

UNIT 4

User-specific Settings

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UNIT OBJECTIVES

- Create a new document type
- Define a status network
- Assign object links
- Understand the meaning of "Frontend Type"
- Check the Knowledge Provider settings
- Make the workstation settings required for a new file type
- Assign the viewers
- Define the settings relevant for the Office Integration
- Set user profiles
- Define roles
- Use the authorization objects

Unit 4

Lesson 1

Understanding Control Data

LESSON OVERVIEW

In this lesson you will become familiar with the basic principles of customizing for document types. This includes making the necessary settings for the status network and object links.

Business Example

As the manager of the engineering department, you decide to introduce a new CAD system containing new file types. For this purpose, the customizing settings must be changed and enhanced.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Create a new document type

- Define a status network

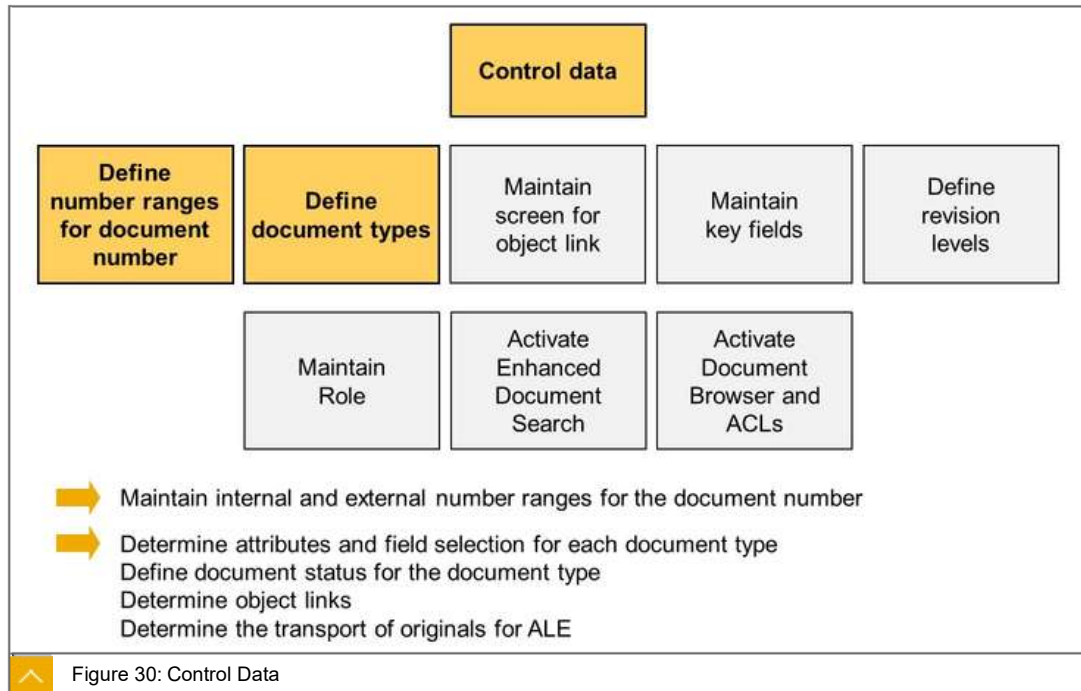
- Assign object links

Document Types

Up to now you used the SAP DMS without any kind of problems. Now your company implements a new CAD system, which makes it necessary, that you check the existing customizing settings. You must now change the existing entries or define new one.

Follow the following menu path from the SAP menu: Tools Customizing IMG Cross-Application Components Document Management Control Data .

Control Data



Before the document types can be determined, the internal and external document number definitions are required. For this, you determine the number ranges in Customizing. When SAP delivers S/4HANA, some predefinitions of internal and external number ranges are available.

You must consider the following question:

How many number ranges do we have to use?

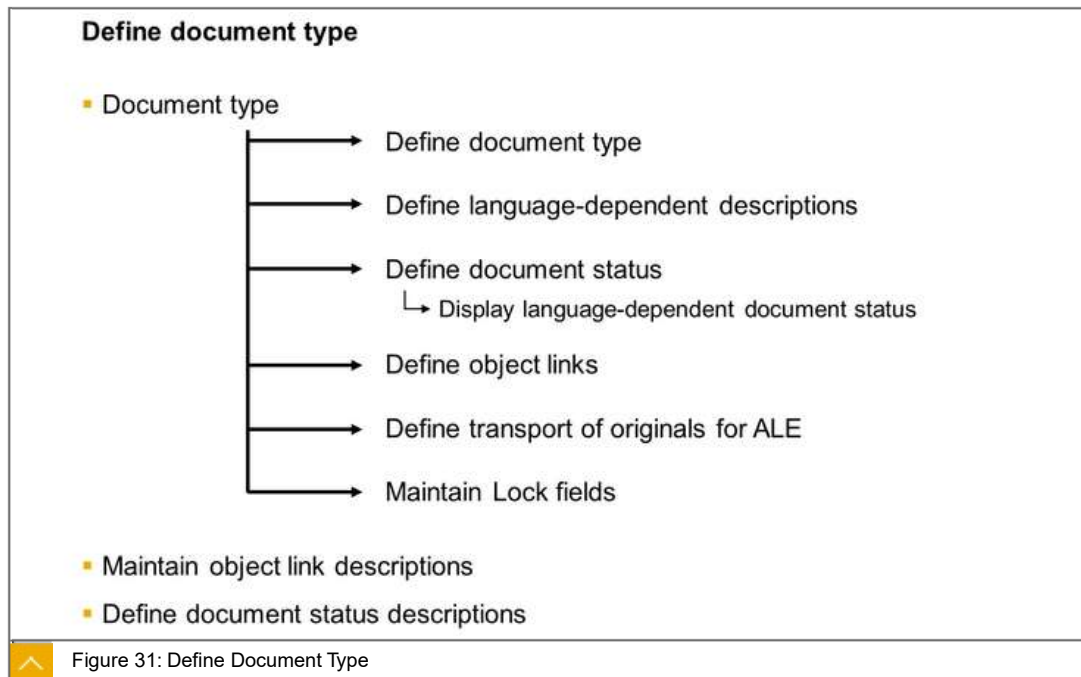
Does it makes sense to define our own number ranges per document type?

