NAV Integration - Product Definition

This product definition describes the content of the NAV integration package and the supported functionality. This product definition was last updated November 25th, 2016.

1 Overview

The Microsoft Dynamics NAV (NAV) integration consists of two parts. One part is an adapter for Medius Integration Gateway (MIG), the Medius integration engine. The other part is a set of custom created objects to call standard functions in NAV. This part is imported in NAV (as Extensions for NAV2016).

No standard objects in NAV are modified

The solution makes it possible to transfer master data (such as suppliers, accounts etc.) from NAV to MediusFlow. It also makes it possible to transfer invoice data from MediusFlow to NAV where the invoice data is handled automatically inside NAV. Once the posting is done NAV will also return a voucher or error message to MediusFlow.

Below is a picture of the whole system with the two parts of the solution marked as part 1 and part 2.
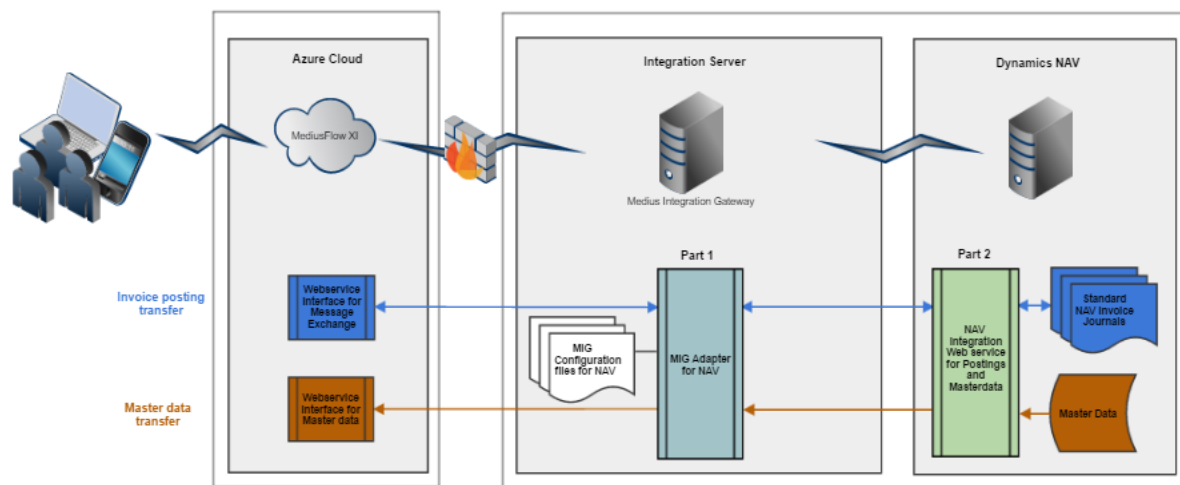
Part 1

- MIG adapter for NAV is a DLL written in C# .NET to direct the information to the correct web service functions using SOAP
- Used to communicate between MediusFlow and NAV

Part 2

- Code written in C/AL
- Consists of NAV custom objects

1.1.1   Master Data

- MIG fetches master data from NAV by using the MIG Adapter for NAV to call the NAV Integration Webservice
- MIG is used to transform the master data to the MediusFlow API
- To be able to handle delta data (only fetch master data that has been modified) the integration uses the "Changelog"-function in NAV to get correct timestamps on modified data

1.1.2   Posting Documents

- Posting invoice information fetched from MediusFlow
- NAV integration web service call using the NAV Adapter
- NAV Integration web service function calls posting procedure using the standard objects in NAV.
- No standard objects in NAV are modified, standard functions are called in the same way as a manual posting would do.

1.2 NAV web service
If the NAV version does not have support for web service, we strongly recommend the customer to install it because an alternative and not as good solution would be to use Medius created integration tables for message exchange in the NAV database.

This requires extra cost because it is not supported in standard integration package.

