

Workflow and the HR Organizational Structure

**Thomas Kosog
Platinum Workflow Consultant
SAP America**

Organizational Chart

- **Display**
- **Building Blocks**
- **Relationships**
- **Evaluation Paths**
- **Changing the structure**

Design a Hierarchical Approval in Workflow

- **using an organizational structure**
- **without a structure a SAP HR**

Responsibility Role

Workflow Documentation

The Organizational Chart

Organization and staffing (workflow) Display

1. Find by

- Organizational unit
 - Free search
 - Search term**
 - Structure search
 - Object history
- Position
- Job
- Person
- User
- Workflow template
- Standard task

2. Stat... Name Chief ID

	IDES AG		O 00000001
--	---------	--	------------

3. Task assignment

	ID	Valid from	Valid to
IDES AG	O 00000001	01.01.1994	Unlimited
Exec.director - Germany	O 00000100	01.01.1994	Unlimited
Executive Board - Italy	O 00000220	01.01.1994	Unlimited
Executive Board - USA	O 00000300	01.01.1994	Unlimited
Chief Executive Officer (US)	S 49999998	01.01.1994	Unlimited
Executive (US)	C 50029026	01.01.1994	Unlimited
Debbie Davis	P 00100135	01.01.1995	Unlimited
Executive Assistant to CEO (US)	49999999	01.01.1994	Unlimited

4. Details for Position Chief Executive Officer (US)

Basic data

Position: CEO - US Chief Executive Officer (US)

Job: Executive (US)

Head of own organizational unit

Staffing status: Vacancy occupied or put on hold

Staff: Staff

Holder	Percentage	Assigned as ...	Assigned until	General description
Deb...	100,00	01.10.1998	Unlimited	

Transaction PPOSW

Building Blocks of the Org. Chart

Visible in transaction PPOSW

- O Unit** (White Box)

- S Position**
 - normal (No hat, gray body)
 - special (Hat, red body) → Chief: Head of unit

- C Job** (Desk)

- P Person** (HR Master Record)

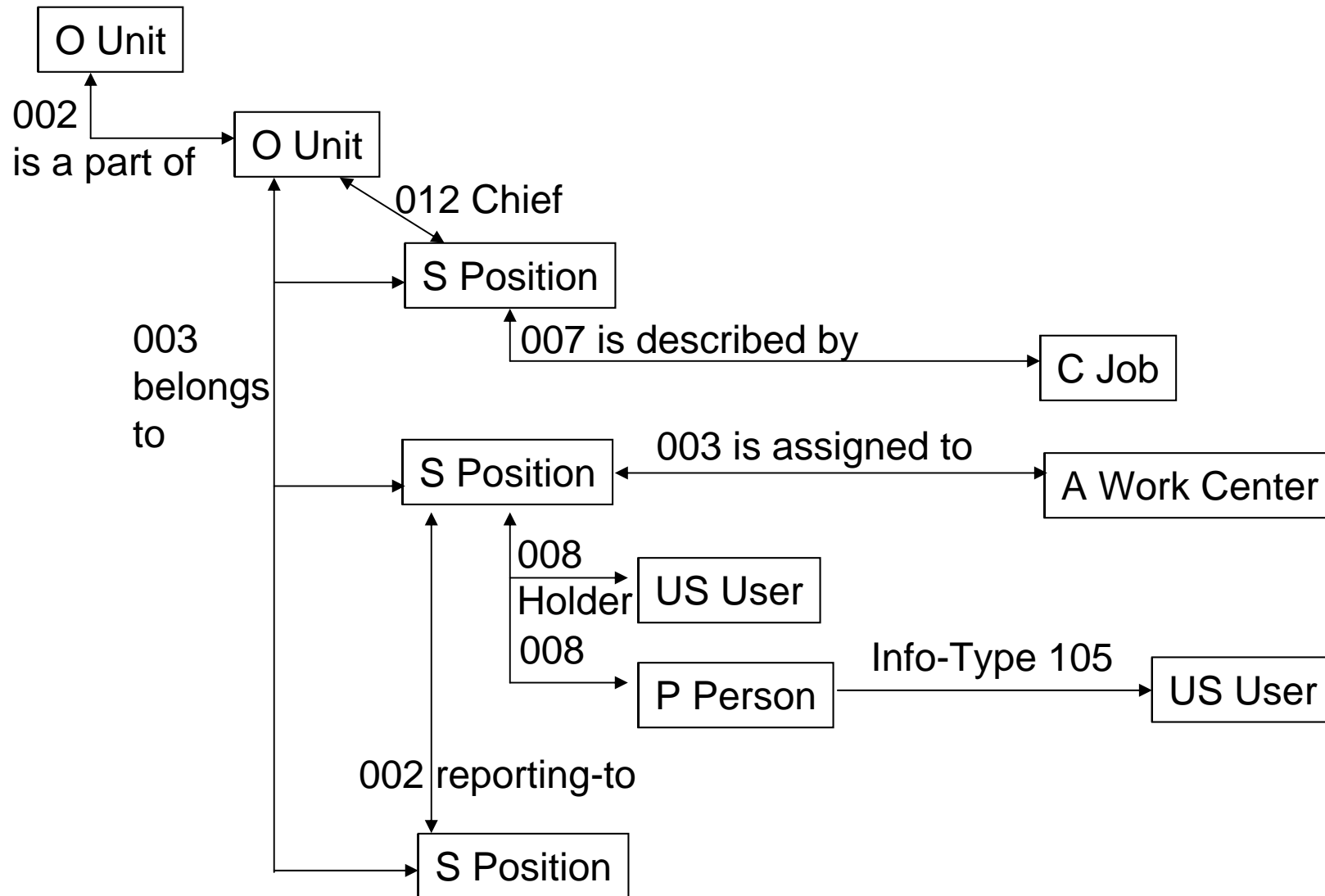
- US User** (SAP user-ID)

