HR Forms Workplace (PY-XX-FO)

HELP.PYXXFORM

Release 4.6C

SAP™

Copyright

Icons

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HR Forms Workplace (PY-XX-FO)

Purpose

A form often functions as an enterprise's business card, which means it requires an attractive graphical design. The HR Forms Workplace (which will be called the Forms Workplace from now on) will enable you in future to create flexible reports with an attractive layout for HR master data, personnel time data, and payroll results. Therefore, it will be a central *Human Resource* tool that enables you to select data from various sources in a uniform manner, which you can then design and print.

The Forms Workplace is currently in the development phase and is continually enhanced. It uses the SAP Smart Forms [Ext.] tool to design forms.

> If you require detailed information on the tools' current stages of development (supported countries), access SAPNet (alias *HR*) and choose *mySAP Human Resources → Media Center → Literature*.

HR Forms Workplace

Information (MetaNet with Directory	Data Selection (InfoNet)
Results wage types for payroll	*Payments*
Employee	Employee
Payroll period for which result was created	Payroll period for which result was created
Payroll period in which result was created	Payroll period in which result was created
Wage type	Wage type
Company code	Company code
Personnel area	Personnel area
.....	Number
....	Rate
Number	Amount
Rate	
Amount	

Payroll result

Form design using SAP Smart Forms

HR Forms Workplace (PY-XX-FO)

Implementation Information

The logical database for payroll [Ext.] constitutes the basis on which you work with the Forms Workplace. Therefore, you must run report H99U_RGDIR_WPBP (*Reconstruct Tables HRPY_RGDIR and HPPY_WPBP*) to convert payroll results that were generated in a release earlier than 4.6B. In the case of the country versions for the USA and Canada, this task has already been performed by the upgrade [Ext.] to 4.6C.

We continually enhance and supplement the tables and fields that you can select using the Forms Workplace. Customer enhancements (such as infotypes) are possible at any time.

Scope of Functions

The Forms Workplace facilitates the following:

- Standard reporting on data that can originate from different sources within *Human Resources*.

- Standardization of the appearance of all HR forms.

- Standard, intuitive, and user-friendly data selection. You enjoy the benefits of structured data access (payroll results, for example) because the Forms Workplace uses the advantages of the logical database for Payroll.

- Changes to the layout without changes to data selection because data selection and form design do not occur at the same time. This means you can change the layout without any technical knowledge.

Form Specialist

Tasks

The form specialist is an expert in the technical aspects and contents of forms in *Human Resources.* He or she enters settings for forms in the system, and is responsible for finding and solving problems.

His or her tasks include the following:

- Selecting data for HR forms

- Designing the layout of HR forms

- Activating HR forms

- Testing and correcting form printing

- Starting form printing

Form Creation

Purpose

It is usually the case that data is selected for the form and the form layout is determined when the SAP System is set up.

When the form is created, data selection and form layout are separate. In one step, you select the data you want to subsequently print on the HR form from the set of all available information. In a later step, you design the form on the basis of the selected data. The form can also be printed later.

Prerequisites

HR master data is maintained in the system. You want to report on this data.

You have completed *Payroll* successfully, and want to report on the payroll results.

You know which data is required to create the form, and you know which SAP System tables are used to store the data.

If the data is stored in customer tables or infotypes, it means you maintained the data in the metadata and therefore in the MetaNet [Page 15].

Process Flow
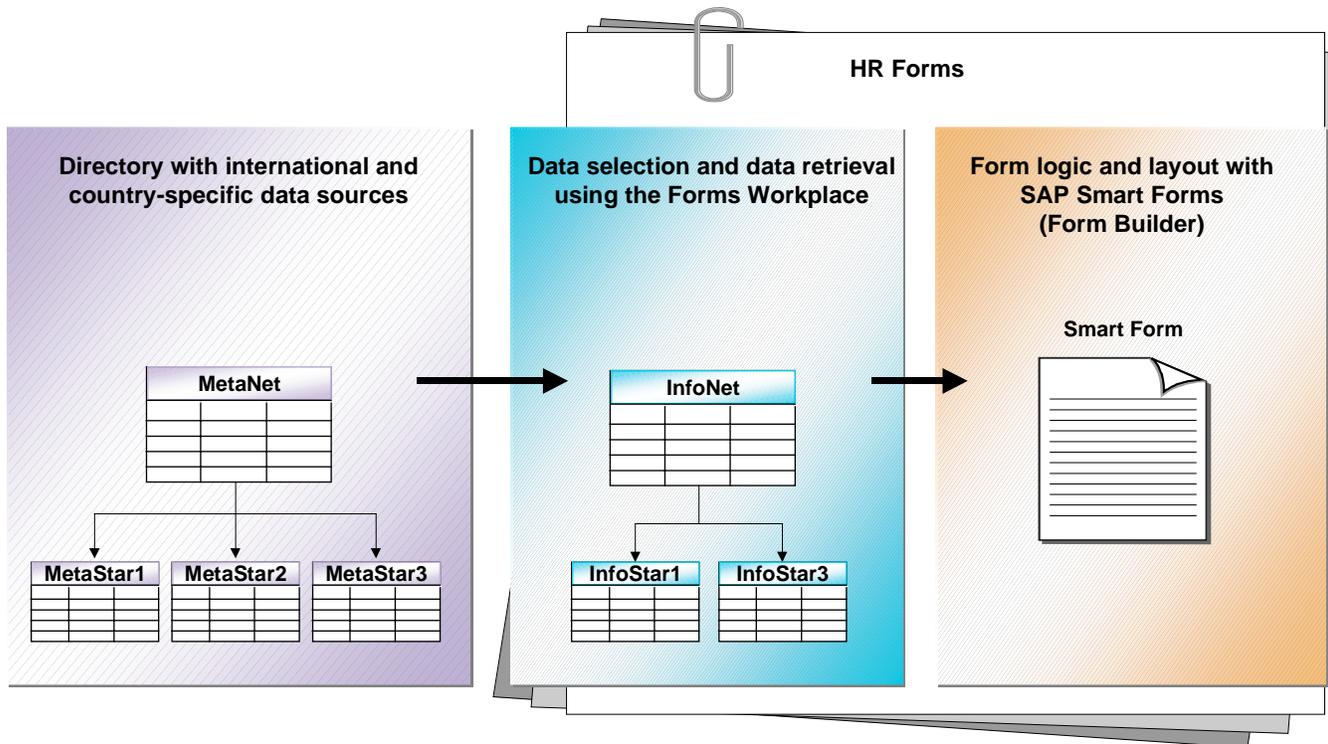
1. You select data using the *Forms Workplace*.

