

PROCESS DIRECTOR

Troubleshooting Guide

Version: 7.4

Date: 2017-11-15



© 2017 Kofax. All rights reserved.

Kofax is a trademark of Kofax, Inc., registered in the U.S. and/or other countries. All other trademarks are the property of their respective owners. No part of this publication may be reproduced, stored, or transmitted in any form without the prior written permission of Kofax.

Table of Contents

About this guide	4
Collecting debugging information	4
Displaying debug messages	5
Displaying message call stacks.....	5
<i>Enable message call stacks</i>	<i>5</i>
<i>View message call stacks</i>	<i>6</i>
Dealing with short dumps	7
Troubleshooting performance issues.....	7
Poor performance in PROCESS DIRECTOR	7
Slow performance on starting PROCESS DIRECTOR	7
Testing the ArchiveLink connection	8
Repairing the Worklist	8
Worklist.....	8
Selection screen	8
Troubleshooting the Web Application connection.....	8
How to display the PROCESS DIRECTOR Web Application version.....	8
Troubleshooting missing action buttons	9
Configuration settings that can influence action availability	9
<i>For SAP GUI</i>	<i>9</i>
<i>For Web Application.....</i>	<i>10</i>
Setting types	10
<i>Base action pool</i>	<i>10</i>
<i>Document authorizations</i>	<i>10</i>
<i>Per document status</i>	<i>11</i>
<i>For documents in workflow</i>	<i>11</i>
<i>Per workflow step.....</i>	<i>11</i>
<i>User exit / BAdl</i>	<i>11</i>
Troubleshooting the Services for Object button	11
User exit / BAdl problems	12
Creating the /EBY/ namespace	12
Establishing number ranges.....	13
Regenerating menus and toolbar	13

About this guide

This guide is intended for implementation consultants who are installing and configuring the SAP/ABAP component of PROCESS DIRECTOR.

The guide offers useful tips and tricks on what to do if something is going wrong with PROCESS DIRECTOR. For information on installing and configuring PROCESS DIRECTOR, see the following guides:

- *PROCESS DIRECTOR Import Guide*
- *PROCESS DIRECTOR Configuration Guide*
- *PROCESS DIRECTOR Advanced Configuration Guide*
- *PROCESS DIRECTOR Reference Guide*

Collecting debugging information

If you are not sure where something is going wrong, it can be helpful to collect more debugging information.

Try to zero in on the problem by successively increasing the logging granularity:

1. Start by checking the document message logs for warnings and errors.
2. If a given logging detail level does not provide enough information, increase the logging detail level and recheck the message logs.

Logging detail level	How to set
Production	This detail level refers to the logging behavior as currently configured—that is, the default level of message logging in the production configuration.
Debug messages	As above, but in addition: <ul style="list-style-type: none"> • Successively enable display of debug messages.
Message call stacks	As above, but additionally: <ul style="list-style-type: none"> • Successively enable display of message call stacks.

Displaying debug messages

1. Select the SAP GUI menu item **System > User Profile > Own Data** and then click the **Parameters** tab.
2. Add the parameter ID `/EBY/PDBO_DEBUG_MSG` to the table and set the appropriate parameter value:

Value	When to use
<i>EE</i>	If you want to display <i>Debug Error</i> messages only
<i>WW</i>	If you want to display debug <i>Debug Error</i> and <i>Debug Warning</i> messages.
<i>//</i>	If you want to display all <i>Debug</i> messages

3. Save your changes.

Displaying message call stacks

Enable message call stacks

For SAP GUI

1. Select the SAP GUI menu item **System > User Profile > Own Data** and then click the **Parameters** tab.
2. Add the parameter ID `/EBY/PDBO_CALLSTACK` to the table and set the appropriate parameter value, then save your changes.

Value	When to use
<i>E</i>	To enable call stacks for errors only.
<i>W</i>	To enable call stacks for errors and warnings.
<i>S</i>	To enable call stacks for all messages.

