Business Document Service
(BC-SRV-BDS)

Release 4.6C
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<table>
<thead>
<tr>
<th>Icon</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Caution Icon]</td>
<td>Caution</td>
</tr>
<tr>
<td>![Example Icon]</td>
<td>Example</td>
</tr>
<tr>
<td>![Note Icon]</td>
<td>Note</td>
</tr>
<tr>
<td>![Recommendation Icon]</td>
<td>Recommendation</td>
</tr>
<tr>
<td>![Syntax Icon]</td>
<td>Syntax</td>
</tr>
<tr>
<td>![Tip Icon]</td>
<td>Tip</td>
</tr>
</tbody>
</table>
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Purpose

The Business Document Service (BDS) provides general and easily integrated document management functions for R/3 applications. The Business Document Navigator (BDN) navigation interface is the central component of these functions. This user interface enables users to perform document management functions such as displaying, creating and deleting documents. Users can interactively execute these functions.

The BDS is also closely related to the business processes in an enterprise, which is particularly apparent in general object relationships. Together with SAP Desktop Office Integration, the BDS is a solution package for integrating general desktop office applications (see also Desktop Office Integration [Ext.]).

Implementation Considerations

You do not need to customize when you implement the BDS.

Customizing is only possible for special requirements regarding assigning attributes to documents, specifying as client-specific or cross-client, transport connections and defining a repository other than the standard. (See also Content Models [Ext.].)

For more information on BDS Customizing, see the Implementation Guide (IMG) under Basis - Basis Services - Business Document Service.

Integration

The BDS can be integrated into all SAP applications that involve context documents and do not have any special requirements regarding document management. For an example application, choose Office → Business Documents → Documents → Find.

Class CL_BDS_DOCUMENT_SET is available within the BDS. For more information on integrating the methods belonging to this class, see Integrating the BDS in SAP Applications [Page 56].

Features

The BDS has the following features:

- Simple handling of desktop office products
- Support of scenarios for
  - Authoring
  - Publishing
  - Retrieval
- Storing of private and shared documents
- User interface for
  - Attribute assignment
  - Classification
  - Detailed information and document information
- Displaying
- Changing
- Navigation

- Connection to the Change & Transport System
Concepts

Introduction

The Business Document Service (BDS) manages all the documents belonging to an application object. Application objects are objects in a BDS client application that is using the BDS to manage documents for this type of object.

Application objects are identified by their class name and the corresponding class type, as well as the object ID (see also Parameters [Page 13]). Individual documents are identified by their document ID, their version number and their variant number.

The link between the application object and documents is managed in the BDS. Document attributes and relationships, and the content of documents are managed in the SAP Knowledge Provider [Ext.] in special data structures - so-called content models (see also Content Models [Ext.]). The BDS can evaluate information from various content models, provided that they conform to a basic schema. This means that the individual client applications can use content models that differ according to delivery class, whether or not they are client-specific and available document attributes.

The document meta data are managed in the R/3 database. The document content can also be managed in the R/3 database or it can be transported to a content server via HTTP. It is also possible to move the document content from one physical storage medium to another at a later stage.

Document Model

Documents have various functions: They may be paper documents in the classical sense of the word, but may also be document templates, macros or notes, among other things. In addition, documents may be related to other documents. For example, a note created for a document has a particular relationship to the document itself. In the BDS document model therefore, documents are characterized by attributes and relationships. Attributes relate to the document type ID, while relationships are represented as "belongs-to" relations between documents.

In connection with the BDS document management system, a document is considered within the framework of its whole life cycle. For this reason, the sequence of content, language and format versions comes into consideration when defining a document. Context information and relationships with other objects and documents are also involved.

Business Document Set

The business document set is a central component of the BDS document model. A business document set contains all documents belonging to an application object. The set may contain just one individual document or several documents and their versions and variants. The connection of a document to an application object can be brought about by a direct relationship, or indirectly by relationships within the document (for example, where there are content or language variants).

Individual documents can be addressed directly. Either the entire document including versions and variants or specific content versions or specific variants are addressed.
**Isolated Documents**

An isolated document is one single document that exists in one single version and one single variant. In this case, there are no relationships at all between this document and other documents. An isolated document can be addressed using the following parameter combination:

- **DOC_ID**  
  Document ID
- **DOC_VER_NO**  
  Document content version ID
- **DOC_VAR_ID**  
  Document variant ID

**Versioning**

The content of documents can take various forms. These forms are called content versions or versions. Each ‘predecessor’ version has one ‘successor’ version, which in turn has one successor version and so on. This BDS linear content versioning is characterized as follows:

- Each new version is appended to the linear chain of versions as the latest version.
- Versions are listed.
- Every version can be updated and/or deleted.

**Variants**

As well as existing in various content forms, documents/document content can be in various languages or formats. For example, a document may be a text editing file or an HTML file, in English or in French. In the BDS environment, these specific version types are called language and format variants or simply variants.

The following variant types are supported:

- **LA**  
  Language variant
- **FO**  
  Format variant
- **OR**  
  Original

The variant principle is shown in the diagram below:
All variants are of equal status, that is, the original document is not marked especially.

The set of variants is not structured.

Variants are numbered.

New versions relate to the set of variants as a whole.

Every variant can be updated and/or deleted.

**Relationships**

Between physical documents, there can be relationships to logical documents. These relationships are expressed by the belongs-to relationship type:
Methods

The central BDS class CL_BDS_DOCUMENT_SET provides three method sets for checking documents from various sources in and out:

- Access via URL
- Access via file name
- Access via internal table

For more information, see the sections under Methods [Page 23].

Standard Attributes

The following standard attributes are available in the BDS:

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDS_ARCHIVED_AT</td>
<td>Archiving date</td>
</tr>
<tr>
<td>BDS_CONTREP</td>
<td>Content repository</td>
</tr>
<tr>
<td>BDS_DOCID</td>
<td>Document ID</td>
</tr>
<tr>
<td>BDS_DOCUMENTCLASS</td>
<td>Document class</td>
</tr>
<tr>
<td>BDS_DOCUMENTTYPE</td>
<td>Document type</td>
</tr>
<tr>
<td>BDS_KEYWORD</td>
<td>Keyword</td>
</tr>
<tr>
<td>BDS_STATE</td>
<td>BDS status of application</td>
</tr>
<tr>
<td>BDS_NOTE</td>
<td>Type of note</td>
</tr>
</tbody>
</table>
You cannot assign values to the attributes BDS_ARCHIVED_AT, BDS_CONTREP and BDS_DOCID.

The attributes BDS_DOCUMENTTYPE and BDS_DOCUMENTCLASS must be used in accordance with the SAP ArchiveLink conventions for document types (BDS_DOCUMENTTYPE) and document classes (BDS_DOCUMENTCLASS). For more information, see the Implementation Guide (IMG) under Basis → Basis Services → SAP ArchiveLink → System Settings, sections Maintaining Document Classes [Ext.] and Maintaining document Types [Ext.].

The attributes BDS_KEYWORD and BDS_STATE can be used without restriction.

