

Hovitaga Report Generator

Boosting SAP report development processes

Executive overview

Hovitaga Report Generator is an ABAP add-on that accelerates SAP reporting by significantly reducing development time. This is achieved with automatic ABAP code generation, which eliminates manual programming of code that is always part of every report but is always different.

Depending on the generation settings, 200-1000+ lines of ABAP code can be generated in a few minutes. This can save from a few hours to a day of development time depending on the complexity of the report.

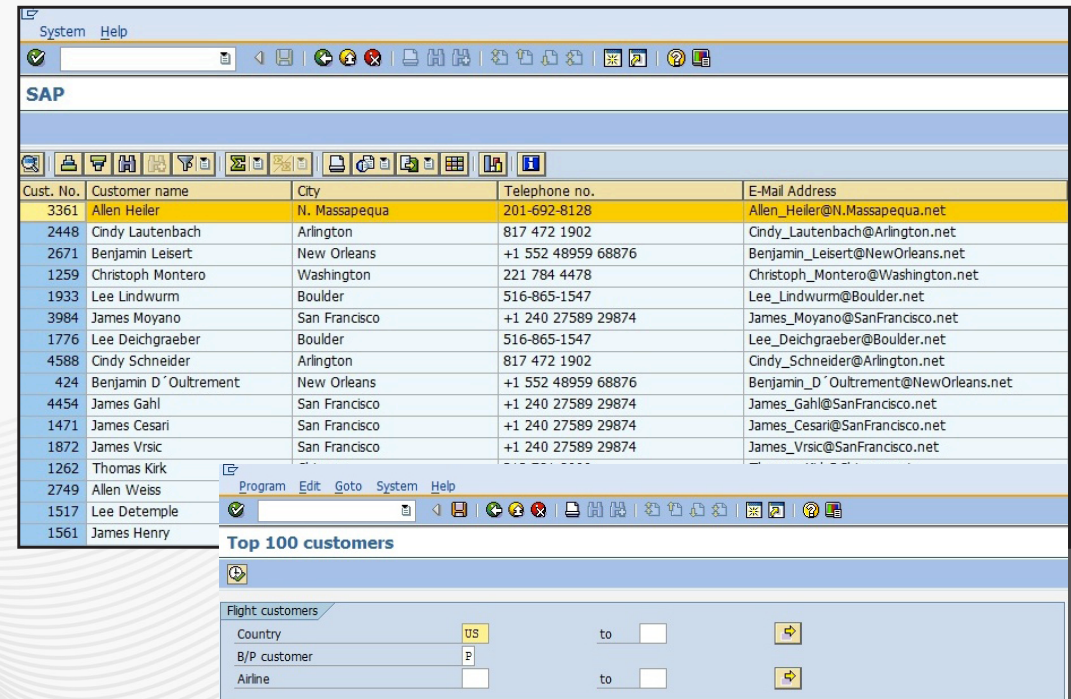
Reporting is critical from the perspective of the business, since all business decisions are based on some sort of report. The availability and quality of SAP reports have a great influence on the efficiency of SAP implementations. Creating custom business reports is a key area software developers and consultants spend a lot of time on. Your business can benefit from accelerated ad-hoc reporting with the use of Hovitaga Report Generator.

Introduction

Are you frequently requested for reports like “how many products does a customer order monthly, aggregated by product type”, “who are the top 20 customers in Bonn and which is their favorite product” or simply “how much do we spend monthly on printing costs”? If so, the Hovitaga Report Generator is the right tool for you!

The Report Generator is a powerful software that helps SAP consultants and

ABAP developers to quickly create simple reports. Only the OpenSQL query has to be built, no further ABAP programming is required. The source code of an ABAP program will be generated automatically, along with a transaction code, that directly executes the report. The generated report can have a selection-screen and it displays the data with an ALV grid or ALV tree. Thanks to the standard look and feel every authorized user can use the report.



The screenshot displays the SAP Hovitaga Report Generator interface. The top part shows a table with customer data, including columns for Cust. No., Customer name, City, Telephone no., and E-Mail Address. Below the table, there is a selection screen titled 'Top 100 customers' with fields for Country (US), B/P customer, and Airline.

