# E-mail ABAP Report List Output in HTML Format

SAP DEVELOPER NETWORK

# SDN Community Contribution

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# E-mail ABAP Report List Output in HTML Format

SAP DEVELOPER NETWORK

## Applies To:

WAS 6.40

## Summary

Code sample for emailing ABAP report list output as HTML email. Note this doesn't support ALV GRID reports. This has been implemented as a Function Module interface.

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**Company**: Atos Origin Middle East

**Date**: 4th April 2006

## The CODE

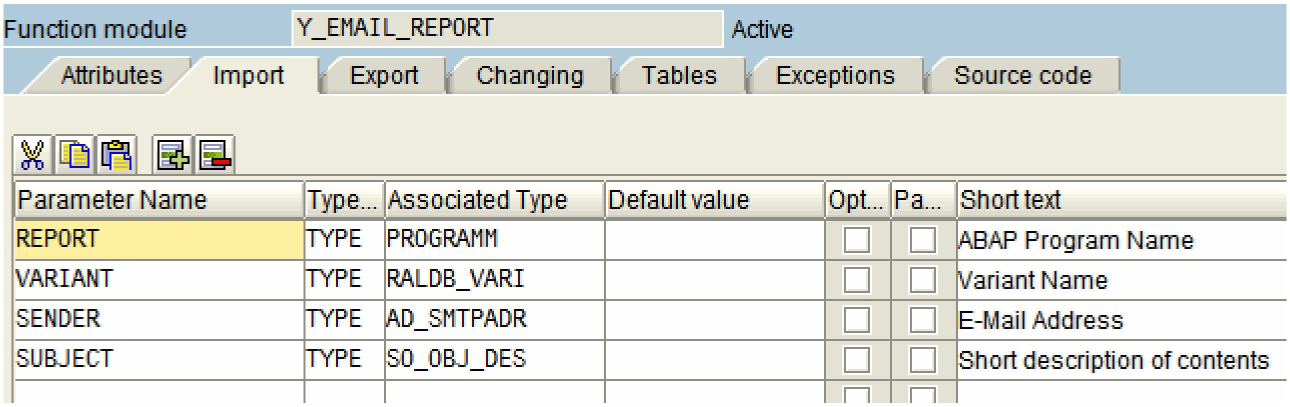
1. As a first step , create a Function group (if you are not familiar with creating function modules and function groups check this link http://help.sap.com/saphelp_nw04/helpdata/en/26/64f623fa8911d386e70000e82011b8/frameset.htm)

2. Copy paste the following code in the top include (global data) of the function group

```
DATA: send_request       TYPE REF TO cl_bcs.
  DATA: text               TYPE bcsy_text.
  DATA: document           TYPE REF TO cl_document_bcs.
  DATA: sender_id             TYPE REF TO if_sender_bcs.
  DATA: recipient          TYPE REF TO if_recipient_bcs.
  DATA: bcs_exception      TYPE REF TO cx_bcs.
  DATA: sent_to_all        TYPE os_boolean.
  DATA: conlength TYPE i ,
        conlengths TYPE so_obj_len ,
        result_content TYPE string .
  DATA: content_length     TYPE   w3param-cont_len ,
        content_type       TYPE   w3param-cont_type,
        return_code TYPE   w3param-ret_code .
  DATA: listobject TYPE TABLE OF abaplist.
  DATA: html_wa TYPE w3html.

  DATA: html TYPE STANDARD TABLE OF w3html .
  DATA: wa_rec TYPE ad_smtpadr .
  DATA: bcs_message TYPE string .
  DATA: tmp_str TYPE string .
  DATA: prog TYPE programm ,
        var TYPE raldb_vari .
```

3. Create the Function Module with parameters as shown in the following screen shots.

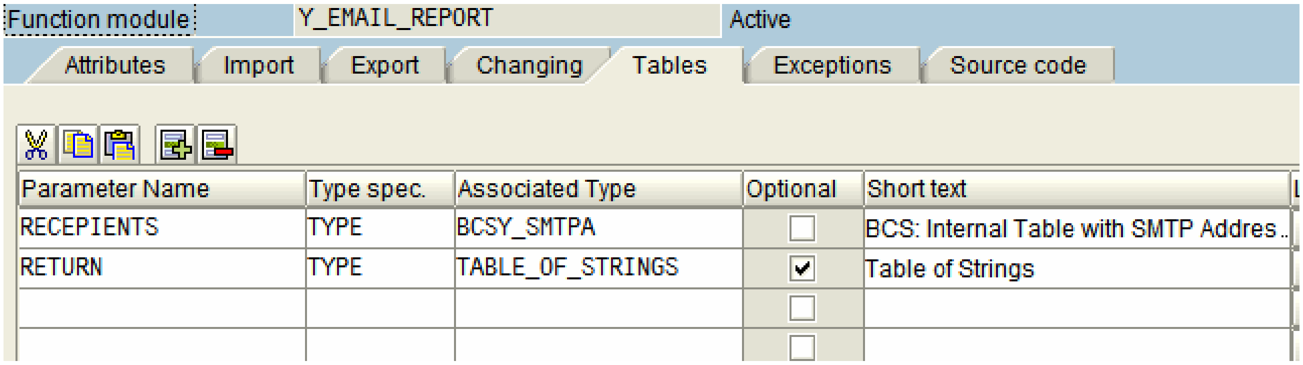
**Import parameters:**



Function module Y_EMAIL_REPORT Active

| Parameter Name | Type... | Associated Type | Default value | Opt... | Pa... | Short text |
|---|---|---|---|---|---|---|
| REPORT | TYPE | PROGRAMM | | □ | □ | ABAP Program Name |
| VARIANT | TYPE | RALDB_VARI | | □ | □ | Variant Name |
| SENDER | TYPE | AD_SMTPADR | | □ | □ | E-Mail Address |
| SUBJECT | TYPE | SO_OBJ_DES | | □ | □ | Short description of contents |
| | | | | □ | □ | |