In-Visible in transaction PPOSW

- A Work Center**

- RY Responsibility**
-
-

Relationships in the Organizational Chart



Get Details about an Element in the Org. Chart

The screenshot shows the SAP Organization and Staffing (workflow) interface. The main window displays a task assignment tree for 'IDES AG'. The 'Chief Executive Officer (US)' position is selected and highlighted. A context menu is open over the selected position, with 'Detail object' selected, leading to an 'Enhanced object description' window. A red arrow labeled '1.' points to this menu. The 'Enhanced object description' window is titled 'Display object' and shows details for the selected position, including 'Plan version: Current plan', 'Object type: Position', 'Object ID: 49999998', and 'Object abbr.: CEO - US'. A red circle labeled '3.' highlights the 'Display object' icon in the top toolbar of this window. Below the details, there are tabs for 'Active', 'Planned', 'Submitted', 'Approved', and 'Rejected'. A table at the bottom shows 'Infotype Name' and 'Object' with checkmarks, and a 'Relationships' section with a dropdown arrow. A red arrow labeled '2.' points to the 'Relationships' section.

Stat...	Name	Chief	ID
	IDES AG		O 00000001

Task assignment	ID
IDES AG	O 00000001
Exec.director - Germany	O 00000100
Executive Board - Italy	O 00000220
Executive Board - USA	O 00000300
Chief Executive Officer (US)	S 49999998
Executive (US)	C 50029026
Debbie Davis	P 00100135
Executive Assistant to CEO (US)	49999999

Infotype Name	Object	Time period
Object		<input checked="" type="radio"/> Period
Relationships		From 1
Description		<input type="radio"/> Today
Department/Staff		<input type="radio"/> All

Select the period and display relationship overview

Relationships of one Position

List display Relationships

Position: CEO - US Chief Executive Officer (US)
 Planning Status: Active

Start	End	R..	Rel...	Relat.text	R..	Rel'd objec...	Abbr.	% Rate
01.01.1994	31.12.9999	A	003	Belongs to	O	00000300	US Exec.	0,00
01.10.1998	31.12.9999	A	008	Holder	P	00100135	Davis	100,00
01.01.2002	31.12.9999	A	012	Manages...	O	00000300	US Exec.	0,00
01.01.1994	31.12.9999	B	002	Is line su	S	50000027	CFO	0,00
01.01.1994	31.12.9999	B	002	Is line su	S	49999999	Exec. Ass-US	0,00
01.01.1994	31.12.9999	B	007	Is describ	C	50029026	Executive	0,00

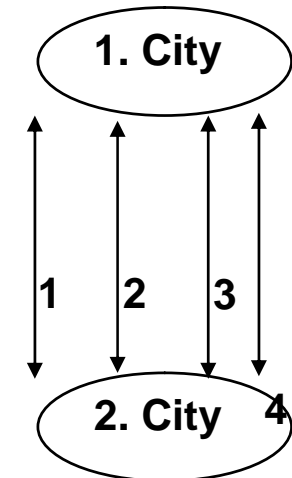
Transaction
PP01_DISP

Data Browser: Table HRP1001 Select Entries 9

Table: HRP1001
 Displayed fields: 23 of 24 Fixed columns: 12 List width 0250

MANDT	OTYPE	OBJID	PLVAR	RSIGN	RELAT	ISTAT	PRIOX	BEGDA	ENDDA	VARYF	SEQNR
800	S	49999998	01	A	003	1		01.01.1994	31.12.9999	O 00000300	000
800	S	49999998	01	A	008	1		01.10.1998	31.12.9999	P 00100135	000
800	S	49999998	01	A	012	1		01.01.2002	31.12.9999	O 00000300	000
800	S	49999998	01	B	002	1		01.01.1994	31.12.9999	S 49999999	000
800	S	49999998	01	B	002	1		01.01.1994	31.12.9999	S 50000027	000
800	S	49999998	01	B	007	1		01.01.1994	31.12.9999	C 50029026	000
800	S	49999998	01	B	038	1		01.02.1999	31.12.9999	P 00070057	000
800	S	49999998	01	B	038	1		01.01.2002	31.12.9999	P 00070231	000
800	S	49999998	01	B	044	1		01.03.2000	31.12.9999	B 50016822	000

Example:
Connections
could be open
at different times
and might not
be on the same
map



