

How to Send a Data Load Status Mail from SAP BI Using "Quick Stats"

Applies to:

All SAP BI 3.x

Summary

Support Consultants / Data Load monitoring team has to send the Load status mails daily to all the users / Team to update about the Error Loads or overall load Status.

For this kind of flexibility we do not have any Direct/Automated tool in BW system through which DLM Team/consultants can **CHECK** and **SEND** the Data Load status mail directly from BW System. So, this custom tool "Quick Stats" will provides you the solution.

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Author Bio



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When and Why to Use *Quick Stats*?

BW Support Consultants / Data Load monitoring team has to send the Load status mails daily to all the users / Team to update about the Error Loads or overall load Status.

For this kind of flexibility we do not have any Direct/Automated tool in BW system through which DLM Team/consultants can **CHECK** and **SEND** the Data Load status mail directly from BW System. So, this custom tool "*Quick Stats*" will provides you the solution.

Please implement the below Abap Program in any SAP BW system which will give you this flexibility.

Prerequisites:

- BW system has to be connected to Web which you can ask your basis team to setup.
- Global IDs (Gmail. Hotmail etc) or Official ID are to be defined.
- Consultant implementing to tool in their system should have knowledge on Abap.

Note:

- Internal Group Mail IDs **WILL NOT WORK**.
- Not good for the running loads. Please change the Code if needed.
- Mailer-Daemon cannot be handled.
- Recipients has to see the content of the mail in Font **Lucida Console** with size 10 for Best View in MS word / Note Pad

Working with Quick Stats

Tool Name: "Quick Stats"

Quick Stats

The screenshot shows the SAP Quick Stats tool interface. It features a blue header bar with a clock icon and the text "Quick Stats". Below the header, there are several input fields and buttons. The "Date" field contains "18.04.2007" and has a "to" field next to it. The "InfoSource" field is empty and also has a "to" field. The "Senders UserId" field contains "E..." and has a "Valid Sender ID to maintain sender information (Must be maintained)" annotation. The "Mail To - E-Mail Address" field contains "aniraparthi@hotmail.com". The "Copy To - E-Mail Address" field contains "raparthi.anil@gmail.com" and has a "Recipients Mail ID (Best if Global IDs are maintained)" annotation. There are yellow arrows pointing to the "to" fields and a yellow highlight on the "Copy To" field.

Selection criteria for the date

Date 18.04.2007 to

InfoSource to

Senders UserId E... Valid Sender ID to maintain sender information (Must be maintained)

Mail To - E-Mail Address aniraparthi@hotmail.com

Copy To - E-Mail Address raparthi.anil@gmail.com Recipients Mail ID (Best if Global IDs are maintained)

Output:

Test send mail											1	
Stat	Date	Time	Load	Type	IS	InfoSource	InfoPackage	InfoCube	Rec-Sel	Rec-in	User	ST
00	18.04.2007	19:03:18	D	M	0	OMAT_SALES	Delta: OMAT_SALES_ATTR	?	1	1	BIWREMOTE	08
00	18.04.2007	19:03:19	F	M	0	OMAT_UNIT	Full: OMAT_UNIT_ATTR	?	678	3	BIWREMOTE	08
00	18.04.2007	19:09:59	F	M	0	OMOVETYPE	OMOVETYPE_ATTR	?	236	0	BIWREMOTE	08
00	18.04.2007	19:03:12	F	M	0	0PLANT			17	0	BIWREMOTE	08
00	18.04.2007	19:01:59	F	M	0	0PRODORDER			793	0	BIWREMOTE	08
00	18.04.2007	19:02:18	F	M	0	0PRODVERS			54	0	BIWREMOTE	08
00	18.04.2007	19:01:08	F	M	0	0PROFIT_CTR			821	1	BIWREMOTE	08
00	18.04.2007	19:09:10	F	M	0	0SALESDEAL			236	0	BIWREMOTE	08
00	18.04.2007	19:01:09	F	M	0	0SALESORG			2	0	BIWREMOTE	08
00	18.04.2007	19:02:51	F	M	0	0STKEYFIG			57	0	BIWREMOTE	08
00	18.04.2007	19:07:20	F	M	0	0STOR_LOC	0STOR_LOC_ATTR	?	107	0	BIWREMOTE	08
00	18.04.2007	19:01:12	F	M	0	0TRANSTYPE	0TRANSTYPE_ATTR	?	259	0	BIWREMOTE	08
00	18.04.2007	19:01:13	D	M	0	0VENDOR	Delta: 0VENDOR_ATTR	?	18.569	16	BIWREMOTE	08
00	18.04.2007	19:08:11	D	M	0	0VEN_COMP	Delta: 0VEN_COMP_ATTR	?	3.789	0	BIWREMOTE	08
00	18.04.2007	19:03:13	D	M	0	0VEN_PUR			678	3	BIWREMOTE	08
00	18.04.2007	19:09:40	F	M	0	0WBS_ELEM			236	0	BIWREMOTE	08
00	18.04.2007	19:07:18	F	M	0	0WORKCENTER			133	0	BIWREMOTE	08
00	18.04.2007	19:05:36	F	M	0	0ASASSET			798	4	BIWREMOTE	08
00	18.04.2007	19:06:13	F	M	0	0ASBANKGL			4.047	0	BIWREMOTE	08
00	18.04.2007	19:06:55	F	M	0	0ASBANK_V			2.881	0	BIWREMOTE	08
00	18.04.2007	19:01:11	F	M	0	0ASCOMPANY	Attr from R3->ASCOMPANY	?	3.788	1	BIWREMOTE	08
00	18.04.2007	19:04:12	F	M	0	0ASIFR_PUR	ASIFR_PUR_ATTR	?	161	0	BIWREMOTE	08
00	18.04.2007	19:12:19	F	M	0	0ASIOCHAR	ZFHUP_COORD_ATTR	?	24	0	BIWREMOTE	08
00	18.04.2007	19:11:19	F	M	0	0ASIOCAT			13	0	BIWREMOTE	08
00	18.04.2007	19:11:58	F	M	0	0ASIOCHAR			34	0	BIWREMOTE	08
00	18.04.2007	19:08:51	F	M	0	0ASUPACKNO			236	0	BIWREMOTE	08
00	18.04.2007	19:11:32	F	M	0	0BP_BNFPO			429	0	BIWREMOTE	08
00	18.04.2007	19:06:25	F	M	0	0GP_CM_DL			2.881	0	BIWREMOTE	08
00	18.04.2007	19:04:01	F	M	0	0GP_INFREC			134	0	BIWREMOTE	08
00	18.04.2007	19:08:03	F	M	0	0MAT_PLANT	Delta: OMAT_PLANT_ATTR	?	568	1	BIWREMOTE	08
00	18.04.2007	09:34:45	C	D	I	2LIS_D9_BF	Init: 2LIS_D9_BF-Goods Movements From IM	ASPUR_C03	7.561	7.486	EWRAH	0A
00	18.04.2007	04:03:25	D	D	I	8ASWM_003	Delta Package for Update by ODS ASWM_003	ASWM_C03	279	0	CHYEM	0A
00	18.04.2007	19:01:07	F	M	0	0ASSET	0ASSET_ATTR	?	6.436	4	BIWREMOTE	0A
00	18.04.2007	19:08:15	F	M	0	0GN_VENDOR	Full: 80VENDORM	?	3.789	0	BIWREMOTE	0A
00	18.04.2007	19:03:15	R	M	0	0MATERIAL	Delta: 0MATERIAL_ATTR	?	1	1	BIWREMOTE	0A
00	18.04.2007	19:03:13	F	M	0	0SBAT_MAT	Full: 0SBAT_MAT_ATTR	?	1.497	0	BIWREMOTE	0A

Load: D- Delta / F- Full Load / R - Repeat / C - initialization / I - Opening balance

Load Type: M- Master / T- Text / H- Hierarchy/ D- Transaction

Data Target Type: I - Cube / O- InfoObject

Email Sent to anilraparathi@hotmail.com
Copy to raparathi.anil@gmail.com

Recipient Mail ID list in case of success

Tables Used

System tables: rsseldone, rsreqdone, rsldpiot, rsmonfact.

