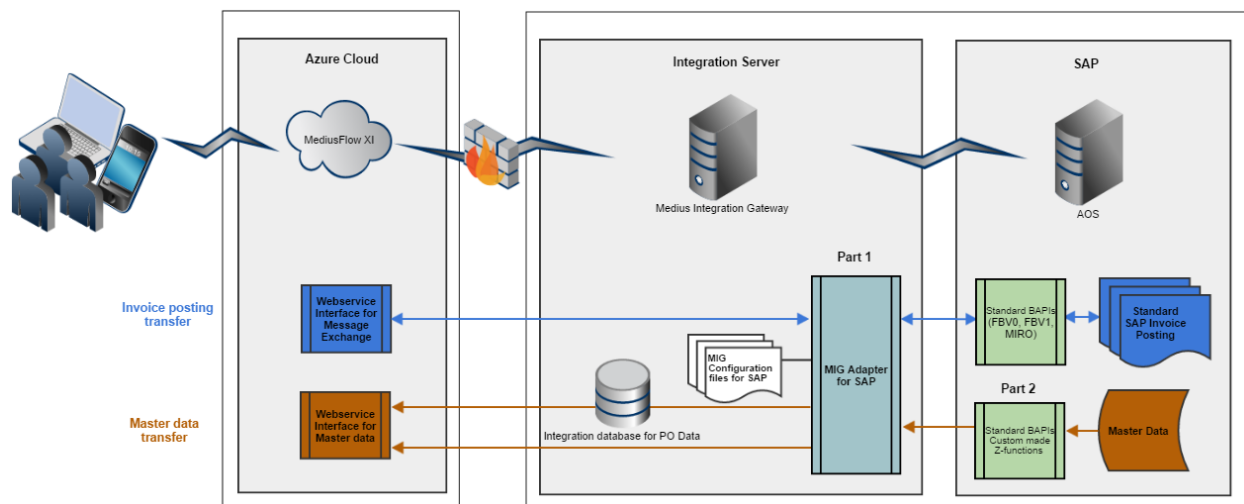


# SAP Integration - Product definition

This product definition describes the content of the SAP integration package and the supported functionality. This product definition was last updated December 21st, 2017.

## 1 Overview

The MediusFlow integration to SAP consists of both an adapter to Medius Integration Gateway (MIG), the Medius integration engine, as well as some custom objects in SAP for master data retrieval. The integration makes it possible to transfer master data (such as suppliers, accounts etc.) from SAP to MediusFlow. It also makes it possible to post invoices from MediusFlow to SAP with a document number or error message in return to MediusFlow. Below you find an overview of how the integration works.



### Part 1

- Code written in C# .NET

### Part 2

- Provided as a package of txt files and matching structures
- Code written in ABAP
- Consists of SAP Functional modules

#### 1.1 Version dependencies

The below versions of SAP are supported by the integration:

- SAP ECC 6.0
- SAP 4.7
- SAP 4.6 (with some limitations)

## 1.2 Integration Package Content

***The Integration package includes the following for Medius Integration Gateway (MIG):***

- Custom adapter that communicates with SAP
- Configuration files for the SAP integration

***The Integration package includes the following for SAP:***

- SAP custom functional modules
- Excel spreadsheet with the corresponding structures exported by the functional modules

## 2 MediusFlow Modules & Functions

**The functionality of the integration is based on Medius' experience and the suggested best practice of configurations between MediusFlow and SAP but does not cover all configuration settings supported by SAP.**

Below you find a summary of the MediusFlow modules that are included in SAP integration standard package.

Information in column "**Basic Setup**" means that the feature/functionality is included in the basic deployment and is based on Best Practices.

Information in column "**Custom Setup**" means further information about the customer's processes and system(s) setup is required to implement and thus requires additional consultant configuration work.

