Monitoring and Managing IDocs for SAP® Systems with Libelle EDIMON

A well-functioning continuous IDoc Operation is an essential part of running business processes supported by SAP® systems. The IDoc workflow represents a critical aspect of how orders, deliveries, and invoices are moving in and out of the company. A successful IDoc workflow is inextricably tied to core business operations including Invoicing, Delivery, Production, and other areas.

Libelle EDIMON has been developed specifically for SAP systems and handles monitoring of the IDoc interface. It is based on ABAP® and designed for the all current and older SAP Releases. In set intervals, EDIMON checks for IDoc issues via a planned SAP Job for an automatic launch of the program in transaction SM36/SM37. A central EDIMON Cockpit provides an overview of items such as whether or not there are any faulty or not posted IDocs. Corresponding rules trigger reactions such as notification, automatic reposting, or correction programs.

Libelle EDIMON is a software product to monitor and manage IDocs across the SAP System Landscape. The solution automates typical monitoring and troubleshooting tasks in regards to the management of IDocs. It allows continuous monitoring of incoming and outgoing IDocs and enables customers to have a clear picture of the transfer of critical information in and out of the business.

EDIMON runs in the background and investigates the status of IDocs, which are then displayed in a central Cockpit. Notifications by E-Mail, SAP-Mail, or SOX-conform C-Mails can also be configured. EDIMON allows for the setup of triggering for automatic error correction covering known error statuses. The solution replaces tedious manual and repetitive troubleshooting tasks with a pre-defined automated process.

IDocs in SAP® Systems

IDocs (Intermediate Document) represent the standardized data structure for electronic data interchange (EDI) between application programs for SAP Systems. IDocs serve as the container for data transfer in SAP's Application Link Enabling (ALE) system. IDocs are used for asynchronous transactions: each IDoc that is generated exists as a self-contained text file that can then be transmitted to the requesting receiver without connecting to the central database.

EDIMON Core Functionality

Libelle EDIMON monitors the central IDoc flow for IDocs that are created in SAP or external systems, IDocs that are inbound to or outbound from the SAP system, or IDocs that are processed inside the SAP system and provide confirmation status to connecting systems. Libelle EDIMON monitors for failed IDocs and triggers automated reactions. Such a reaction may include a simple e-mail notification to the responsible Business Unit that, for example, a Purchase Order is referring to a non-existing Cost Center and thus does not get posted. The Business Unit can then fix the order and re-post, which would clear the error status.

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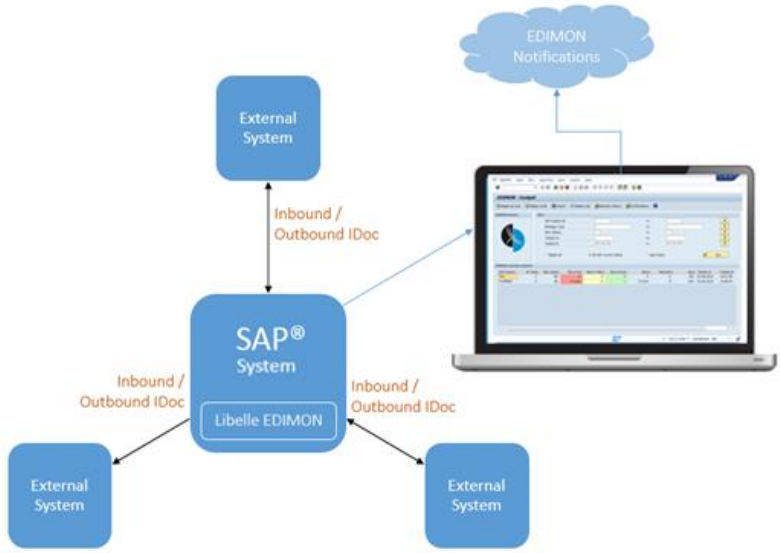
Another option includes the possibility of an automated program within EDIMON to fix re-curring known issues directly.



Libelle EDIMON centrally monitors the flow of all IDoc traffic and keeps track of issues in a central Cockpit.

Automated rules then trigger automated re-actions such as e-mail notifications.

EDIMON Rules and Reactions

After implementation, EDIMON continuously and centrally collects all IDoc issues. It then counts and categorizes IDocs into three distinct statuses based on the SAP error codes. Libelle provides a standard methodology for classifying the SAP® error codes as red, yellow, or green, and customer may adjust that classification.

- Green: IDoc was processed correctly
- Red: IDoc processing failed (Typically Error Code 51)
- Yellow: IDoc was processed, but SAP raised a warning

After the classification, EDIMON applies a customizable set of rules, which may include any of the following:

- E-Mail – Standard e-mail, for example to the Business Unit responsible for the IDoc
- SAP Mail – Standard SAP mail
- SAP Program, SAP Function, SAP Event, or SAP job.
- C-Mail – SOX-conform confirmation e-mail

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EDIMON Installation

The solution is implemented into the SAP® system via a transport file provided by Libelle and follows the standard transport procedure. After installation, basic customization is performed to the full extent required by the user of the EDIMON tool.