What's the message behind a internal document number?



Note:

The entry Maintain DIR Access Based on Personal Data is only relevant in the context of vendor and customer objects and not relevant for standard DMS scenario.



Customizing for the document type does not just affect the appearance of the basic data screen; it also affects the status network or the object links.

Therefore the customizing is structured in subdialogs. First you create the relevant settings for the document type. Then you set up the document status and the object links.

The texts for the object link and the document status can be preset independently of the document type.

The transport of originals for an ALE (Application Link Enabling) scenario is set up depending on the document type and the data carrier. You can preset a suitable application, but you do not necessarily have to do so.

The lock fields are used, when you connect the right status type with the status. In Customizing you define the fields which are open to change.



Document Type DRW

- ☒ Use KPro
- ☒ Status Change
- ☒ Rev. Lev. Assgmt
- ☒ Version Assgmt
- ☒ Change Docs
- ☒ Use ACM
- ☒ Display Object Links
- ☒ Use DS package

- Number Assgmt (internal, external, mixed)
- Internal / External Number Range
- Number Exit (MCDOKZNR)
- Vers. No Incr (1-9, A-Z, *)
- Version Sequence
- File Size (1500000)

- Class Type (017)
- Class (CL0001)

- Default Appl. (BMP, JPG, Tif...)
- Dis. WS. applic. (BMP, JPG, Tif...)

Field selection

Class Data	- *
Hierarchy Indicator	- *
Document Status	- *. +
Document Desc.	- *. +
User	- *. +
Authorization Group	- *. +
Lab/Office	- *. +
Change Number	- *. +
CAD Indicator	- *
Superior Document	- *. +
WS Application 1	- *. +
WS Application 2	- *. +
CM Relevance	- *. +

- Hide

* Display

. Optional

+ Required

Figure 32: Document Types

The document type is a central control element in document management. It subdivides documents according to characteristics, and the organizational processes that result from these characteristics.

You permit or forbid functions by setting indicators in the attributes. For example, you first set whether the originals are checked in using the Knowledge Provider (KPro). Working with S/4HANA, you have to set the KPro indicator, because S/4 prefers the use of HTTP Content Server. If this is the case, KPro provides you with all the options that it contains. This includes the assignment of N originals or N content versions.

In addition, you define whether a status change is to take place after each change to the document info record or whether the system is to assign a revision level along with a change number when a document is released.

The indicator for version assignment is connected to the version number increment. Here you specify whether automatic versioning is to take place and the increment by which it is to take place.

The following entries are only relevant for the use of the PLMWebUI:

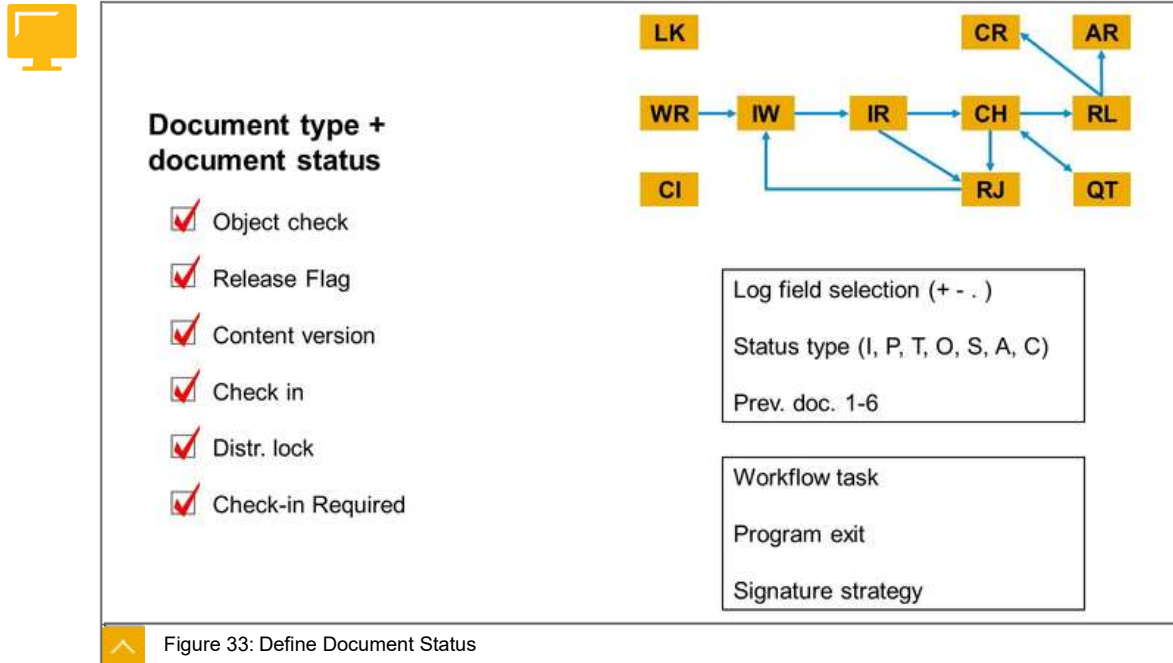
The entries for Access Control Management (ACM) and object links are relevant for the special authorization concept. The settings of this check boxes has consequences for standard DVS.

With the DS package (Digital Signature) indicator your can activate the DS feature in PLMWebUI. In classic SAP GUI digital signature is a common used scenario.