The following standard attributes of the SAP Knowledge Provider are also available, but they cannot be modified:

<table>
<thead>
<tr>
<th>Attribute Name</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHECKED_OUT</td>
<td>Flag for checked-out documents</td>
</tr>
<tr>
<td>CHECKOUT_USER</td>
<td>User</td>
</tr>
<tr>
<td>CREATED_AT</td>
<td>Creation time</td>
</tr>
<tr>
<td>CREATED_BY</td>
<td>Creator</td>
</tr>
<tr>
<td>DESCRIPTION</td>
<td>Short description</td>
</tr>
<tr>
<td>DOCUMENT_PROTECTION</td>
<td>Document protection</td>
</tr>
<tr>
<td>LANGUAGE</td>
<td>Language</td>
</tr>
<tr>
<td>LAST_CHANGED_AT</td>
<td>Time of change</td>
</tr>
<tr>
<td>LAST_CHANGED_BY</td>
<td>Last person to make changes</td>
</tr>
<tr>
<td>STATE</td>
<td>Status</td>
</tr>
<tr>
<td>STORAGE_CATEGORY</td>
<td>Content category</td>
</tr>
</tbody>
</table>
Parameters

Application objects are identified by the following parameters:

- **LOGICAL_SYSTEM**
  Logical system, ID of R/3 System instance
  For more information, see the Implementation Guide (IMG) under Basis → Distribution (ALE) → Prepare sender system and recipient system in the activities under Setting up logical systems (Specifying a Logical System [Ext.], Assigning a Logical System to a Client [Ext.], Converting a Logical System in Application Tables [Ext.]).

- **CLASSNAME**
  Class name, name of application class

- **CLASSTYPE**
  Class type, type of application class
  A class type may be an object type from the Business Object Repository.

- **OBJECT_KEY**
  Object ID

- **CLIENT**
  Client
  This parameter is optional, except in the case of client-specific documents, where it must be used.

The application object is identified and the relevant document set determined, by a query for all documents assigned to this application object.

An individual document is specified by the following parameters:

- **DOC_ID**
  Document ID

- **DOC_VER_NO**
  Document version number

- **DOC_VAR_ID**
  Document variant ID
Tables
Signature Table

The document(s) is/are identified via the signature table, that is, by the parameter SIGNATURE. This table is used to perform both the query and the response: If you specify what you know about the document or documents concerned, a hit list of the documents that correspond to the criteria is displayed. Attributes of one or more documents can be transferred in the signature table. The signature table has the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOC_COUNT</td>
<td>Document counter</td>
</tr>
<tr>
<td></td>
<td>This field counts individual document variants. There may be several entries per variant. If so, the individual entries differ only in the fields attribute name and attribute value.</td>
</tr>
<tr>
<td>DOC_ID</td>
<td>Document identification</td>
</tr>
<tr>
<td>DOC_VER_NO</td>
<td>Document version number</td>
</tr>
<tr>
<td>DOC_VAR_ID</td>
<td>Document variant ID</td>
</tr>
<tr>
<td>DOC_VAR_TG</td>
<td>Document variant tag</td>
</tr>
<tr>
<td></td>
<td>The type of variant is specified. A variant can take one of three forms:</td>
</tr>
<tr>
<td></td>
<td>• Original</td>
</tr>
<tr>
<td></td>
<td>• Language variant</td>
</tr>
<tr>
<td></td>
<td>• Format variant</td>
</tr>
<tr>
<td>COMP_COUNT</td>
<td>Component counter, total number (sum) of document components</td>
</tr>
<tr>
<td>PROP_NAME</td>
<td>Attribute name</td>
</tr>
<tr>
<td>PROP_VALUE</td>
<td>Attribute value</td>
</tr>
</tbody>
</table>

The more fields you specify, the fewer hits will be found. This gives you the option of restricting your search to just one variant, for example.
Component Table

The table `COMPONENTS` contains components of a document set. The components of several documents can be transferred:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
</table>
| DOC_COUNT | Document counter  
             This field counts individual document variants. There may be several entries per variant. If so, the individual entries differ only in the fields attribute name and attribute value. |
| COMP_COUNT | Component counter for a document, numbering.  
               The counter increases by one for each component. |
| COMP_ID   | Component ID |
| MIMETYPE  | MIME type of component |
| COMP_SIZE | Size of component |
**File Table**

The table **FILES** is used for handling document contents with the aid of local files. The following fields are specified in this table:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOC_COUNT</td>
<td>Document counter</td>
</tr>
<tr>
<td></td>
<td>This field counts individual document variants. There may be several entries</td>
</tr>
<tr>
<td></td>
<td>per variant. If so, the individual entries differ only in the fields attribute name and attribute value.</td>
</tr>
<tr>
<td>COMP_COUNT</td>
<td>Component counter for a document</td>
</tr>
<tr>
<td></td>
<td>The counter shows the sum of the components of the document.</td>
</tr>
<tr>
<td>DIRECTORY</td>
<td>Name of source directory</td>
</tr>
<tr>
<td>FILENAME</td>
<td>File name</td>
</tr>
<tr>
<td>MIMETYPE</td>
<td>MIME type of component</td>
</tr>
</tbody>
</table>

Enter a backslash, if the root directory of a partition is to be addressed when the field **DIRECTORY** is transferred. For example, C:\
URL Table

In the URL table, document content is transferred via URLs, that is, complete URLs are transferred. This specifies where the documents can be stored. The URL table has the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOC_COUNT</td>
<td>Document counter</td>
</tr>
<tr>
<td></td>
<td>This field counts individual document variants. There may be several entries per variant. If so, the individual entries differ only in the fields attribute name and attribute value.</td>
</tr>
<tr>
<td>COMP_COUNT</td>
<td>Component counter for a document</td>
</tr>
<tr>
<td></td>
<td>The counter shows the sum of the components of the document.</td>
</tr>
<tr>
<td>URI_COUNT</td>
<td>URL counter</td>
</tr>
<tr>
<td></td>
<td>The number of fields is entered in this field, depending on URI. The individual URI parts are numbered.</td>
</tr>
<tr>
<td>URI</td>
<td>URL</td>
</tr>
<tr>
<td></td>
<td>This field has a restricted length of 4096 characters. If the URL does not fit into this field, it is split and continued in another field. This causes an increase (of one) in the URI_COUNT counter.</td>
</tr>
</tbody>
</table>
Content Table

In the table CONTENT (the binary table), document contents are transferred directly. Transfer is via an internal table. The relevant field is LINE:

<table>
<thead>
<tr>
<th>Field</th>
<th>Data Element</th>
<th>Data Type</th>
<th>Length</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LINE</td>
<td>SDOK_SDATX</td>
<td>RAW</td>
<td>1022</td>
<td>Line for binary document content, length for upload</td>
</tr>
</tbody>
</table>

If a caller transfers the content of a document in the binary table and at the same time defines that the mime type is text/Subtyp, the document is handled as a text document, that is, it is converted into the current R/3 code page and stored as text.

Several components of various documents can be transferred in a content table: A new row is started for each component. The size of the individual components (table COMPONENTS [Page 16]) indicates the beginning and end (row x) in the content table.

