



D'IDOC Express Viewer

Functional Documentation

D-PRO Innovation Ltd.

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www.D-Pro.biz



1.1.1 General

D'PROS **D'IDoc ExpressViewer** is an unprecedented utility that accelerates dramatically the efficiency and speed in high volume IDoc searches. **D'IDoc ExpressViewer** enhances, customizes and personalizes the IDoc inherent search and reporting capabilities, overcoming the existing highly laborious search. **D'IDoc ExpressViewer** maintains its high performance while the business grows, as a result of applying a unique structured search algorithm.

Furthermore, **D'IDoc ExpressViewer** dynamically generates an ALV Report per each IDoc type, resulting in making IDoc search intuitive and accessible to non-technical SAP users.

D'IDoc ExpressViewer enhanced features include IDoc-type search with aggregated attributes, wildcard, multiple and value selection (F4).



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Implementing SAP's standard value selection (F4) within the **D'IDoc Express Viewer** is a powerful and unique feature. Value selection is performed directly from the SAP tables (including multiple selections), without having to memorize technical field-names and codes anymore. It is logical and straightforward to look for "Material" instead of "MATNR" or search by "Material Group" instead of writing down the "material number/s"(SKUs).

To ensure fast and correct results with every search, **D'IDoc ExpressViewer** applies the structured search algorithm to every search. It works in such a way that every new incoming and outgoing IDoc is being indexed according to the customized parameters. For every new search, **D'IDoc ExpressViewer** uses the already existing indexed information to quickly and dynamically retrieve the requested information.

D'IDoc ExpressViewer is composed of the following layers:

- **Configuration & Maintenance** - Configuration of the IDoc Type indexation fields, attributes and inter-IDoc relations.
- **Scanner** - Scans the IDoc database and creates/delete indexes.
- **Monitor** - Sets the search parameters for the IDoc data retrieval and searches the relevant IDoc collection according to the specified selection criteria.





1.1.2 D'IDoc ExpressViewer: Configuration & Maintenance

Configuration of the IDoc indexation fields is the first step before being able to retrieve the IDoc data. It encompasses Indexation Fields and their respective Attributes information.

1.1.2.1 D'IDoc Indexation Fields

Definition of the indexation fields is performed by first selecting the relevant Basic type value. Additional dependent parameters are selectable from SAP standard tables or typed information.

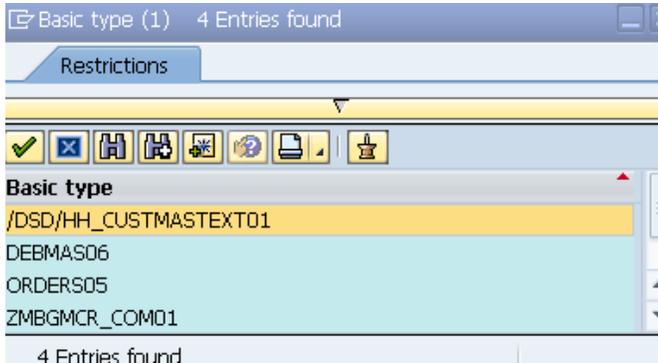
The Sequence of each specific field is set as well, for presentation purposes by the IDoc Monitor (see o. below).

Additionally, the system recommends reference data (table & field) according to the dynamically parsed/generated report. User may overrule this setting to better depict the organization's business processes.

Basic type	SAP segment n...	Field Name	S...	Attr...	Reference table	Ref. Field
DEBMA506	KNA1M	COUNC	2		/BEV3/CHBDKR	COUNC
DEBMA506	E1KNA1M	LAND1	6	MAT	/BEV1/TSCONT_S	LAND1
DEBMA506	E1KNA1M	ORT01	10		KNA1	ORT01
DEBMA506	E1KNVVM	INCO1	5		/BEV3/CHBDKR	INCO1
DEBMA506	E1KNVVM	KDGRP	2		/BEV1/TSRV43A1I	/BEV1/TSKDGPR
DEBMA506	E1KNVVM	MSGFN	5		/ISDFPS/ME_CA_0	MSGFN
DEBMA506	E1KNVVM	VKORG	4		KNVV	VKORG
DEBMA506	E1KNVVM	VTWEG	3		/BEV1/BO_DATA	VTWEG
DEBMA506	ZE1KNA12	FLAG1	7		/SPE/XHU_LOCK_0	ACTVT
DEBMA506	ZE1KNA12	FLAG2	8		/ISDFPS/FMWRTP	WRITP
ORDERS05	E1EDK01	BSART	4		/ISDFPS/ADVCODE	BSART
ZMBGMCR_CO	ZMAT_HEADER_COM	DOC_DATE	5		/BEV1/SR_H	DOC_DATE
ZMBGMCR_CO	ZMAT_HEADER_COM	DOC_YEAR		TEST2	/SAPNEA/ROWA	MJAHR
ZMBGMCR_CO	ZMAT_HEADER_COM	ENTRY_DATE	3		/BEV2/ED_EX_SL	CPUDT_MKPF
ZMBGMCR_CO	ZMAT_HEADER_COM	MAT_DOC			/BEV2/EDMSE	MBLNR
ZMBGMCR_CO	ZMAT_HEADER_COM	PSTNG_DATE	2		/BEV1/SR_H	PSTNG_DATE