MediusFlow module	Basic Setup	Custom Setup	Comment
Invoice	YES		Parking + final posting or final posting only
Match	YES		Final posting only
Procurement	NO	YES	Match invoice against MediusFlow PO is posted as FI document. Only final posting, no parking
Contract	NO	YES	

### 3 Master Data

Below you find a summary of the different master data entities.

Master data entity	Basic Setup	Custom Setup	Description	Comment
<b>Company</b>	NO	NO	New company codes in SAP needs to be manually added in MediusFlow and set up for integration	
<b>Currency rates</b>	YES			Currency rates maintained using base currency supported as custom setup
<b>GL Accounts</b>	YES			Only 1 language per company code can be transferred
<b>Fixed assets</b>	YES		Fixed Assets are available in the the first coding segment with a prefix "A"	
<b>Cost center</b>	YES			
<b>Internal orders</b>	YES			
<b>Profit center</b>	NO	YES		
<b>WBS element</b>	NO	YES		
<b>Trading partner</b>	NO	YES		
<b>Functional area</b>	NO	YES		
<b>Tax codes</b>	YES			
<b>Account restrictions</b>	NO	NO	No support for transferring Field Status Groups per G/L account.	
<b>PaymentTerms</b>	YES			Complex payment terms are not supported, only number of days
<b>Vendors</b>	YES			1 purchasing organization per company code in standard
<b>Supplier items</b>	YES		Item table for cross reference in connection between PO lines and invoice lines	
<b>Purchase order with goods receipt</b>	YES		Purchase order goods receipts flagged for "goods receipt based invoice verification" (EKPO-WEBRE) All lines with goods receipt indicator (EKPO-WEPOS) set	Purchase order goods receipts not flagged for "goods receipt based invoice verification" (EKPO-WEBRE) supported as extension

			Lines with "Free of charge" indicator are not transferred
<b>Purchase order without goods receipt</b>	NO	YES	Service/Non goods receipt order matching All lines without goods receipt indicator( EKPO-WEPOS) set
<b>Planned delivery costs (pricing conditions)</b>	NO	YES	
<b>Purchase order account assignment</b>	NO		

#### 4 Message Exchange

Below you find a summary of the different invoice posting scenarios.

<b>Posting scenarios</b>	<b>Basic Setup</b>	<b>Custom Setup</b>	<b>Description</b>
<b>Expense invoice (FI) parking and final posting</b>	YES		Document types KR used for debit invoices and KG for credit notes
<b>Cancellation of parked invoices that are invalidated in MediusFlow</b>	YES		Only applies for FI documents
<b>Expense invoice (FI) final posting only</b>	YES		
<b>Assignment field for supplier and GL line (FI &amp; MM)</b>	NO	YES	
<b>Accrual postings</b>	NO	NO	Limited by lack of standard support in SAP
<b>PO invoice with match against GR</b>	YES		Supports both GR/IV and non GR/IV flagged orders. No parking supported
<b>PO invoice with match against PO line</b>	NO	YES	Only of non GR/IV flagged orders. No parking supported.
<b>Invoice match with return orders (negative receipt lines)</b>	NO	YES	
<b>Invoice match with planned delivery costs (pricing conditions)</b>	NO	YES	
<b>Actual payment date update sent to MediusFlow</b>	NO	NO	
<b>Add link to Invoice document in SAP (Archive link)</b>	NO	YES	Not supported with non-calendar based fiscal year in SAP

## 5 Regional compliance

The integration package is used by customers in about 20 different countries worldwide. Any country specific legal requirements, including but not limited to VAT compliance requirements, have to be analysed and identified by the parties in the project. Any additional services needed to ensure compliance with requirements not supported by the standard integration package may be provided by Medius on a time and material basis and will require a Change Order signed by the Parties.

## 6 SAP Integration Requirements

In addition to the Technical Requirements for MediusFlow, these are SAP Integration specific requirements to be able to deploy, configure, and troubleshoot integrations to MediusFlow.