For the Web Application

1. In SAP transaction SU01, enter the name of the Web Application RFC user and click .
2. Add the parameter ID `/EBY/PDBO_CALLSTACK` to the table and set the appropriate parameter value.
3. Save your changes.

View message call stacks

For SAP GUI

To display the call stack for a message:

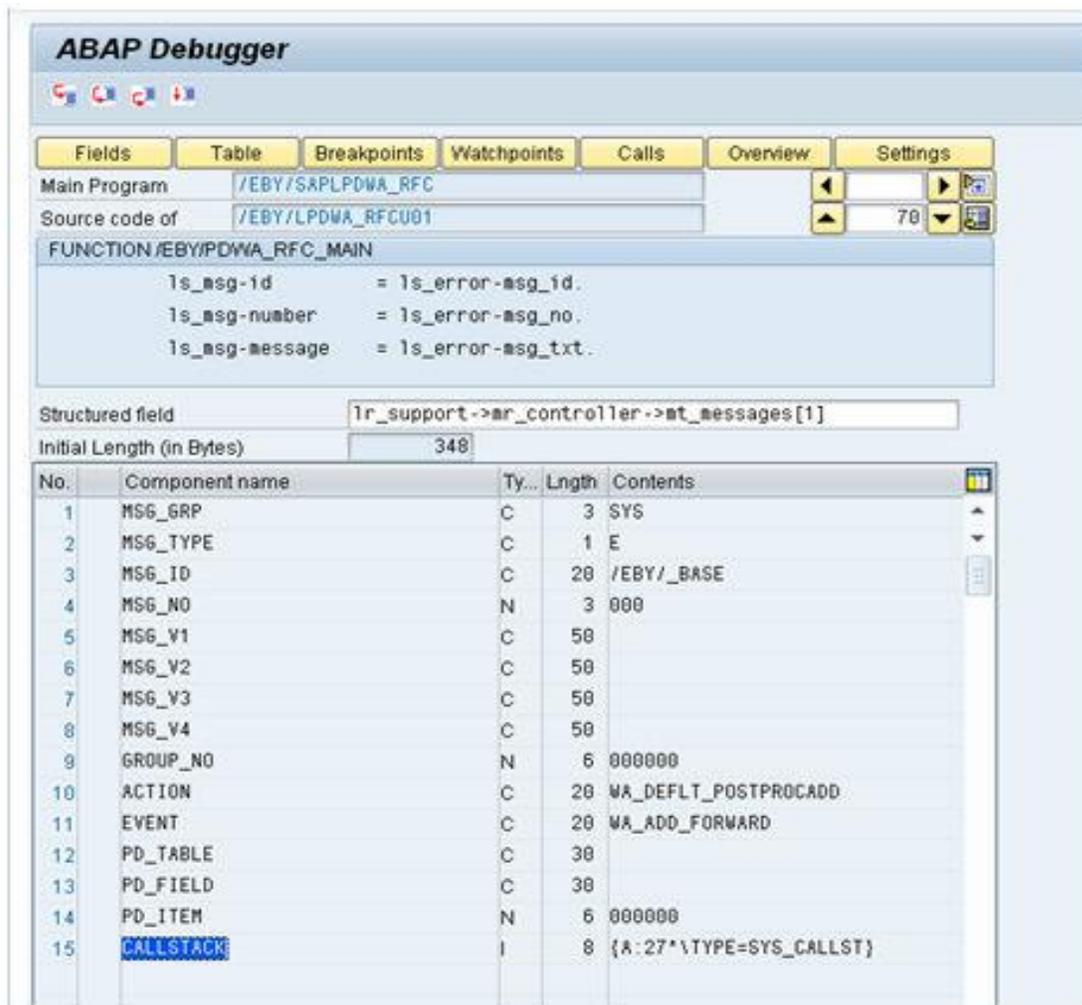
1. Enable message call stacks.
2. Click  to open the message viewer
3. Click the message's call stack icon .