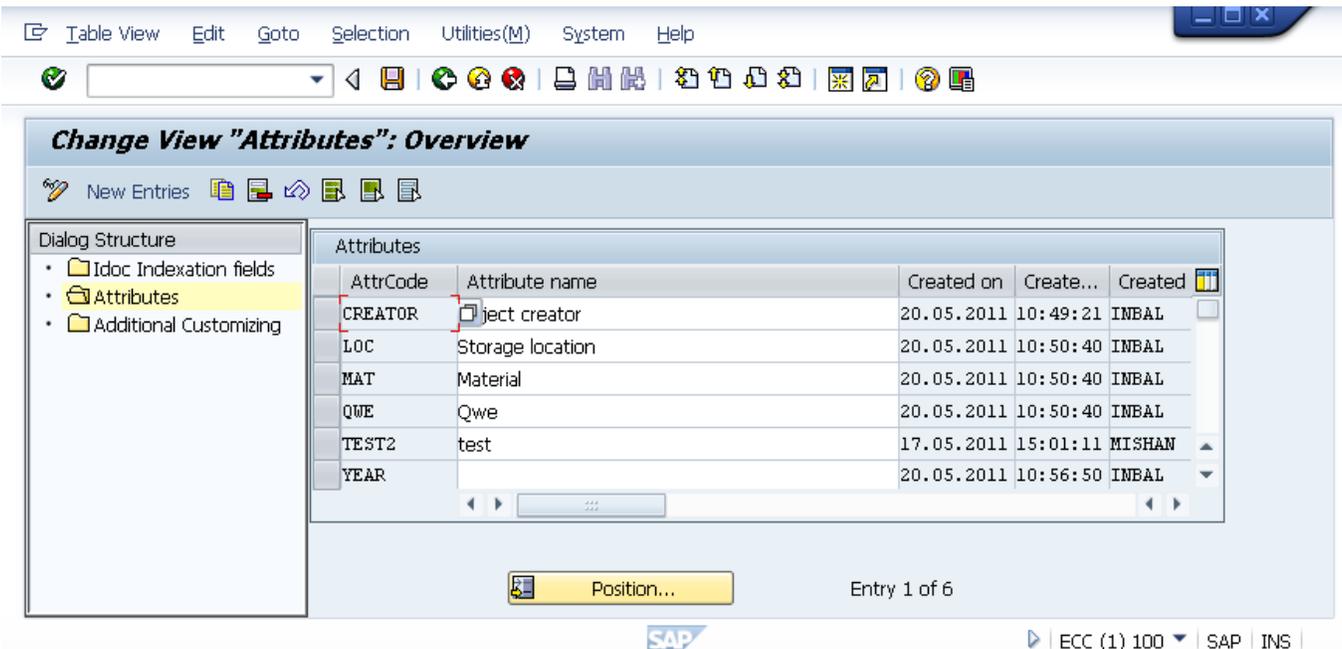


The IDoc indexation fields are selectable (F4) as following:



1.1.2.2 Attributes

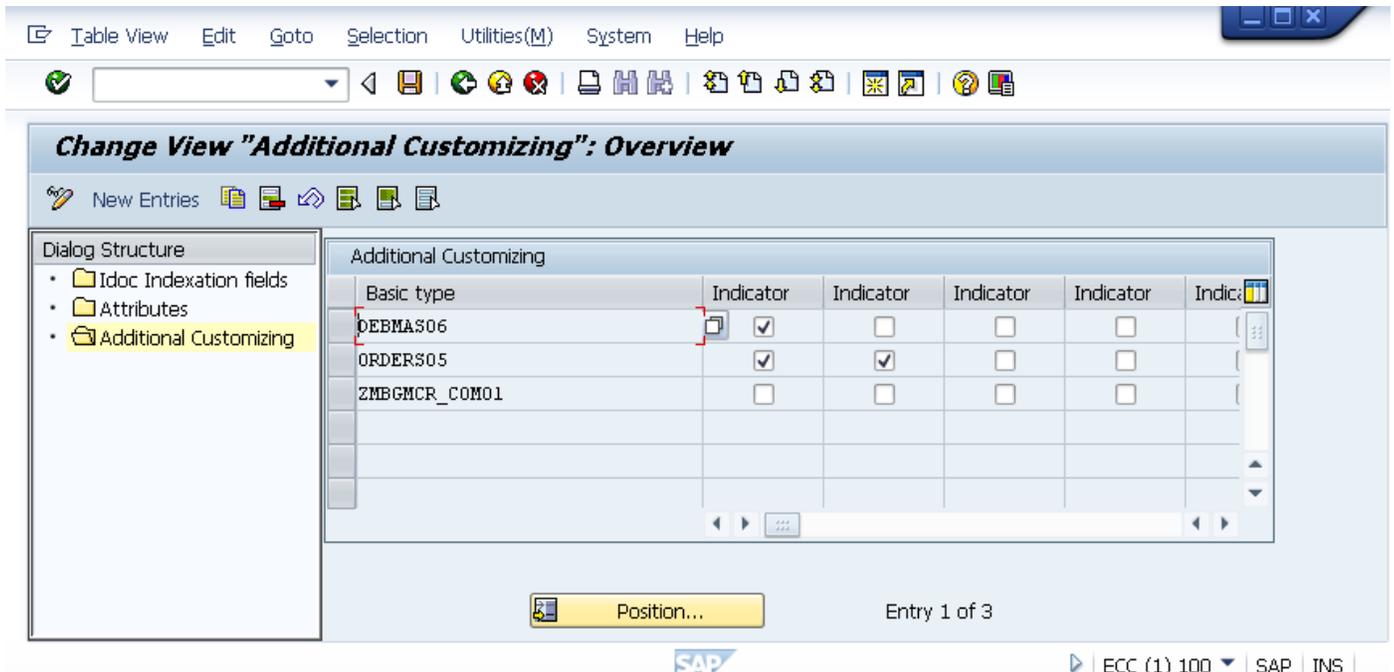
Field Attributes are defined to enable inter-IDoc searches across various IDoc types. This unique and highly utilized feature enables one to search for a specific entity, even-though it is used by different names and different IDoc types and context, as it refers to the content of the database field. Using this approach, material 'AAA' in one IDoc Type, which is referred to as Construction type 'AAA' in another IDoc Type can be easily retrieved. The same applies for Employee No and Manager ID. As long as these entities are aligned to the same attribute, i.e., content of the field, **D'IDoc Express Viewer** will easily find all its instances.





1.1.2.3 Additional Customizing Parameters

Additional parameters can be defined for each Basic Type. This feature enables one to interlink IDocs according to their data, i.e., in case the outcome of an IDoc is a delivery number, this number can be used later as a search parameter.



1.1.3 D'IDoc ExpressViewer Scanner

This layer is in-charge of indexing the various IDocs residing in the system. The indexing process is performed only in the background to avoid performance degradation.

The scanner uses the following operation modes:

- **Standard** – Periodically indexes the newly added IDocs
- **Mass** – By specifying IDoc selection criteria, it allows mass indexation of all relevant IDocs
- **Mass Clean** - By specifying IDoc selection criteria, it allows mass deletion of already existing indexation data of all relevant IDocs



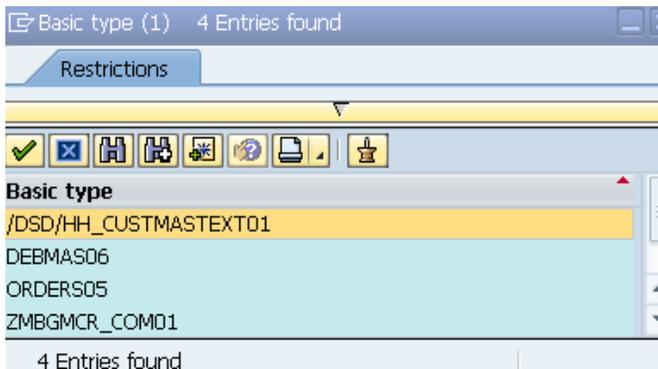
Idoc monitor scan program

Switch To Cleaner

Indexing parameters

Basic type	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	
IDoc number	<input type="text"/>	to	<input type="text"/>	
Created on	<input type="text"/>	to	<input type="text"/>	
Created at	<input type="text" value="00:00:00"/>	to	<input type="text" value="00:00:00"/>	

Indexation definition selection is available only for those already defined above (see 1.1.2.1).



