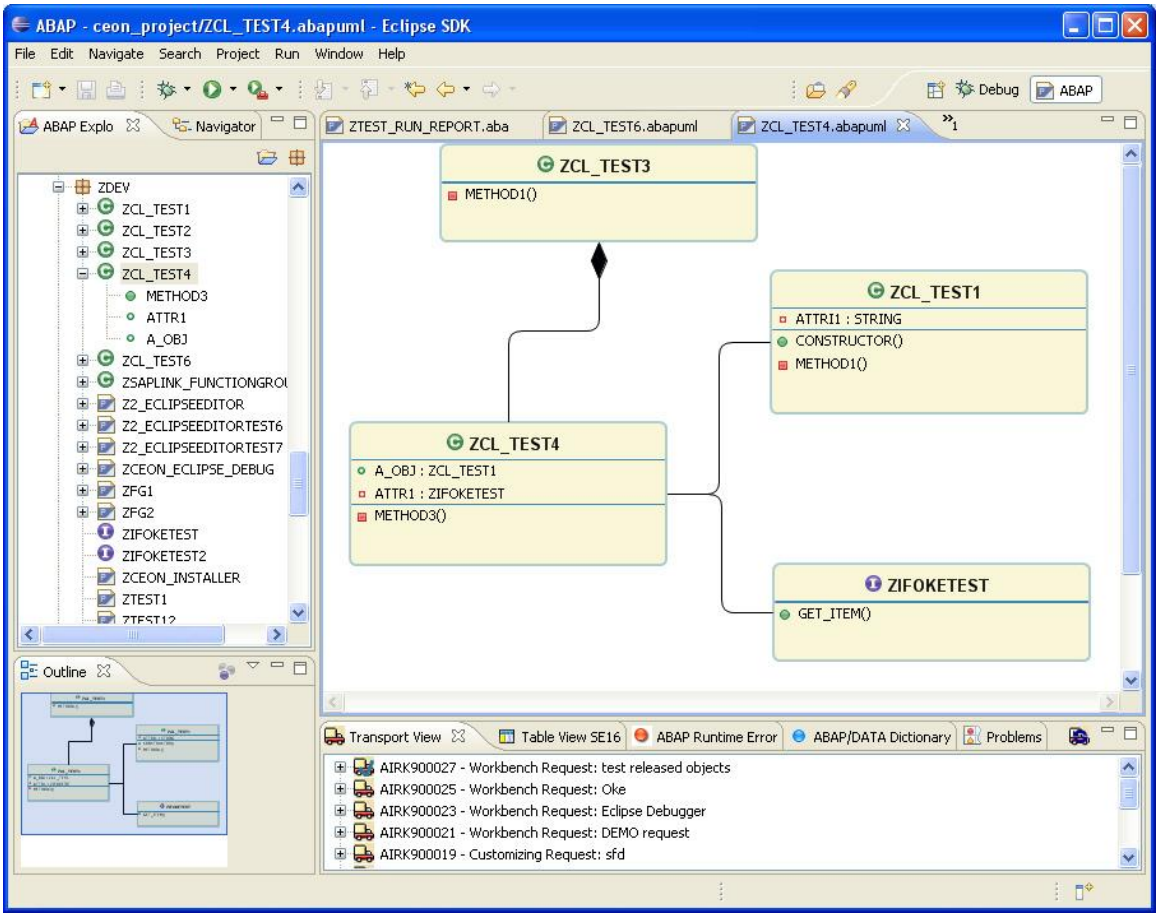
So why search for the exact field names in the DDIC (e.g. via double clicking)?
The ABAP Eclipse editor helps you interactively:
If you type in a variable of a structure type e.g. lv_sflight- the Eclipse editor displays a pop up window with all available table fields in the structure (incl. Data element, type, name, description, length). With the Enter key you can insert the complete field name in one step. No additional typing is necessary.

As you can see after entry of '-' a list of components are shown, selecting component CONND shows characteristics of this component.