Transp. Table	RSSELDONE	Active
Short Text	Monitor: Selections for executed request	

Transp. Table	RSREQDONE	Active
Short Text	Monitor: Saving of the QM entries	

Transp. Table	RSLDPIOT	Active
Short Text	Texts about variants logpid	
Attributes Delivery and Maintenance Fields Entry help/check Cur		

Transp. Table	RSMONFACT	Active
Short Text	Fact table monitor	

Abap code for Quick Stats

```
*-----*
* Abap code for "Quick Stats".
* Developer: Anil Raparathi & Ravi Swarna
* Use: 1) BW Support team can check the Load status for a requested date.
*      2) Can send and E-mail with a list of all FAILED InfoPackages
* Date: June 18th June 2007
*-----*
```

report ZTEST_SENDMAIL line-size 150.

tables: rsseldone, rsreqdone, rsldpiot, rsmonfact.

select-options: s_datum for sy-datum.
 selection-screen skip 1.
 select-options: s_is for rsseldone-source.
 selection-screen skip 1.
 parameters: s_uname like sy-uname obligatory default sy-uname.
 selection-screen skip 1.
 parameters: r_intadr like adr6-smtp_addr.
 parameters: c_intadr like adr6-smtp_addr.

include <icon>.

types: rsatr_dta_object(1) type c.
 types: rsm3_isource(31) type c.
 types: rsatr_command(30) type c.

data: t_select like rscdst occurs 0 with header line.
 data: l_t_seldone like rsseldone occurs 0 with header line,
 l_t_rnr like rsrnr occurs 0 with header line.

data: begin of g_s_mon_list,
 rnr type rsreqnr,
 date like sy-datum,
 time like sy-uzeit,
 zeit like sy-uzeit,
 is type rsm3_isource,
 is_type like rsseldone-typ,
 ds type rsm3_isource,
 ip type rslogdpid,
 ip_text(40) type c,
 cube type rsinfocube,
 qs type rsslogsys,
 user like sy-uname,

```

stat like icon_green_light(3),
view type rs_bool,      "already seen
flw type rs_bool,      "follow-up necessary
assi like sy-msgno,
add_rec like rsmonfact-req_select,
RNRTYP like rsseldone-rnrtyp,
in_rec like rsmonfact-req_insert_sum,
L_typ like rsseldone-updmode,
loc type rs_error_location,
end of g_s_mon_list.

* g_t_mon_list like g_s_mon_list occurs 0.
data: begin of g_t_mon_list occurs 0.
  include structure g_s_mon_list.
data: end of g_t_mon_list.

data: begin of err_list occurs 0,
  errline like soli-line,
  end of err_list.

data: date like sy-datum.
data: lcnt type i.
data: ws_ip type rslogdpid.
data: ws_err(1) type c.
data: sep(1) type c value ';'.
data: wdate like sy-datum.
*****
initialization.

at selection-screen.

start-of-selection.
* Setup Selection
refresh: t_select, err_list, g_t_mon_list.
clear: t_select, ws_ip, ws_err.

t_select-fnam = 'DATUM'.
describe table s_datum lines lcnt.
if lcnt > 0.
  loop at s_datum.
    t_select-sign = s_datum-sign.
    t_select-option = s_datum-option.
    t_select-low = s_datum-low.
    t_select-high = s_datum-high.
    append t_select.
  endloop.