For the Web Application

In the ABAP debugger, set a breakpoint at the end of the function module `/EBY/PDWA_RFC_MAIN`.

When the breakpoint is hit:

1. Add this field to the field names: `lr_support->mr_controller->mt_messages`.
2. View the message call stack by clicking on the `CALLSTACK` field:



The screenshot shows the ABAP Debugger interface. At the top, the title bar reads "ABAP Debugger". Below it, there are several tabs: "Fields", "Table", "Breakpoints", "Watchpoints", "Calls", "Overview", and "Settings". The "Fields" tab is active, showing the "Main Program" as `/EBY/SAPLPDWA_RFC` and the "Source code of" as `/EBY/LPDWA_RFCU01`. The function being debugged is `FUNCTION /EBY/PDWA_RFC_MAIN`, with the following code visible:

```

1s_msg-id      = 1s_error-msg_id.
1s_msg-number  = 1s_error-msg_no.
1s_msg-message = 1s_error-msg_txt.

```

Below the code, the "Structured field" is set to `lr_support->mr_controller->mt_messages[1]`, with an "Initial Length (in Bytes)" of 348. The main area displays a table of fields:

No.	Component name	Ty...	Lngh	Contents
1	MSG_GRP	C	3	SYS
2	MSG_TYPE	C	1	E
3	MSG_ID	C	20	/EBY/_BASE
4	MSG_NO	N	3	000
5	MSG_V1	C	50	
6	MSG_V2	C	50	
7	MSG_V3	C	50	
8	MSG_V4	C	50	
9	GROUP_NO	N	6	000000
10	ACTION	C	20	WA_DEFLT_POSTPROCADD
11	EVENT	C	20	WA_ADD_FORWARD
12	PD_TABLE	C	30	
13	PD_FIELD	C	30	
14	PD_ITEM	N	6	000000
15	CALLSTACK	I	8	{A: 27*\TYPE=SYS_CALLST}

Dealing with short dumps

If dumps occur during document posting, you can try to narrow down the possible cause by elimination:

- If short dumps are occurring during control framework flushes (*METHOD FLUSH*), the underlying problem is usually being hidden by asynchronous processing. To track the problem down, you need to switch on automatic synchronous queue processing by selecting the SAP GUI menu item **System > Utilities > Autom. Queue: Synchronous Processing**.
- Post the same document from a standard SAP transaction to see whether PROCESS DIRECTOR is at fault. For example, if posting fails in PROCESS DIRECTOR Requisitions, try posting with the same data in SAP transaction ME21N.
- Deactivate your dynamic presets to see whether they are causing the problem.
- Deactivate your user exit / BAdI implementations.

Short dump **LOAD_PROGRAM_LOSS**

If this short dump occurs during document transfer, check, post, or other actions, increase the *abap/buffersize* parameter in transaction RZ11 . Recommended value: 400000 or higher.

Troubleshooting performance issues

Poor performance in PROCESS DIRECTOR

If you are experiencing poor performance in PROCESS DIRECTOR, check the Tune Summary in transaction ST02 with the SAP System Administrator.

Slow performance on starting PROCESS DIRECTOR

Depending on the document volume and the database software, the start of the PROCESS DIRECTOR application (SAP GUI and Web Application) can be slow.

Reason

Selecting the document counters from the database views takes a lot of time. If you perform the "number of entries" selection from the view used in the Worklist configuration, the response time will be slow.

You can test this in the SE11 transaction.

Test again by using the *PROJECT = "*select option to see the difference in performance.

Solution

To troubleshoot this slow performance issue, complete the following steps.

1. Change the view used in the Worklist configuration.
 1. Copy the standard views to the project's namespace.
 2. Add the following selection condition: /EBY/PDB0_TNES table, **PROJECT EQ "** field name.

Testing the ArchiveLink connection

To test the ArchiveLink connection:

1. Directly enter SAP transaction 0AC0.
2. Select the PROCESS DIRECTOR content repository in the overview list.
3. Click the  button to go to the detail view.
4. Click the  button.