Cust. No.	Customer name	City	Telephone no.	E-Mail Address
3361	Allen Heiler	N. Massapequa	201-692-8128	Allen_Heiler@N.Massapequa.net
2448	Cindy Lautenbach	Arlington	817 472 1902	Cindy_Lautenbach@Arlington.net
2671	Benjamin Leisert	New Orleans	+1 552 48959 68876	Benjamin_Leisert@NewOrleans.net
1259	Christoph Montero	Washington	221 784 4478	Christoph_Montero@Washington.net
1933	Lee Lindwurm	Boulder	516-865-1547	Lee_Lindwurm@Boulder.net
3984	James Moyano	San Francisco	+1 240 27589 29874	James_Moyano@SanFrancisco.net
1776	Lee Deichgraeber	Boulder	516-865-1547	Lee_Deichgraeber@Boulder.net
4588	Cindy Schneider	Arlington	817 472 1902	Cindy_Schneider@Arlington.net
424	Benjamin D'Oultremont	New Orleans	+1 552 48959 68876	Benjamin_D'Oultremont@NewOrleans.net
4454	James Gahl	San Francisco	+1 240 27589 29874	James_Gahl@SanFrancisco.net
1471	James Cesari	San Francisco	+1 240 27589 29874	James_Cesari@SanFrancisco.net
1872	James Vrsic	San Francisco	+1 240 27589 29874	James_Vrsic@SanFrancisco.net
1262	Thomas Kirk			
2749	Allen Weiss			
1517	Lee Detemple			
1561	James Henry			

Top 100 customers

Flight customers

Country: US to []

B/P customer: [] to []

Airline: [] to []

With the standard functionalities of the ALV grid the list can be easily visualized using charts and diagrams, and can be exported to MS Excel for further analysis. This export functionality provides a way to supply business users with live data from your SAP system for detailed analytics.

Product Highlights

The Report Generator is built on the top of the Hovitaga OpenSQL Editor. You not only can generate reports, but you can also instantly test your OpenSQL queries.

Any OpenSQL query can be built, checked and executed easily, the result is displayed instantly. User-friendly features help to construct the SELECT commands as comfortably as possible.

ABAP reports can be generated based on the OpenSQL queries. The report is created as a standard repository object, it can be assigned to a package and added to a transport request. The entire source code of the report, the type and data declarations, the coding of the ALV display, the definition of the selection screen and the data selection query is automatically generated. This way developers can spare a lot of time when creating new reports!

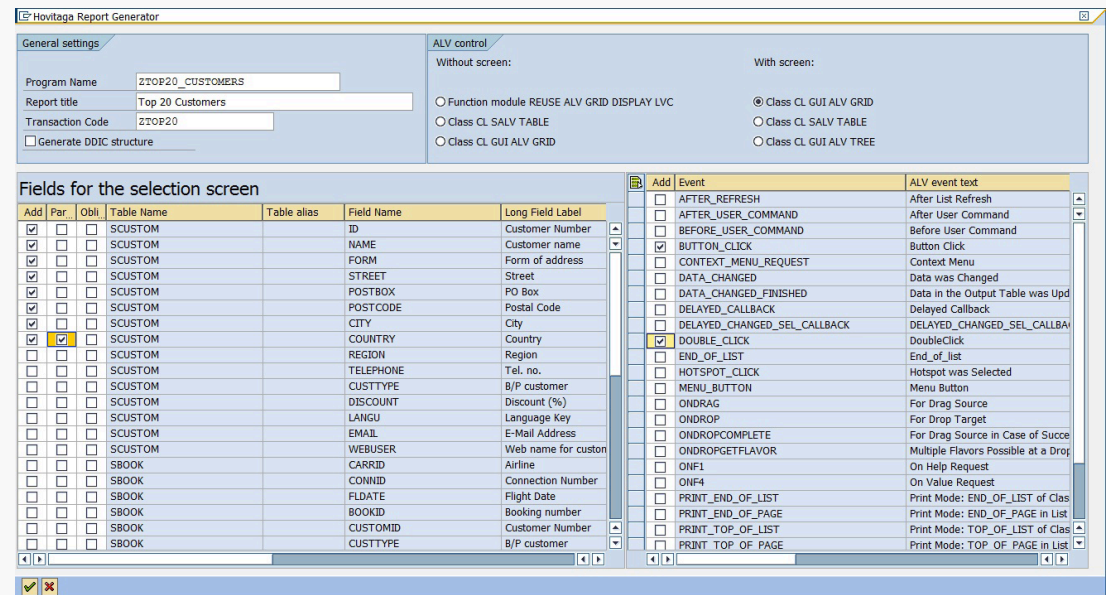
The generated source code is fully compliant with the SAP developer guidelines (naming conventions etc.), it is well commented and readable, allowing developers to easily modify or enhance the report by adding further coding if needed.

