

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 September 26th, 2017.

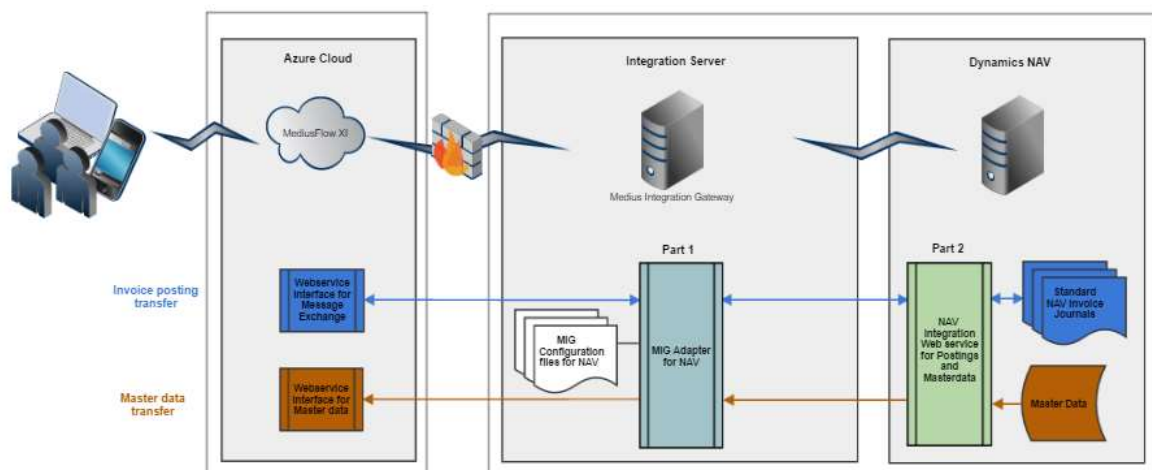
1 Integration Overview

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 and later).

No standard objects in NAV are modified when the integration objects are imported

The solution makes it possible to transfer master data (such as vendors, 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 Web service
- 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 Change Log 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 vendors, 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 and later the integration code is imported as Extensions by customer or the NAV vendor/partner.

1.4 Version dependencies

NAV Version	Integration Package Version	MediusFlow XI Version	Comment
NAV 2009 R2 Build 34302 and later	R7 HF2	Cloud/W16 and later	This product definition is written for web service based integrations (WS)
NAV 2013 R2 Build 36310 and later			
NAV 2015 Build 42603 and later			
NAV 2016 CU13 (Build 47256) and later (on-premise and cloud)			
NAV 2017 CU3 (Build 15140) and later (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	NO	YES	Match invoice against Goods receipt of Purchase order created in MediusFlow Procurement module. Posted as expense in NAV.
Contract	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		Integration requires configuration of dimensions in MediusFlow Setup form/page in NAV before master data transfer is run to transfer G/L accounts	All G/L accounts with type "Posting" are transferred. The account is set to inactive in MediusFlow when the account is blocked in NAV and/or VAT Prod. Posting Group is missing
Dimensions	YES		Integration requires configuration of dimensions in MediusFlow Setup form/page in NAV before master data transfer is run to transfer dimensions. Includes a maximum of 8 dimensions excluding the G/L account, Project (Job) and Project Task (Job Task).	If the Project module in NAV is used, only 8 dimensions is included as the Project and Project Task allocate 2 dimensions in MediusFlow

Master Data Entity	Basic Setup	Custom Setup	Description	Known Limitations
Dimension Validations in NAV	YES		<p>Support for G/L account's "Default Dimensions" settings:</p> <ul style="list-style-type: none"> • "Code Mandatory" (Required restriction in MediusFlow) • "Same Code" (Fixed restriction in MediusFlow) • "No Code" (Forbidden restriction in MediusFlow) • Empty, Purposed value (Default restriction in MediusFlow) <p>Support for "Limited" and "Blocked" restrictions configured in "Dimension Combinations" matrix in NAV.</p>	<p>"Blocked" restrictions configured in Dimension Combinations matrix in NAV has to be manually configured as a forbidden type restriction in MediusFlow.</p> <p>Dimension validations for Maintenance codes are not transferred to MediusFlow.</p>
Projects (Jobs)	YES		<p>Projects are transferred. As default "Status" controls if Project is transferred as active or not. If "Status" is "Completed" means inactive.</p> <p>Integration has the possibility to configure to use "Blocked" instead to transfer Project as active or not.</p>	<p>Projects are pre-defined in integration to be transferred to Dimension 10</p>
Project Tasks (Job Tasks)	YES		<p>Project Tasks are transferred if Job Task Type is "Posting"</p>	<p>Project Tasks are pre-defined to be transferred to Dimension 11</p>
Fixed Assets	YES		<p>Fixed Assets are transferred. As default "Inactive" controls if Fixed Asset is transferred as active or not.</p> <p>Integration has the possibility to use "Blocked" instead to transfer Fixed Asset as active or not.</p> <p>Fixed Assets are available in the first coding segment (Dimension 1) with a prefix "FA" as default in MediusFlow.</p> <p>If Maintenance codes are used on Fixed Assets, they are transferred as dimension values in Dimension 12 in MediusFlow.</p>	