   Available data is represented as a directory in the *Forms Workplace*. You select the data that is required for the form from the directory:

- Using the *MetaNet*, which represents a directory, you create the InfoNet [Page 22].

- You create the *InfoNet*, which contains one or more *InfoStars* with the selected information.

- The system generates the required structures.

   Each structure [Ext.] is stored in the ABAP Dictionary [Ext.] so that SAP Smart Forms can access them when forms are designed. The structure is used as an interface between the generated print program and SAP Smart Forms.

2. You design the form using *SAP Smart Forms*.

- You design the layout of the form [Page 11] using *SAP Smart Forms*. You are supported by graphical tools. You can use different fonts, bold font, shading, boxes, graphics, lines, and other design elements.

- You describe the individual elements (text, tables, addresses, etc.) that the form contains.

- You define the form logic used by the SAP System to read application data from internal tables, for example. If the text is a standard, fixed text, the form logic can be very simple; however, more complicated IF/THEN logic is also possible.

Form Creation

- A Smart Form is created. The system uses the Smart Form to generate a function module that contains the generated ABAP Dictionary structure as an interface and uses this interface together with the form logic to create a form printout.

3. You activate the HR form [Page 13].

    The *Forms Workplace* generates a print program that reads the selected data from the database and then accesses the Smart Forms function module.

4. You can test the print program to ensure that all data is retrieved correctly for printing the form. The selected data is displayed in a table format.

5. You start printing the form using the *Forms Workplace*.

Result

The printed form is available for testing.

Example: Remuneration Statement Using HR Forms Workplace

Integration of graphics

Remuneration statement

SAP™

Payroll for	**December 1999**		
Your administrator	Ms Book		
Remuneration notification of	12.20.1999		

Employee Information

Personnel no.	473
Date of birth	12.01.1960
Entry date	

Different fonts

Employee Address

Ms
Barbara Bonus
35 Smithfield Road
London W3

Cost center	
Department	
Remaining leave, previous year	0.00
Leave for current year	5.00
Available leave days	5.00

Compensation

Basic compensation	4,874.03
Cost-of-living allowance	968.32
ER share of savings plan	26.00

Gross Remuneration

Total gross amount	5,868.35	5,868.35
Gross tax amount	5,973.73	
Gross SI, HI/NI	6,038.93	
Gross SI, PI/UI	6,038.93	

Legal Deductions

Income tax	1,370.25	1,370.25
Health insurance	102.76	102.76
Pension insurance	109.62	109.62
Unemployment ins.	404.61	404.61
	612.95	612.95
	196.27	196.27
	51.33	51.33

Shading

Legal net amount	**3,020.56**

Other Payments/Deductions

Contribution to savings plan	26.00-

Lines boxes . . .

Bank Transfers

Net transfer	**2,994.56**
Transfer for savings plan	**26.00**

Information on Monthly Bank Transfers

Net transfer	2,994.56	123456678	XYZ Bank	67292200
Transfer for savings plan	26.00	London Trust	London	00000472

Information on Monthly Bank Transfers

Total net transfer	2,994.56
Total transfer for savings plan	26.00

Example: Remuneration Statement Using HR Forms Workplace

Example: Remuneration Statement Using HR Forms Workplace

HR Forms

Definition

A complete HR form is an executable report with its own selection screen in the SAP System.

Use

The report is generated by the Forms Workplace and creates the form. To generate the print program, the Forms Workplace requires the following additional information:

- Information on the data which has been selected for printing in the form and which must be read from the database. The *InfoNet* contains the selected data.

- The active Smart Form containing the form logic and layout information. The form logic determines the sequence in which the data is printed. The layout information defines the appearance of the form.

Structure

An HR form consists of several parts which are shown in an example below:

The HR form has the name Form1**.**

Object	Name
InfoNet	**Form1**
ABAP Dictionary Structure	**/1pyxxfo/form1**
Smart Form	**pyxxfo_form1**
Print program	**/1pyxxfo/form1_prnt**

For print program **/1pyxxfo/form1_prnt** to run, all parts must be complete and active in the system. The then functions like an ordinary report in the SAP System.