1.1.3.1 Switch to Cleaner



Switch to Cleaner button will switch modes between creating and deleting indexes for a certain Basic type, IDoc numbers, and time frame in cases where the parameters were changed above. It is an important option that ensures that only the relevant IDoc data is presented. This model supports scenarios such as:

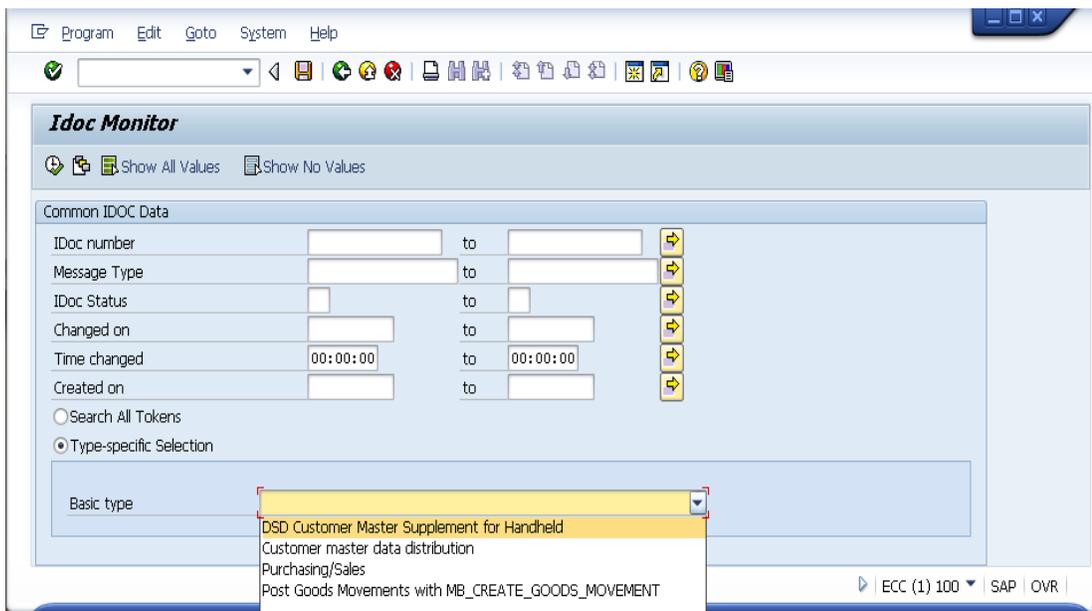
- Changed customization for indexed fields & attributes
- IDoc Archiving
- IDoc Express Viewer initialization



1.1.4 D'IDoc ExpressViewer Monitor

The Monitor is the central point of **D'IDoc ExpressViewer** and sets the parameters for the IDoc data retrieval.

It encompasses two main search layers: Metadata & IDoc content-related search. User may search by IDoc metadata and activate either Attributes (All tokens option) or Content-Related (Type-specific selection) options. These are materialized as search definition zones.



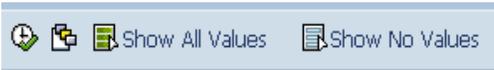
D'IDoc ExpressViewer Monitor consists of three search definition zones:

- **IDoc Metadata** – search parameters are set individually or per range with greater search flexibility
- **Search all Tokens** – search by free string and attribute across all IDoc types
- **Type-Specific Selection** – search according to basic types



1.1.4.1 General menu

Using the relevant icons, new search criteria is created/defined. The icons provide maximum search flexibility, by including/excluding a full range of values all at once.



 Get Variant as per relevant field



Show All/No relevant values as per search field

1.1.4.2 D'IDoc Metadata Search

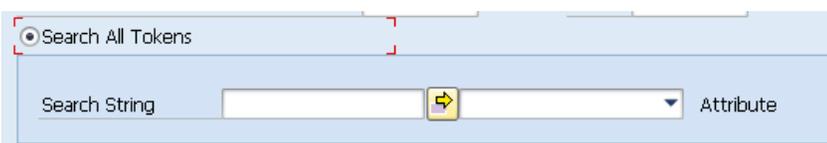
IDoc search can be performed according to one individual value or a range, according the following parameters:

- **IDoc Number** – type IDoc number or range. Multiple Selection option is applicable.
- **Message Type** – select Message type from table, including range
- **IDoc Status** – select IDoc Status from table, including range
- **Changed On** – select time from factory calendar, including range
- **Time Changed** – type specific time, including range
- **Created On** - select time from factory calendar, including range

Multiple Selection option is applicable for all parameters.

