NMB

Bridging the gap

Moulding D365 Finance and Supply Chain into a shipping masterclass with NMB Gateway for Parcel
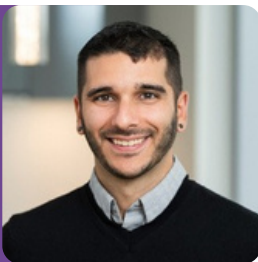
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INTRODUCTION

Today's supply chain leaders are under increasing pressure to deliver faster, smarter, and more cost-effective solutions. More professionals are turning to specialized parcel and LTL (less-than-truckload) shipping solutions—integrating them within their dedicated D365 systems to optimize their end-to-end workflows—transforming traditional shipping processes into streamlined, automated operations.

This eBook explores how integrating a purpose-built shipping solution within your supply chain ecosystem, especially when paired with platforms like Microsoft Dynamics 365, can revolutionize your operations from order to delivery. Whether you're scaling operations or looking to gain a competitive edge, this guide offers valuable insights into making shipping a strategic advantage, not just a back-end function.

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SUPPLY CHAIN COMPLEXITIES

Global supply chains are becoming increasingly complex, demanding a specialized set of shipping tools to keep pace with relentless consumer demand. As a result, many supply chain professionals are actively evaluating their technology stacks—leveraging powerful ERP systems like Microsoft Dynamics 365 Finance and Supply Chain to streamline their shipping operations, enhance visibility, and drive efficiency towards greater, sustainable profitability.

As a comprehensive cloud-based ERP solution designed for medium to large organizations, D365 aims to unify and streamline corporate processes with robust tools for managing core business functions such as finance, manufacturing, warehouse management, and sales. Its modular design provides enterprise-level flexibility and scalability, effectively dismantling interdepartmental silos like those between sales, marketing, and customer service service. However, for most shippers, Microsoft's comprehensive toolkit falls short when it comes to handling the intricate nuances of small parcel and LTL shipping logistics.

Not a 'one-size-fits-all tool'

Automation and data centralization are now critical components to a supply chain's success. As such, we've seen a steady stream of enhancements added to Microsoft D365, including AI and machine learning integration, Copilot integration for demand planning, customer and vendor netting, enhanced bank reconciliation, and a new Credit and Collections workspace[1]. Although groundbreaking in resolving common corporate headaches, most standard D365 implementations fail to connect those myriad features to tangible shipping modules as functional limitations impact their effectiveness:

Limited Carrier Integration: D365's out-of-the-box capabilities may not support seamless integration with all carriers, particularly regional or specialized ones. This necessitates additional development or third-party solutions to bridge the gap, potentially increasing complexity and costs.

Manual Rate Updates: The system often requires manual updates for carrier rates, which can be time-consuming and prone to errors. Without automated rate synchronization, businesses might face discrepancies in shipping costs.

Visibility and Tracking Challenges: Limited real-time visibility into shipment tracking and status updates can affect customer satisfaction and operational efficiency. Without comprehensive tracking, responding proactively to shipping issues becomes more difficult.

Surcharge Management Difficulties: Managing and forecasting surcharges, such as fuel and handling, can be complex without additional tools. D365's standard features offer simple solutions to managing core finances, but fail to provide the necessary flexibility to handle these variable shipping costs effectively.

For shippers, this is just a shortlist of functional gaps that can lead to inefficiencies, increased costs, and a lack of operational visibility—ultimately hindering growth and customer satisfaction; the complete opposite of what an ERP system is designed to achieve.

To overcome these shortcomings, businesses are increasingly seeking out specialized Independent Software Vendor (ISV) solutions that seamlessly integrate with D365. These specialized solutions, like NMB's Gateway for Parcel, are designed to extend D365's standard shipping capabilities by offering advanced features tailored to meet complex shipping requirements. From optimizing carrier selection and automating workflows to ensuring compliance with global trade regulations, ISV shipping solutions offer a refined lens, empowering businesses to achieve more efficient, reliable, and cost-effective shipping processes without compromising the comfort of D365's solid UI.