In the settings for number assignment, you decide whether to use internal, external, or mixed number assignment, with or without a user exit. Use the program MCDOKZNR to select a number exit to store routines for number assignment. Entering a file size restricts the size of the original when you check it in into the SAP database, as long as the KPro is NOT being used.

The document type determines which presettings are used for the creation of originals as regards the application used, and the distribution of originals.

You can set up individual fields on the basic data screen in the field selection. You can decide, which field, is a required one, grayed out or just displayed. The field selection properties differ from field to field.



You can define the status in according to the document type.

You use the attributes to fine-tune each status. In this way, you can check whether the linked ERP objects are available, whether it is necessary to check-in the originals, or whether a check-in occurs after the status has been set. A content version is used to freeze the processing statuses of an original. When you store your files, the content versions are shown on the Original tab page. You can use the selection log field to control the how the log field is used when the status of a document is changed. You can, for example, make the user fill a status-dependent log field as a required entry. The impact of each status on the document info record is defined depending on the status type.

You can define different statuses for each document type. You can also set up the status network using predecessor and successor relationships. A maximum of 6 predecessors can be defined for each status. The system determines all the input possibilities for the status in each processing situation. You can also display the status network graphically. In the workflow workbench you define the workflow task to be performed when you set the status.

The different status types were detailed defined inside document info record lesson. In summary: when you create a new document, the status type should be primary or initial. An initial status can be set for several times. The status type O-Original Processing- should be combined with a Work status. The user, defined inside document, is the exclusive user. If you don't like it, delete the status type O and think about authorizations.

The lock field status has a relevant customizing entry. There you define which fields can be changed or not.



Document type DRW + Object link MARA

- | | |
|----------------------------|--|
| ▪ Object (MARA) | <input checked="" type="checkbox"/> 1:n ratio |
| ▪ Screen number (201) | <input checked="" type="checkbox"/> Deletion block |
| ▪ Additional object (KAN1) | <input checked="" type="checkbox"/> Additional functions |

▪ When New Version

▪ Create Document

▪ Document Version

ALE distribution

- | |
|---|
| <input checked="" type="checkbox"/> No maint via ALE |
| <input checked="" type="checkbox"/> Obj. link target system |
| <input checked="" type="checkbox"/> Object link from ALE |

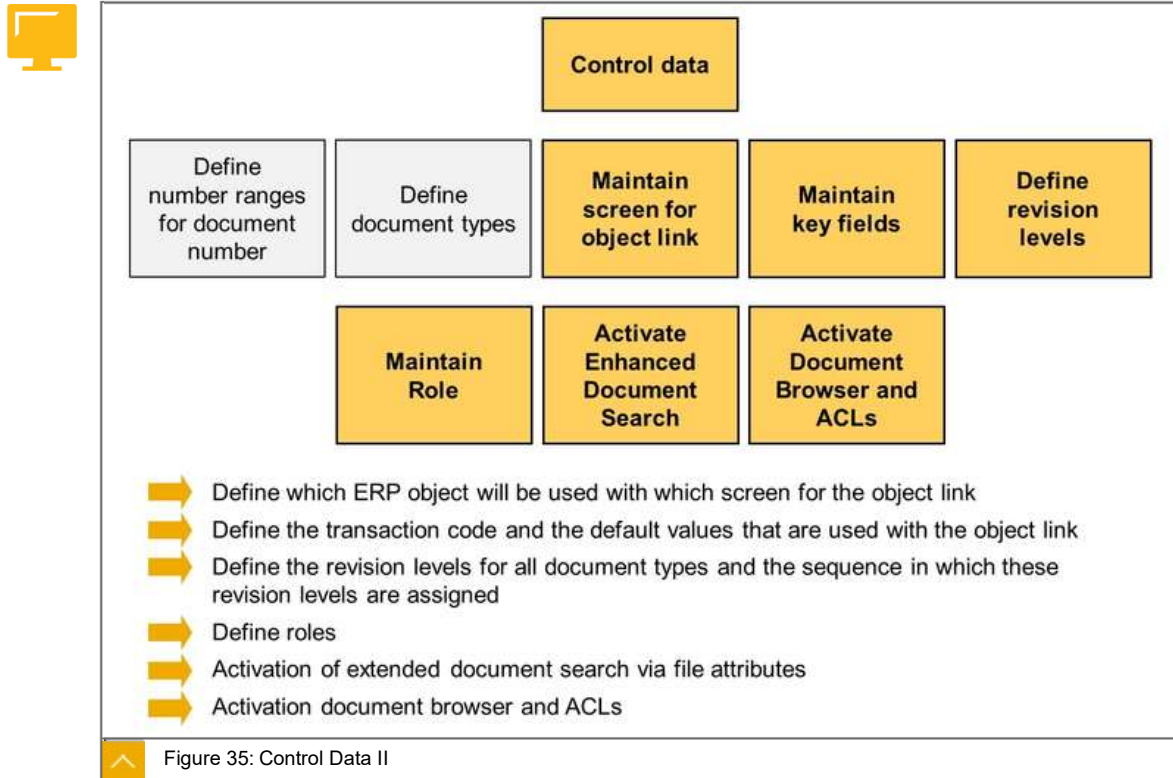


Figure 34: Object Links

The object links refer to the object tables and corresponding screen number. When creating a new version of a document info record, you can set whether the person responsible chooses the object links, whether they are copied automatically, or ignored. You can create documents straight from the object links, or by using a transaction. You can preset whether only the current version or all versions are to be displayed in each SAP object. You can use a 1:n link to restrict the object links so that only one document can be assigned to multiple master records. A deletion lock prevents a document info record from being deleted if an object link exists for it. You can activate additional functions such as long texts, classification, and additional objects centrally. The additional object can provide a closer description of an object link. If document info records with corresponding object links are distributed to another system via ALE, multiple use can be set up.