Objects in the Forms Workplace

Definition

Human Resource data and its system-related information are retrieved and managed in various objects to facilitate the process of creating forms [Page 8].

Use

The Forms Workplace uses these objects to

- Select data for creating forms

- Retrieve data for designing forms

- Print data in forms

Structure

Objects that are used in the Forms Workplace on the:

Meta Side	Info Side
MetaNet [Page 15]	InfoNet [Page 22]
MetaStar [Page 16]	InfoStar [Page 24]
MetaDimension [Page 18]	InfoDimension [Page 26]
MetaFigure [Page 20]	InfoFigure [Page 28]
MetaField [Page 21]	InfoField [Page 29]

MetaNet 🖼

Definition

The *MetaNet* is a view of printable data in the SAP System. It covers all data sources in *Human Resources* that are available for the form creation process. The *MetaNet* is provided by SAP and represents a directory from which you can select data to be printed in forms.
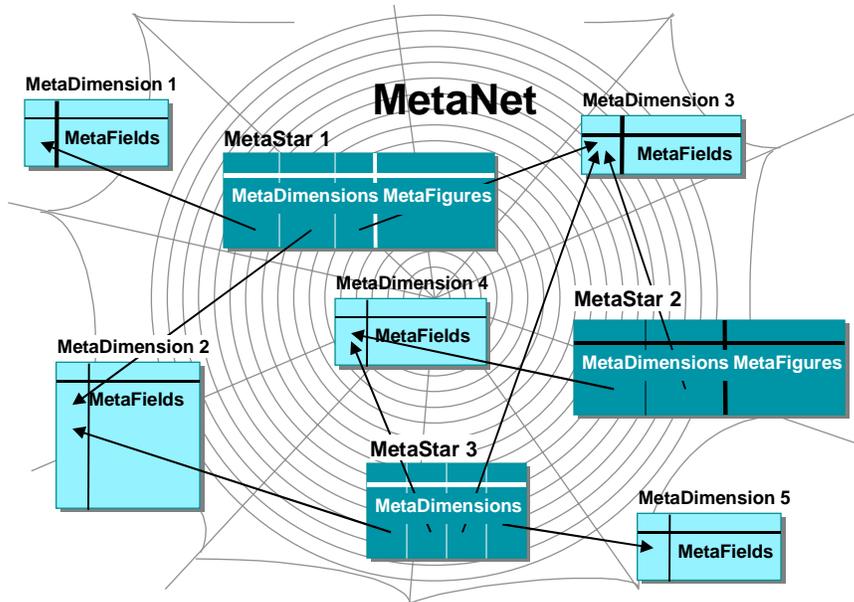
The *MetaNet* must contain all data to be used in the HR form. This data is then stored as MetaStars [Page 16] 🔺. The *MetaStar* is a view of individual data sources in the system. A data source (such as an internal table) is stored in a *MetaStar*. This means that the *MetaNet* covers **all** *MetaStars*.

Use

The *MetaNet* provides all data and its system-related information in a directory. You can then select it to create forms. Once the data has been selected, an InfoNet [Page 22] is used to make the data available to form processing using *SAP Smart Forms*.

Structure

The *MetaNet* contains *MetaStars* and is displayed in the system as an overview tree. The *MetaNet* is **above** the *MetaStar* in the hierarchy and is country-specific. It contains, for example,

- Infotypes (such as Organizational Assignment (0001) and Basic Pay (0008)) that contain *Personnel Administration* and *Personnel Time Management* data.

- Internal tables (such as RT, BT, and SV) that contain payroll results from the *Payroll* system.

MetaStar ▲

Definition

The *MetaStar* is a view of data that can be read from a specific data source in the system. It contains MetaDimensions [Page 18] ▲ (complete descriptions of business objects or concepts) and MetaFigures [Page 20] ▲ (key figures). The *MetaDimensions* contained in a MetaStar characterize the *MetaFigures* of this MetaStar.
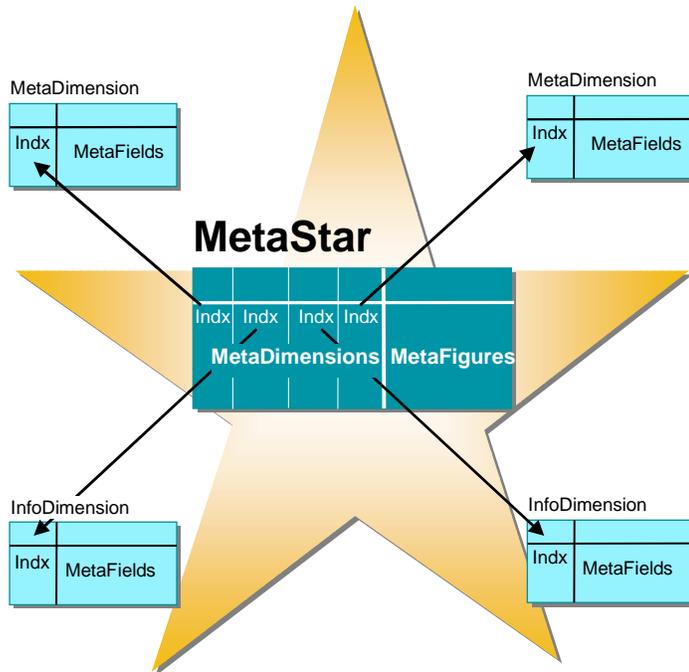

Use

A *MetaStar* contains data and its system-related information for which the same *MetaDimensions* are meaningful. Therefore, it groups information together from the same business area. For example, one *MetaStar* can contain the payments and deductions of a payroll, while another *MetaStar* contains the data of an absence type. Different *MetaDimensions* are both meaningful and possible for each of these *MetaStars*. In the case of deductions, for example, the type of deduction could be taxes or benefits-related deductions, while in the case of absence types, it is necessary to know when leave was taken and the amount with which it was paid.