This eBook explores the functional limitations and gaps that contribute to supply chain challenges when shipping parcels using standard D365 compared to shipping with NMB Gateway for Parcel. In particular, we'll look at three key processes that every supply chain operation should be familiar with.

1. The **packing** and **shipping** process

2. Shipping **hazardous** materials

3. Carrier **invoice** reconciliation

Whether your business operates in retail, manufacturing, healthcare, or any other industry with complex shipping needs, understanding how to optimize your shipping processes through ISV solutions can be a game-changer. By integrating such specialized shipping solutions, supply chain operators can address the inherent limitations of D365 standard processes, leading to more efficient and compliant shipping operations.

Let's dive in.

SPOTTING THE GAP

Understanding whether your organization requires an extended D365 shipping solution starts with two steps:

(1) The first step includes being able to answer the simple question: ***"Is now the time to enhance my D365 system?"***.

(2) The second step involves conducting a thorough gap analysis to determine the functional differences between your organization's **current technology stack versus the desired state**.

Balance is key: excessive developments can divert resources from high-value improvements, while neglecting to address clear gaps in your shipping processes can quickly cause irreversible damage to your company's future.

Extending D365?

Extending means configuring a solution to meet your specific business needs, which we can categorize into the following types:

- Extending by modifying off-the-shelf functionalities
- Extending by introducing new functionalities on top of a native one
- Creating custom solutions on the platform

STEP 1: TIME FOR AN ENHANCED SOLUTION?

Oftentimes, D365 extensions are essential for supply chain operations looking to enhance efficiency, user satisfaction, decision-making, and competitiveness, especially when they operate within niche industries that require strict, proactive due diligence over everyday shipping processes. While D365 offers robust features for managing inventory, shipping carriers, and basic warehousing processes, it may not align perfectly with a company's unique workflows and processes. For shippers specifically, standard D365 offers the basic framework for connecting the system to a carrier rate engine but requires users to purchase or build a separate shipping engine, a complex and resource-intensive process. Added configuration options (or a subset of parameter-based toggles) allow supply chains to tailor the platform to their specific needs, adjusting workflows and execution parameters; thereby ensuring smoother integration and improved efficiency via seamless adoption.

Personalizing D365 enhances the user experience by creating intuitive interfaces, automating repetitive tasks, and incorporating familiar branding elements. These features boost user satisfaction and ease the adoption process. Leveraging this **configurability** also enables shippers to build tailored reports and dashboards, improving decision-making through enhanced data accuracy and insights.

Here's a shortlist of reasons why **configurability** is important and how it may benefit your organization:[2]

MEETING BUSINESS NEEDS

Each department and company has unique packing workflows, business rules, and financial processes that are essential to their daily supply chain operation. Enhanced shipping modules enable companies to leverage D365 to meet their unique shipping requirements.

IMPROVING USER ACCEPTANCE AND SATISFACTION

Implement industry-centric language, branding components, and procedures to boost user adoption and happiness. Rule-based parameters can automate repetitive procedures, improving the overall user experience and lowering friction with user adoption.