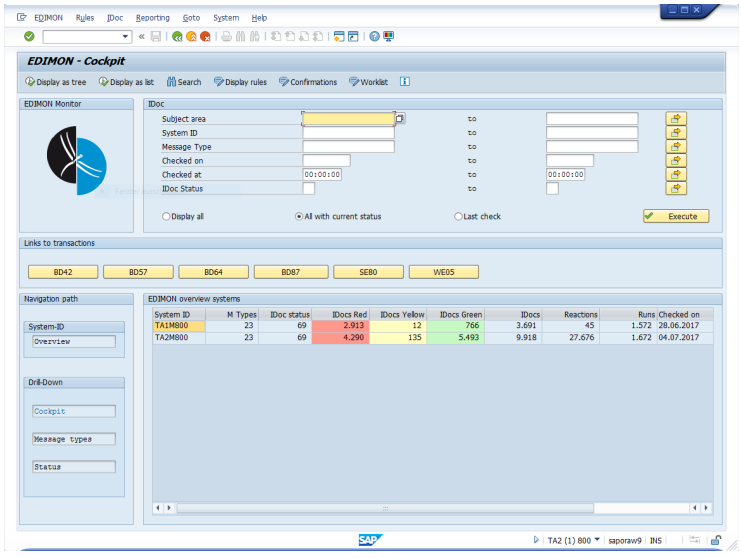
Implementation follows a pre-defined workflow of installation, rule setup, testing, and go-live

EDIMON – Cockpit Overview

The EDIMON Cockpit displays a summarizing overview of the results from the checks for each connected system. This provides information on the number of different checks being carried out, on how many message types and statuses have been tested, and on the number of IDocs ascertained in doing so, all broken down into the 3 categories. Furthermore EDIMON displays the number of reactions that have taken place for the checks performed (for an explanation, see below), as well as date and time of the last check performed.

Cockpit Display Filters

The EDIMON Cockpit provides filtering functions. By default, no filter is set, and all data is displayed in the EDMON system. A filter 'all with current status' selects those IDocs that are currently open, and a filter 'last check' selects IDocs that have been added in the respective system during the last checks on message type and status.



The EDIMON Cockpit is the central place to monitor all IDoc statuses.

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Drill Down Functionality
Drill-down functionality is available and focuses on the Message Types, Statuses, or on Single IDocs:

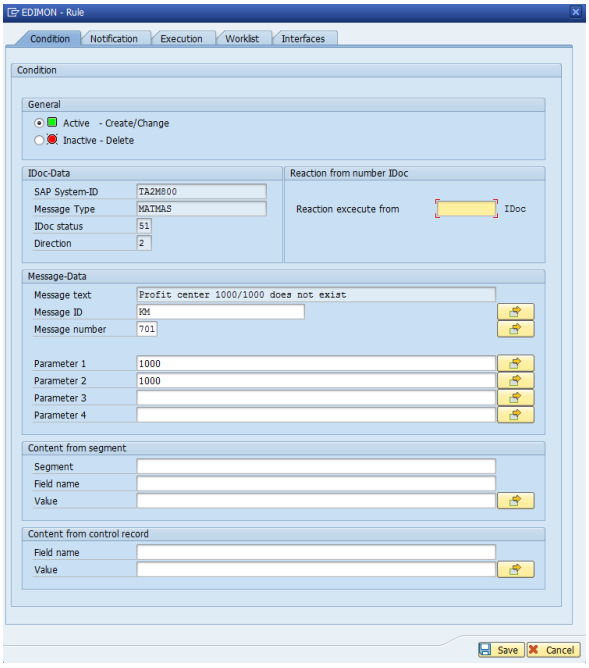
1. View all IDoc statuses per system – (System)
2. View all message types for one system - (Message types)
3. View for one system, one message type, all statuses - (Status)
4. View for one system, one message type, one status, all IDocs - (Single IDoc)

Rules and Reactions

EDIMON provides a framework of defining and managing rules on how to proceed when IDocs of a certain message type and status are detected. Rules can be created based on from which SAP® system they are generated, the message type, the status, or the IDoc direction (incoming or outgoing). Message classes summarize the messages of a specific area or certain content.

After the rules are defined, seven available reactions can be selected as seen below:

- E-Mail
- SAP Mail
- C-Mail (Internal EDIMON notification requiring receipt confirmation)
- SAP Program
- SAP Function
- SAP Event
- SAP Job
- Worklist
- Interfaces (CCMS / system operation commands)



All rules can be supplemented with a text for the notification. In addition to text, it's also possible to export segments in the notification. Sequence of text elements and field content are set using the sequence number.