1 highway
2 mountain road
3 bike path
4 train track

Evaluation Path

Table View Edit Goto Selection Utilities System Help

Change View "Evaluation path (individual maintenance)": Overview

New Entries

Dialog Structure

- Evaluation paths
 - Evaluation path (individual maintenance)
 - Short names

Evaluation Path: 0-0-S-P Staff assignments along organizational structure

No.	Obj. type	A/B	Relat'ship	Relationship name	Priority	Rel.obj.type	Skip
5	0	B	002	Line supervisor of	*	0	
10	0	B	003	Incorporates	*	S	
20	S	A	008	Holder	*	P	

Transaction
OOAW

Define a
Custom
Search
Procedure

Structure Display/Maintenance

Objects

Plan version: 01 current plan

Object type: 0 Organizational unit

Object ID: 300

Search Term:

Object status: All existing Data status

Set structure conditions

Reporting period

Today A11

Current month Past

Current Year Future

Key date

Other period

Structure parameters

Evaluation Path: 0-0-S-P Staff assignments along organizati

Structure Display/Maintenance

Plan Version: 01

Evaluation Path: 0-0-S-P (Staff assignments along organizational structure)

Depth: 0

Status Vector: 1

Key Date: 15.03.2004

Object Name	Object abbr.	O	Extended ...
Executive Board - USA	US Exec.	0	00000300
Operations - (US)	Oper. -US	0	50000590
Operations (US)	Operation-US	0	50028929
Hospitality (US)	Hospital-US	0	50028893
Best Restaurant	Best Rest	0	50028894
Wait Staff	Wait	S	50028895
Patty Melt	Melt	P	00100258
Wait Staff	Wait	S	50028896
Susan Spaghetti	Spaghetti	P	00100259

Transaction S_AHR_61016528

Function to Read an Evaluation Path

Change View "Evaluation path (individual maintenance)": Overview

Dialog Structure

- Evaluation paths
 - Evaluation path (individual maintenance)
 - Short names

Evaluation Path: US_CHEF User's superior

No.	Obj. type	A/B	Relat'ship	Relationship name	Priority	Rel.obj.type	Skip
10	US	B	008	Is superior	*	S	<input checked="" type="checkbox"/>
20	S	B	002	Is line supervisor of	*	S	<input type="checkbox"/>
30	S	A	003	Belongs to	*	O	<input checked="" type="checkbox"/>
40	O	B	012	Is managed by...	*	S	<input type="checkbox"/>
50	O	A	002	Reports (line) to	*	O	<input checked="" type="checkbox"/>

Elements flagged as "SKIP" are not exported to the result list in ACTOR_TAB

Test Function Module: Initial Screen

Debugging (Ctrl+F7) | Test data directory

Test for func | Debugging (Ctrl+F7) | W0

Function module | RH_GET_STRUCTURE

Upper/lower case |

RFC target sys: |

Import parameters	Value
ACT_WEGID	US_CHEF

Tables	Value
ACTOR_TAB	0 Entries
AC_CONTAINER	0 Entries

Use this function to test your own evaluation paths and to access data in your

- Custom Object Type Methods (Background Step with temporary error)
- Rule resolution (Full stop, if exception was raised)

Change the Organizational Chart

Authorized users can use transaction PPOMW to change chart in the production system. Rather than deleting a relationship, use “Delimit”

Organization and staffing (workflow) Change

The screenshot displays the SAP PPOMW transaction interface. On the left, a navigation pane shows the organizational structure with 'User' selected. The main area shows a task assignment tree with 'FI Systems Analyst' highlighted. A red arrow points to this node. On the right, a 'Choose Relationship' dialog box is open, listing various relationship types such as 'Holder', 'Is described by', and 'Incorporates'. Three buttons in the top toolbar are circled in red, indicating the 'Delimit' function.