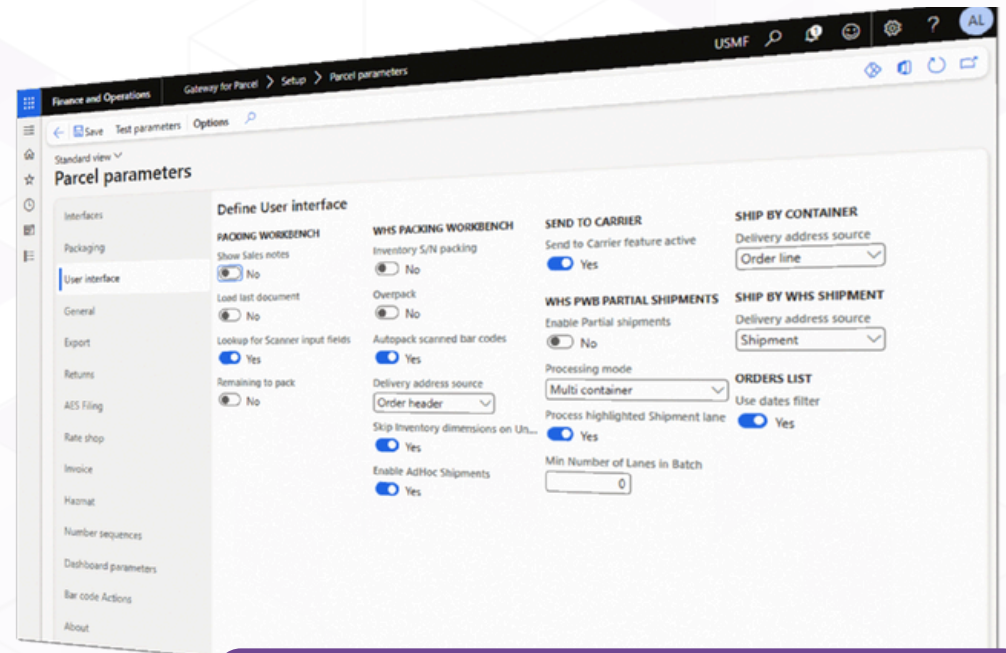## INCREASED DECISION-MAKING AND DATA ACCURACY

Although D365 has strong analytics and reporting functions, supply chain operators may adjust these functionalities to meet their own picking, packing, and shipping requirements. Improve decision-making by developing personalized reports, dashboards, and data visualizations.

SIMPLIFY WORKFLOWS AND PROCEDURES

Configurability enables companies to adjust pre-built procedures to meet their unique needs. Extending native D365 functionality with centralized shipping modules will simplify data flow, eliminate silos, and promote scalability—three pillars in scaling efficiency.

GAINING THE ADVANTAGE

An extended D365 enables businesses to differentiate themselves, create unique value propositions, and respond quickly to market changes—empowering them to deliver innovative products, services, and experiences that set them apart from competitors.

NMB's Parcel parameters are designed to keep Gateway for Parcel scalable to each organization's unique needs.

STEP 2: HOW WOULD IT HELP?

A gap analysis is the next logical step in determining where and how a specialized shipping solution could fit within your organization's D365 setup. Here, you'll want to methodically assess current pain points in your shipping operation, incorporating the following elements into your implementation plan:

- **Areas of analysis:** Start by pinpointing the areas within your supply chain operation that you want to assess. Are you examining your entire fulfillment workflow, or **targeting specific weak points**? Is your carrier selection adequate, or are you frustrated with mounting freight invoices that are causing major profit losses? Are you looking to actively prepare for **peak-season spikes** that require more efficient data capture tools?

- **Future goals:** Setting **attainable KPIs** for your organization should be commonplace; setting these goals and translating them into actionable insights should lead to business scalability. Factoring **ISV experience** and implementation timelines should be a core calculation in your decision-making.

- **Current state:** Evaluate your existing operations and contracts to determine their effectiveness and potential for improvement. Identify contributing factors and assess how an enhanced shipping solution can better **achieve your shipping goals**. Be sure to evaluate every level of your organization, from system administrators to warehouse workers.

Fit gap?

Fit-gap analysis (or gap analysis) is a critical step in ERP selection and implementation – it's also a critical phase in determining the needs and benefits of implementing an ISV shipping solution into your existing D365 systems.

Performed in two stages, it's used to identify necessary process changes, software customizations, and integration requirements to ensure a successful implementation:

- A high-level analysis evaluates overall compatibility.
- A detailed analysis outlines functional, non-functional, integration, and interface requirements

THE SHIPPING PROCESS SIMPLIFIED

Let's start with the essentials: the packing process within standard D365. Leveraging D365 for parcel and LTL shipping provides a unified platform to manage, track, and optimize shipments from order creation to last-mile delivery. The interface and its functions work well for low-volume shippers, as its baseline features cater to simple packing processes. For mid-to-high-volume shippers handling multiple carriers throughout various legal entities, D365's ability to leverage shipping rules, generate shipping labels, and streamline warehouse management processes is invaluable—when automated.