The *MetaNet* and its *MetaStars* constitute the directory that contains all of the data for creating forms. Once the data has been selected from the *MetaStar*, an InfoNet [Page 22] and its InfoStars [Page 24] are used to make the data available to form processing using *SAP Smart Forms*.

Structure

In the overview tree of the *MetaNet*, a *MetaStar* is a node and represents the relationship of MetaDimensions [Page 18] and MetaFigures [Page 20]. The *MetaStar* is **below** the *MetaNet* in the hierarchy and is also country-specific. It can only consist of *MetaDimensions*.
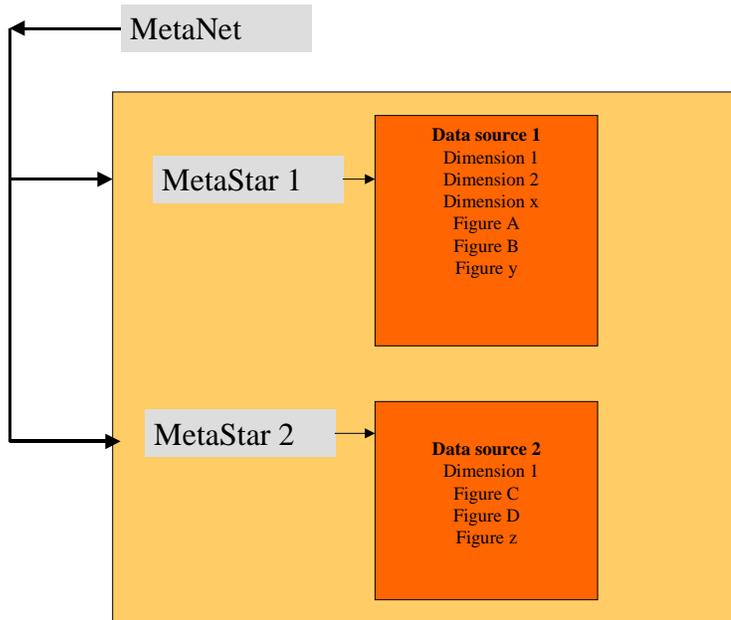
MetaDimension ▲

Definition

The *MetaDimension* is a complete description of a business object or concept. This description consists of several pieces of information, the *MetaFields* ⬀ 🔳. Each *MetaField* is part of the key ⬀ that provides a complete technical specification of the *MetaDimension*, or the *MetaField* is an attribute 🔳, an additional characteristic of the *MetaDimension*.

> The PAY_RESULT *MetaStar* contains the wage type *MetaDimension*.
>
> The key belongs to the wage type (for example, one part of the key is /101 and the other part of the key is country indicator 01 for Germany).
>
> The long text and short text attributes belong to the wage type.
>
> Furthermore, the amount and number MetaFigures [Page 20] belong to the PAY_RESULT *MetaStar*.
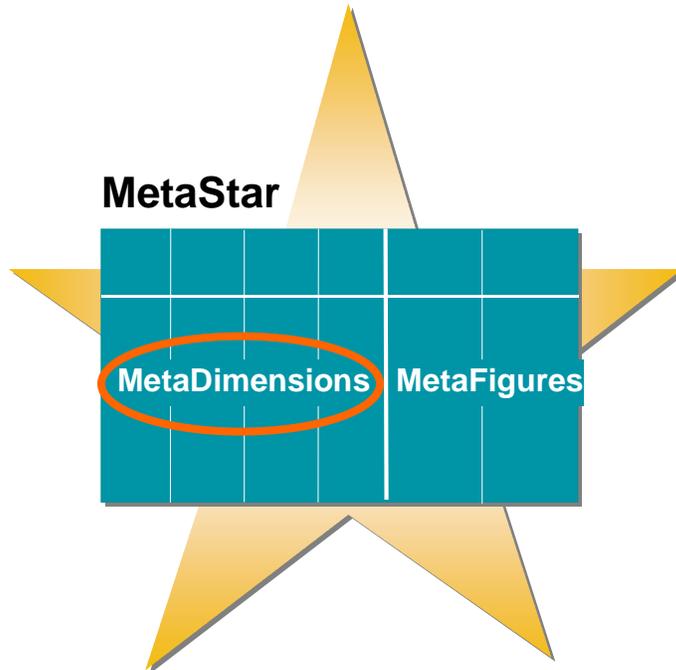
Every *MetaDimension* has attributes.

> The attributes of the employee *MetaDimension* include first name, last name, and date of birth.

Use

MetaDimensions and MetaFigures with their relationships constitute a MetaStar [Page 16]. The *MetaDimensions* are stored in separate tables and can be used in several *MetaStars*. Not all *MetaDimensions* are assigned to a country grouping.