# 3. ABAP™ Objects UML Diagrams

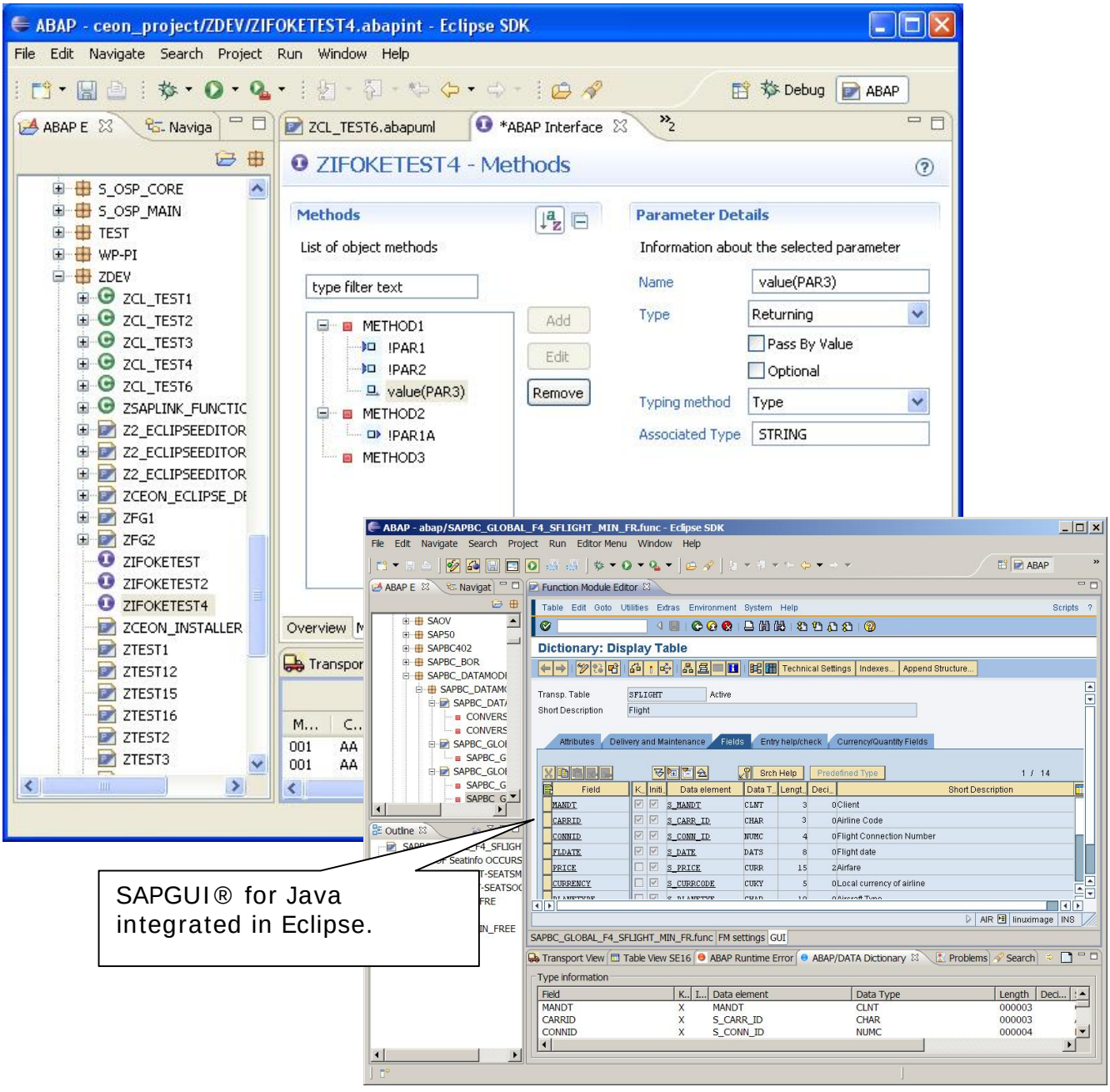
This feature gives an excellent overview of the structure of ABAP objects. Objects and Interfaces are shown in a graphical way. Thus it enables developers to quickly understand the structure of software. It allows as well to easily navigate from a UML-diagram to code and vice versa. From UML one can update Objects or Interfaces.