The standard packing and shipping process in D365 is an entirely manual process. It requires manually entering License plate or shipment identifiers, selecting items and their quantities, adjusting inventory levels, creating containers for shipping, and confirming the shipment before releasing to the warehouse for shipping. The standard system does not connect to a dedicated shipping engine, forcing shippers to access logistics providers' websites to track packages and delays. For shippers, **shipping engine connectivity** is the key component in calculating shipping charges and generating carrier-compliant labels and associated shipping documentation. While executing these processes using standard D365 functionality is possible, the functional gaps are clear:

LIMITED CARRIER SUPPORT

D365's out-of-the-box shipping capabilities are limited to basic carrier integrations, often requiring manual set up and updates. This restricts flexibility and forces businesses to rely on manual processes or costly third-party integrations. E-commerce, for example, relies heavily on shipping carriers to deliver products to customers. However, D365's limited shipping capabilities only support basic carrier integrations, forcing enterprise-level ecommerce operations to manually set up and update carrier information, which is time-consuming and prone to errors.

INFLEXIBLE RATE MANAGEMENT

Without said third-party shipping engine, the standard system cannot support dynamic carrier rate calculations, contract rate management, or automatic updates based on real-time carrier APIs, leading to outdated or inaccurate shipping costs. Relying on a limited carrier network without predictable rates creates significant operational challenges. Such constraints hinder the ability to adapt to market fluctuations, potentially leading to increased costs and service disruptions. For instance, during peak seasons or unexpected demand surges, a limited carrier selection can lack the capacity to handle increased shipments, resulting in delays and dissatisfied customers. Unpredictable rates complicate budgeting and financial planning, making it difficult to manage transportation expenses effectively.
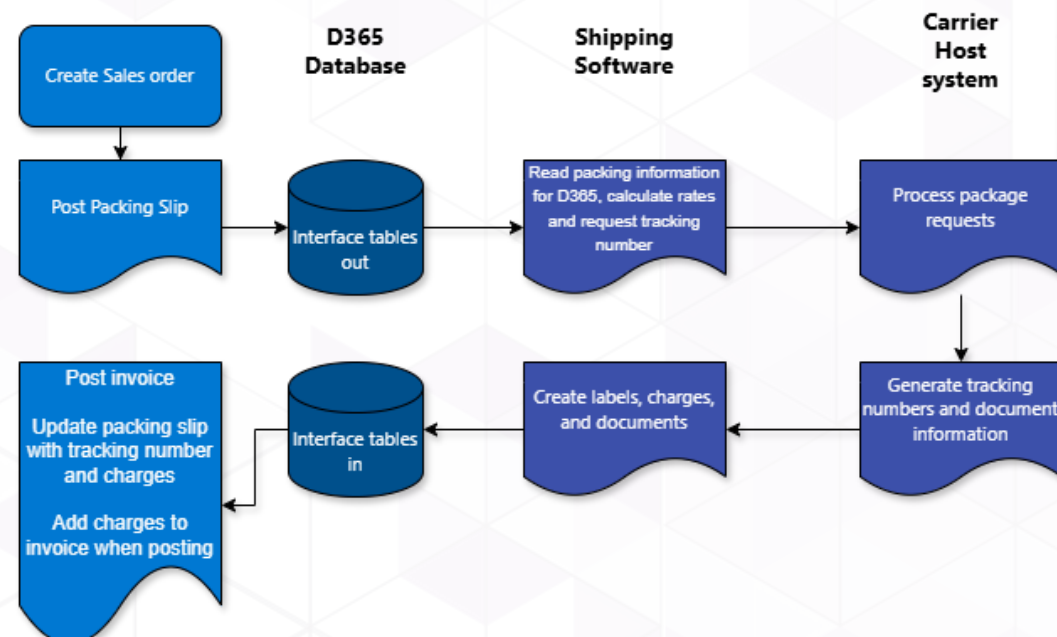
LACK OF AUTOMATION FEATURES