MetaStar

Structure

A *MetaDimension* is represented by the ▲ icon in the node of a *MetaStar* within the overview tree of the *MetaNet*. Every *MetaDimension* has *MetaFields*, and therefore keys ▰ and attributes ▰.

The *Show details* ▰ function also enables you to display an overview of *MetaFields* with their keys and attributes for a MetaDimension.

MetaFigure

Definition

The *MetaFigure* is a key figure. If the key figure is linked to a unit, this unit is also part of the *MetaFigure*.
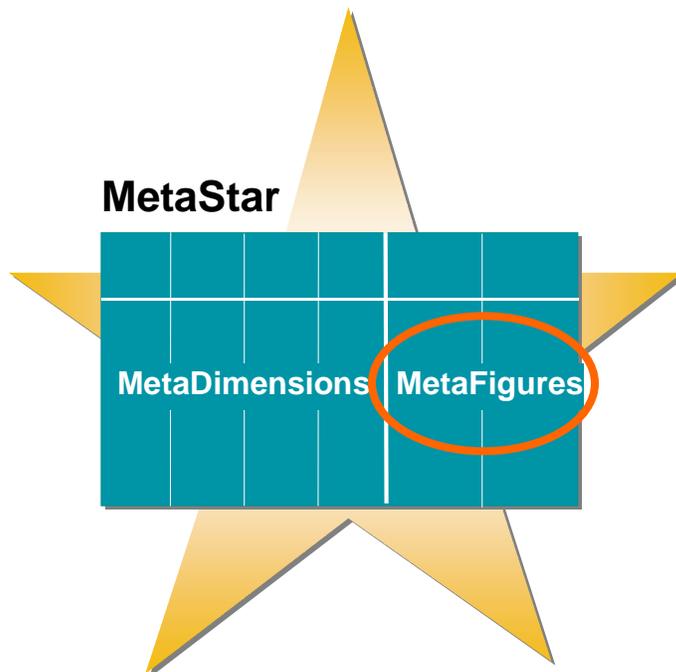
Amount with currency (5 EURO; 15 $)

Use

MetaFigures and MetaDimensions [Page 18] with their relationships constitute a MetaStar [Page 16].

The *MetaFigures* are usually international. A *MetaFigure* can be used in several *MetaStars*.
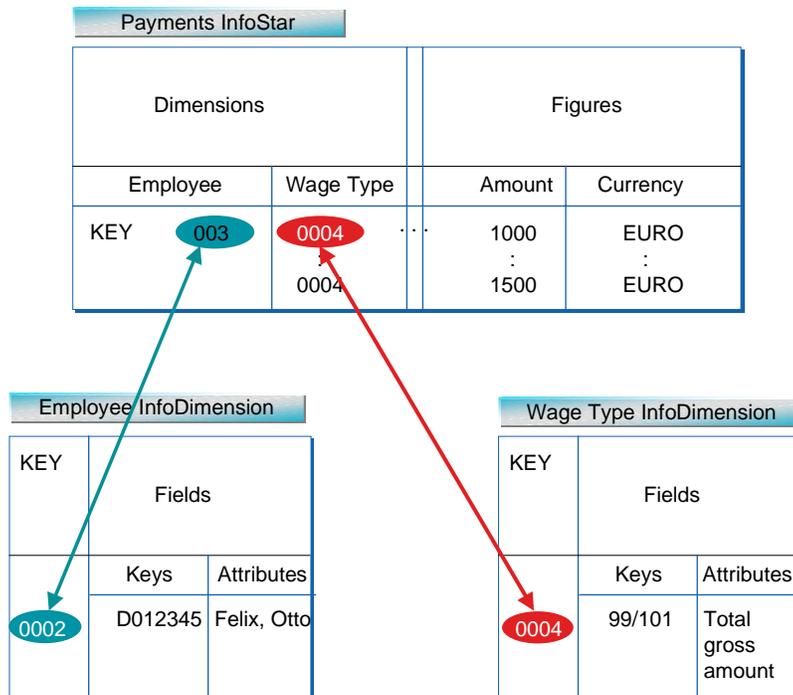

Structure

A *MetaFigure* is represented by the ⬛ icon in the node of a *MetaStar* within the overview tree of the *MetaNet*.

MetaFields 🔑 📇

Definition

MetaFields are pieces of information that exist in a MetaDimension [Page 18]. Each *MetaField* is part of the key 🔑 that completely specifies the *MetaDimension*, or it is an attribute 📇, an additional characteristic of a MetaDimension.

Each *InfoDimension* in the form contains the complete key for the *MetaDimension*.

Payments InfoStar				
Dimensions			**Figures**	
Employee	Wage Type		Amount	Currency
KEY ⬤003	⬤0004 · · ·		1000 :	EURO :
	0004		1500	EURO

Employee InfoDimension		
KEY	**Fields**	
	Keys	Attributes
⬤0002	D012345	Felix, Otto

Wage Type InfoDimension		
KEY	**Fields**	
	Keys	Attributes
⬤0004	99/101	Total gross amount

Use

The *MetaFields* with their keys and attributes constitute the *MetaDimension* and are part of the MetaStar [Page 16].