Additional Control Data

Control Data II



In the Maintain Screen for Object Link section, you can define new object links in addition to the standard object links. SAP delivers empty dynpros, which can be used. Please read the SAP help. It explains in detail, which settings you edit in ABAP Workbench SE80. These new objects are also defined in the table Maintain key fields.

This table is also used to define the transaction codes, which will be opened, when you double-click the object ID.

**Note:**

Be aware of the following: This table is also used by other SAP areas.

You can assign a revision level to a document, when it is released with a change number. The revision level indicates an important document version. You determine revision levels in Customizing for Document Management or Engineering Change Management. In addition you have to activate the assignment of revision levels for each document type. Inside Customizing for Engineering Change Management you make some general settings for the revision level definition.

If you would like to Maintain Roles, the standard transaction (PFCG) is started. You are then able to change existing roles or create new ones.

With the activation of the Enhanced Document Search, the transaction CV04N gives you the opportunity, to search for documents entering files attributes.

Document browser and Access Control Lists can be switched on or off.



LESSON SUMMARY

You should now be able to:

- Create a new document type
- Define a status network
- Assign object links

Unit 4

Lesson 2

Working with General Data

LESSON OVERVIEW

In this lesson, you will control the settings for the Knowledge Provider and data carriers.

Business Example

Your department implemented a new CAD system. As well as using new file and document types, you now evaluate a new secure storage area within the SAP landscape. You are also considering using various different data carriers, including front-end computers.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Understand the meaning of “Frontend Type”

- Check the Knowledge Provider settings

General Data

General Data I

General Data within Customizing is relevant for all technical issues. This happens independent from document types.

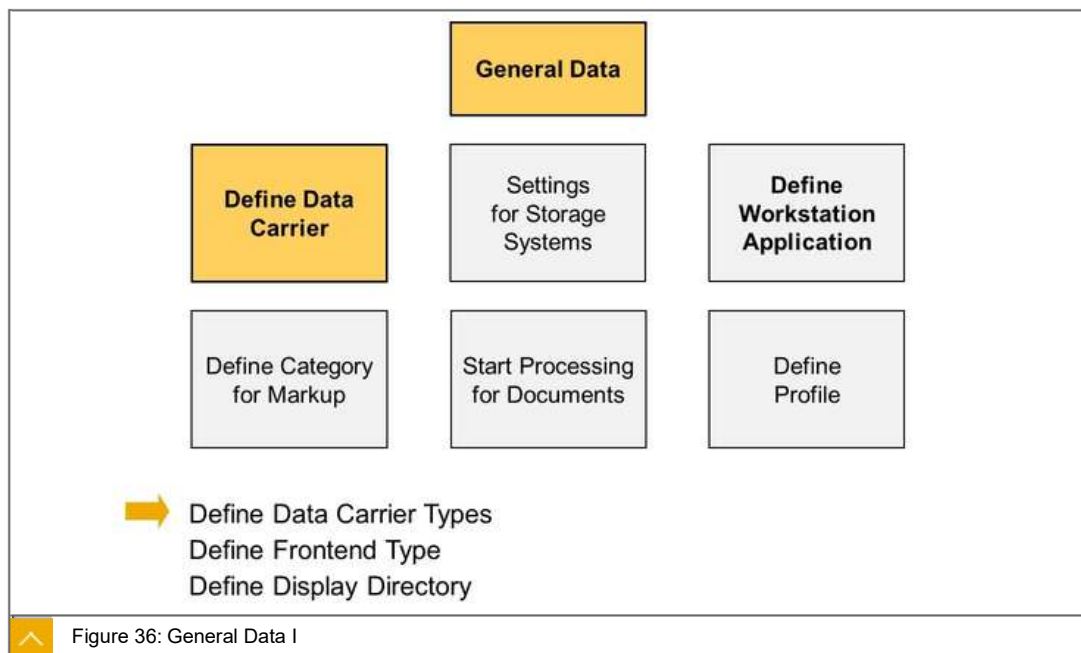


Figure 36: General Data I

The first relevant settings are the definitions of data carrier types: Cross-Application Components Document Management General Data Define Data Carrier.

Define Data Carriers



Define data carriers

- Define data carrier type “archive”
 - ↳ Define archive
- Define data carrier type “vault”
 - ↳ Define vault
- Define data carrier type “server, frontend”
 - ↳ Define servers and files or folders
 - ↳ Identify frontend computers
- Define data carrier type “external DMS”
 - ↳ Define external DMS
- Define mount points / logical drive

Figure 37: Define Data Carrier I

In Customizing for the data carriers, you could manage settings for the old DMS storage location (ECC). These are either vaults or RFC archives. If you are working with an SAP S/4 system landscape, the Knowledge Provider (KPro) storage location is the preferred scenario and the these entries are not relevant.



Define data carrier types “server” and “frontend”