The standard system relies more on manual processes for tasks like data entry, shipment confirmation, document generation, and tracking. Shippers in the manufacturing industry, for example, often manage complex international shipping operations involving multiple carriers and stringent import/export regulations. A manufacturer exporting machinery to various countries may need to select from several carriers based on destination, cost, and service level while complying with diverse import/export rules and filing Electronic Export Information (EEI) through the Automated Export System (AES) for shipments exceeding specific values or containing controlled goods. Relying on standard systems with manual processes can not only lead to inefficiencies and errors, but it could also usher in unwanted compliance risks and financial repercussions.

SCALABILITY ISSUES

As businesses grow, the standard modules struggle to handle high volumes of shipments efficiently, impacting order fulfillment speed and accuracy.

RIGID PROCESSES

A lack of configurable options can also be limiting to an organization managing a diverse range of products. The retail industry, for example, typically ships and manages a wide range of products, each with unique storage and shipping requirements. A retailer shipping both electronics and hazardous materials must therefore configure default settings in D365 to ensure efficient handling. Items containing hazardous materials may require expedited shipping and cold storage, while electronics might only need standard shipping with specific packaging to prevent damage. Defining default order settings and dimensions for each product category, such as specifying default warehouses, order quantities, and container sizes, can streamline their supply chain operations and ensure timely deliveries, while remaining compliant with corresponding regulatory bodies.

The recurring theme continues when comparing standard D365 functionalities to NMB's Parcel shipping solution: manual, repetitive processes are cumbersome; manual workflows and data entry hamper supply chain operations and processes.

Supply chain operators need their D365 environment, shipping engine, and carriers connections to work in perfect harmony—but managing each component separately is tedious and promotes increase risks.

What about D365's Small Parcel Shipping (SPS)?

Upon its release in 2021, the SPS module was touted as the solution to enterprise-class parcel shipping, with key features including:

CARRIER INTEGRATION FRAMEWORK

The module enables communication with shipping carriers through APIs, allowing D365 to send details about packed containers and receive shipping rates, labels, and tracking numbers. However, setting up carrier integrations requires manual configuration, which is complex and time-consuming. Furthermore, it may not support integration with specific carriers, particularly LTL, smaller-scale, or regional ones, thereby limiting shipping options. Handling complex rate structures, such as those based on dimensional weight or specific service levels, remains challenging within the native SPS set up.

RATE ENGINE SUPPORT

As noted, D365 SPS does not include built-in rate engines, requiring shippers to download and deploy demo rate engines via extension models. Organizations must develop or acquire these separately, adding resource expenditure and cost. Additionally, the lack of real-time rate shopping capabilities makes it difficult to compare and select the most cost-effective shipping options. Limited visibility into shipment tracking and status updates can affect customer satisfaction and operational efficiency.
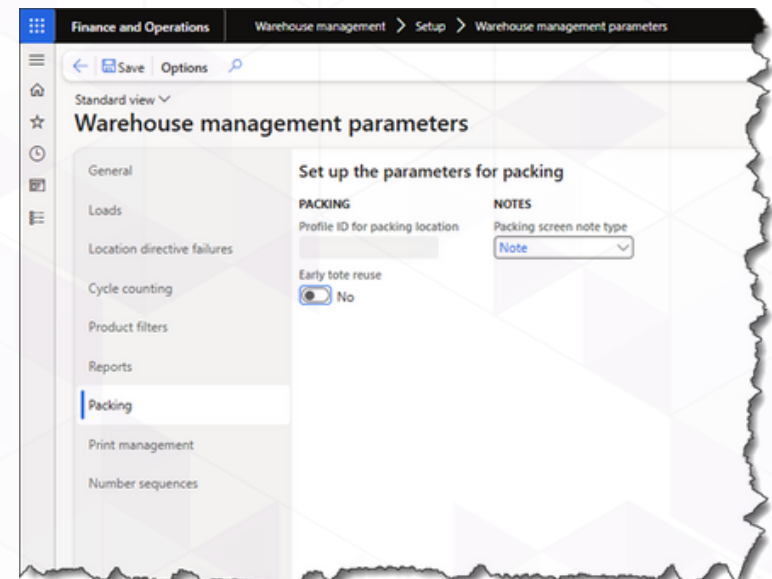
SIMPLIFIED CONFIGURABILITY