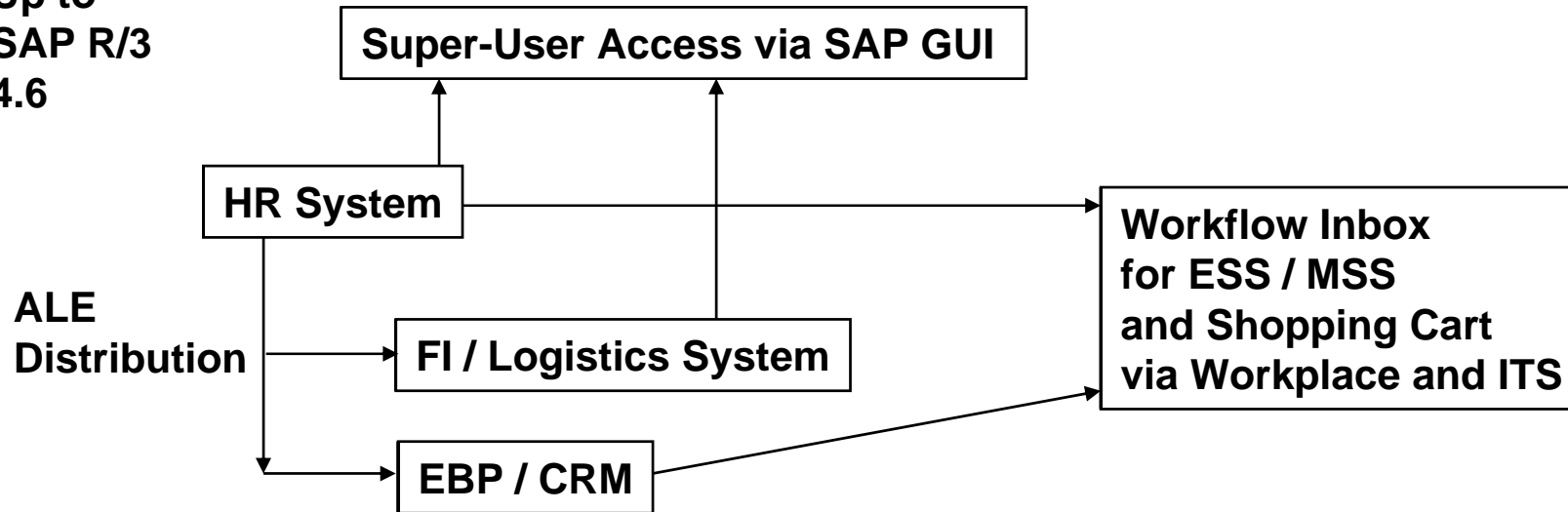
Either use “Drag & Drop”

- Select object
- Let go of the mouse
- Left click on object, keep button pressed and move to target
- Let go of the mouse

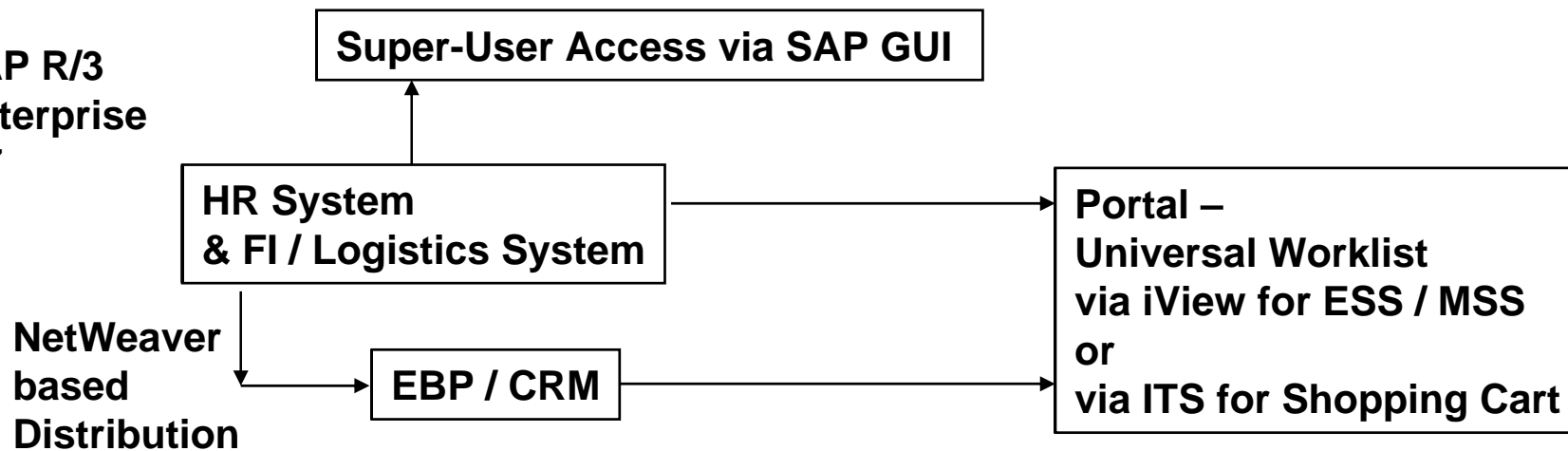
or use buttons

Distribution and Access

Up to
SAP R/3
4.6



SAP R/3
Enterprise
4.7



Maintenance of the Organizational Chart

HR data is not on a SAP System

- Workflow Administrator is handling the Org. Chart
- Each position could have several holders (users)