In the table ASCII_CONTENT (the ASCII table), document contents are transferred directly. Transfer is via an internal table. The relevant field is LINE:

<table>
<thead>
<tr>
<th>Field</th>
<th>Data Element</th>
<th>Data Type</th>
<th>Length</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LINE</td>
<td>SDOK_SDAT</td>
<td>CHAR</td>
<td>1022</td>
<td>Line for text document content, length as for upload</td>
</tr>
</tbody>
</table>

Several components of various documents can be transferred in a content table. A new row is started for each component. The size of the individual components (table COMPONENTS) indicates the beginning and end (row x) in the content table.

In the Content table, one text line is transferred per table line. Line breaks are recognized implicitly by the character = Space after the last character, that is, there are no explicit line breaks. Continuous text can be defined for applications with very long text lines. This can be implemented using the statement text_as_stream = 'X': Carriage Return and Line Feed are in the text implicitly. Therefore, line breaks can be specified explicitly.
## Relationship Table

In the table **RELATIONS**, relationships between documents are specified. The following attributes are provided:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOC_COUNT</td>
<td>Document counter &lt;br&gt;This field counts individual document variants. There may be several entries per variant. If so, the individual entries differ only in the fields attribute name and attribute value.</td>
</tr>
<tr>
<td>RELA_ID</td>
<td>Relationship ID</td>
</tr>
</tbody>
</table>
Attributes Table

In the table PROPERTIES both attributes are transferred:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROP_NAME</td>
<td>Attribute name</td>
</tr>
<tr>
<td>PROP_VALUE</td>
<td>Attribute value</td>
</tr>
</tbody>
</table>

This table is used for methods that only address one document.
Query Table

The selection criteria for the search query are specified in the table `QUERY`.

Each entry returns restrictions for an attribute, analogous to the structure of a ranges table. The following attributes are expected:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROP_NAME</td>
<td>Attribute of a document or description</td>
</tr>
<tr>
<td>SIGN</td>
<td>Include-Exclude attribute in a query</td>
</tr>
<tr>
<td>OPTION</td>
<td>Comparison operator in a query</td>
</tr>
<tr>
<td>LOW</td>
<td>Lower interval limit in a search query</td>
</tr>
<tr>
<td>HIGH</td>
<td>Upper interval limit in a search query</td>
</tr>
</tbody>
</table>
Methods
General Methods
ASSIGN

This method is used to assign a document to another application object. The ID of the application object and the document ID of the document that is to be assigned are transferred.
CALL_NAVIGATOR

The application object (Document Set) is identified by the attributes described in the section Parameters [Page 13].

Documents are identified using the signature table [Page 15].

In the table EXCLUDING you can specify which functions are not offered. The following values are defined for EXCLUDING:

<table>
<thead>
<tr>
<th>Function</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO_MODIFY</td>
<td>No modifying of document</td>
</tr>
<tr>
<td>NO_DELETE</td>
<td>No deleting of document</td>
</tr>
<tr>
<td>NO_TRANSPORT</td>
<td>No transporting of document</td>
</tr>
<tr>
<td>NO_CREATE</td>
<td>No creating documents</td>
</tr>
<tr>
<td>NO_STANDARD_DOCS</td>
<td>No standard document types</td>
</tr>
<tr>
<td>NO_MODIFY_ATTRIS</td>
<td>No modifying attributes/keywords</td>
</tr>
<tr>
<td>NO_COPY</td>
<td>No copying documents</td>
</tr>
<tr>
<td>NO_USER_OPTIONS</td>
<td>No user-specific settings</td>
</tr>
<tr>
<td>NO_KEYWORDS</td>
<td>No keywords for documents</td>
</tr>
<tr>
<td>NO_DOCINFO</td>
<td>No document information</td>
</tr>
<tr>
<td>NO_DISPLAY</td>
<td>No displaying of documents</td>
</tr>
<tr>
<td>NO_EXPORT</td>
<td>No exporting of documents to frontend</td>
</tr>
<tr>
<td>NO_NOTE</td>
<td>No note functions</td>
</tr>
<tr>
<td>NO_EAI_TOOLS</td>
<td>No annotations</td>
</tr>
<tr>
<td>NO_EAI_FILE_DROP</td>
<td>No Drag and Drop in the EAI viewer</td>
</tr>
<tr>
<td>NO_OBJ_DISPLAY</td>
<td>No displaying of BOR objects</td>
</tr>
<tr>
<td>NO_DRAG_DROP</td>
<td>No Drag and Drop for documents</td>
</tr>
</tbody>
</table>

For example, you may wish it to be possible only to display documents in the BDN, in which case you would explicitly exclude the modifying and deleting functions in the table EXCLUDING.
CHANGE_PROPERTIES

This method is used to change or create document attributes.

The application object (Document Set) is identified by the attributes described in the section Parameters [Page 13]. Individual documents are specified by the attributes that are also described in the section Parameters. The table PROPERTIES [Page 21] is used for changing attributes.
DELETE

This method is used to delete documents.

The application object is identified (Document Set) by the attributes described in the section Parameters [Page 13].

The document to be deleted is specified in the signature table [Page 15]. Since the object ID is optional, all documents can be deleted.
GET_FAST_INFO

This method does not return documents but rather information about existing documents. This information is stored in the signature table [Page 15]. The signature table is used to store general information and attributes. Whereas the component table contains technical information about the individual components that the documents consist of.

The application object (Document Set) is identified by the attributes described in the section Parameters [Page 13].

In contrast to the method GET_INFO [Page 30], the method GET_FAST_INFO does not return information about the components of the document nor does it return detailed information about all the individual documents.

Depending on the value of the parameter GET_PROPERTIES, some document attributes are returned (GET_PROPERTIES = 'X') or no document attributes are returned.
GET_INFO

This method does not retrieve documents, but information about existing documents. This information is stored in the signature table [Page 15] and component table [Page 16]. General information and attributes are stored in the signature table. The component table contains technical information on the individual components, which make up the documents.

The application object is identified (Document Set) by the attributes described in the section Parameters [Page 13].
GET_INFO_NEWEST_ONLY

This method retrieves information about the newest version of a document only. Other than this, it is analogous to the method GET_INFO [Page 30].
QUERY_DOCUMENT

This method queries the attributes of documents.

The selection conditions are specified in the table QUERY [Page 22]. Each entry returns restrictions for an attribute, analogous to the structure of a ranges table.
COPY

This method is used to copy a document.

The application object is identified (Document Set) by the attributes described in the section Parameters [Page 13]. The content version is identified by the attributes likewise described in the section “Parameters”.

When a document is copied, the link is also copied. The following attributes are transfer parameters:

- **NEW_CLASSNAME**
  - Class name, name of application class

- **NEW_CLASSTYPE**
  - Class type, type of application class

- **NEW_OBJKEY**
  - Object ID

- **NEW_CLIENT**
  - Client
    - This parameter is optional, except in the case of client-specific documents, where it must be used.

The attribute name and value are transferred in the table PROPERTIES [Page 21].

The new document is appended to either the outgoing business object or a new document. The new variant is identified by the following attributes (in the same way as the content version):

- **NEW_DOC_ID**
  - Document ID

- **NEW_DOC_VER_NO**
  - Document version number

- **NEW_DOC_VAR_ID**
  - Document variant ID

This means that this method can be used for both copying and reassigning.
CREATE_WITH_FILES/URL/TABLE/AS_TABLE

The following four methods are available for creating documents:

- CREATE_WITH_FILES
- CREATE_WITH_TABLE
- CREATE_WITH_AS_TABLE
- CREATE_WITH_URL

The difference between these methods is the source from which the data is retrieved. The source can either be a file name, a table or a URL.