The SPS module includes basic automation for submitting shipment details and receiving responses from carriers. It can automatically generate and print shipping labels using Zebra Programming Language (ZPL) printers, but requires manual intervention when applying documents to shipments. The module enables users to set basic parameters, defining default shipping methods, label printing mechanics, carrier setups, packaging types and dimensions, etc.

The Community Review

Even in its title: the Small Parcel Shipping is designed to handle basic parcel shipping within D365, however many users reported several challenges that impacted its efficiency and usability in practice. Recent reviews posted by Gartner Peer Insights share similar experiences, with critical reviews stating that *"the initial setup and integration with carriers [is] complex and time-consuming, while the need for manual configuration and separate rate engines adds to the challenge"*. Many organizations find that SPS lacks the advanced features and flexibility offered by specialized, integrated shipping solutions like NMB Gateway for Parcel.[3]
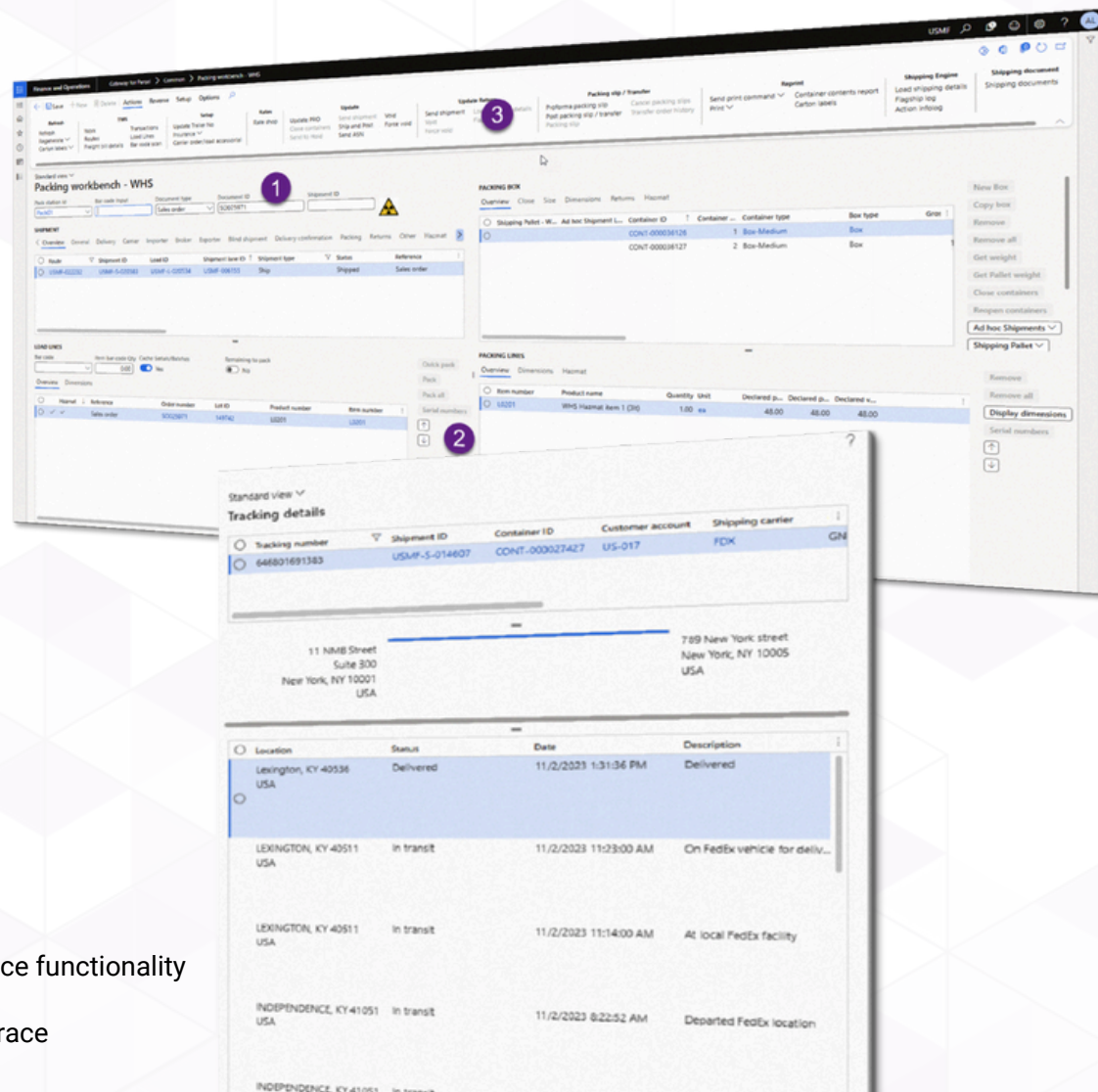
NMB's Packing Workbench