1.3 Integration Package Content

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

- Custom adapter to connect to NAV
- Configuration files for the NAV integration

The Integration package includes the following for NAV:

- Custom objects (**in total 5 objects**) that needs to be imported and compiled in NAV
    - 1 Table
    - 2 Code units
    - 1 Form/Page (depending on Classic or RTC client)
    - 1 Menu suite (Could be one extra if using both Classic and RTC client in NAV)
- In order for us to put these objects in NAV, we need a set of available object number listed in the customer's NAV license
- Some of the NAV objects are needed to read the master data in the form of suppliers, payment terms, accounts, dimensions and currencies, etc
- Some of the NAV objects are designed to retrieve messages from MediusFlow for invoice registration and posting in NAV
- There is also a setup form for the integration configuration

For NAV2016 the integration code is imported as Extensions.

1.4 Version dependencies

NAV Version	Integration Package Version	MediusFlow XI Version	Comment
NAV 2009 R2 or later, including NAV 2016 (on-premise and Cloud)	6.0		NAV 2009 R2 or later, including NAV 2016 (on-premise and Cloud)

2   MediusFlow Modules & Functions

Below you find a summary of the MediusFlow modules that are included in NAV 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 in order to implement and thus requires additional consultant configuration work.

MediusFlow Module	Basic Setup	Custom Setup	Comment
Invoice	YES		Preliminary, cancel and final posting
Match	YES		Preliminary, cancel and final posting
Procurement	YES		Match invoice against Goods receipt of Purchase order created in MediusFlow Procurement module. Posted as expense in NAV.
Contract	NO	YES	Contract based invoice is posted as expense in NAV.

3   Master Data

The following MediusFlow entities are imported in the master data transfer process:

Master Data Entity	Basic Setup	Custom Setup	Description	Known Limitations
Company	NO	NO	New companies added in NAV needs to be manually added in MediusFlow and set up for integration	
Currency codes & rates	YES		Currency Codes and current Currency Rates are transferred for handling invoices with different currencies as well as authorization limits	In standard package only currencies with 3 characters are transferred to MediusFlow
G/L Accounts	YES		All G/L accounts with type "Posting" are transferred.	

Master Data Entity	Basic Setup	Custom Setup	Description	Known Limitations
			The account is set to inactive in MediusFlow when the account is blocked in NAV and/or VAT Prod. Posting Group is missing Integration requires configuration of dimensions in MediusFlow Setup form/page in NAV before master data transfer is run	
Dimensions	YES		Includes a maximum of 10 dimensions excluding the G/L account. Integration requires configuration of dimensions in MediusFlow Setup form/page in NAV before master data transfer is run	If the Project module is used, only 8 dimensions is included as the Project and Project Task allocate 2 dimensions in MediusFlow
Dimension validations in NAV	YES		Support for G/L account's "Default Dimensions" settings: "Code Mandatory" (Required restriction in MediusFlow) "Same Code" (Fixed restriction in MediusFlow) "No Code" (Forbidden restriction in MediusFlow) Support for "Limited" and "Blocked" restrictions configured in "Dimension Combinations" matrix in NAV.	No support for purposed value (empty) in G/L account "Default Dimensions" settings in NAV. "Blocked" restrictions configured in Dimension Combinations matrix in NAV has to be manually configured as a forbidden type restriction in MediusFlow.
Projects	YES		Projects are transferred if active and has any Project Tasks	
Project Tasks	YES		Project Tasks are transferred	
Fixed Assets	YES		Fixed Assets are available in the the first coding segment with a prefix "FA" as default	
VAT Business Posting Group	YES		VAT Business Posting Group with references to Tax codes are transferred.	Only valid posting groups in VAT Posting Setup are transferred to MediusFlow. They are required to have specified "Purchase VAT