Structure

In the overview tree, a *MetaField* is represented by the icons for the key 🔑 and for the attribute 📇.
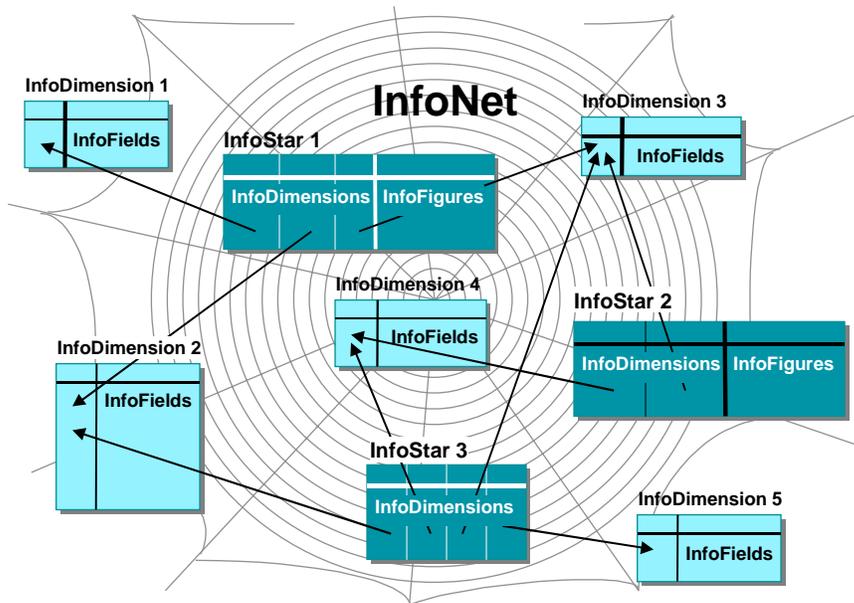
If you place the cursor on a *MetaDimension*, you can choose *Show details* 📊 to create an additional screen area that displays the keys and attributes.

InfoNet 🏛

Definition

The *InfoNet* defines the data of a concrete HR form [Page 13] that is read from the database at a later juncture. The MetaNet [Page 15] constitutes the template for the *InfoNet*.

Use

On the basis of the *InfoNet*, data that is subsequently printed in the form is read in the system.

Structure

The *InfoNet* contains InfoStars [Page 24]. An *InfoStar* contains InfoDimensions [Page 26] and InfoFigures [Page 28]. An *InfoDimension* contains *InfoFields* (attributes and keys). The *InfoNet* and its *InfoStars* are displayed in the system as an overview tree. If you require further information and functions, see the tab pages.

1. The *HR Form* tab page includes the following:

- Name of the HR form

    It cannot be changed here.

- Status

    - Status (active or inactive)

    - Created by

    - Changed by

- Form parts

- DDIC structure

- SmartForm

- Print program

2. The *InfoStars* tab page includes an overview of used *InfoStars* (technical name and description).

3. The object is described on the *Documentation* tab page.

4. The *Selection Screen* tab page includes an overview of *InfoDimensions* and *InfoFields*.

   You determine the fields that are included in the print program selection screen once the print program has been generated. For example:

   - Company code

   - Cost center

   - Personnel number

   - Employee subgroup

   - Employee group

   - Personnel area

   - Personnel subarea

   - Legal person

   You determine which employees and payroll results are used to create forms. You do not have to print all of the fields that you selected in the *InfoNet* on the selection screen tab page.

InfoStar

Definition

The *InfoStar* defines the data of a single data source for a concrete HR form. When the print program is executed, this data is read from the database. The *InfoStar* characterizes the relationships of InfoDimensions [Page 18] and InfoFigures [Page 20]. The MetaStar [Page 16] constitutes the template for the *InfoStar*.
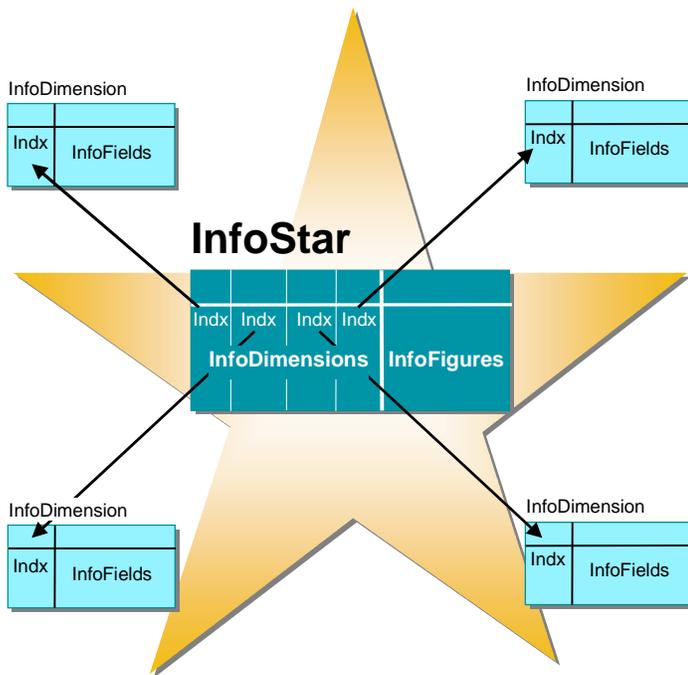