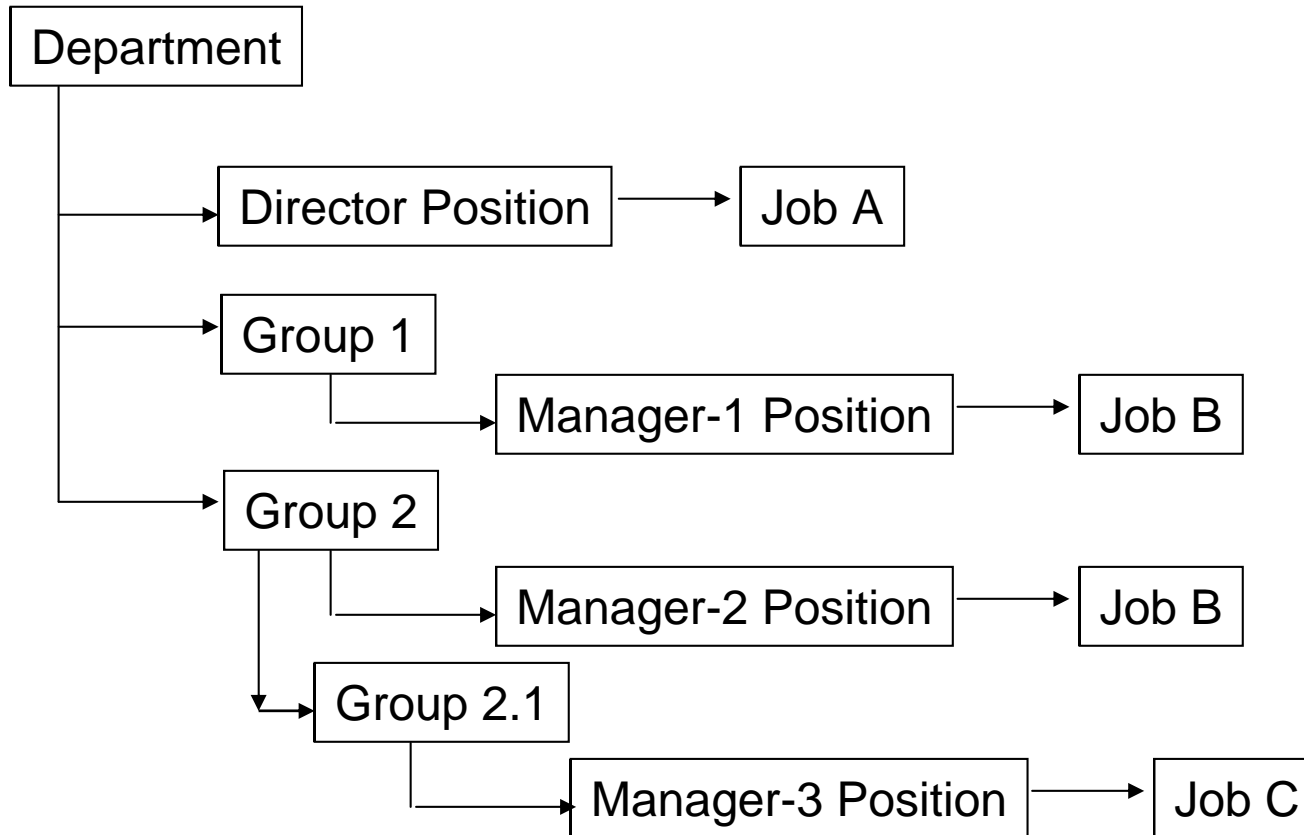
Company is using SAP HR for the employee data

- HR Department is maintaining the Org. Chart
- Workflow Templates for New Hires and Terminations.
- Consider one position as one “paycheck” for one person.
(Person is assigned to one position, and one position has one holder)
- Workflow Administrator has limited access to HR data.
- Sensitive data, like SS#, salary and job are only available to
 - HR department
 - managers via structural authorization
- Employees Self Service available for everybody to change personal data.
- Managers can use Internet Service Request
(with approval Workflow) to create / change positions.

General Hint:

The first set-up of the organizational chart could be done on the development system. After the transport to the Production system, no more org. elements are ever transported to Production.