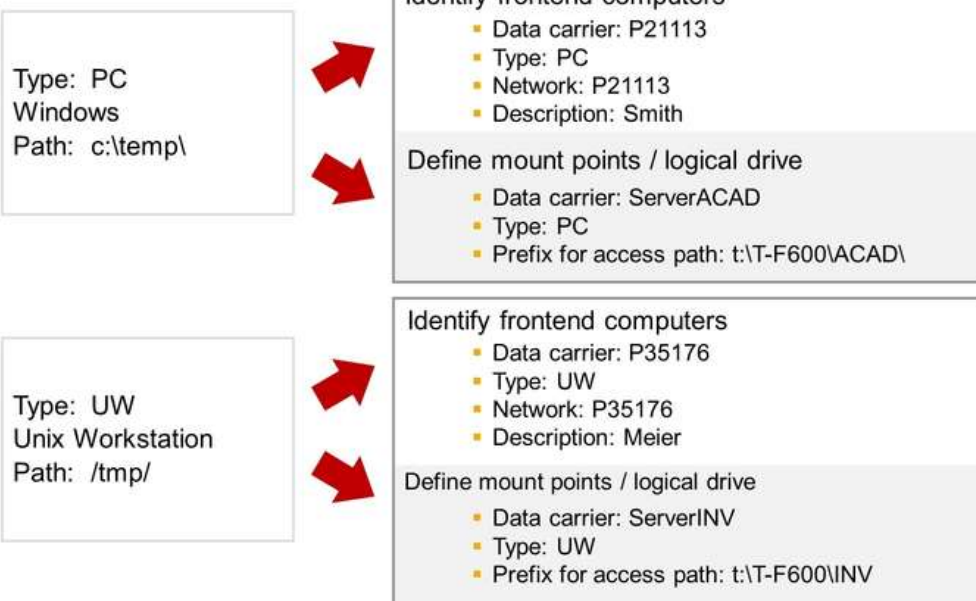


Figure 38: Define Data Carrier II

First, enter all of the front-end types in the Define data carrier type server, front end detailed entry.

The Frontend-type is a central element inside DMS:

The Frontend-type has to be selected inside document info record. This is only possible, if your PC network address is added in customizing and you do not work with the Default entry.

The Frontend-type is defined inside customizing. In addition to the description, you could specify a path indicating where the original is stored when it is displayed. The best decision is to do not an entry. Then the operating system, like MS Windows, decides where the file is displayed. For MS Windows the display path is set in the environment variables.

When you display the files, the files are only copied to the given path, because the real original is still stored in the secure storage area.

How does the system decides, whether the Default entry is used or a selectable Frontend-type? In the environment variables of your local PC you define the Variable-hostname and connect it to your PC network address. Now your PC is connected to the SAP System. If you start the document info record with a named PC, the SAP system uses the right frontend type. For additional help open SAP Help.

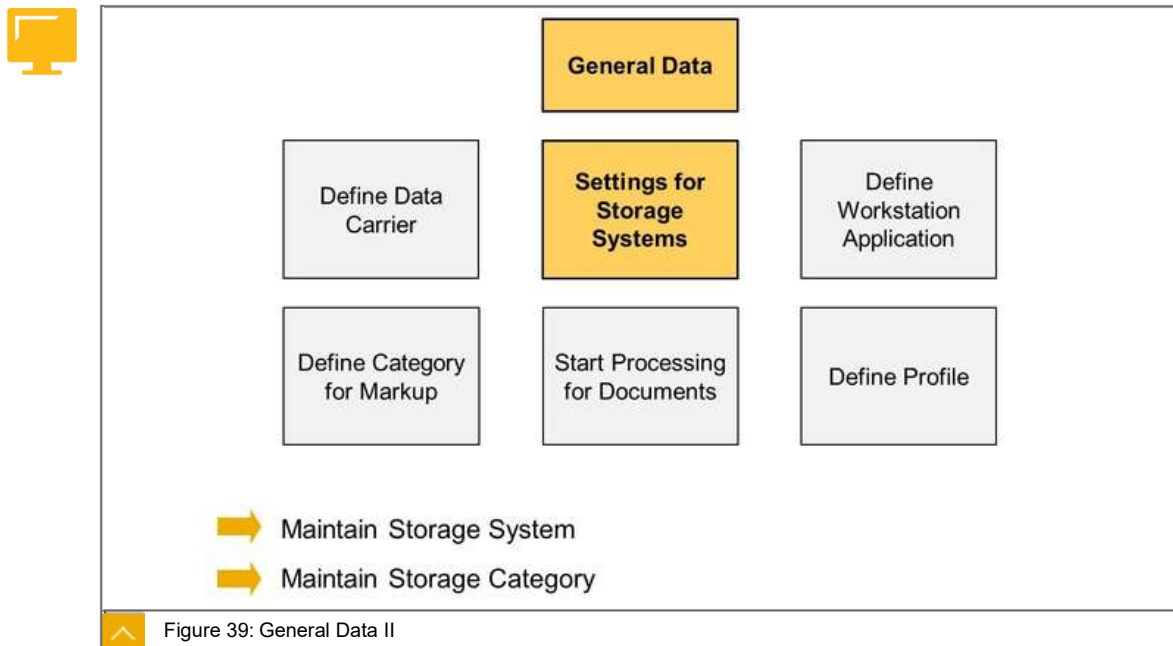
In customizing Workstation Application you connect your different frontend types with Display or Change workstation applications.

In the past you used different Frontend-types for different operating systems. Now you can connect different Frontend types to different groups in your company.

External document management system allows you to define an external DMS like an Internet server.