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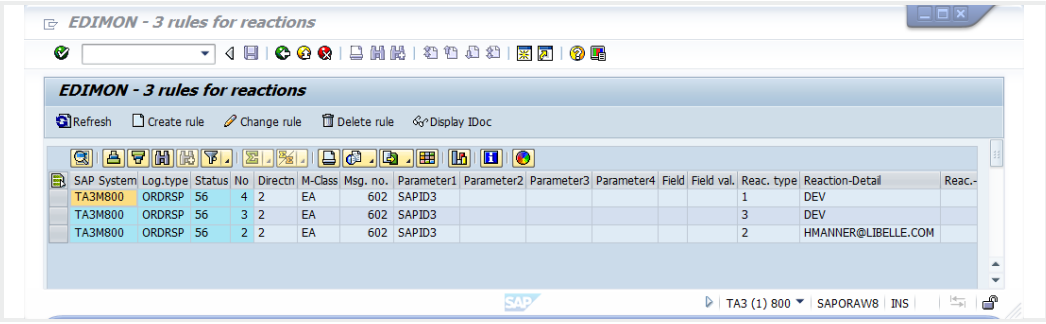
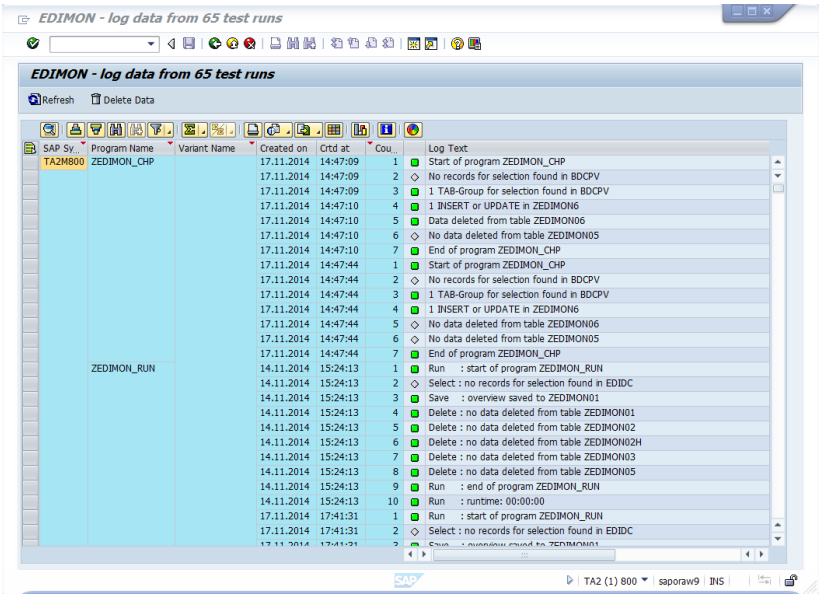


After saving the rule, an overview table of all rules corresponding to the selection criteria selected prior is displayed.

EDIMON Logs

A log file is written for each check performed, providing information on how many data sets have been found, whether reactions were triggered, etc. These data can be accessed via the Reporting Menu. A variety of filtering options are available.



EDIMON keeps track of all checks that run on the system.

Operation

After activating the check program and setting up the rules, EDIMON is ready for operation. Once it receives IDoc information from a check corresponding to the conditions laid out in the rules created, then a corresponding reaction will be triggered.