Org. Chart and Hierarchical Approval using Jobs

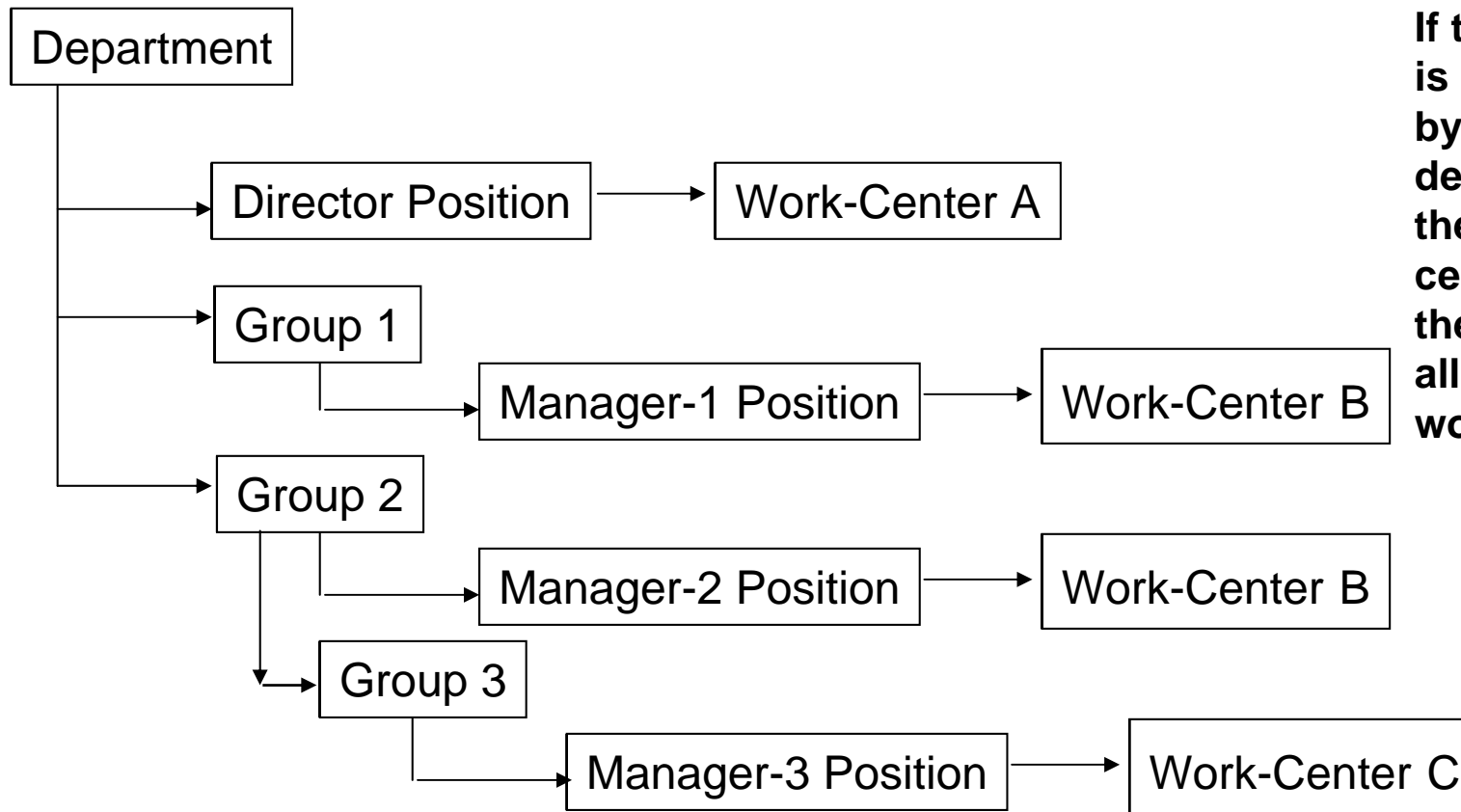


This is a possibility, if the Workflow Administrator is building the org. chart

Custom Table for Approval Level

<u>Job</u>	<u>Amount</u>	<u>Currency</u>
A	100000	USD
B	50000	USD
C	30000	USD

Org. Chart & Hierarchical Approval via Work-Center

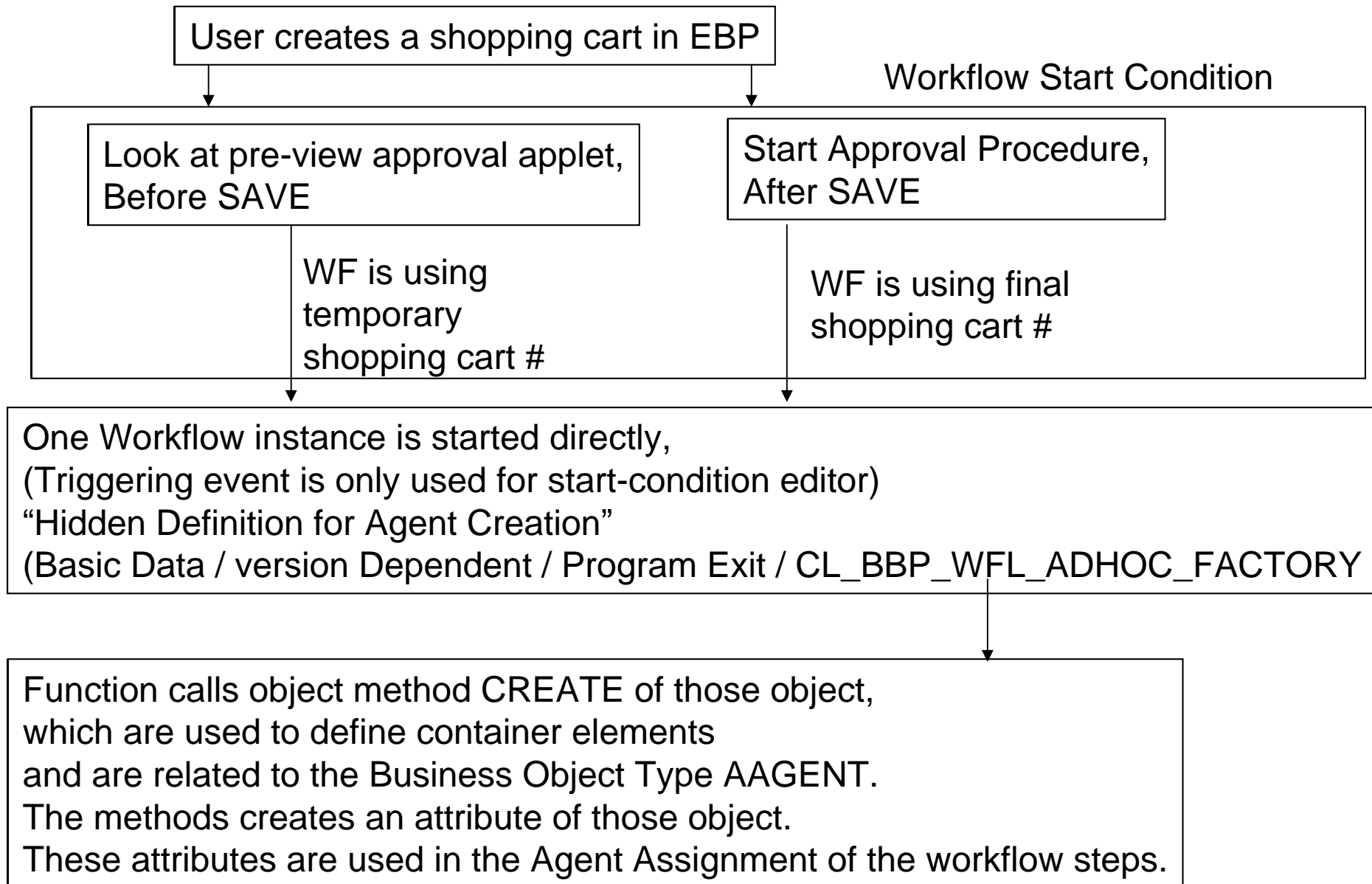


If the org. chart is maintained by the HR-department, then the work-center might be the only add-on allowed for workflow

Custom Table for Approval Level

<u>Work-Center</u>	Amount	Currency
A	100000	USD
B	50000	USD
C	30000	USD

EBP access to the Organizational Chart



Structural Approval Hierarchy without an Org. Chart

Excel spreadsheet can be uploaded into custom SAP table

Cost Center	Main Approver	Approver up to X \$	Approver up to Y\$	Approver up to Z\$
12345678	Mr. A	Ms. B	Ms. C	-
87654321	Ms. D	Mr. L	-	Ms. B
12341234	Mr. O	-	-	-

- Main Approver is added during implementation project.
- Main Approver can request to add 'delegates'
- Custom Z-function module will find appropriate approver at runtime