Use
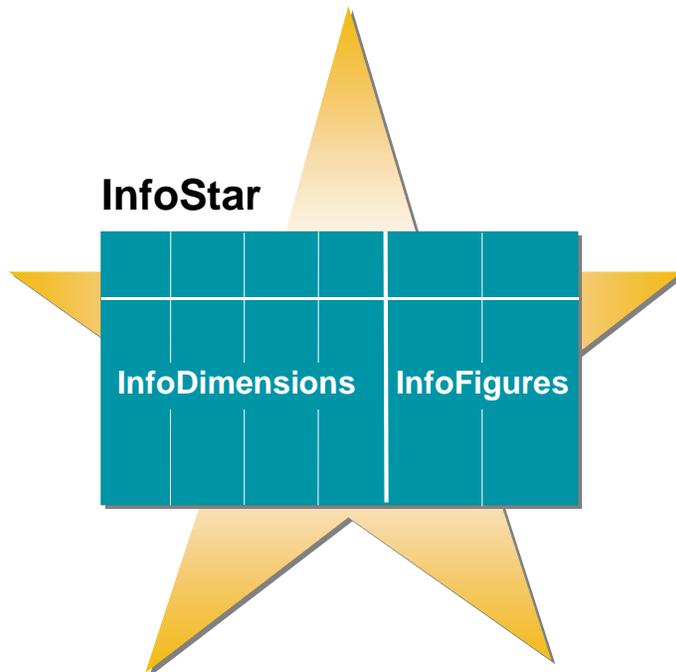
On the basis of the *InfoStar*, the data of a single data source is read in the system and then prepared for form printing (designated).

Structure

In the overview tree of the *InfoNet*, an *InfoStar* is a node and specifies the relationships of InfoDimensions [Page 18] and InfoFigures [Page 20]. It can only consist of *InfoDimensions.*

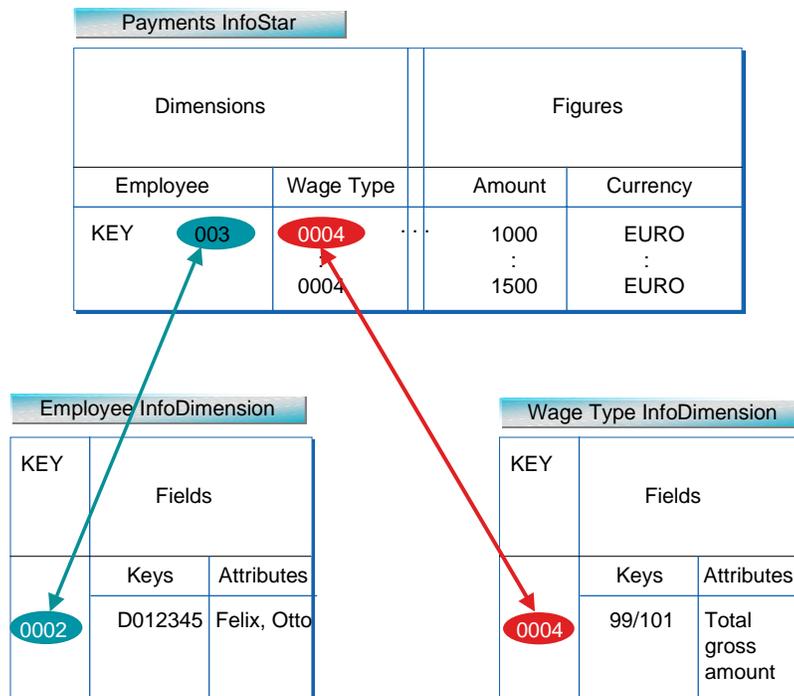If you require further information, see the tab pages:

1. The *InfoStar* tab page includes the names of the *InfoStar* and *MetaStar*.

2. The *InfoDimensions* tab page includes an overview of the *InfoStar*.

   A table is used to list the used *InfoDimensions*, their descriptions, the used *MetaDimensions*, and the names of the *InfoStars*.

5. The object is described on the *Documentation* tab page.

InfoDimension 🏔

Definition

An *InfoDimension* is a complete description of a specific (individual) business object or concept. This description consists of several pieces of information, the *InfoFields* 🔑 🏬. Each *InfoField* is part of the key 🔑 that provides a complete technical specification of the *InfoDimension*, or the *InfoField* is an attribute 🏬, a further characteristic of the *InfoDimension*.

Use

InfoDimensions and InfoFigures with their relationships constitute an InfoStar [Page 24]. The *InfoDimensions* are stored in separate tables and can be used in several *InfoStars*. Not all *InfoDimensions* are assigned to a country grouping.

Structure

An *InfoDimension* is represented by the 🏔 icon in the node of an *InfoStar* 🔺 within the overview tree of the *InfoNet* 🗺.

If you require further information, see the tab pages:

2. The *InfoDimension* tab page includes the names of the *InfoDimension* and the *MetaDimension*.

3. The *InfoFields* tab page includes the type (key or attribute), the name of the *InfoField*, the text, the name of the *MetaField*, and the name of the *InfoDimension*.

4. The *Selection* function enables you to show the *Selection* tab page for an *InfoDimension*. You can restrict values for a specific key.

InfoFigure

Definition

An *InfoFigure* is a key figure. If the key figure is linked to a unit, this unit is also part of the *InfoFigure*.

Amount with currency (5 EURO; 15 $)

Use

InfoFigures and InfoDimensions [Page 18] with their relationships constitute an InfoStar [Page 24] .

The *InfoFigures* are usually international. An *InfoFigure* can be used in several *InfoStars*.

Structure

An *InfoFigure* is represented by the icon in the node of an *InfoStar* within the overview tree of the *InfoNet* .