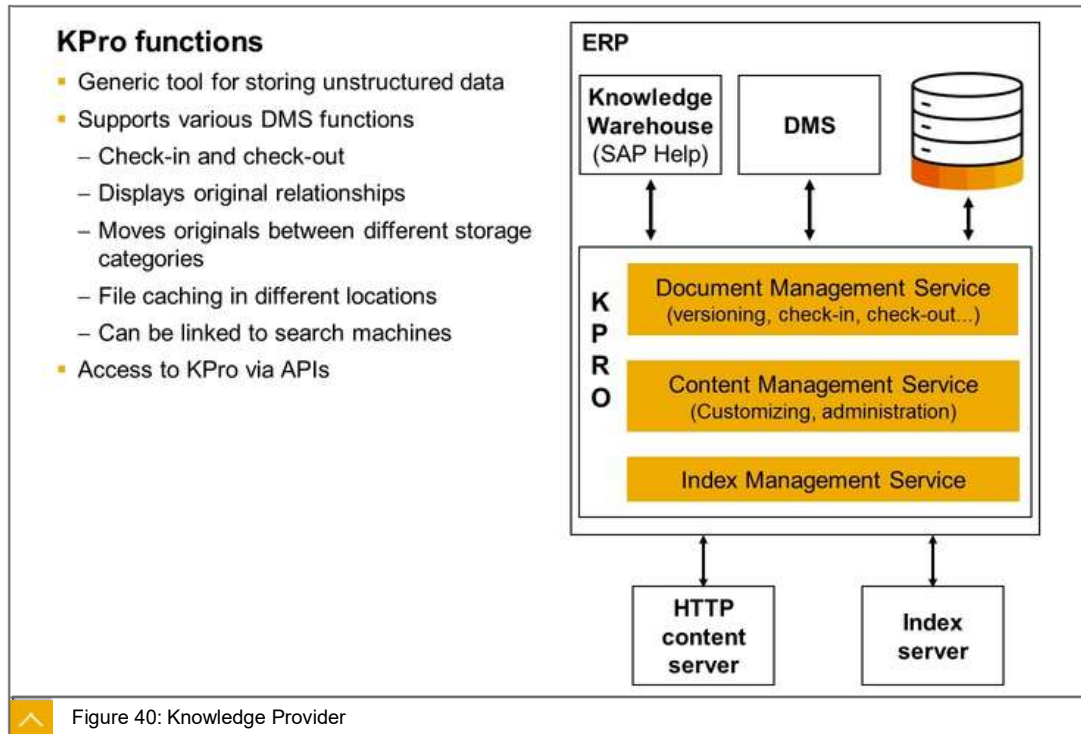
You can use Define mount points / logical drive to define a network drive (data carrier) where the originals are stored. These drives are dependent on the frontend-type. If you assign an original using a logical drive in the document info record, you get a selection of possible data carriers.

General Data II



In document management you can check in originals using the KPro (Knowledge Provider). To do this, you define storage systems and storage categories. The KPro is activated in the Customizing settings for the document type. The next lesson will provide you with a deeper insight.

Knowledge Provider



The Knowledge Provider is the right software inside SAP System, to store your files inside secure storage areas. The KPro is not a storage, it only contain the right services. The complete KPro customizing can be found in the area of SAP Netweaver customizing. Inside DMS you only find the definition of storage system and storage category.

In addition to the storage systems, you can also connect index servers that are used for full-text search.

If you want to transfer files from one KPro controlled secure storage area to another, use the program **Dms_Relocate_Content**. However, you can also use this program if you want to transfer files from a live HTTP content server to an archive HTTP content server.

An additional feature of the SAP HTTP Content Server is the caching of files for different locations.

Settings for Storage Systems



Maintain storage system

Content rep.: DMS_C1
 Description: SAP database
 Storage type: SAP system database
 Details: Content table: DMS_CONT1_CD1

SAP System Database
HTTP content server

Maintain storage category

Storage category: DMS_C1_ST
 Description: DMS default storage
 Content rep.: DMS_C1
 DocManageArea: DMS

Figure 41: Settings for Storage Systems

First you maintain the different Content Repositories, when you select the entry storage systems. Then you select the right document area and the storage type you want to use. In the area of DMS it can only be HTTP content server or SAP System Database. Preferred scenario in SAP S/4 is the HTTP Content Server.

Defining a HTTP Content Server you are able to open the administration view to do the detailed settings. As an alternative transaction CSADMINs also available. The Content Repository is the technical view.

The storage category provides the information which is visible in the document info record. It's the end user view.

In the definition, you connect the storage category with the content repository. The document area with the entry DMS ensures that, when you check in originals in the document info record, the relevant storage categories are available.



Note:

In SAP S/4 HANA a simple upload of files is possible. The only thing you have to do is to define the storage location and activate the simple upload. In combination with status settings you are able to automate the upload to the right secure storage area whenever a status is set.



LESSON SUMMARY

You should now be able to:

- Understand the meaning of "Frontend Type"
- Check the Knowledge Provider settings

Unit 4

Lesson 3

Managing Workstation Applications

LESSON OVERVIEW

In this lesson, you will learn about the settings required for workstation applications.

Business Example

Now you want to use new file types. Therefore you have to define new workstation applications.



LESSON OBJECTIVES

After completing this lesson, you will be able to:

- Make the workstation settings required for a new file type
- Assign the viewers
- Define the settings relevant for the Office Integration
- Set user profiles

