

SAP HR – WORKING WITH DYNAMIC ACTIONS

***TWO-WAY INTEGRATION OF DYNAMIC
ACTIONS & ABAP PROGRAM***

PREREQUISITES :

- ***Tutorial intended for audience that familiar with basics of working with SAP
DYNAMIC ACTIONS***

SHORT THEORETIC EXPLANATION FOR ACTIONS CASE SHOWN IN THE SAMPLE :

Reference Personnel Number (RPN) in SAP HR establishes a link between multiple personnel numbers that belong to the same individual. Imagine scenarios where an employee:

- Changes their legal name: Perhaps due to marriage or other personal reasons.
- Has multiple employment contracts, Such as working concurrently in different subsidiaries of the same company.
- Rejoins the company after a break: Starting a new employment period after they previously left.

The Reference Personnel Number ensures that the employee's historical HR data, including payroll, benefits, and time records, remains connected and accessible regardless of separate personnel numbers assigned to them over time.

Where is it Stored?

SAP HR stores the Reference Personnel Number in Infotype 0031 (Reference Personnel Number). Additionally, you'll find the information within the HRP1001 table, which manages relationships between objects within the HR module.

TASK SCENARIO :

When hiring employee by reference some infotypes data are copied completely, for this purpose the field “copy infotype “ in infotype attributes must be checked, e.g.

Personal data in the screenshot:

Display View "Infotype attributes (Customizing)": Details



Infotype 0002 Personal Data

General attributes

Time constraint	1	<input type="checkbox"/> Subtype obligatory	<input type="checkbox"/> Accntng/log.data
Time cnstr.tab.		Subtype table	<input type="checkbox"/> Text allowed
Maint.aft.leave		Subty.text tab.	<input checked="" type="checkbox"/> Copy infotype
<input type="checkbox"/> Access auth.		Subtype field	<input type="checkbox"/> Propose infotype

Display and selection

Select w/ start	3	Create w/o strt	1	Sort sequence	
Select w/ end	5	Create w/o end	1	Screen header	01
Select.w/o date	2	<input type="checkbox"/> List time per.		<input type="checkbox"/> Choose data	

Retroactive accounting trigger

<input type="checkbox"/> Before ERA date	<input type="checkbox"/> Entry of RA limit time	Past entry all.	
Retr.acct.payr.	Retr.acct.PDC	No org.assign.	

Technical data	Applicant infotypes				
Single screen	2000	Dialog module	RP_0002	Applicant DBTab	
List screen	3000	Structure	P0002		
<input type="checkbox"/> List entry		Database table	PA0002		

Alternatively sometimes required to copy only partially data , e.g. cellular number, Private email address & Linkedin profile URL from IT0105 – communications & may be Preferable to do it programmatically via dynamic actions. This example explains how to do it

IN DYNAMIC ACTIONS THE NEXT ROWS MUST BE
ADDED TO CALL SUBROUTINE SET_DEFAULTS
IN THE PROGRAM ZST7_DYNAMIC_ACT_TEST :

IT...	STy.	Field N	FC	No	S	Variable function part
0000			04	370	P	**WHEN HIRING BY REFERENCE COPY COMM.DATA
0000			04	371	P	PSPAR-MASSN='01'
0000			04	372	P	PSPAR-RFPNR<>PSPAR-PERNR
0000			04	373	F	SET_DEFAULTS(ZST7_DYNAMIC_ACT_TEST)

Where pspar-pernr is the new employee number
& pspar-rfpnr is the reference employee number

In the program we have to retrieve the required communication data via reference employee number. In order to return retrieved data to dynamic actions the structure RP50D must be used. This structure included in the program of dynamic actions (MPPERS00) & must be included in our custom program.

Repository Browser

P Program

MP000000

Object Name

- Dictionary Structures
 - *P0000
 - *T529A
 - NRIV
 - P0000
 - P0001
 - P0002
 - P0003
 - P0031
 - P0302
 - PA0003
 - PME01
 - PME04
 - PME05
 - PME42
 - PRELP
 - PSHDR
 - PSKEY
 - PSPAR
 - PSYST
 - Q0000
 - RP50D**
 - RP50M
 - SELC
 - T001P
 - T100

Include MPPERS00

```
1 * ECC 600
2 * SERN632050 301
3 * SKBN842983 030
4 * ECC 500 LCP
5 * XPVN741400 062
6 * XREN741035 052
7 * 4.70 LCP
8 * SKBN329486 012
9 * XREN641106 072
10 *
11 * XYVN583532
12 * XRCN564692
13 * XPSL6BK000133
```

Structure RP50D Active

Short Description HR: Return Fields for Dynamic Actions

Attributes Components Input Help/Check Currency/quantity fields

Built-In Type 1 / 5

Component	Typing Method	Component Type	Data Type	Length	Deci...	Coordinate	Short Description
FIELD1	1 Types	CHAR20	CHAR	20	0	0	Char 20
DATE1	1 Types	DATUM	DATS	8	0	0	Date
DATE2	1 Types	DATUM	DATS	8	0	0	Date
FLAG1	1 Types	XFELD	CHAR	1	0	0	Checkbox
.INCLUDE	1 Types	CI_PRP50D		0	0	0	

This structure has included extendable structure
CI PRP50D where custom field may be added:

Structure CI_PRP50D Active

Short Description additional Return Fields for Dynamic Actions

Attributes Components Input Help/Check Currency/quantity fields

Built-In Type 1 / 3

Component	Typing Method	Component Type	Data Type	Length	Deci...	Coordinate	Short Description
PRIV_MAIL	1 Types	COMM_ID_LONG	CHAR	241	0	0	Communication: Long Identification/Number
CELL	1 Types	SYSID	CHAR	30	0	0	Communication Identification/Number
LKND	1 Types	COMM_ID_LONG	CHAR	241	0	0	Communication: Long Identification/Number

We have to add fields for next data:

MAN...	PERNR	SUB...	USRTY	USRID	USRID_LONG	OE
100	00000015	0030	0030		GYHUJI@GMAIL.COM	
100	00000015	CELL	CELL	0545321789		
100	00000015	LKND	LKND		HTTPS://WWW.LINKEDIN.COM/IN/SOMEBODY89/	

```

1  □ *&-----*
2  | *& Report ZST7_DYNAMIC_ACT_TEST
3  | *&-----*
4  | *&
5  | *&-----*
6  REPORT ZST7_DYNAMIC_ACT_TEST.
7
8  TABLES : RP50D,PSPAR.
9
10 START-OF-SELECTION.
11
12     PERFORM SET_DEFAULTS.
13 □ *&-----*
14 | *& Form set_defaults
15 | *&-----*
16 | *& text
17 | *&-----*
18 | *& -->  p1          text
19 | *& <--  p2          text
20 | *&-----*
21 □ FORM SET_DEFAULTS .
22 |
23     SELECT SINGLE USRID INTO RP50D-CELL FROM PA0105
24     WHERE USRTY = 'CELL' AND PERNR = PSPAR-RFPNR AND ENDDA > SY-DATUM.
25     SELECT SINGLE USRID_LONG INTO RP50D-PRIV_MAIL FROM PA0105
26     WHERE USRTY = '0030' AND PERNR = PSPAR-RFPNR AND ENDDA > SY-DATUM..
27     SELECT SINGLE USRID_LONG INTO RP50D-LKND FROM PA0105
28     WHERE USRTY = 'LKND' AND PERNR = PSPAR-RFPNR AND ENDDA > SY-DATUM..
29
30 ENDFORM.

```

The next challenge: customer wants to display proposal data to user & to enable or save them, or edit, or delete. For this purpose the next rows must be added to dynamic actions(the content of those rows will be performed after retrieved communication data will be returned from the program

Change View "Dynamic Actions": Overview

New Entries

IT...	STy.	Field N	FC	No	S	Variable function part
0000			04	344		*-- SA PBS. CREATE IT2001 FOR SUSPENSION
0000			04	370	P	**WHEN HIRING BY REFERENCE COPY COMM.DATA
0000			04	371	P	PSPAR-MASSN='01'
0000			04	372	P	PSPAR-RFPNR<>PSPAR-PERNR
0000			04	373	F	SET_DEFAULTS(ZST7_DYNAMIC_ACT_TEST)
0000			04	374	I	INS,0105,,, (P0000-BEGDA) , (P0000-ENDDA)
0000			04	375	W	P0105-USRID_LONG=RP50D-PRIV_MAIL
0000			04	376	W	P0105-USRTY='0030'
0000			04	377	*	P0105-SUBTY='0030'
0000			04	378	I	INS,0105,,, (P0000-BEGDA) , (P0000-ENDDA)
0000			04	379	W	P0105-USRID_LONG=RP50D-LKND
0000			04	380	W	P0105-USRTY='LKND'
0000			04	382	I	INS,0105,,, (P0000-BEGDA) , (P0000-ENDDA)
0000			04	383	W	P0105-USRID=RP50D-CELL
0000			04	384	W	P0105-USRTY='CELL'
0000			04	400		*** CREATE INSTEAD 41 WHEN HIRING CD ***

Now we perform hiring by reference in transaction PA40. the details of this process may be

different in different organizations, so we'll jump over up to result of performed development:

3 screens are displayed with proposal values of required communication data with the fields open to edit. User can to keep those values or change or delete :



Infotype

Edit

Goto

Extras

System

Help

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Create Communication

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Personnel No

83

EE group

1

Employee

Personnel ar

1710

Region 1710 (US)

EE subgroup

Y1

Employee

Status

Active

Start

01.11.2024

to

31.12.9999

Communication

Type

0030

Private E-Mail Address

System ID

GYHUJI@GMAIL.COM

InfotypeEditGotoExtrasSystemHelp

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Create Communication

📄↶📄↷👤

Personnel No	84	Name	John Student043	
EE group	1 Employee	Personnel ar	1710	Region 1710 (US)
EE subgroup	Y1 Employee	Status	Active	
Start	01.11.2024	to	31.12.9999	

Communication

Type	LKND	Linkedin
System ID	HTTPS://WWW.LINKEDIN.COM/IN/SOMEBODY89/	

Infotype

Edit

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Create Communication

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Personnel No	85	Name	John Student043	
EE group	1 Employee	Personnel ar	1710	Region 1710 (US)
EE subgroup	Y1 Employee	Status	Active	
Start	01.11.2024	to	31.12.9999	

Communication

Type	CELL	Cell Phone
System ID	0545321789	

WE DID IT!