1.1.4.3 Search All Tokens

Inter-IDoc search is performed according to a free string, accompanied by an Attribute, as per the definition in Configuration & Maintenance above. The ability to search according to a free string and Attribute is an extremely unique, powerful and highly useful feature, as it enables users to perform an Inter-IDoc search across various IDoc types. It actually enables to search for a specific entity even-though it is used by different names and different IDoc types and context, as it refers to the content of the database field, i.e., content of the field. **D'IDoc Express Viewer** will easily find all its instances.

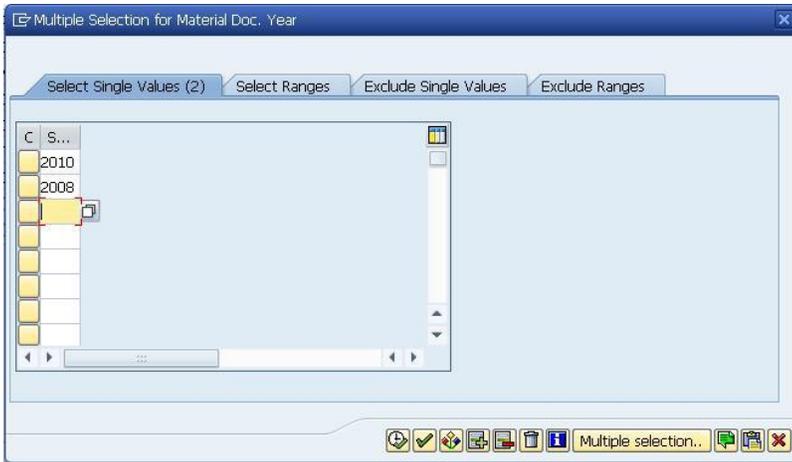




1.1.4.4 Multiple Selection

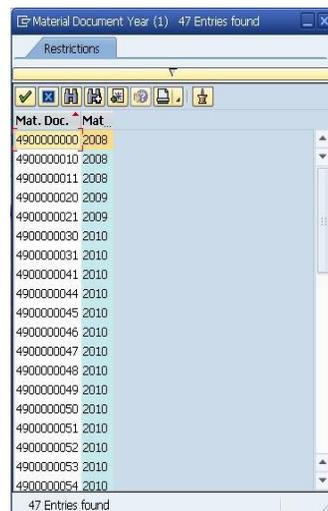
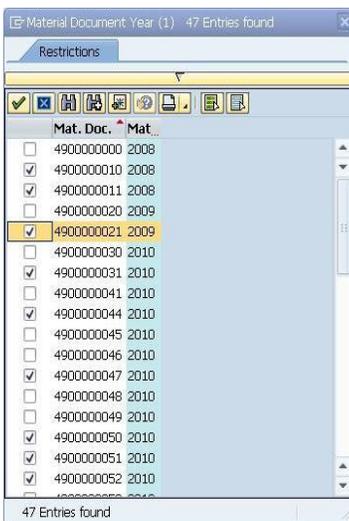
Multiple-selection is a plethora of search options that can include or exclude single values or range of values. It is applicable to many search parameters.

Single Value Selection:



Multiple Value Selection

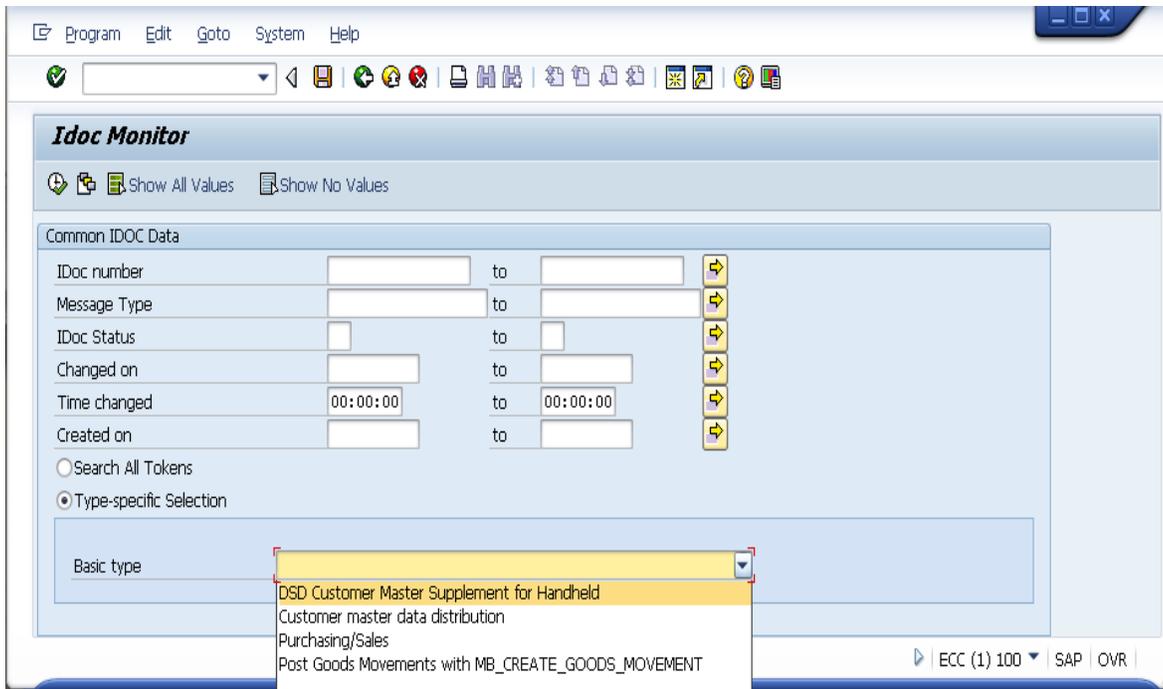
Range Value Selection





1.1.4.5 Type-Specific Selection

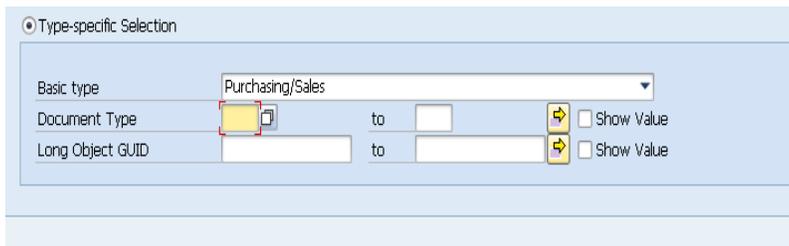
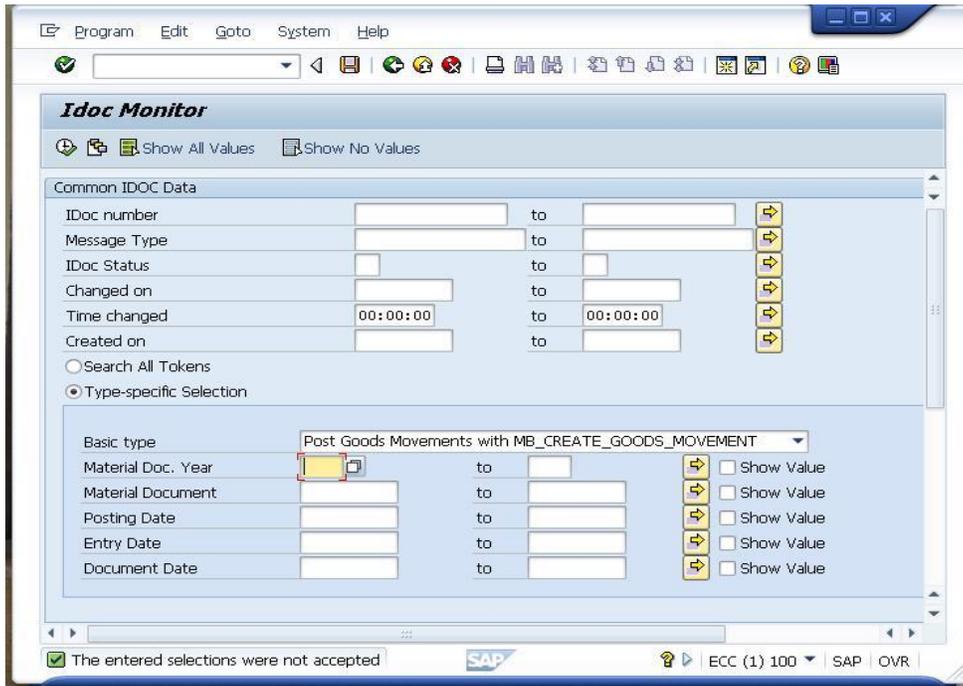
Type-Specific Selection Search is the most elaborated IDoc search. This is a dynamic search dependent on the Basic Type. The other parameters will be displayed according to the Basic Type.



The first parameter to be selected from the menu is the Basic Type, according to which a dynamic selection screen is generated. The Basic Type configuration was defined above in Configuration & Maintenance. Other search parameters are the ones relevant to the Basic Type selection and are displayed above according to the Sequence Number as per the definition in Configuration & Maintenance.

The F4 search help at the field level is deduced as-well from the customization layer.

Show Value/No Show Value search option is available for all parameters.