```



```
else.
```

```
  t_select-sign = 'I'.
  t_select-option = 'BT'.
  wdate        = sy-datum - 1.
  t_select-low  = wdate.
  t_select-high = sy-datum.
  append t_select.
endif.
```

```
* Call Function to get list of Packages Scheduled
```

```
call function 'RSSM_MON_READ'
  exporting
    language      = sy-langu
  tables
    t_select      = t_select
    t_rnr         = l_t_rnr
  exceptions
    no_record_found = 1.
```

```
* Fill Internal Table
```

```
perform fill_rnr_list tables l_t_rnr.
```

```
sort g_t_mon_list descending by ip date zeit.
```

```
clear: lcnt.
```

```
* Keep last Package Loaded
```

```
loop at g_t_mon_list.
  if ws_ip is initial.
    move g_t_mon_list-ip to ws_ip.
  endif.
  if ws_ip = g_t_mon_list-ip.
    add 1 to lcnt.
    if lcnt > 1.
      delete g_t_mon_list.      "delete subsequent entries
    endif.
  else.
    move g_t_mon_list-ip to ws_ip.
    move 1 to lcnt.
  endif.
endloop.
```

```
* create header for output to email
```

```
move 'Date_____'      to err_list-errline.
move 'Time_____'      to err_list-errline+9(*).
move 'Load_____'      to err_list-errline+16(*).
* move 'T_____'        to err_list-errline+22(*).
move 'InfoSource_____' to err_list-errline+22(*).
```

```

move 'InfoPackage Text____' to err_list-errline+37(*).
* move 'Cube'          to err_list-errline+71(*).

append err_list.
clear err_list.

* Print to Spool
sort g_t_mon_list by stat is_type is date zeit.
loop at g_t_mon_list into g_s_mon_list.

  if g_s_mon_list-stat+1(2) = '08'.
    write:/ icon_green_light as icon.
  * if g_s_mon_list-stat+1(2) = '09'.
  *   write:/ icon_YELLOW_light as icon.
  else.
    write:/ icon_red_light as icon.
    move 'E' to ws_err.
    move g_s_mon_list-date  to err_list-errline.
    move g_s_mon_list-zeit  to err_list-errline+9(*).
    move g_s_mon_list-L_typ  to err_list-errline+17(*).
    move g_s_mon_list-is_type to err_list-errline+19(*).
    move g_s_mon_list-is     to err_list-errline+22(*).
    move g_s_mon_list-ip_text to err_list-errline+37(*).
  *   move g_s_mon_list-cube  to err_list-errline+71(*).

  append err_list.
* endif.
endif.
write:
6 g_s_mon_list-date,
16 '|',
17 g_s_mon_list-zeit,
25 '|',
26 g_s_mon_list-L_typ,
30 '|',
31 g_s_mon_list-rnrtyp,
34 '|',
35 g_s_mon_list-is_type,
37 '|',
38 g_s_mon_list-is,
55 '|',
56 g_s_mon_list-ip_text,
98 '|',
99 g_s_mon_list-cube,
112 '|',
113 g_s_mon_list-add_rec,

```

```

124 '|',
125 g_s_mon_list-in_rec,
136 '|',
138 g_s_mon_list-user,
148 '|',
149 g_s_mon_list-stat+1(2),
151 '|'.
*****

*****

endloop.
* Send email if load errors
if not ws_err is initial.
  if not r_intadr is initial.
    perform email_via_class.
  endif.
endif.

*&-----*
*&  Form fill_rnr_list
*&-----*
*   text
*-----*
*   -->P_T_RNR  text
*-----*
form fill_rnr_list tables p_t_rnr structure rsnr.

data l_time_string_s(2) type c.
data l_time_string_l(6) type c.
data l_s_monictab      like rsmonictab.
data l_t_monictab      type rsmm_t_ictab.
data l_s_uicdone       type rsuicdone.
data l_t_uicdone       type rsmm_t_uicdone.
data l_t_reqicods      like rsreqicods occurs 0.
data l_s_reqicods      like rsreqicods.
data l_s_rsmonfact     like rsmonfact.
data l_dta_type        type rsatr_dta_object.

constants: rsm3_c_unknown type c value '?',
rsatr_c_dta_get type rsatr_command value 'GET'.

loop at p_t_rnr.
* ---- RequestID ----
  g_s_mon_list-rnr = p_t_rnr-rnr.
  select single * from rsseldone where rnr = p_t_rnr-rnr

```

```

                and source in s_is.
if sy-subrc = 0.

* ---- Time and Date ----
call function 'RSSM_GET_TIME'
  exporting
    i_datum_utc = rsseldone-seldate
    i_zeit_utc = rsseldone-seltime
  importing
    e_datum_loc = g_s_mon_list-date
    e_zeit_loc = g_s_mon_list-zeit.
l_time_string_s = g_s_mon_list-zeit.
concatenate l_time_string_s '0000' into l_time_string_l.
if l_time_string_l = '000000'.
  l_time_string_l = '000001'.
endif.
g_s_mon_list-time = l_time_string_l.

* ---- InfoSource ----
* concatenate rsseldone-typ rsseldone-source into g_s_mon_list-is.
move rsseldone-typ to g_s_mon_list-is_type.
move rsseldone-source to g_s_mon_list-is.
  if g_s_mon_list-is is initial.
    g_s_mon_list-is = rsm3_c_unknown.
  endif.

* ---- Request Type ---
g_s_mon_list-rnrtyp = rsseldone-rnrtyp.

* ---- DataSource ----
concatenate rsseldone-rnrtyp rsseldone-oltpsource
  into g_s_mon_list-ds.
if g_s_mon_list-ds is initial.
  g_s_mon_list-ds = rsm3_c_unknown.
endif.

* ---- Logsys ----
g_s_mon_list-qs = rsseldone-logsys.
if g_s_mon_list-qs is initial.
  g_s_mon_list-qs = rsm3_c_unknown.
endif.

* ---- User ----
g_s_mon_list-user = rsseldone-uname.
if g_s_mon_list-user is initial.
  g_s_mon_list-user = rsm3_c_unknown.
endif.

* ---- InfoPackage ----