Repairing the Worklist

Worklist

If you are having a Worklist related issue, you should:

1. Be aware that Worklist behavior may not match the currently saved configuration, as the configuration may have changed since the Worklist was last generated.
2. Check any Worklist node authorization objects to make sure they are not causing the problem.
3. Make sure the problem is not being caused by an active implementation of the user exit / BAdI **Modify Worklist**.
4. Regenerate the Worklist. Choose **Yes** in the popup that asks if you want to regenerate static nodes.

If these steps do not resolve the issue, directly enter SAP transaction SE38 and execute the standard Worklist repair reports that ship with PROCESS DIRECTOR:

1. /EBY/PDBO_GEN_FAILED_NSTDSETS
2. /EBY/PDBO_CHECK_NESTEDSET_NEW
3. /EBY/PDBO_CHECK_WL_DOC_COUNT

Selection screen

To debug selection screen related issues, try setting a breakpoint on the `/EBY/CL_PDBO_WORKLIST_NODE` method `GET_GUIDS` and examine the content of the `lt_query` field.

Troubleshooting the Web Application connection

How to display the PROCESS DIRECTOR Web Application version

Log on to the PROCESS DIRECTOR Web Application, change the URL in the browser address bar to `.../pdweb-app/copyright.jsp` and reload the page.

This will display a page containing version information.

Troubleshooting missing action buttons

There are a number of configuration settings that can influence whether or not an action button is available in a given context.

Configuration settings that can influence action availability

For SAP GUI

Applicable configuration settings for the SAP GUI (in the ascending order of precedence)

Setting type	Configuration activity	Layer	SAP transaction
Base action pool	Menu structure and user commands	System	/EBY/PDVI_VMEN
		Customer	/EBY/PDVI_VMENC
	Assign function codes to actions	System	/EBY/PDVI_VUCO
		Customer	/EBY/PDVI_VUCOC
Document authorizations	Action authorization activities	System	/EBY/PDBO_VACA
Per document status	Change system settings > Model > Excluded actions per document status	System	/EBY/PDBO_VSTE
		Customer	/EBY/PDBO_VSTEC
For documents in workflow	Default excluded actions	System	/EBY/PDWC_VEAC
	Generally excluded actions	Customer	/EBY/PDWC_VEACC
Per workflow step	Initial settings > Workflow > Define steps > Action restriction	Customer	/EBY/PDWC_VSTPC
User exit / BAdI	User exits / BAdIs > Platform > Basic > Screen PBO/PAI > EXCLUDE_FUNCTION_CODES	Customer	

For Web Application

Applicable configuration settings for the Web Application (in the ascending order of precedence)

Setting type	Configuration activity	Layer	SAP transaction
Base action pool	Available actions for Web Application	System	/EBY/PDWA_CACT
		Customer	/EBY/PDWA_CACTC
Document authorizations	Action authorization activities	System	/EBY/PDBO_VACA
		Customer	/EBY/PDBO_VACAC
Per document status	Change system settings > Model > Excluded actions per document status	System	/EBY/PDBO_VSTE
		Customer	/EBY/PDBO_VSTEC
For documents in workflow	Default excluded actions	System	/EBY/PDWC_VEAC
	Generally excluded actions	Customer	/EBY/PDWC_VEACC
Per workflow step	Initial settings > Workflow > Define steps > Action restriction	Customer	/EBY/PDWC_VSTPC
User exit / BAdI	User exits / BAdIs > Platform > Web Application > Set actions	Customer	

Setting types

Base action pool

Important: For the SAP GUI, an action must be in the base action pool in order for any of the other configuration settings in the table to take effect with regard to it.

However, for the Web Application, the user exit / BAdI **Platform > Web Application > Set actions** can enable actions that are not in the base action pool.

Document authorizations

If document authorizations are in use for a given process type, *all* actions in the base pool are disabled *unless* the user has the appropriate authorization for their associated activity.