The application object (Document Set) is identified by the attributes described in the section Parameters [Page 13].

The method CREATE_WITH_FILES is identified by the following additional parameters:

- FILES [Page 17]
- SIGNATURE [Page 15]

The method CREATE_WITH_TABLE is identified by the following additional parameters:

- COMPONENTS [Page 16]
- CONTENT [Page 19]
- SIGNATURE [Page 15]

The method CREATE_WITH_AS_TABLE is identified by the following additional parameters:

- COMPONENTS [Page 16]
- ASCII_CONTENT
- SIGNATURE [Page 15]

The method CREATE_WITH_URL is identified by the following additional parameters:

- COMPONENTS [Page 16]
- URIS [Page 18]
- SIGNATURE [Page 15]

CREATE_WITH_URL must always be called in conjunction with CONFIRM_CREATE [Page 39] in order for a document to be stored successfully.

CREATE_WITH_URL only transfers a target URL. CONFIRM_CREATE passes on the information that a document has been created successfully.
CREATE_WITH_OWN_URL

This method is a slight variation of the method CREATE_WITH_URL [Page 34]. In this case, the source URL is not generated but it can be specified externally. This presupposes that the content of the document can be reached by this URL.

The source URL is transferred by the parameter URL.

The MIME type of the document must be transferred in the parameter MIME_TYPE.

It is specified in the parameter BINARY_FLAG whether the content of the document is binary (BINARY_FLAG = 'X').

It is not necessary to call the method CONFIRM_CREATE [Page 39].
UPDATE_WITH_FILES/URL/TABLE/AS_TABLE

The following four methods are available for changing documents:

- UPDATE_WITH_FILES
- UPDATE_WITH_TABLE
- UPDATE_WITH_AS_TABLE
- UPDATE_WITH_URL

The difference between these methods is the source from which the data is retrieved. The source can either be a file name, a table or a URL. If it is a table, it can either be an ASCII table or a binary table.

The application object (Document Set) and the document are identified by the attributes described in the section Parameters [Page 13].

The method **UPDATE_WITH_FILES** is identified by the following additional parameters:

- FILES [Page 17]
- SIGNATURE [Page 15]

The method **UPDATE_WITH_TABLE** is identified by the following additional parameters:

- COMPONENTS [Page 16]
- CONTENT [Page 19]
- SIGNATURE

The method **UPDATE_WITH_AS_TABLE** is identified by the following additional parameters:

- COMPONENTS
- ASCII_CONTENT
- SIGNATURE

The method **UPDATE_WITH_URL** is identified by the following additional parameters:

- COMPONENTS
- URIS [Page 18]
- SIGNATURE

**UPDATE_WITH_URL** must always be called in conjunction with CONFIRM_CREATE [Page 40] in order for a document to be identified as successfully changed.

**UPDATE_WITH_URL** only transfers the target URL. CONFIRM_UPDATE passes on the information that a document has been changed successfully.
GET_WITH_FILES/URL(TABLE/AS_TABLE)

These methods are used to retrieve a document. Four different methods are available:

- GET_WITH_FILES
- GET_WITH_TABLE
- GET_WITH_AS_TABLE
- GET_WITH_URL

The difference between these methods is the source from which the data is retrieved. The source can either be a file name, a table or a URL.

The application object (Document Set) is identified by the attributes described in the section Parameters [Page 13].

The method GET_WITH_FILES is identified by the following additional parameters:

- FILES [Page 17]
  - The target directory is transferred in the table FILES.

- SIGNATURE [Page 15]
  - This table is used to limit the number of hits when the method is called and afterwards for information.

The method GET_WITH_TABLE is identified by the following additional parameters:

- COMPONENTS [Page 16]
- CONTENT [Page 19]
- SIGNATURE

The method GET_WITH_AS_TABLE is identified by the following additional parameters:

- COMPONENTS
- ASCII_CONTENT
- SIGNATURE

The method GET_WITH_URL is identified by the following additional parameters:

- SIGNATURE
- COMPONENTS
  - The entire contents are available in this table.

- URIS [Page 18]
  - This table only specifies the URL that points to the document.

- URL_LIFETIME
  - Time period for validity, lifetime. This parameter can have two different meanings:
GET_WITH_FILES/URL/TABLE/AS_TABLE

a. This parameter is used only for R/3 System URLs. It specifies the lifetime of the URL and the URL that this URL points to. If the content of the document is in the R/3 database, URL_LIFETIME is used to control the lifetime of the table, on the client.
   
   For more information, see the documentation for the function module DP_CREATE_URL, in particular the documentation for the parameter LIFETIME.

b. If GET_WITH_URL returns a general URL on an external content server, the lifetime results from the validity of the URL, which is a maximum of two hours. The prerequisite for this is the use of a digital signature.
CONFIRM_CREATE

This method is always called in conjunction with CREATE_WITH_URL, CREATE_VARIANT_WITH_URL and CREATE_VERSION_WITH_URL.

This method must always be called when (a) document(s) has/have been stored successfully via URL. Otherwise the administrative data must be deleted using DELETE.

The application object is identified (Document Set) by the attributes described in the section Parameters [Page 13].

This method is specified by the following parameters:

- COMPONENTS [Page 16]
- URIS [Page 18]
- SIGNATURE [Page 15]
CONFIRM_UPDATE

This method is always called in conjunction with UPDATE_WITH_URL.

This method must always be called when (a) document(s) has/have been stored successfully via URL. Otherwise the administrative data must be deleted using DELETE.

The application object is identified (Document Set) by the attributes described in the section Parameters [Page 13].

This method is specified by the following parameters:

- COMPONENTS [Page 16]
- URIS [Page 18]
- SIGNATURE [Page 15]

This method is analogous to CONFIRM_CREATE [Page 39], with the difference that it concerns updating and not creating documents.
Specific Methods
Methods for Relationships
CREATE_RELATION

This method is used to create relationships for an application object.

The outgoing document is identified by the attributes described in the section Parameters [Page 13]. The relationships specified in the table SIGNATURE [Page 15] are generated for this document and returned using the table RELATION [Page 20].
GET_RELATIONS

GET_RELATIONS

This method makes the relationships belonging to a document available along with the corresponding partners.

The outgoing document is identified by the attributes described in the section Parameters [Page 13]. The table RELATION [Page 20] contains the relationships existing for the document. The partner documents are specified in the table SIGNATURE [Page 15].
DELETE_RELATIONS

This method is used for deleting the relationships that exist for a document.

The application object (Document Set) is specified by the attributes described in the section Parameters [Page 13]. The relationships that exist for this document, which are specified in the table RELATION [Page 20], are explicitly deleted.
QUERY_RELATIONS

This method queries attributes of a relationship as well as attributes of the documents to which a relationship is to exist.

Besides the identification of the application object and the document from which the relationships to be found are to start, the method also has two other transfer parameters:

- For the attributes of the documents to be found (parameter SIGNATURE) and
- For the transfer of the search area of the relationship attributes to be found (parameter QUERY).