Features in detail

Report generation

All you have to do for a new report is to build the OpenSQL query which reads the data from the database. The software will guide you thru the rest of the process.

- You can select from a list which fields would you like to include in the selection screen as select-options or selection parameters.
- You can select which event handler methods of the ALV grid or Tree would you like to implement.
- Choose a name and a transaction code for the report.
- You can specify the package name and the transport request for the new objects with the standard dialogs.



The screenshot shows the 'Hovitaga Report Generator' window. It has two main tabs: 'General settings' and 'ALV control'. The 'General settings' tab is active, showing fields for 'Program Name' (ZTOP20_CUSTOMERS), 'Report title' (Top 20 Customers), and 'Transaction Code' (ZTOP20). There is a checkbox for 'Generate DDIC structure'. The 'ALV control' tab is also visible, showing options for 'Without screen' and 'With screen'. The 'With screen' section has radio buttons for 'Function module REUSE ALV GRID DISPLAY LVC', 'Class CL SALV TABLE', and 'Class CL GUI ALV GRID'. The 'Fields for the selection screen' table is shown below, with columns for 'Add', 'Par.', 'Obl.', 'Table Name', 'Table alias', 'Field Name', and 'Long Field Label'. The table lists various fields from the SCUSTOM table, including ID, NAME, FORM, STREET, POSTBOX, POSTCODE, CITY, COUNTRY, REGION, TELEPHONE, CUSTTYPE, DISCOUNT, LANGUAGE, EMAIL, WEBUSER, CARRID, CONNID, FLDATE, BOOKID, CUSTOMID, and CUSTTYPE. The 'Add' column has checkboxes, and the 'Par.' column has checkboxes. The 'Obl.' column has checkboxes. The 'Table Name' column has checkboxes. The 'Table alias' column has checkboxes. The 'Field Name' column has checkboxes. The 'Long Field Label' column has checkboxes. The 'ALV event text' table is also visible, showing a list of events and their corresponding text.

You no longer need to manually implement the following code, since all these are automatically generated with a few clicks:

- definition of selection screens
- type declaration
- data declaration
- programming of the UI (ALV grid or tree)
- declaration of event handler class and methods

- creation of a global structure in the data dictionary or a local structure in the report

You can choose which ALV control to use:

- class based ALV grid (cl_gui_alv_grid)
- class based SALV table (cl_salv_table)
- class based ALV tree (cl_gui_alv_tree)
- function module based ALV grid (reuse_alv_grid_display_lvc)

Having all the options above, every developer can find the control that is the most comfortable for him/her, regardless of age, experience or skill level.

Execution of OpenSQL queries - One of the most interesting features is that the SQL statement can be executed and the result is displayed immediately. Developers can test and optimize the SQL query for rapid prototyping, and when the query is ready, a

standard SAP report can be generated based on it. The generated report will take over the field structure of the result set.

Robustness - All syntax variations are accepted, without the use of local variables. Group functions, subqueries (nested to any level), inner and outer joins are all supported.

Linked Query Assistant - A feature that helps to develop commands with inner and outer joins. The Linked Query Assistant reads the data dictionary to explore the relations between database tables. With a few clicks, a join or a subquery may be implemented automatically, without typing anything.