Master Data Entity	Basic Setup	Custom Setup	Description	Known Limitations
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 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		Payment terms are transferred to be able to calculate due date on invoice in MediusFlow if not imported on document	
Vendors (Suppliers)	YES		Vendors are transferred and set to inactive in MediusFlow for all "Blocked" values except "None" (empty value).	<p>Only vendors that fulfils following criteria are transferred:</p> <p>Payment Terms Code is specified VAT Business Posting Group is specified</p> <p>If Vendor Bank Account is used to get supplier identifiers, then only the first record is fetched (if multiple bank accounts exist).</p>
Vendor Item Numbers	YES		<p>The vendor item numbers for non-blocked items are transferred to an item table.</p> <p>This table is used as a cross reference table in connection between PO lines and invoice lines in MediusFlow.</p>	

Master Data Entity	Basic Setup	Custom Setup	Description	Known Limitations
Purchase Orders	YES		Posted Purchase Orders and Purchase Order Lines are transferred	
Goods Receipts	YES		<p>Integration transfers Goods Receipt Lines for matching invoices to goods receipts in MediusFlow</p> <p>Goods Receipt Lines with Free of Charge items are transferred with unit price 0 and can be used to connect to invoices in MediusFlow</p> <p>Rejected Posted Purchase Receipt Lines (NAV command called Undo Receipt) are summarized with the delivered quantity on the Purchase Receipt Line. This means that if a Purchase Receipt Line is fully undone in NAV, it will get 0 in delivered quantity in MediusFlow to be matched correctly to invoice(s).</p>	
Return Orders	YES		Posted Return Orders and Return Order Lines are transferred	
Accrual Accounting / Deferral Templates	YES		Accrual Accounting / Deferral Templates are transferred for NAV 2016 and later and can be used in MediusFlow to set the correct accrual postings in NAV	Accrual templates/schemes must be manually created in MediusFlow for previous versions than NAV 2016

4 Message Exchange

Posting Scenarios	Basic Setup	Custom Setup	Description
Expense invoice - preliminary and final posting	YES		<p>Preliminary posting / Inward registration and final posting of invoices</p> <p>Note: Available for NAV SE versions only or as customization. Support for SweBase AddOn.</p>
Expense invoice - only final posting	YES		<p>Only final posting (no preliminary / inward registration)</p> <p>Note: Available for both NAV SE and W1 versions</p>
Expense invoice - invalidation (cancellation) of preliminary posting	YES		<p>Cancellation of preliminary posted invoice</p> <p>Note: Available for NAV SE versions only or as customization</p>
Expense invoice - accrual accounting	YES		<p>Accrual accounting to allocate cost on different periods/months</p> <p>Note: Available for NAV SE versions only or as customization</p>
3-way matching	YES		<p>Support for handling deviations in MediusFlow according to deviation setting "Split proportional".</p> <ul style="list-style-type: none"> • Invoice is matched against several goods receipts on line detail level. One unit price deviation exists. Approved deviation is distributed based on connected amount over the connected goods receipts. • Support for Price List if used in NAV in invoice posting process • Fetching goods receipt lines with Free of Charge items is supported in integration posting process • Item Charge functionality in NAV cannot be used in the integration
Invoice match with return orders	YES		<p>Matching invoices to the return order documents in NAV</p>
Actual payment date response	NO		<p>Note: Payment of invoices is made manually in NAV and the actual payment date is not sent back to MediusFlow</p>
Adjustment requests with block and release payments	NO		<p>Note: Functionality to send a payment block on original invoice is not included</p>
Contract based invoice (Contract module)	YES		<p>Invoice is posted as Expense invoice in NAV</p>

Posting Scenarios	Basic Setup	Custom Setup	Description
Procurement invoice (Procurement module)	NO	YES	Invoice is posted as Expense invoice in NAV Note: Requires extra implementation time
Replace invoice line description with accounting comment	YES		Use comment in NAV on coding line from MediusFlow
Add link to Invoice document in MediusFlow in NAV	YES		Link to document in MediusFlow, user have to authenticate.

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.

Note: For all NAV versions except NAV 2009 it is a requirement that the Change Log function in NAV is activated. It is the customer or NAV vendor/partner who is responsible for it. It is also recommended that customer or the NAV vendor/partner sets up a maintenance clean up job on Change Log to only keep log records from the latest 3 months.

The Change Log is used by the integration for the following master data tables:

- Default Dimension
- Deferral Template
- Dimension Value
- Dimension Value Combination
- Job Task
- Payment Terms
- Purchase Header
- Purch. Rcpt. Header
- Return Shipment Header
- VAT Business Posting Group
- VAT Posting Setup

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 2016/2017 Software/Component Requirements

For On-Premise installations of NAV 2016 and NAV 2017 the requirements are the same as the previous versions.

For NAV 2016 and NAV 2017 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