The selection criteria are specified in the table QUERY [Page 22]. Each entry returns restrictions for an attribute, analogous to the structure of a ranges table.
Methods for Versions and Variants
CREATE_VERSION_WITH_FILES/URL/TABLE/AS_TABLE

The following four methods are available for creating content versions:

- **CREATE_VERSION_WITH_FILES**
- **CREATE_VERSION_WITH_TABLE**
- **CREATE_VERSION_WITH_AS_TABLE**
- **CREATE_VERSION_WITH_URL**

The difference between these methods is the source from which the data is retrieved - as is the case with **CREATE_VERSION_WITH_FILES**, **CREATE_VERSION_WITH_TABLE**, **CREATE_VERSION_WITH_AS_TABLE** and **CREATE_VERSION_WITH_URL**. The source can either be a file name, a table or a URL.

The application object (Document Set) is identified by the attributes described in the section **Parameters** [Page 13]. The version is identified by the attributes, which are also described in the section **Parameters**.

The new variant is identified by the parameter **NEW_DOC_VER_NO**, that is, by the new version number.

The parameter **PROPERTIES** is used instead of the parameter **SIGNATURE**.

The method **CREATE_VERSION_WITH_FILES** is identified by the additional parameter **FILES** (see section **File Table** [Page 17]).

The method **CREATE_VERSION_WITH_TABLE** is identified by the following additional parameters (see sections **Component Table** [Page 16] and **Content Table** [Page 19]):

- **COMPONENTS**
- **CONTENT**

The method **CREATE_VERSION_WITH_AS_TABLE** is identified by the following additional parameters (see sections **Component Table** [Page 16] and **Content Table** [Page 19]):

- **COMPONENTS**
- **ASCII_CONTENT**

The method **CREATE_VERSION_WITH_URL** is identified by the following additional parameters (see sections **Component Table** [Page 16] and **URL Table** [Page 18]):

- **COMPONENTS**
- **URIS**

**UPDATE_WITH_URL** must always be called in conjunction with **CONFIRM_CREATE** [Page 39] in order for a document to be identified as successfully stored.

**CREATE_VERSION_WITH_URL** only transfers a target URL. **CONFIRM_CREATE** passes on the information that a document has been created successfully.
CREATE_VARIANT_WITH_FILES/URL/TABLE/AS_TABLE

The following four methods are available for creating language and format variants:

- CREATE_VARIANT_WITH_FILES
- CREATE_VARIANT_WITH_TABLE
- CREATE_VARIANT_WITH_AS_TABLE
- CREATE_VARIANT_WITH_URL

The difference between these methods is the source from which the data is retrieved - as is the case with CREATE_VARIANT_WITH_FILES, CREATE_VARIANT_WITH_TABLE, CREATE_VARIANT_WITH_AS_TABLE and CREATE_VARIANT_WITH_URL. The source may be a file name, a table or a URL.

The application object (Document Set) is identified by the attributes described in the section Parameters [Page 13]. The variant is identified by the attributes that are also described in the section Parameters.

The new variant is identified by the following parameters:

- NEW_DOC_VAR_ID
  New variant ID
- NEW_DOC_VAR_TG
  New variant tag
  The variant tag can take the following forms:
  - Original
  - Language variant
  - Format variant
  One of these forms of variant must be transferred when this method is called. The new variant ID is returned.

The parameter PROPERTIES is used instead of the parameter SIGNATURE (see section Properties table [Page 21]).

The method CREATE_VARIANT_WITH_FILES is identified by the additional parameter FILES (see section File Table [Page 17]).

The method CREATE_VARIANT_WITH_TABLE is identified by the following additional parameters (see sections Component Table [Page 16] and Content Table [Page 19]):

- COMPONENTS
- CONTENT

The method CREATE_VARIANT_WITH_AS_TABLE is identified by the following additional parameters (see sections Component Table [Page 16] and Content Table [Page 19]):

- COMPONENTS
The method CREATE_VARIANT_WITH_URL is identified by the following additional parameters (see sections Component Table [Page 16] and URL Table [Page 18]):

- **ASCII_CONTENT**

CREATE_VARIANT_WITH_URL must always be called in conjunction with CONFIRM_CREATE [Page 39] in order for a document to be identified as successfully stored.

CREATE_VARIANT_WITH_URL only transfers a target URL. CONFIRM_CREATE passes on the information that a document has been created successfully.
Methods for Transport
GET_TRANSPORT_INFOS

This method is used to provide the necessary entries for transport.

The application object is identified (Document Set) by the attributes described in the section parameters. The document(s) is/are identified via the signature table, that is, by the parameter SIGNATURE (see also Tables [Page 15]).

The parameter COMMFILE_ENTRIES provides the necessary entries for the transport, that is, the individual object entries for requests and tasks in the Workbench Organizer.
DOCUMENT_ENQUEUE

This method locks a document for other users. Only a logical lock can be set, that is, this lock only has an effect on the logical level.

It is still possible to use the other methods. The method DOCUMENT_ENQUEUE should always be used if there is a possibility that more than one person may modify a document at the same time.

If an error occurs when this method is called, for instance because the document is already blocked by another user, modifying methods should not be used because otherwise data consistency cannot be guaranteed.

After the modifications have been made, the method DOCUMENT_DEQUEUE [Page 55] should be called. This method unlocks the document again.
DOCUMENT_ENQUEUE

This method unlocks a document that was locked using the method DOCUMENT_ENQUEUE [Page 54].
Integration of the BDS in SAP Applications

Purpose
You integrate the BDS into your SAP application if you wish to use the BDS functions. For more information, see Business Document Service [Ext.].

Prerequisites
- Your SAP application involves documents.
- You do not have any special requirements concerning the BDS document management.

Process Flow
1. Analysis
   This analysis phase involves specifying general questions, as well as the scope of the intended integration of the BDS into the relevant R/3 application:
   - What is the business background?
   - For which release is the integration of the BDS to be completed?
   - What sorts of documents are to be stored?
     For example: Bitmaps, Office documents.
   - How many documents are there likely to be?
   - Does the SAP3 application need its own administration tables?
   - What delivery class are the administration tables to have?
   - What is the application class ID?
   - What sort of application class is involved?
     - Business Object Repository
     - R/3 Class Library
     - Others
   - Is a transport connection required?
   - Is the application context client-specific?
   - Which of the BDS methods are likely to be used?
     - CALL_NAVIGATOR (you want to call the BDN)
     - CREATE_VARIANT_WITH_FILES (you want to create a variant and transfer the file name simultaneously).
   - Are specific attributes required? If so, then which attributes?

2. Discussion and Decision
In this phase, your project team discusses how your requirements can best be realized. The team decides on the data model to be used (see also Content Models [Ext.]) and the methods to be implemented for your application.