In the customer configuration for action authorization activities, you can create new customer action-authorization mappings, redefine existing system mappings, or disable system mappings (by redefining with an empty activity).

Per document status

Here, you can disable actions, depending on the current document status of the document.

In the customer configuration for action exclusion per document status, you can re-enable actions that were disabled in the system configuration for action exclusion per document status—but not re-enable actions that were disabled elsewhere.

For documents in workflow

Here, you can generally disable actions for documents in workflow.

In the customer configuration for action exclusion during workflows, you can re-enable actions that were disabled in the system configuration for action exclusion during workflows—but not re-enable actions that were disabled elsewhere.

Per workflow step

Here, you can disable actions and/or re-enable actions that have been generally disabled for documents in workflow—but not re-enable actions that were disabled elsewhere.

User exit / BAdI

Here, you can disable actions and/or re-enable actions that were disabled elsewhere. For the Web Application, you can also enable actions that are not part of the base action pool.

Troubleshooting the Services for Object button

If the Services for Object button is not displayed for a process type in the SAP GUI, make sure that the following settings are entered in transaction SGOSM:

Setting	Required entry
Name of service	/EBY/ARCHIVE
Description	Store business document
Quick info	Store business document
Class f.Gen.Service	/EBY/CL_PDBO_ARL_SRV_LINK
Service type	Single Service
Icon	ICON_VIEWER_OPTICAL_ARCHIVE
Next service	CREATE_ATTA
Subservice	Blank
Control	Not checked
Commit required	Checked

Make sure that the same content repository ID is assigned to the PROCESS DIRECTOR object type and its corresponding SAP business object type in OAC3.

You can configure which SAP business objects a PROCESS DIRECTOR document type connects to so that the documents attachments can be viewed in the SAP document.

User exit / BAdI problems

Your user exit / BAdI method implementation does not appear to be working:

- Is the BAdI activated? Is the BAdI filter-dependent? Are the results being overridden by some other BAdI implementation?
- Set a breakpoint at the beginning of the method implementation to see whether it is being called.
- Make sure you are following the general best practice guidelines for user exits / BAdIs.

If your user exit / BAdI method implementation is dumping, see [Dealing with short dumps](#).

Creating the /EBY/ namespace

In PROCESS DIRECTOR, the namespace /EBY/ comes with the code transport and normally does *not* need to be created manually. These instructions are only for reference.

If for some reason it is necessary to manually create the namespace, simply perform these steps:

1. Directly enter SAP transaction SE03.
2. Select **Administration > Display/Change Namespaces** and create the namespace /EBY/ with the values from this table:

Field	Entry
Namespace	/EBY/
Namespace role	C
Repair license	05790374410114137903
Short text	PROCESS DIRECTOR - ReadSoft Ebydos AG - Germany, Frankfurt/M
Owner	ReadSoft Ebydos AG

3. After creating the namespace /EBY/, the system changeability must be set to changeable. Do this in SAP transaction SE03 under **Administration > Set System Change Option**.

Establishing number ranges

Each PROCESS DIRECTOR document obtains a specific number that is taken from a number range for that business object.

The number range objects for the PROCESS DIRECTOR business document types currently come with the code transport and normally do *not* need to be created manually. These instructions are only for reference.

To maintain number range objects, directly enter SAP transaction SNR0.

The number range definition and interval for each business document type must exist and the current number should be 0. If it is not 0, reset it manually.

Regenerating menus and toolbar

Normally, the GUI status is automatically generated by /EBY/PD. These instructions are only for reference, in case you need to manually regenerate the application's toolbar and menus:

1. In SAP transaction SE80, create a new GUI status program (naming proposal: ZXY_PDVI_GENERATED_CUA) as an empty module pool.
2. In SAP transaction SE38, run program /EBY/PDVI_CUA_MAPPER on this empty GUI status program to populate it with generated menus.
3. In SAP transaction /EBY/PDVI_VMAI, configure PROCESS DIRECTOR to use this GUI status program.