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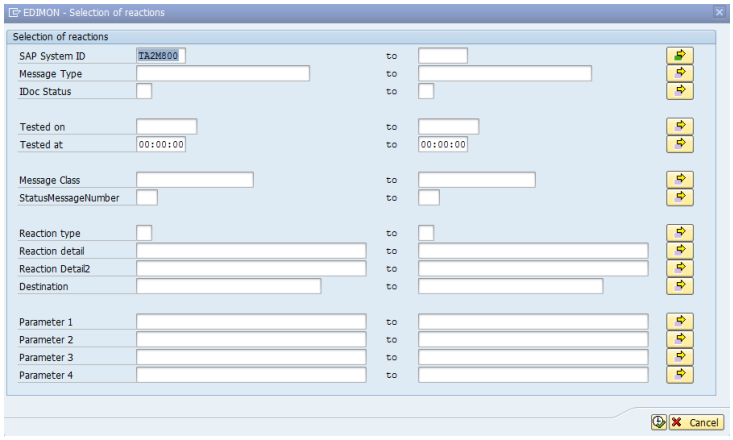
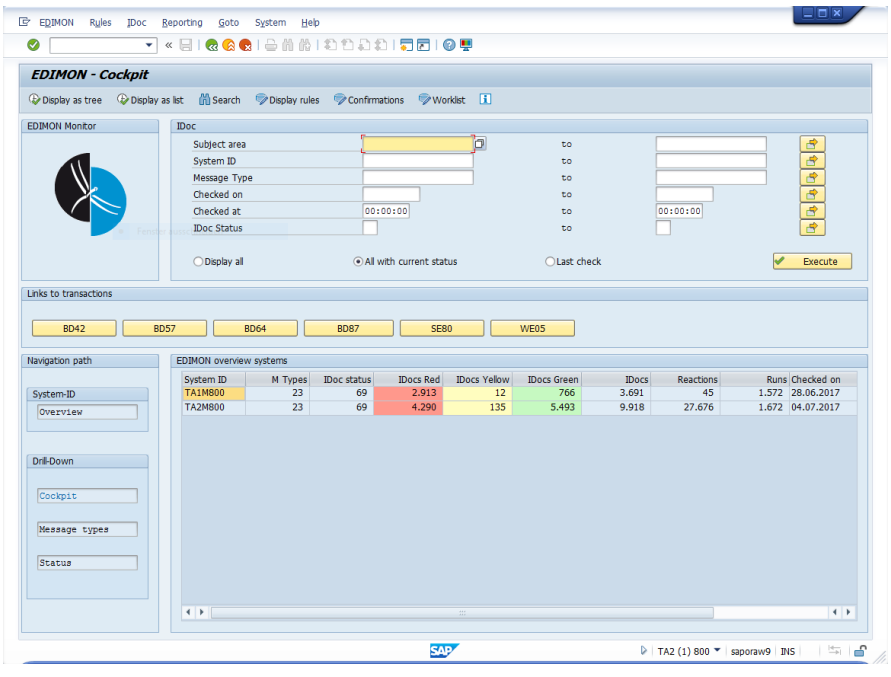
In order to maintain an overview of which reactions have been triggered, they are registered and can be accessed using a "Reaction History" function.



EDIMON stores all reactions, and customers may filter the data here beforehand via a selection screen.

Quick access to SAP® Transaction

The EDIMON tool provides options for user-specific customization to create shortcuts to other important SAP transactions, which the user needs in his/her day-to-day IDoc monitoring tasks, from the EDIMON cockpit.



Customizable shortcuts in EDIMON provide access to frequently needed Transactions during IDoc troubleshooting.

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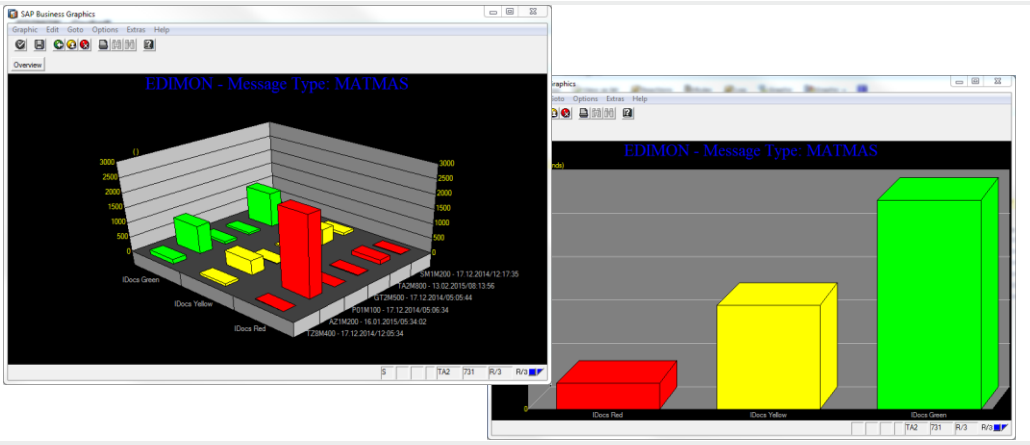
Reports

The EDIMON tool allows for the generation of 2-D or 3-D reports based on the requirement. While selecting reporting from EDIMON Cockpit, users can select option for 2-D and 3-D reports, which will help to analyze the IDoc traffic in the system and also gives an overview of error statuses based on IDoc type.



EDIMON provides 2-D or 3-D Charts for Reporting and Analysis.

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Summary

EDIMON significantly reduces the time and resources necessary for IDoc monitoring and sends notification to the right person or department automatically from the EDIMON Cockpit. It is safe and easy to install in any SAP® environment and can be used immediately.

- Oversee the most important business processes:
  Orders, Invoices, and Deliveries.
- Standardize and automate IDoc monitoring.
- Monitor both incoming and outgoing IDocs.
- Automatically identify and locate Errors.
- Saves time and resources for SAP basis team.
- Management cockpit and extensive notifications options.
- Automatic Error Correction.
- Standard Monitoring Template and Customization Options.

More Information

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