1.1.5 D'IDoc Search Results Display

D'IDoc Express Viewer may be used as the sole cockpit for all IDocs. All IDoc related data can be viewed from this display and all IDoc operations can be triggered. Furthermore, it allows users to view, at a glance, the entire status per IDoc.

Moreover, it is important to stress that each IDoc is materialized as a single record in the IDoc list, regardless of the number of segments or the number of entities corresponding to the search terms. This feature is extremely valuable as it even provides non-technical users with clarity of the information like never before.

The IDoc search results are displayed in list form. The information is clearly and logically displayed, without the need to be a technical expert on IDocs.

The information details in the view are displayed according to the search selection of "Show All Values" or Show No Values" as described above (see 1.1.4.5).

The following logical information is available: IDoc no., Basic Type (message type), Basic Type detailed description, IDoc status (colour driven), Status id and logical Status Description, Direction (inbound/outbound), ObjectGUID, Created on (date), Created at (time), Material document year, Material document id(s), Posting date.

IDoc no.	Message Type	Description	Status	Status Description	Directn	Directn	ObjectGUID	Created on	Created at	Changed on	Time	Mat'Yr	Material Document	Posting Date	Entered on	Doc. Date
2002	ZMBGMCR_COM	Post goods movements with MB_CREATE_GOODS_MOVEMENT	OO	03 Data passed to port OK 1	→			16.08.2010	18:34:26	16.08.2010	18:34:26	2010	4900000046	16/08/2010	16/08/2010	16/08/2010
2003	ZMBGMCR_COM	Post goods movements with MB_CREATE_GOODS_MOVEMENT	OO	03 Data passed to port OK 1	→			16.08.2010	18:48:56	16.08.2010	18:48:57	2010	4900000047	16/08/2010	16/08/2010	16/08/2010
2004	ZMBGMCR_COM	Post goods movements with MB_CREATE_GOODS_MOVEMENT	OO	03 Data passed to port OK 1	→			16.08.2010	18:53:43	16.08.2010	18:53:43	2010	4900000048	16/08/2010	16/08/2010	16/08/2010
2005	ZMBGMCR_COM	Post goods movements with MB_CREATE_GOODS_MOVEMENT	OO	03 Data passed to port OK 1	→			16.08.2010	18:53:43	16.08.2010	18:53:43	2010	4900000048	16/08/2010	16/08/2010	16/08/2010
2006	ZMBGMCR_COM	Post goods movements with MB_CREATE_GOODS_MOVEMENT	OO	03 Data passed to port OK 1	→			18.08.2010	18:28:24	18.08.2010	18:28:25	2010	4900000049	18/08/2010	18/08/2010	18/08/2010
3001	ZMBGMCR_COM	Post goods movements with MB_CREATE_GOODS_MOVEMENT	OO	03 Data passed to port OK 1	→			21.08.2010	23:51:05	21.08.2010	23:51:29	2010	4900000044	16/08/2010	16/08/2010	16/08/2010
3002	ZMBGMCR_COM	Post goods movements with MB_CREATE_GOODS_MOVEMENT	OO	03 Data passed to port OK 1	→			25.08.2010	10:52:06	25.08.2010	10:52:08	2010	4900000050	25/08/2010	25/08/2010	25/08/2010
3003	ZMBGMCR_COM	Post goods movements with MB_CREATE_GOODS_MOVEMENT	OO	03 Data passed to port OK 1	→			25.08.2010	10:54:44	25.08.2010	10:54:44	2010	4900000051	25/08/2010	25/08/2010	25/08/2010
3004	ZMBGMCR_COM	Post goods movements with MB_CREATE_GOODS_MOVEMENT	OO	03 Data passed to port OK 1	→			25.08.2010	11:27:30	25.08.2010	11:27:30	2010	4900000054	25/08/2010	25/08/2010	25/08/2010
3005	ZMBGMCR_COM	Post goods movements with MB_CREATE_GOODS_MOVEMENT	OO	03 Data passed to port OK 1	→			25.08.2010	12:12:23	25.08.2010	12:12:24	2010	4900000056	25/08/2010	25/08/2010	25/08/2010
3006	ZMBGMCR_COM	Post goods movements with MB_CREATE_GOODS_MOVEMENT	OO	03 Data passed to port OK 1	→			26.08.2010	15:15:18	26.08.2010	15:15:21	2010	4900000058	26/08/2010	26/08/2010	26/08/2010
3007	ZMBGMCR_COM	Post goods movements with MB_CREATE_GOODS_MOVEMENT	OO	03 Data passed to port OK 1	→			26.08.2010	15:29:06	26.08.2010	15:29:06	2010	4900000059	26/08/2010	26/08/2010	26/08/2010
3008	ZMBGMCR_COM	Post goods movements with MB_CREATE_GOODS_MOVEMENT	OO	03 Data passed to port OK 1	→			26.08.2010	15:30:25	26.08.2010	15:30:25	2010	4900000060	26/08/2010	26/08/2010	26/08/2010
3009	ZMBGMCR_COM	Post goods movements with MB_CREATE_GOODS_MOVEMENT	OO	03 Data passed to port OK 1	→			26.08.2010	15:31:55	26.08.2010	15:31:55	2010	4900000061	26/08/2010	26/08/2010	26/08/2010
3010	ZMBGMCR_COM	Post goods movements with MB_CREATE_GOODS_MOVEMENT	OO	03 Data passed to port OK 1	→			26.08.2010	15:34:43	26.08.2010	15:34:43	2010	4900000062	26/08/2010	26/08/2010	26/08/2010
3011	ZMBGMCR_COM	Post goods movements with MB_CREATE_GOODS_MOVEMENT	OO	03 Data passed to port OK 1	→			26.08.2010	15:34:43	26.08.2010	15:34:43	2010	4900000062	26/08/2010	26/08/2010	26/08/2010
4001	ZMBGMCR_COM	Post goods movements with MB_CREATE_GOODS_MOVEMENT	OO	56 IDoc with errors added 2	←			30.08.2010	16:48:22	21.09.2010	07:35:14	2010	4900000051	25/08/2010	25/08/2010	25/08/2010
9003	ZMBGMCR_COM	Post goods movements with MB_CREATE_GOODS_MOVEMENT	OO	56 IDoc with errors added 2	←			02.06.2011	16:19:37	02.06.2011	16:19:37	2010	4900000046,4900005555	16/08/2010	16/08/2010	16/08/2010