# 4. Close to other development environments

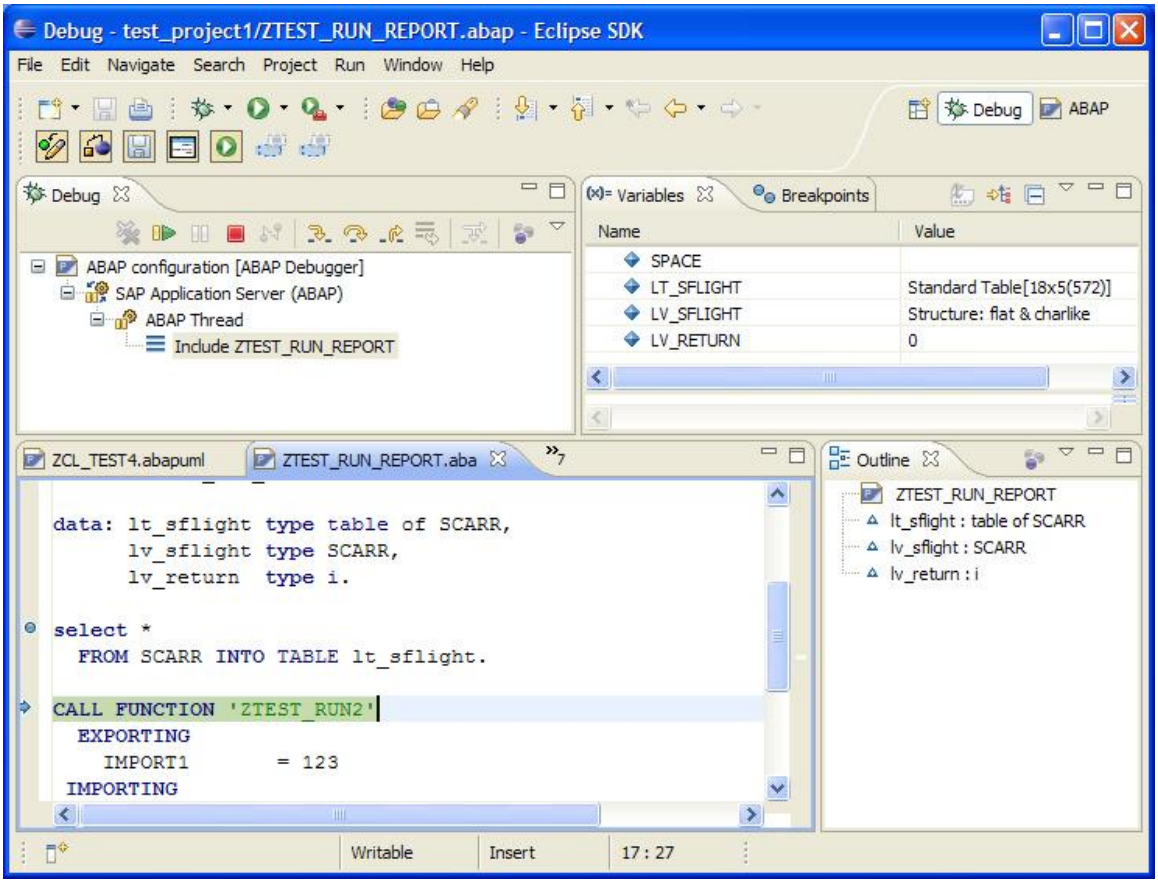
As shown below, editing methods can be done just like SAP transaction SE24. But now with the combination of both worlds ABAP™ and Eclipse.

- ABAP™ Integrated in Eclipse features like To-do/tasks, cheat sheet, help, templates etc. etc.
- Code generation for other programming languages such as; C++, Java, PHP etc.
- Familiar development environment.
- Easy accessibility to other development environments.
- Other programming languages can be applied in the Eclipse editor as well.



## 5. Debugging

Completed code of new developed functionality can be directly tested from within the Eclipse editor applying debugging features as shown below.
Code can immediately be modified during debugging.




## 6. Implement Classic and New BAdi.

## 7. BApi Explorer.

## 8. SM50: View Process Overview

# 9. Future developments

In the coming years innovative developments will be made available in future releases to constantly improve productivity of ABAP developers.

Subscription to a Yearly Maintenance fee of 10% of the purchase price guarantees you benefit from future developments.

# 8. Contact

ABAP Eclipse Editor Website: http://www.ceon.com.au/abapeclipse
Website: http://www.ceon.com.au
Email: info@ceon.com.au

CEON Business Systems & Marketing Pty Ltd.
Level 11, George Street,
Sydney, NSW 2000.
Australia

Tel. 02 9262 5599