```

```

g_s_mon_list-ip = rsseldone-logdpid.
g_s_mon_list-ip_text = rsseldone-logdpid.
if g_s_mon_list-ip is initial.
  g_s_mon_list-ip = rsm3_c_unknown.
else.
  select single * from rsldpiot
    where logdpid = rsseldone-logdpid
    and objvers = 'A'.
  if sy-subrc = 0.
    move rsldpiot-text to g_s_mon_list-ip_text.
  endif.
endif.
* ---- Status ----
select single * from rsreqdone where rnr = p_t_rnr-rnr.
if rsreqdone-qmstatus is initial.
  g_s_mon_list-stat = rsreqdone-tstatus(3).
else.
  g_s_mon_list-stat = rsreqdone-qmstatus(3).
endif.
if g_s_mon_list-stat is initial.
  g_s_mon_list-stat = rsm3_c_unknown.
endif.
* ---- Already seen ----
g_s_mon_list-view = rsreqdone-viewed.

* ---- Number of Records ---- Ewrah111
select single * from rsmonfact where rnr = p_t_rnr-rnr.
g_s_mon_list-add_rec = rsmonfact-req_select.
g_s_mon_list-in_rec = rsmonfact-req_insert_sum.
g_s_mon_list-L_typ = rsseldone-updmode.

* .... ODS-Activation missing ....
select * from rsreqicods
  into table l_t_reqicods
  where rnr = p_t_rnr-rnr
  and typ = 'I'.
select * from rsmonictab into table l_t_monictab
  where rnr = p_t_rnr-rnr
  and infocube <> ".

* ---- Assistant ----
g_s_mon_list-assi = rsreqdone-assistant.
* ---- Fehlerort ----
g_s_mon_list-loc = rsreqdone-location.
* ---- InfoCubes ----
if not l_t_reqicods[] is initial.

```

```

loop at l_t_reqicods into l_s_reqicods.
  g_s_mon_list-cube = l_s_reqicods-tabname.
  if g_s_mon_list-cube is initial.
    g_s_mon_list-cube = rsm3_c_unknown.
  endif.
  append g_s_mon_list to g_t_mon_list.
endloop.
else.
  g_s_mon_list-cube = rsm3_c_unknown.
  append g_s_mon_list to g_t_mon_list.
endif.

endif.      "select on reseldone

endloop.

endform.      " FILL_RNR_LIST
*
top-of-page.
* Heading----
write: 6 'Stat Date' ,
      16 '|',
      17 'Time' ,
      25 '|',
      26 'Load',
      30 '|',
      31 'Typ',
      34 '|',
      35 'IS' ,
      37 '|',
      38 'InfoSource',
      55 '|',
      56 'InfoPackage',
      98 '|',
      99 'InfoCube',
      112 '|',
      113 'Rec-Sel' ,
      124 '|',
      125 'Rec-in' ,
      136 '|',
      138 'User',
      148 '|',
      149 'ST',
      151 '|'.

```

uline .

```

* send email
*****
*&-----*
*&   Form email_via_class
*&-----*
* This part of coding is done by Ravi Swarna & Anil Raparathi
*-----*
* --> p1   text
* <-- p2   text
*-----*
form email_via_class .

data: send_request   type ref to cl_bcs.
data: text           type bcsy_text.
data: document       type ref to cl_document_bcs.
data: sender         type ref to cl_sapuser_bcs.
data: recipient      type ref to if_recipient_bcs.
data: bcs_exception  type ref to cx_bcs.
data: sent_to_all    type os_boolean.

try.
* ----- create persistent send request -----
  send_request = cl_bcs=>create_persistent( ).

* ----- create and set document -----
* create document from internal table with text
  loop at err_list.
    append err_list-errline to text.
  endloop.

  document = cl_document_bcs=>create_document(
    i_type   = 'RAW'
    i_text   = text
*?         i_length = '12'
    i_subject = 'BW Load Failure' ).

* add document to send request
  call method send_request->set_document( document ).

* ----- set sender -----
* note: this is necessary only if you want to set the sender
*       different from actual user (SY-UNAME). Otherwise sender is
*       set automatically with actual user.