Workstation Applications

General Data III

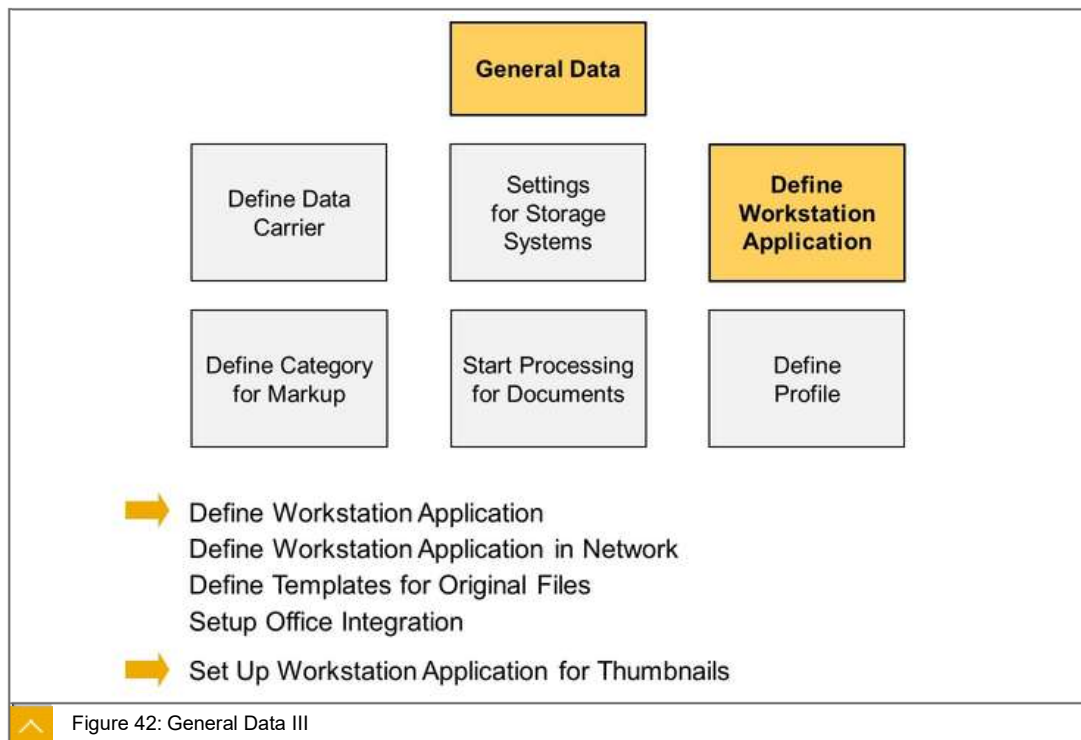


Figure 42: General Data III

In the Define Workstation Application detail entry, you first make the detailed settings for the applications that are to be used. Depending on the front-end type, you assign the network path of the program that is to be started. There are several possible selections.

You can define templates to specify a document info record or a file that is used as a template for new document info records and their originals.

You can use Office Integration for easy processing of original application files in Microsoft Office applications (for example, Word, Excel).

In the thumbnail settings, you specify the workstation applications that can use thumbnails. You also define the sequence in which the SAP system call the assigned files as a Thumbnail.

Workstation Application



Define workstation application of the type BMP

Description: Bitmap
 File suffix for application: BMP
 File format: *.BMP
 MIME type: image/x-ms-bmp

- | | |
|---|--|
| <input checked="" type="checkbox"/> Start Authorization | <input checked="" type="checkbox"/> Additional files |
| <input checked="" type="checkbox"/> You cannot rename temporary files | <input checked="" type="checkbox"/> Content version |
| <input checked="" type="checkbox"/> Dialog when overwriting | |
| <input checked="" type="checkbox"/> Data check off | |
| <input checked="" type="checkbox"/> Delete file after check-in | |

Define workstation application in network

Appl.	AT	Type	Application path
BMP	1	PC	%VIEWER-CONTROL% %SAPPROVIS%
BMP	2	PC	Pbrush.exe
BMP	1	TR	%SAP-OFFICE-INTEGRATION.OUTPLACE%
BMP	2	TR	%auto%

Figure 43: Workstation Application

In Customizing for the workstation application, you first define the required description. You then specify the file suffix for the application. This indicates the file format for a temporary file that the system creates to display original data that has already been checked in.

The file format ensures the selection of the correct original, if an original is linked to the document info record. The values entered are in the input help when you look for a file on the local hard drive or in the network. Specifying the MIME types ensures that originals (for example, those that are called in a Web browser) are displayed correctly.

You can use the application to control originals. Therefore, the original can be deleted from the work area after it has been checked in to a secure storage area or, when an original is checked out, the system can check the work area for another original with the same description. In addition, you specify whether you want to work with content versions or additional data.

By making the settings for Define workstation application in network you can set which application is used to display, edit, and print in relation to the front end type.

%VIEWER-CONTROL% %SAPPROVIS% is the relevant entry, if you would like to use the Visual Enterprise Viewer.

Pbrush.exe means, that you only have to enter the executable file, no matter where the program is located on your hard disk.

%SAP-OFFICE-INTEGRATION.OUTPLACE% is a setting, which is explained on the next figure.

%auto% is an entry, which enables the local operating system to use the right program. No definition made by you. The operation system decides.



Note:

Pay attention to the following: Depending on the MS-Windows operating system the variable %auto% doesn't work. Working with Windows 2018 Server this functionality is offline.

Office Integration



Defining Workstation Applications in Networks

Appl.	Type	Cat.	Application path
DOC	1	PC	%SAP-OFFICE-INTEGRATION.INPLACE%%MAXSIZE%
DOC	2	PC	%SAP-OFFICE-INTEGRATION.INPLACE%
DOC	3	PC	%SAP-OFFICE-INTEGRATION.OUTPLACE%



Figure 44: Office Integration

You can use Office Integration for easy processing of original application files in Microsoft Office applications (such as Microsoft Word and Microsoft Excel) directly from the document info record.