Tables:



Function module Y_EMAIL_REPORT Active

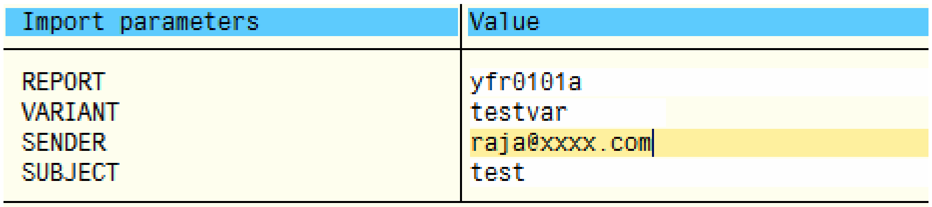
| Parameter Name | Type spec. | Associated Type | Optional | Short text |
|---|---|---|---|---|
| RECEPIENTS | TYPE | BCSY_SMTPA | □ | BCS: Internal Table with SMTP Addres... |
| RETURN | TYPE | TABLE_OF_STRINGS | ☑ | Table of Strings |
| | | | □ | |
| | | | □ | |

4. Copy paste the following code in the Source code section of the Function Module.

```
FUNCTION y_email_report.
*"----------------------------------------------------------------------
*"*"Local Interface:
*"  IMPORTING
*"     REFERENCE(REPORT) TYPE  PROGRAMM
*"     REFERENCE(VARIANT) TYPE  RALDB_VARI
*"     REFERENCE(SENDER) TYPE  AD_SMTPADR
*"     REFERENCE(SUBJECT) TYPE  SO_OBJ_DES
*"  TABLES
*"      RECEPIENTS TYPE  BCSY_SMTPA
*"      RETURN TYPE  TABLE_OF_STRINGS OPTIONAL
*"----------------------------------------------------------------------


  IF NOT recepients[] IS INITIAL .
    CLEAR: var, prog .
    MOVE: report TO prog ,
          variant TO var .
    TRANSLATE prog TO UPPER CASE .
    TRANSLATE var TO UPPER CASE .
    SUBMIT (prog) USING SELECTION-SET var  EXPORTING LIST TO MEMORY AND RETURN.
    CLEAR: listobject , html .
    REFRESH : listobject, html .

    CALL FUNCTION 'LIST_FROM_MEMORY'
      TABLES
        listobject = listobject.

    CALL FUNCTION 'WWW_HTML_FROM_LISTOBJECT'
      EXPORTING
        report_name = prog
      TABLES
        html        = html
        listobject  = listobject.
    CLEAR tmp_str .
    CLEAR : html_wa .
    LOOP AT html INTO html_wa .
      CONCATENATE tmp_str html_wa INTO tmp_str.

    ENDLOOP .
    CLEAR: conlength,conlengths .

    conlength = STRLEN( tmp_str ) .
    conlengths = conlength .

    TRY.
        CLEAR send_request .

        send_request = cl_bcs=>create_persistent( ).

        CLEAR document .
        document = cl_document_bcs=>create_document(
                        i_type    = 'HTM'
                        i_text    = html
                        i_length  = conlengths
                        i_subject = subject ).

*     add document to send request
        CALL METHOD send_request->set_document( document ).

        CLEAR sender_id .
        sender_id = cl_cam_address_bcs=>create_internet_address( sender ).
        CALL METHOD send_request->set_sender
          EXPORTING
            i_sender = sender_id.

        CLEAR wa_rec .

        LOOP AT recepients INTO wa_rec  .
          CLEAR recipient .

          recipient = cl_cam_address_bcs=>create_internet_address(
                                            wa_rec ).

*     add recipient with its respective attributes to send request
          CALL METHOD send_request->add_recipient
            EXPORTING
              i_recipient = recipient
              i_express   = 'X'.
        ENDLOOP .
        CALL METHOD send_request->set_status_attributes
          EXPORTING
            i_requested_status = 'E'
            i_status_mail      = 'E'.

        CALL METHOD send_request->set_send_immediately( 'X' ).
*      ---------- send document ---------------------------------------
        CALL METHOD send_request->send(
          EXPORTING
            i_with_error_screen = 'X'
          RECEIVING
            result              = sent_to_all ).
        IF sent_to_all = 'X'.
          APPEND 'Mail sent successfully ' TO return .
        ENDIF.

        COMMIT WORK.

      CATCH cx_bcs INTO bcs_exception.
        bcs_message = bcs_exception->get_text( ).
        APPEND bcs_message TO return .
        EXIT.

    ENDTRY.
  ELSE .

    APPEND 'Specify email address for sending' TO return .
  ENDIF .


ENDFUNCTION.
```

5. Tips on passing parameters:

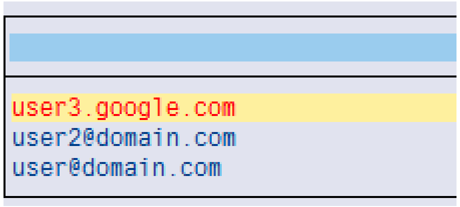
Import Parameters:



| Import parameters | Value |
|---|---|
| REPORT | yfr0101a |
| VARIANT | testvar |
| SENDER | raja@xxxx.com |
| SUBJECT | test |

Tables parameter:

Receipients table:



| |
|---|
| user3.google.com |
| user2@domain.com |
| user@domain.com |

## Author Bio

Durairaj Athavan Raja works as Business System Analyst with Atos Origin Middle East and has been involved in SAP development for over 8 years. He is a big fan of SDN.