An **integration server**, set up by customer to host the Medius Integration Gateway (MIG) application, **is required**.

The technical requirements for this server is described in the General Integration Requirements for MediusFlow.

### 6.1 Communication to SAP

MediusFlow/SAP integration mainly using RFC calls in SAP. The RFC server will be listening on Port range: 30007-39907. All inbound request to SAP system will be through this range and the default value is 30007. As SAP does not specify any specific port and this is assigned automatically it is difficult to specify any particular port.

### 6.2 SQL server

- SQL server 2008 R2 or higher. It can be a SQL server express installed on the batch/integration server
- SQL server should have collation SQL\_Latin1\_General\_CP1\_CI\_AI

### 6.3 SAP GUI

SAP GUI needs to be installed on the integration server so that Medius consultants can ensure proper communication between integration engine and SAP as well as to verify master data and tests of invoice postings.

SAP user that will be used by the integration to perform work in SAP. The access required can be seen in the section "Access within SAP" below.

### 6.4 Access within SAP

#### 6.4.1 Batch user

The MediusFlow SAP integration runs processes and access data in SAP, through BAPI:s and custom functions. This is done through an integration application on the integration server. The user for the integration application will use a SAP batch user that is specific to MediusFlow integrations and has date and decimal format specifically set according to the SAP questionnaire. Also all warning messages in FI bookings (FBV1, FBV0) must be suppressed for this user. Due to the specific needs for this user, it's important that Medius batch user is not shared with other processes.

The following is needed to be setup for the integration user within SAP.

- Transactions(TCODE) We need to be able to perform the following transactions in SAP including additional settings to make them work appropriately:
  - FBV0 - Final posting a parked FI document
  - FBV1 - Parking an FI document
  - FBV4 - Edit parked documents
  - SE91 - See error codes in SAP
  - SPRO - Archive link
- BAPI:
  - Postings:
    - RFC\_CALL\_TRANSACTION\_USING - Calling the screen sequences for Parking and final posting FI documents
    - BAPI\_INCOMINGINVOICE\_CREATE - Final match a MM document
    - BAPI\_BARCODE\_SENDLIST - For archive link if it's used, it's not available for all installations
    - ARCHIV\_BARCODE\_GLOBAL - For archive link if it's used, it's not available for all installations
  - Master data:
    - BAPI\_GL\_ACC\_GETLIST - GL account export
    - BAPI\_COSTCENTER\_GETLIST - Cost center export
    - BAPI\_PROFITCENTER\_GETLIST - Profit center export(Usually not used)
    - BAPI\_FIXEDASSET\_GETLIST - Fixed assets export
    - BAPI\_INTERNALORDER\_GETLIST - Internal order export
    - BAPI\_PROJECTDEF\_GETLIST - Project/WBS export
    - BAPI\_EXCHRATE\_GETCURRENTRATES - Currency rate export
- Custom functions:
  - Z\_MEDIUS\_VENDOR - Exporting suppliers
  - Z\_MEDIUS\_GR - Exporting purchase order information
  - Z\_MEDIUS\_VAT\_CODES - Exporting VAT codes
- Table access:
  - TCURR
  - COAS
  - TO52
  - T100

#### 6.4.2 Consultant user

Dialogue user to be used by Medius consultants to login in SAP and verify invoice postings during test phase.

- Additional transactions in SAP
  - SHDB/OSHDB - To perform recording
  - SE37 - For troubleshooting
  - SE16 - Table browser
  - OAC5 - Check barcode settings for given types
  - OAC0 - Archive link content repository settings
  - OAM1 - Monitor linked documents
  - FB03 - Display document
  - SU03 - User authorization
  - ME23N - Display PO
  - ME33L - View scheduling agreement PO
  - XK03 - Display vendor master data

- MIRO - Post MM invoices
- MIR4 - Display MM invoices
- FBL1N - List parked documents
- Additional table access:
  - TOA01
  - BDS\_BAR\_EX