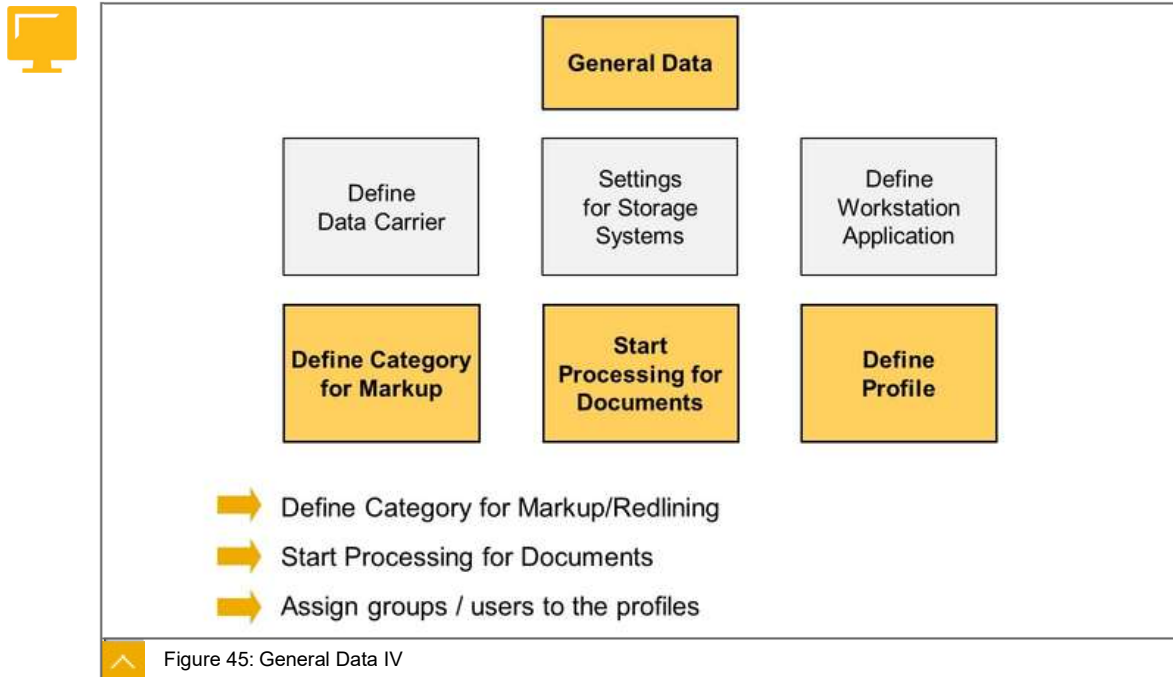
You set up the type of Microsoft Office integration in the network settings, for example, for the workstation application DOC. The selection of **Inplace** means that Microsoft Office integration is started for processing within the SAP window. The selection of **Outplace** means that a new window is opened for the processing. If you set the variable **Maxsize**, then Microsoft Office integration is started in the largest window possible.



Note:

Always remember the following: an integrated display or change is only available in the SAP GUI. In FIORI Launchpad the files are often displayed as a separate application. Do not forget the MIME type.

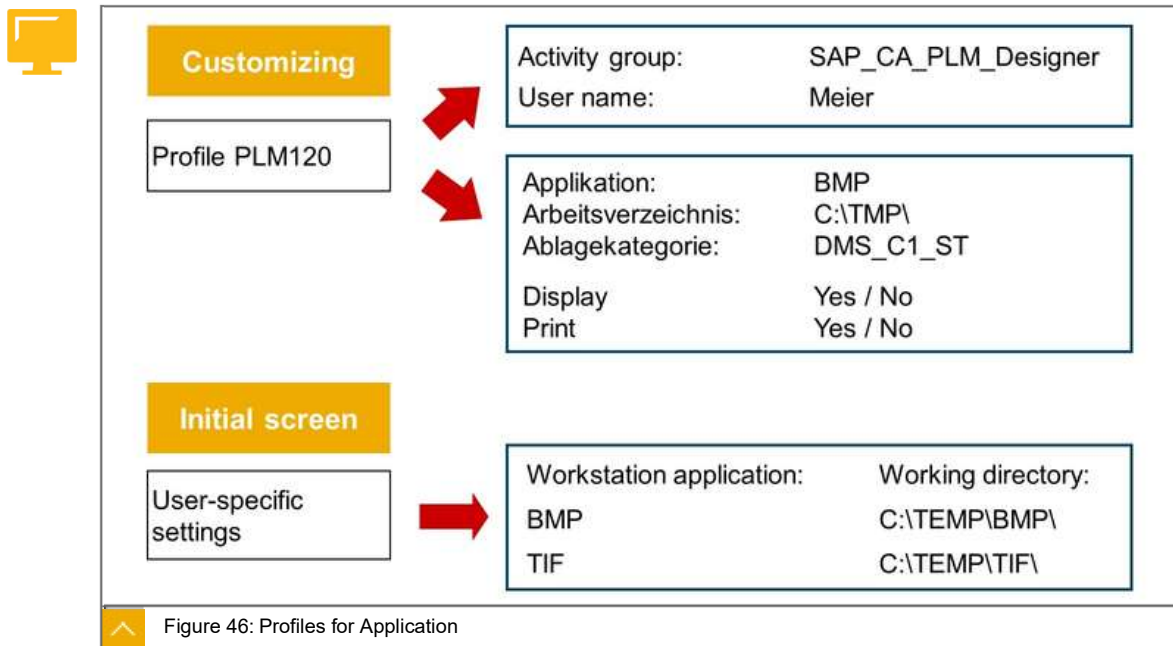
General Data IV



In the Define Category for Markup entry, you enter the markup category that you select when you create a redlining for an original file. The markup category is assigned to an authorization object within a role (and, therefore, to the user). In the authorization object, you specify whether a user can create, change, display, or delete a redlining file.

In the Start Processing for Documents entry, you can store function modules that you use in the results list in the document search transaction CV04N. Within this, you select the required documents and start processing as required (for example, Set Deletion Flag).

Profiles for Application



You can define profiles in Customizing, to which individual DMS users or activity groups (roles) are assigned. You can define work directories for the individual applications. This is where the originals are copied when you check them out from the secure storage area for editing. You can pre-assign a storage category of the Knowledge Provider for the originals. In addition to the default for displaying an application, the system provides you with a limited selection of originals when you display a document. The default for printing ensures that the system checks that the workstation application that was entered acts as a filter when printing original application files (for example, from an external document management system).

In the initial screen for the document info record, you can set up user-specific settings for a work directory for the individual workstation applications. These values have a higher priority than the profile settings that you made in Customizing.



LESSON SUMMARY

You should now be able to:

- Make the workstation settings required for a new file type
- Assign the viewers
- Define the settings relevant for the Office Integration
- Set user profiles