```

```

sender = cl_sapuser_bcs=>create( s_uname ).
call method send_request->set_sender
exporting
  i_sender = sender.

* ----- add recipient (e-mail address) -----
* create recipient
recipient = cl_cam_address_bcs=>create_internet_address(
  r_intadr ).

* add recipient with its respective attributes to send request
call method send_request->add_recipient
exporting
  i_recipient = recipient
  i_express = 'X'.

* Copy To
if not c_intadr is initial.
recipient = cl_cam_address_bcs=>create_internet_address(
  c_intadr ).

call method send_request->add_recipient
exporting
  i_recipient = recipient
  i_copy = 'X'.
endif.

* ----- send document -----
call method send_request->send(
exporting
  i_with_error_screen = 'X'
receiving
  result = sent_to_all ).
if sent_to_all = 'X'.
skip 1.
write:/ 'Email Sent to ', r_intadr+0(80).
write:/ ' Copy to ', c_intadr+0(80).
endif.

commit work.

* -----
* * exception handling
* -----
* * replace this very rudimentary exception handling

```


* * with your own one !!!

* -----

```
catch cx_bcs into bcs_exception.  
  write: 'Email Send Error'.  
  write: 'Error No', bcs_exception->error_type.  
  exit.
```

endtry.

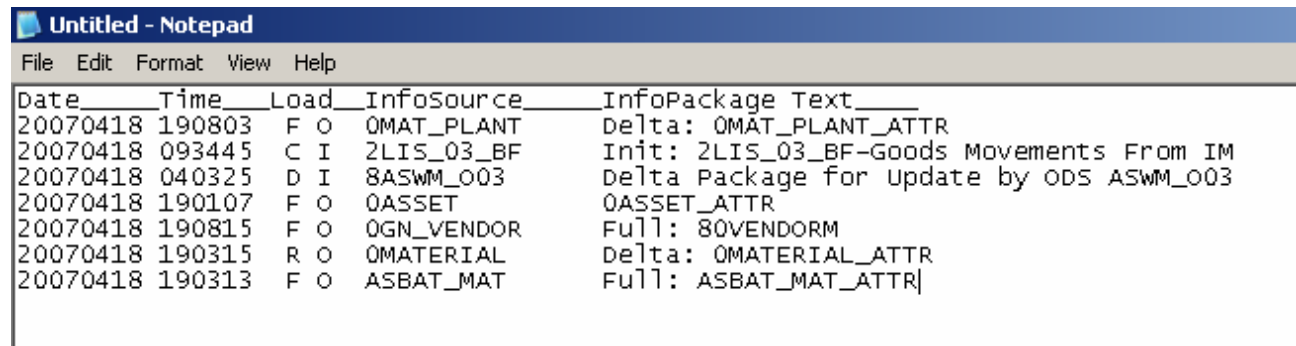
endform. " email_via_class

Mail arrived in my Global ID:




For better View:

Copy past the content of the mail in Font **Lucida Console** with size 10 for Best View in MS word / Note Pad



Tips and Tricks

1. You can enhance this tool to provide more information in the output, for which please check the system tables used in this coding.
2. You can enhance the code to show the status of the loads which are running in the system and populate the  `ICON_YELLOW_LIGHT` icon.
3. Enhance this code and provide timestamp in the selection criteria so that you can see the status for any period.
4. With the above enhancement you can even use this program at the end of the process chain (Meta chain) using Abap Prog process type and send the status mails to the users as soon as the loads are completed.
5. Create a T-Code to "Quick stats" through which you can maintain authorizations and can be restricted to certain user.
6. Authorizations can also be maintain dynamically out side the BW standard authorizations for which you need to enhance the code with certain logic.

--> create an info object and upload the user IDs as a master data and then use this Master datatable in the "Quick Stats" program where the program check the SY-UNAME in this Table else an error msg saying no authorization.

Related Content

- [Custom Process Types "Remote Trigger" and "End Time"](#)
- [Tracking Real-Time Loads with a Bex Query](#)
- [How to Track the status of all the Historical Requests in a Data Target](#)

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