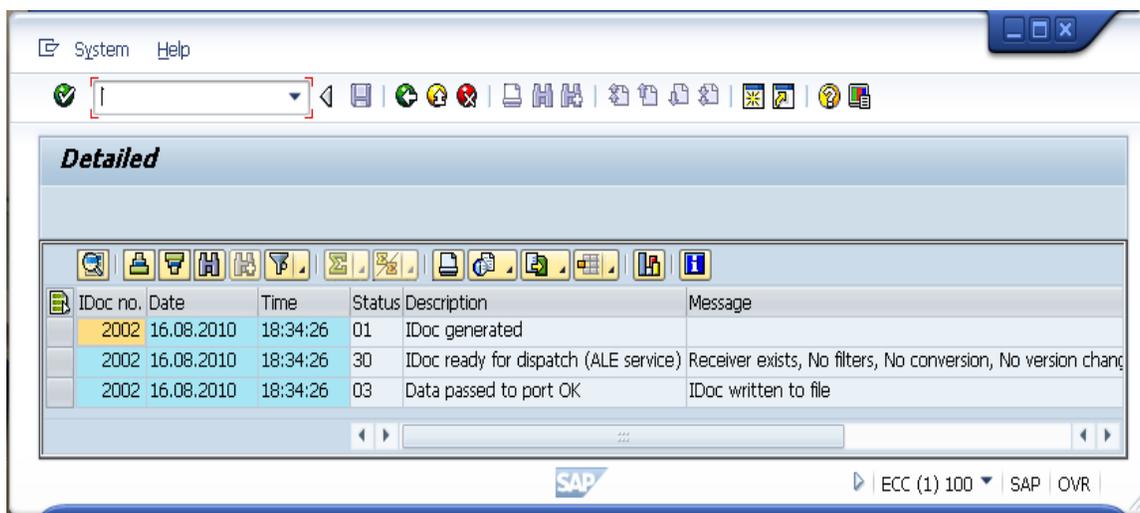
The following operations can be triggered from the cockpit view:

- WE02  - Activates directly SAP's WE02. User will view the IDoc in its original SAP form.
- Display Messages  - Displays IDocs segments. See further details in 1.1.5.1 below.
- Edit IDoc – Edits the IDoc in SAP original screens.

1.1.5.1 D'IDoc display

Explicit IDoc details can be viewed by clicking on the relevant IDoc number in the list or selecting a line on the list and clicking the  button.

Each IDoc is materialized as a single record in the IDoc list. However, the IDoc may contain a number of segments or a number of entities in it's corresponding to the search terms, as in the screen below.



Another option is to activate directly SAP's WE02, and see the IDoc in its original SAP form.



D'SOX



D'MANAGER



D'PLISHER



D'RAINBOW



D'IDoc



D'NOTIFIER



D'CHANGER



ON D'GO

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