3. Implementation

You integrate the methods required for your application. The methods provided are described in the sections under General Methods [Page 24] and Specific Methods [Page 41].
Example: CREATE_WITH_FILES

data: o_document_set type ref to cl_bds_document_set.
create object o_document_set.
move: '1' to wa_signature-doc_count,
     '1' to wa_files-doc_count,
     'C:\SAPPCADM' to wa_files-directory,
     'BDSPresentation.PPT' to wa_files-filename.
append wa_signature to i_signature.
append wa_files to i_files.

call method o_document_set->create_with_files
   exporting
       classname        = 'MyApplication'
       classtype       = 'OT'
   changing
       object_key       = i_object_key
       files            = i_files
       signature        = i_signature.
Example: GET_WITH_FILES

data: o_document_set type ref to cl_bds_document_set.
create object o_document_set.
move: '1' to wa_signature-doc_count,
      'BDS_LOC1  B18EBB28E773D21197E70060B0672A3C' to wa_signature-doc_id,
      '1' to wa_signature-doc_ver_no,
      '1' to wa_signature-doc_var_id,
      '1' to wa_files-doc_count,
      'C:\SAPPCADM' to wa_files-directory,
append wa_signature to i_signature.
append wa_files to i_files.

call method o_document_set->get_with_files
  exporting
      classname       = 'MyApplication'
      classtype      = 'OT'
      object_key     = '0815'
  changing
      files          = i_files
      signature      = i_signature.
Business Document Navigator

Purpose

The Business Document Navigator (BDN) is the central tool for processing documents. You can use the BDN to execute standard document management functions on documents managed, for example, by SAP ArchiveLink.


You do not need to make any settings in Customizing (IMG).

Overview Graphic

In the upper part of the screen, the relevant documents, sorted by document type (the document types in turn belong to specified application objects) are displayed in the tree. The lower left part of the screen contains tab pages with the functions Detailed display, Document information (version string), Keywords and Storing. On the right-hand side of the screen, you can display a selected document in-place.

Features

The BDN provides the following functions:

- Display hit list
You see the hit list in the form of a hierarchical list.
For more information, see Displaying the Hit List [Page 63].

- Display individual documents
  You view the individual documents directly in the dynpro or in an external viewer.
  For more information, see Displaying Documents [Page 64].

- Display detailed information on stored documents
  For more information, see Displaying Detailed Information on a Document [Page 65].

- Store existing documents
  You can display standard document types and object-specific document types, and store
  corresponding documents by double-clicking.
  For more information, see Storing Documents [Page 66].

- Create new documents
  You start applications that are supported by SAP Desktop Office Integration in-place and
  create new documents.
  For more information, see Creating New Documents [Page 69].

- Create and edit notes
  You can create, display, edit and delete general and private notes for documents and
  application objects.
  For more information, see BDS Note [Page 72].

- Display keywords for a document
  You can display all keywords that were stored for a document.
  For more information, see Displaying Keywords [Page 76].

- Display version string
  You can display all the versions and variants for a document.
  For more information, see Displaying the Version String [Page 77].

- Copy documents
  For more information, see Copying Documents [Page 78].

- Transport documents
  For more information, see Transporting Documents [Page 86].

- Delete documents
  For more information, see Deleting Documents [Page 79].

- Edit documents
  You can edit DOI-compatible documents that are stored using upload. You can overwrite
  the current document, create a new document and create a new version or variant.
  For more information, see Editing Documents [Page 80].

- Change existing keywords
You can change the existing keywords and descriptive text for a document.
For more information, see Changing Attributes [Page 81].

- Refresh the hit list
For more information, see Refreshing the Hit List [Page 83].

- Annotations for BDS documents that are displayed using the EAI viewer
For more information, see Creating Annotations [Page 82].

- Display documents using HTML control
For more information, see Displaying Documents [Page 64].

- Store WWW addresses
For more information, see Storing Documents [Page 66] and Storing and Displaying WWW addresses [Page 71].

- Navigation to any WWW address
For more information, see Storing and Displaying WWW Addresses [Page 71].

- Export documents to frontend
For more information, see Exporting Documents [Page 85].

- Lock documents when changes are being made
For more information, see Editing Documents [Page 80].

- Create a transport request when documents are deleted
For more information, see Transporting Documents [Page 86].

- Store documents using drag and drop
For more information, see Storing Documents Using Drag and Drop [Page 68]

- Display hit list and documents in the SAPGUI for HTML and in the SAPGUI for Java

- Direct navigation to BOR objects from the BDN

- Display SAP ArchiveLink documents (faxes) in Single Page Tiff Format

You can call the functions Display document, Display detailed information, Display document information, Display keywords, Change document, Change attributes, Copy document, Export document, Transport document, Delete document and Notes from the display tree via the context menu.
Displaying Hit Lists

Use
This function generates a hierarchical list of documents that were stored for a certain application object.

Prerequisites
When you call the Business Document Navigator, you must also specify a class name (or BOR object type). If no object ID is specified, the documents for all object IDs are displayed (see also Searching for Stored Documents [Ext.]). The hit list is sorted by object ID and then, within each object ID, by document type.

Features
The hit list is displayed as a tree structure.
The root node of the tree is always the specified class. If there are several object IDs, the hit list is sorted by object ID and then, within each object ID, by document type. The documents come under the document types. Always the most up to date document is listed. The following attributes are displayed:

- Descriptive text
- File name
- Date created
If possible, the document class is displayed using an appropriate symbol.

You can call the following functions from the hit list using the context menu:

- Display document
- Change document
- Delete document
- Transport document
- Export document
- Create and process notes
- Copy document
- Display detailed information
- Display versions
- Display keywords
- Change attributes

Activities
By opening the individual nodes, you can see the documents for the object ID.
Displaying Documents

Use
This function displays individual documents.

Features
The document is generally displayed in the dynpro itself, that is, in place. The document is displayed either via SAP Desktop Office Integration (DOI, see also BC - Desktop Office Integration [Ext.] and Viewer for Displaying Original Files in Standard [Ext.] and SAP HTML Viewer [Ext.]). If possible, documents of classes BMP, GIF, JPG, PCX, PS, TIF, TXT and STL are displayed in place using the viewer control first named, the EAI viewer. If, however, a DOI-compatible application is found, this is used to display the document. MS Office 97, Lotus SmartSuite 98 and the Acrobat Reader are currently supported, that is, document classes DOC, XLS, PPT, 123, PRZ, LWP and PDF. Documents of classes GIF, JPG, MOV, HTM and XML can be displayed in place using HTML control [Ext.].

Documents of document classes FAX and OTF are displayed according to the settings in the relevant SAP ArchiveLink protocol (see Maintaining Protocols [Ext.]).

If it is not possible to display the document in place, an appropriate viewer that is available on the PC is started and the document is displayed "out place".

Activities
To display, double-click on the relevant document in the tree.
Displaying Detailed Information on a Document

Use
This function is used to display detailed information on individual documents.

Features
The following information is currently displayed on the tabstrip controls tab page:

- Class name
- Object ID
- Document name
- Descriptive text
- Document type
- Language
- Version number and variant number
- Created by
- Created on
- Changed by
- Changed on
- Document class
- MIME type
- Content repository
- Document ID
- Status

As of Release 4.6C, fixed attributes can be transferred when the BDN is called. These fixed attributes are also displayed in the detailed information.

Activities
Select a document in the tree. The detailed information is displayed on the tabstrip controls tab page, in the lower left part of the screen.
Storing Documents

Use
This function is used to store existing documents.

Prerequisites
If several object keys, that is, object IDs, are displayed in the upper left part of the screen, before you store a new document you have to select an object key under which the document is to be stored.