Field Selection Wizard - An efficient feature that provides a way to select the fields used in a command without manual typing. It reads the table definition from the Data Dictionary and offers the fields with their descriptions in a list for selection.

```
Report      ZTOP20_CUSTOMERS      Active
157  L *-----*
158  FORM main_prog.
159
160  IF go_alv_grid IS INITIAL.
161
162  * build field catalog for the ALV grid
163  PERFORM create_fcat.
164
165  * Create the ALV grid
166  CREATE OBJECT go_alv_grid
167  EXPORTING
168    i_parent = cl_gui_container=>default_screen.
169
170  * Register event handlers
171  SET HANDLER lcl_event_handler_alv=>on_button_click FOR go_alv_grid.
172  SET HANDLER lcl_event_handler_alv=>on_double_click FOR go_alv_grid.
173
174  * create grid
175  CALL METHOD go_alv_grid->set_table_for_first_display
176  CHANGING
177    it_outtab          = gt_result
178    it_fieldcatalog     = gt_fcat
179  EXCEPTIONS
180    invalid_parameter_combination = 1
181    program_error                = 2
182    too_many_lines               = 3
183    others                      = 4.
184
185  IF sy-subrc <> 0.
186    MESSAGE ID sy-msgid TYPE sy-msgty NUMBER sy-msgno
187            WITH sy-msgv1 sy-msgv2 sy-msgv3 sy-msgv4.
188  ENDIF.
189  ELSE.
190    CALL METHOD go_alv_grid->refresh_table_display.
191  ENDIF.
192
193  * display screen
194  CALL SCREEN 100.
```

```
1  SELECT scustom-id
2         scustom-name
3         scustom-city
4         t005t~landx50
5         scustom-telephone
6         scustom-email
7         SUM( loccuram ) AS sum_payment
8  FROM   scustom INNER JOIN sbook ON scustom-id = sbook~customid
9         INNER JOIN t005t ON t005t~land1 = scustom~country
10
11  UP TO 20 ROWS
12  WHERE carrid = 'LH' AND t005t~spras = sy-langu
13
14  GROUP BY scustom-id
15          scustom-name
16          scustom-city
17          t005t~landx50
18          scustom-telephone
19          scustom-email
20
21  ORDER BY sum_payment DESCENDING
```

Commands can be organized into folders within the My Repository - Command properties may be set for each command (short and long description, link to Business Object or Application Component, search terms..). Commands can be searched by any of these properties.

Benefits

The benefits of Hovitaga Report Generator are affecting both the technical people and the business people. The business can benefit from a quicker ad-hoc reporting process. The average time to develop an SAP report will be drastically reduced. The sooner the ad-hoc reports are available, the better the business runs.

Technical people will also benefit from using the product. ABAP developers and SAP consultants don't have to waste time and effort on monotonous work arising every time, but can concentrate on the business logic of the reports that they develop.

As a summary, SAP IT costs can be significantly lowered due to reduction of development time needed to create SAP reports.

Requirements and installation

The Report Generator is entirely written in ABAP, so it is transparent (not a black-box development) and integrated into the SAP system. No interfaces needed, no platform-dependency, no separate IT team to maintain. It does not expose the SAP system to any access from outside.

Installation is a process of few minutes, since it only consists of importing one transport with the TMS (Transport Management System). The only additional effort is to set up the authorizations for the users. Due to the intuitive user interface and extensive documentation no consulting or implementation project is needed. On request, we can install the software for you.

Hovitaga Report Generator runs on SAP 4.6C but some features require SAP Netweaver 7.00 (aka. 2004s) or above.

Support and maintenance

We provide two levels of support. Standard support makes our customers eligible to receive regular support packages that contain all corrections and improvements. Customers who choose the premium support will receive every enhancement or correction immediately without having to wait for the new support package to be released. The Report Generator can be purchased without any support also, if required.



To learn more about Hovitaga Report Generator, visit www.hovitaga.com or send a mail to info@hovitaga.com.

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