Master Data Entity	Basic Setup	Custom Setup	Description	Known Limitations
				Account" to be able to use them.
VAT Product Posting Group	YES		VAT Prod. Posting Group with references to Tax codes are transferred	Only valid posting groups in VAT Posting Setup are transferred to MediusFlow. They are required to have specified "Purchase VAT Account" to be able to use them.
Payment terms	YES		Transfers all payment terms to be able to calculate due date on invoice.	
Vendors (Suppliers)	YES		Only vendors with following status are transferred: Payment Terms Code is specified VAT Business Posting Group is specified If Vendor Bank Account is used to get supplier identifiers, then only the first record is fetched (if multiple bank accounts exists). Vendor is set to inactive in MediusFlow for all blocked statuses except "None".	
Vendor Item Numbers	YES		The vendor item numbers for non-blocked items are transferred to an item table used as cross reference table in connection between PO lines and invoice lines in MediusFlow	
Purchase orders	YES		Integration will transfer Purchase Orders and Purchase Order Lines for POs that are posted as long as the lines are not fully invoiced. Rejected Posted Purchase Receipt Lines (NAV command called Undo Receipt) are transferred with negative quantity to be able to match to invoice(s) in MediusFlow.	
Goods receipts	YES		Integration transfers Goods Receipt Lines for matching	

Master Data Entity	Basic Setup	Custom Setup	Description	Known Limitations
			invoices to goods receipts in MediusFlow	
Return orders	YES		Return Orders and Return Order Lines are transferred to MediusFlow	
Accrual Accounting / Deferral Templates	YES		Accrual Accounting / Defferal Templates are transferred and can be used in MediusFlow to set the correct accrual postings in NAV	Accrual templates/schemes must be manually created in MediusFlow

4   Message Exchange

Posting Scenarios	Basic Setup	Custom Setup	Description
Expense invoice - preliminary and final posting	YES		Preliminary posting / Inward registration and final posting of invoices **Note:** Available for NAV SE versions only or as customization
Expense invoice - only final posting	YES		Only final posting (no preliminary / inward registration) **Note:** Available for both NAV SE and W1 versions
Expense invoice - invalidation (cancellation) of preliminary posting	YES		Cancellation of preliminary posted invoice **Note:** Available for NAV SE versions only or as customization
Expense invoice - accrual accounting	YES		Accrual accounting to allocate cost on different periods/months **Note:** Available for NAV SE versions only or as customization
3-way matching	YES		Support for handling deviations in MediusFlow according to deviation setting "Split proportional". Invoice is matched against several goods receipts on line detail level. One unit price deviation exists. Deviation is distributed based on connected amount over the connected goods receipts.
Invoice match with return orders	YES		Matching invoices to the return order documents in NAV

Actual payment date response	NO		**Note:** Payment of invoices is made manually in NAV and the actual payment date is not sent back to MediusFlow
Adjustment requests with block and release payments	NO		**Note:** Functionality to send a payment block on original invoice is not included
Contract based invoice (Contract module)	YES		Invoice is posted as Expense invoice in NAV
Procurement invoice (Procurement module)	NO	YES	Invoice is posted as Expense invoice in NAV **Note:** Requires extra implementation time
Add link to Invoice document in MediusFlow in NAV	NO	YES	Link to document in MediusFlow, user have to authenticate. **Note:** Requires extra implementation time

5 NAV Integration Requirements

In addition to the Technical Requirements for MediusFlow, these are NAV 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.

5.1 NAV 2009/2013/2015 Software/Component Requirements

On the integration server the following components should be installed:

- NAV Client
- SQL Server Management Studio
- A folder (or a shortcut to a folder) containing files to:
    - NAV - Development environment
    - NAV - Client for Test environment
    - NAV - Client for Prod/Live environment

Additionally for NAV2009 we are strongly advising that the web services component is installed and accessible from the integration server so the integration can make necessary web service calls to post documents in NAV.

5.2 NAV 2016 Software/Component Requirements

For On-Premise installations of NAV 2016 the requirements are the same as the previous versions.

For NAV 2016 Cloud an integration server, on which the Medius Integration Gateway service can be installed and run, is required.

5.3 Medius Integration Consultant User Access to NAV Database and Client

The MediusFlow Integration Consultant should have the following permissions:

- Member of an AD-Group that is   Local administrator on the Integration server
- For NAV Database:
  - CREATE/ALTER TABLE permission to create/modify integration objects for MediusFlow integration.
  - Read access to NAV database to read master data
- In NAV Development Client:
  - User must have the role SUPER in NAV to compile and adjust integration objects in NAV client.
  - User must have necessary client permissions to NAV tables and functions used for registration and posting of invoices as well as validating master data