Features
On the tab page Create, the following document types are displayed in the lower left part of the screen in tree form:

- Standard document types
  - Screen
    Document class TIFF
  - Table template
    Document class XLS
  - Presentation
    Document class PPT
  - Text
    Document class DOC
  - WWW address
    Document class HTM
- Object-specific document types

The standard document types are defined in Maintaining Document Types [Ext.] and exist for each class. In document type maintenance, you must assign a document class to each document type. You can characterize a document type as a standard document type using the standard flag.

You must also create object-specific document types in document type maintenance. You assign document types to BOR object types in link maintenance [Ext.].

When you store a document, you can specify the following additional information in a dialog box:

- Descriptive text
- Document language
- Up to 5 keywords
The search for documents via Office → Business Documents → Documents → Find can be limited using the descriptive text and keywords.

When you store a WWW address, the URL to be created is entered using a dialog box (see also Storing and Displaying WWW Addresses [Page 71]).

Up to Release 4.6B, the content of all documents that were created and stored using the BDN is stored physically in the R/3 database.

As of Release 4.6C, content categories can be assigned to the classes. The documents are then stored in the content repository [Ext.] that is assigned to the specific category. If no category is assigned to the classes, the document is stored in the R/3 database.

**Activities**

Choose the tab page Create in the lower left part of the screen: Double-clicking on the required document type calls the file selection box. You can then store an existing file. Alternatively, you can call the file selection box by choosing Import file in the context menu.
Storing Documents Using Drag and Drop

Use
This function enables you to store documents in the BDN using *drag and drop*. The documents can be at the following places:

- On the desktop
- In the Microsoft Windows Explorer

The document has to be moved to EAI control. It is displayed in the EAI viewer and linked to the object that the previous object also has a link to.

Prerequisites
A document is displayed in the BDN using the EAI viewer (see also [Viewer for Displaying Original Files in Standard [Ext.]]).

Activities
1. Display a document in the BDN using the EAI viewer.
2. Drag the other document from the desktop or from the MS Windows Explorer into the EAI viewer.
3. In the following dialog box, enter a descriptive text and the language.
   - You can also specify up to 5 keywords.
4. Confirm your entries.
Create New Documents

Use
This function is used to create new documents.

Prerequisites
If several object keys, that is, object IDs, are displayed in the upper left part of the screen, before you store a new document you have to select an object key under which the document is to be stored.

Features
On the tab page Create, standard document types and object-specific document types are displayed in the lower left part of the screen in tree form (see also Storing Documents [Page 66]).

You can start applications that are supported by SAP Desktop Office Integration (DOI) (see also BC - Desktop Office Integration [Ext.]) in-place and create new documents. SAP DOI currently supports MS Office 97 and Lotus SmartSuite 98.

When you select an application, it is started on the frontend in the display area of the Business Document Navigator. You can then create the document.

Temporary storing of the document is only possible within the application: The document is then stored on the local hard disk.

Choose the icon Store document to store the document when you have finished editing, and exit the relevant application.

When you store a document, you can specify the following additional information in a dialog box:

- File name
- Descriptive text
- Document language
- Up to 5 keywords

The search for documents via Office → Business Documents → Documents → Find can be limited using the descriptive text and keywords.

The content of all documents that were created and stored using the BDN is stored physically in the R/3 database.

As of Release 4.6C, content categories can be assigned to the classes. The documents are then stored in the content repository [Ext.] that is assigned to the specific category. If no category is assigned to the classes, the document is stored in the R/3 database.
Create New Documents

Activities

1. Choose the tab page Create in the lower left part of the screen: Select the required document type and choose Start application in the context menu. Select the required application from the list of applications that are on the frontend and supported by DOI integration.

   The application is started in-place in the display area in the BDN.

2. Create a document in the required application and store the document by choosing the icon Store document.
Storing and Displaying WWW Addresses

Use

This function is used to navigate to WWW addresses with the BDN using HTML control [Ext.]. The pushbutton *Go to WWW address* is available for this in the BDN navigation bar, if HTML control is active.

WWW addresses can also be stored using the BDN. For more information, see Storing Documents [Page 66].

Activities

To navigate to a WWW site, proceed as follows:

1. Display the WWW site in HTML control and start the browser in-place.
2. Choose *Go to WWW address* and specify a URL.
   - To navigate to your personal homepage, choose the pushbutton *Homepage*.
3. Confirm your entry.

To store a WWW address for a specific object, proceed as follows:

1. In the navigation tree, position the cursor on the object for which the URL is to be stored.
2. Choose the document type *WWW address* by double-clicking on it in the list of standard document types.
3. In the subsequent dialog box, enter a description as well as the WWW address or copy the URL of the displayed site using Import.
**BDS Note**

**Purpose**

BDS Note enables you to use the general note functions for documents and application objects in the Business Document Navigator. This note function can be called by choosing the icon in the BDS application toolbar. In the note dialog box, you can see at a glance which notes already exist and you can edit or display them or create new notes.

You can create both private and general notes.

When documents are deleted or transported from the BDN, the system checks whether notes exist for the relevant documents. After an appropriate query, these notes are then also deleted or transported.

**Features**

- You can display existing notes
- You can create and delete notes. Private notes can also be changed.
  
  Private notes are marked with a specific flag.
- You can store notes.

BDS Note enables you to display and enhance earlier SAP ArchiveLink notes. The prerequisite for this is that notes from SAP ArchiveLink are stored in an HTTP storage system, that is, the notes have to be in an HTTP storage system.

**Constraints**

The note functions are currently only available for Microsoft platforms.
Editing Notes

Use
You go to the tab page Create/Edit in order to:

- Create a new note, that is, a note does not yet exist
- Edit a private note
- Store an existing note as a file
  To do this, choose the icon in the text edit control.
- Store a note locally
  To do this, choose the icon in the text edit control.

Prerequisites
1. You have selected a document or application object in the BDN navigation area or in the Document information for which you want to create or edit a note.
2. You have selected the icon.

Activities

To create a new note, proceed as follows:
1. Enter a title for your note.
2. Create the note yourself in the text edit control.
3. If the standard attribute General note is to be changed to Private note, select the flag Private note.
   You can only change an existing note later if it is a private note.
4. Save your new note by choosing .
   After you have saved, the system goes to the tab page Display.

To edit a private note, proceed as follows:
1. Select the private note in the hit list and choose .
   You go to the tab page Create/Edit, on which your note is displayed.
2. Change your note.
   You can extend the content of your note and/or add new content. Choose the relevant icons in the text edit control for general text editing functions.
3. Save your changes by choosing .
Note Hit List

Use
You go to the tab page Hit list in order to:

- obtain an overview of all existing notes
- delete notes, in accordance with your authorizations.

To delete a note, select the note that you want to delete and choose the icon 🗑️.

Prerequisites
3. You have selected a document or application object in the BDN navigation area or in the document information for which a note already exists.
4. You have selected the icon 📄.

Features
The following information for existing notes is displayed in the hit list:

- Type
  - General note or
  - Private note
- Description
  - Title
- Creator
  - Creator's user name
- Creation time
  - Date and time of creation
- Last changed by
  - User name of last person to make changes
- Change time
  - Date and time of last change

For more detailed information about a note, choose the icon 📄.