- Possibility to build a One-Stop Approval workflow

Other Approaches to find an Approver

Self Managed Approach

- **Send workitem to a group (Unit / Work-Center)**
- **The first user who executes the workitem will be the owner**
- **Workitem will disappear from the other receivers**
- **Deadline is not necessary**
- **Used for EDI-IDOC errors**

Distribution List

- **Build a global distribution list via the SAP Business Workplace**
- **SAP provided Workflow Rule (30000012)**
- **Send workitem to all members of one distribution list**

EBP Ad-Hoc Agent

- **Shopping Cart creator and each approver can add more approvers**

**At runtime, a workflow can only be “delivered” to a user, who is defined as a possible agent of a workitem.
(Exception: A substitute does not have to be a possible agent)**

**If a user is not a possible agent, then he will not see the workitem.
(Exception: The Workflow Administrator can forward any workitem)**

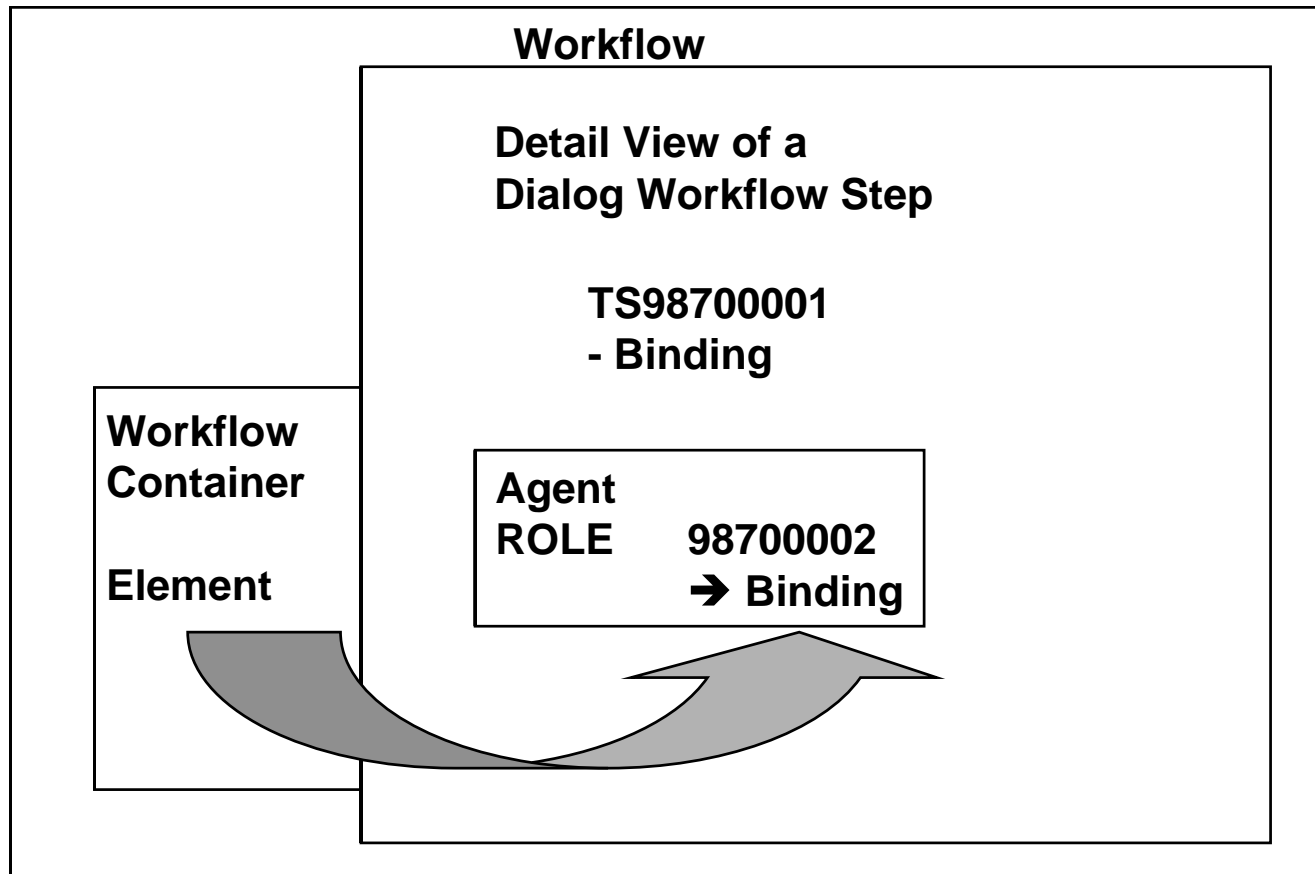
Typical settings for possible agents:

- General Task → everybody**
- List of organizational units → everybody in those units**
- Authorization profiles → everybody connected with that role**

Hint: Please do not forget the possible agent setting for any kind of agent assignment

Responsibility Role

Workflow Builder



Advantages:

- Easy to design
- No ABAP

Limitations:

For complicated cases design an ABAP based background method, which determines the agents, or raises a temporary error if no agents are found.

At run-time the responsibility role 98700002 will determine the users, who receive this workitem in their inbox.




Set Up a Responsibility Rule

Rule: Create

Rule 00000000 Z_Test_Resp
Name Test Responsibility
Pack. Appl. component

Rule Definition Description Container Responsibilities

Basic data
Abbr. Z_Test_Resp
Name Test Responsibility

Rule definition
Category Agent Determination: Responsibilities  
 Take secondary priorities into account
 Personal rule
 Terminate if rule resolution has no result 

Since most customers work with general tasks, please do not forget this flag, otherwise the workitem is sent to every user in the system, when the rule fails.

Container Element for a Responsibility Rule

The screenshot displays the SAP Workflow Designer interface for configuring a Responsibility Rule. The main window is titled 'Rule: Display' and shows the following details:

- Rule: 90600130 CIC-WF-00
- Name: Verification Responsibility
- Pack: \$TMP
- Appl. component: [empty]

The 'Container' tab is active, showing a table of container elements:

Expression	M..	Description
Sold-to party		Sold-to party

The 'Display Container Element' dialog is open, showing the configuration for the 'SoldToParty' element:

- Element: SoldToParty
- Texts:
 - Name: Sold-to party
 - Short Descript.: Sold-to party
- Data Type: SelectionOfPredefinedTypes
 - Object Type: [empty]
 - ABAP Dictionary Reference
 - Structure: VBAAK (Sales Document: Header Data)
 - Field: KUNNR (Sold-to party)

At run-time (based on the defined binding) an element of the workflow container will be moved into the responsibility role. The value of the element will then determine, which agent will receive the workitem

Assign Responsibility to Users

Rule: Change

Rule: 90600130 CIC-WF-00
 Name: Verification Responsibility
 Pack.: \$TMP Appl. component

Tab: Responsibilities

Name	Status	Priority	Code	Assigned as...	Assigned until
Customer Becker 1002676	Res...		Z_Cust_1 1002676	15.03.2004	Unlimited

Try to assign more than one agent, so they can self-manage the workitems.

Responsibility: 50029477
 Derived from: Rule
 Editing period: 15.03.2004 To 31.12.9999
 Responsibility complete

Basic data
 Abbr.: Z_Cust_1
 Name: Customer Becker
 Priority:

Responsibility Specs

Name	of	to
Sold-to party	T-C005A00	

- Transport responsibility to the production system (including 1, 2)
- Define specific user / position assignment (3) on the development test client.
- In QA or Production, use transaction OOCU_RESP for agent assignment

- **Process description**
- **Workflow design**
- **List of typical Workflow users**
- **List of Workflow steps for each user**
- **Drawing of a typical Organizational Chart, where every typical Workflow users is visible**
- **Workflow Rule Resolution for each of these steps**
- **All custom tables for these roles or list of IMG activities to maintain user assignment**
- **All special maintenance steps to add a position / unit to the organizational chart**

Purpose of this documentation:

- **End user training**
- **Testing**
- **Workflow Maintenance**
- **What do you have to do, if a new division of the customer wants to use this workflow.**

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