InfoFields

Definition

InfoFields are pieces of information that exist in an InfoDimension [Page 26]. Each *InfoField* is part of the key that completely specifies the *InfoDimension*, or an attribute, a further characteristic of the *InfoDimension*.

Each *InfoDimension* in the form contains the complete key for the *MetaDimension*.

Use

The *InfoFields* with their keys and attributes constitute the *InfoDimension* and are part of the InfoStar [Page 24].

Structure

In the overview tree, an *InfoField* is represented by the icons for the key and for the attribute .

If you place the cursor on an *InfoDimension*, you can refer to the *InfoField* tab page to determine the key and attributes together with their details.

Selection

Use

You use the function in an <u>InfoStar [Page 24]</u> for *InfoDimensions* and your keys. To restrict the values for a piece of information, you use *Selection*.

Prerequisites

You have used the <u>MetaNet [Page 15]</u> to create the <u>InfoNet [Page 22]</u> with a minimum of one *InfoStar*. The *InfoStar* contains a minimum of one *InfoDimension*.

Scope of Functions

You can restrict the key in an *InfoStar* for an <u>InfoDimension [Page 18]</u>.

You do not want to print all of the wage types included in the payroll results. Instead, you only want to print the *Total Gross Amount* (/101) wage type in the form. Therefore, you only permit the value `/101` for the **WAGETYPE** *InfoDimension* and the **WAGETYPE** *InfoField*.

Copy HR Standard Form

Use

⚠

Do **not** modify HR standard forms. They can be overwritten by release upgrades or by an HR Support Package [Ext.].

If you want to set up an HR form, you must first create it [Page 33]. Alternatively, you can copy an HR standard form to the customer namespace and then redesign it as required.

Prerequisites

You have accessed the initial *Forms Workplace* screen.

Procedure

1. Select the HR standard form you want to copy to the customer namespace.

2. Choose ▯ *Copy*.

   The *InfoNet Name* dialog box is displayed.

3. Enter the customer name, and select the *country grouping*.

4. Choose ✔ *Continue*.

   The *Create Object Directory Entry* dialog box is displayed.

5. Enter the required data.

6. Choose 💾 *Save*.

7. To adapt the form, choose 🖉 *Change*.

8. Choose 💾 *Save*.

Result

You have copied an HR standard form to the customer namespace, and can adapt it as required.

Copy HR Standard Form

Copy HR Standard Form

Create Form

Use

You want to create a new HR form.

Prerequisites

You have maintained the required customer metadata, or you only use the metadata provided by SAP.

Procedure

1. Access the transaction as follows:

Transaction code	`HRFORMS`

2. Choose ▯ *Create*.

    The system inserts a new line in the list of existing HR forms. The *Object name* and *Country grouping* columns are ready for data input.

3. Enter the name of the HR form, and select the country grouping.

    The name (less than 16 characters; no special characters) must be unique in the system. If both entries are without error, the system creates the HR form.

4. If you want to continue creating the *InfoNet*, use the editor to edit the structure for the form by choosing 🖉 *Change*.

    On the left side of the editor, you see an overview tree. This tree contains the *MetaNet*, that is, all of the available *Human Resource* data.

5. Create your *InfoNet*, which contains the required *InfoStars*, *InfoDimensions*, and *InfoFigures*.

6. Choose 💾 *Save.*

Result

You have created a new form. You should then continue by designing the *InfoNet* in more detail.

Select Information Using Drag&Drop

Use

You use the directory in the *MetaNet* to select the information to be printed later, and then store it in the *InfoNet*. To select HR data, you use Drag&Drop to drag *MetaStars*, *MetaDimensions*, and *MetaFigures* from the left overview tree to the right overview tree. An *InfoStar* is created from a *MetaStar*. Similarly, an *InfoDimension* is created from a *MetaDimension*, and an *InfoFigure* is created from a *MetaFigure*.

Prerequisites

You have accessed the Forms Workplace.

Procedure

1. Access the transaction as follows:

Transaction code	HRFORMS

2. On the *HR Forms - Overview* screen, select the HR form you want to change.

3. Choose 🖉 *Change*.

   The *HR Forms Workplace* screen is displayed.

4. For the *MetaNet*, choose 🗗 *Expand all nodes*.

5. Place the cursor on the piece of information (such as an *InfoStar*) that you want to include in the *InfoNet*.

6. Use Drag&Drop to drag the information into the *InfoNet*.

7. Stars can be renamed, but other HR objects cannot.

8. Choose 💾 *Save.*

Result

You have selected the information to be printed later on the form.

Display ABAP Dictionary Structure

Use

After data selection you want to display the ABAP dictionary structure for control purposes and to get an overview of the structure.

Prerequisites

You have created the *InfoNet* for the form and are in the *Change HR Form* screen.

Procedure

1. Choose *Goto* → *Display Structure*.

2. On the *Form Structure in Data Dictionary* screen, you can see all the objects that belong to the InfoNet.

Print Program

Use

Once you have selected data for the form using the Forms Workplace and have designed the form using *SAP Smart Forms*, activate the print program using the Forms Workplace. You can then call the print program as a test or in productive operations.

Scope of Functions

- You can start the print program in test mode to ensure that all data is retrieved correctly for printing the form.

- To print the form, you can start the print program in productive operations:

- You determine the period for printing the form.

- You determine, for example, the personnel numbers for which the form is created.

Activities

You start printing the form.