Choose the relevant icons for further list functions in the hit list.

To display a note, select the relevant note and choose the tab page Display [Page 75].
Note Display

Use
You go to the tab page Display in order to:

- Display an existing note
- Search for specific terms in the text of the note
  To do this, choose the icon in the text edit control.
- Store a note as a local file.
  To do this, choose the icon in the text edit control.

Prerequisites

- You have created a note.
- You have selected an existing note in the hit list and chosen the tab page Display.
Displaying Keywords

Use
This function is used to display keywords.

Features
On the tab page Keywords in tabstrip controls in the lower left part of the screen, the keywords that exist for a document are displayed:

- All keywords created when documents were created
  See also Creating New Documents [Page 69].
- All keywords created when documents were stored
  See also Storing Documents [Page 66].
- All keywords created when attributes of SAP ArchiveLink documents were created or changed
  See also Changing Attributes [Page 81].

Activities
In the upper left part of the screen, select the document for which you want keywords to be displayed and choose the tab page Keywords in the lower left part of the screen.
Displaying the Version String

Use
This function is used to display all the versions and variants for a document.

Features
On the tab page Document information in tabstrip controls in the lower left part of the screen, the versions (content versions) and variants (language variants) that exist for a document are displayed:

The same context menu is active for the documents in the version string as for the documents in the display tree.

The following information is displayed on the tab page:

- Descriptive text
- Date created
- Variant ID

Activities
In the upper left part of the screen, select the document for which you want the version string to be displayed and choose the tab page Document information in the lower left part of the screen.
Copying Documents

Use
This function enables you to copy documents from both the display tree and the version tree.

Documents stored using SAP ArchiveLink cannot currently be copied.

Features
When you copy a document, a new document, that is, a new version, is always created.
You can specify a new descriptive text and new keywords. Alternatively, you can keep those of the original document.

Activities
Select the document that you want to copy and choose Copy document in the symbol toolbar.
Deleting Documents

Use
This function enables you to delete one or more documents from the Business Object Navigator.

A document stored using SAP ArchiveLink is deleted according to the existing scenario for SAP ArchiveLink (see also Displaying Link Entries for Stored Documents [Ext.]).

If it is a document stored using SAP ArchiveLink that has been copied in the BDS, the entry in the BDS tables is deleted first. Then the comment that the document was copied in the BDS is deleted from the SAP ArchiveLink link table. The system then queries whether the document is also to be deleted from the SAP ArchiveLink link table.

Features
Documents stored using SAP ArchiveLink or the Business Document Navigator can be deleted. To delete several documents at once, you can select the documents using the checkboxes in the display tree and on the tab page Document information (in tabstrip control).

If a document for which versions or variants exist is selected in the display tree for deletion, the system queries whether the versions and variants of the document are also to be deleted.

As of Release 4.6C, the system queries whether a transport request is to be created when documents are deleted (see also Transporting Documents [Page 86]).

Activities
Select the document(s) that you want to delete and choose Delete document.
Editing Documents

Use

This function is used to edit documents created and stored in the Business Document Navigator.

You cannot edit a pure SAP ArchiveLink document.

This function is used for documents that can be edited with Desktop Office Integration.

- You can overwrite the current document
- You can create a new document
- You can create a new version (content version) or variant (language variant)

Prerequisites

The MIME type of the document to be edited belongs to an application that is supported by SAP Desktop Office Integration. See also BC - Desktop Office Integration [Ext.].

Features

If the function *Edit document* is called for a selected document, the relevant application is started in the GUI and the document can be edited further. When you save the document, the following four functions are available:

- Store the edited document as a new document
- Overwrite the stored document with the current document
- Create a new content version for the current version
- Create a new language variant for the current version

In all four cases you can change the descriptive text and the keywords.

As of Release 4.6C, documents are locked when changes are being made. This prevents parallel editing of documents.

Activities

Select a document that you want to edit and choose *Edit document* in the symbol toolbar.
Changing Attributes

Use
This function is used to change the descriptive text, language and keywords for a document.

Features
You can change the following attributes:

- Descriptive text
- Language
- Keywords

You can use this function to change attributes of SAP ArchiveLink documents manually.

Activities
Select a document that you want to edit and choose Change attributes in the symbol toolbar. When the function is called, a dialog box appears in which you can change the relevant texts and/or language codes.
Creating Annotations

Use
This function is used to create annotations for documents that are displayed in the EAI viewer (see also Viewer for Displaying Original Files in Standard [Ext.]).

Prerequisites
The documents for which annotations are to be created are displayed using the EAI viewer.

Features
When the document is called, the system checks whether annotations already exist for this document. If annotations exist, the menu option Layer is displayed in the EAI viewer toolbar. All existing annotations are listed under this menu option and can be displayed.

Various tools for editing are available in editing mode (Redlining). New annotations can be created and existing annotations deleted in editing mode.

Activities
Select a document that you want to edit and display it by double-clicking on it.

- To display existing annotations, select the required annotation under the menu option Layer in the viewer.
  The annotation is displayed in the original.

- To edit annotations, choose Tools → Redlining in the viewer.
  A new toolbar with various editing tools is displayed.
  - You can edit the annotation.
  - You can delete the annotation.
  - You can create a new annotation.

- If there are no annotations for a document, the menu option Layer is not displayed when the document is called. To create a new annotation, choose Tools → Redlining in the viewer.
  Before the toolbar is displayed, specify a name for the new annotation.

- After editing, save your annotations by choosing the icon in the EAI viewer standard toolbar.
Refreshing the Hit List

Use
This function restructures the hit list of stored documents.

Features
The hit list is restructured when the function is called. If documents have been stored (by another user, for example) in the meantime, these are displayed afterwards in the display tree.

The display tree is displayed in compressed form after the function has been called.

Activities
Choose the icon Refresh hit list in the icon toolbar.
Navigation to BOR Objects

Use
This function is used for documents that are stored in the Business Object Repository for several instances of an object in order to navigate directly from the BDN hit list to the corresponding object in the BOR (BOR, see also Business Object Repository [Ext.]).

Prerequisites
The BOR objects have implemented the method Display.

Activities
In the navigation tree, choose the required document by double-clicking on it.
Exporting Documents

Use
This function is used to download documents and their components to the user's local frontend. The user can select the relevant target directory before the export.

Activities
Select the document that you want to export and choose the icon 📝 in the standard toolbar.
Transporting Documents

Use
This function is used to transport documents created and stored in the Business Document Navigator.

Documents stored using SAP ArchiveLink cannot be transported.

Prerequisites
The system settings for the application class to which the documents belong provide for the transporting of documents.

Features
The transport connection exists for documents from both the display tree and the version tree.
To create a transport request for several documents at once, you can select the documents using the checkboxes in the display tree and on the tab page Document information (in tabstrip control). A transport request is created for all selected documents.
If a document for which versions and variants exist is selected from the display tree, the system queries whether the versions and variants of the document are also to be transported.

As of Release 4.6C, the system queries whether a transport request is to be created when documents are deleted (see also Deleting Documents [Page 79]).

Activities
Select the document that you want to transport and choose Transport document in the symbol toolbar.