Using NMB's Packing Workbench offers several advantages over both the standard packing and shipping process and the D365 SPS module. It automates several core packing and shipping processes, saving you time and reducing entry errors. It also provides a host of added hardware configurations, such as weight scale and portable scanner integrations, while also allowing for automated delivery notifications, so your customers remain up-to-date on their parcels' whereabouts. At its core, NMB's Packing Workbench delivers enhancements in:

AUTOMATION

Designed for both basic (WMS) and advanced (WHS) warehousing setups, the NMB Packing Workbench optimizes the entire packing process, providing extensive flexibility with automation features, including automated packing, shipping, and tracking workflows – effectively reducing the entire packing and shipping process down to as little as three clicks.

Where both the standard packing and SPS modules lacked advanced features, NMB Gateway for Parcel comes out-of-the-box ready with enhanced and automated packing and shipping workflows for processes such as:

☑ Shipping carrier connectivity

☑ Delivery confirmation rules setup

☑ WMS shipment consolidation

☑ AES filing integration

☑ Weight scale integration

☑ Mobile device functionality

☑ Track and trace

☑ RMA order processing

☑ Email notifications

The NMB Packing Workbench applies easy-to-use, pre-configured workflows to your operation via an easy-to-deploy, step-by-step process. It eliminates double-keying in D365 and your carrier systems, saving you time and reducing entry errors.

RATE SHOPPING AND TRACKING

While standard SPS offers limited real-time visibility into shipment status and tracking, NMB Gateway for Parcel seamlessly connects with a dynamic rate shopping engine that automatically selects the best rates and services to meet delivery timeframes and reduce costs. A mid-to-large-sized supply chain operation using D365 SPS will undoubtedly face challenges with delayed shipment updates, while adding to customer dissatisfaction. Integrating NMB Gateway for Parcel's Packing Workbench with its dedicated rate shopping engine allows real-time tracking capabilities for both parcel and LTL services, enabling proactive communication with customers and improved delivery performance.

CONFIGURABILITY

NMB's specialized shipping solution includes a long list of configuration options via a comprehensive Parcel parameters module, allowing businesses to tailor the system to their specific needs, streamlining processes and reducing manual interventions. Users can define a variety of default settings, such as interface elements, export rules, invoice workflows, packaging defaults, and much more. This adaptability ensures that the solution aligns seamlessly with existing operations, improving efficiency and accuracy in shipping tasks.

Access carrier rate shopping at order entry, through a connected e-commerce operation or at packing to provide accurate rates for your customers—ensuring your customers are getting the best rate for every shipment, and every delivery.
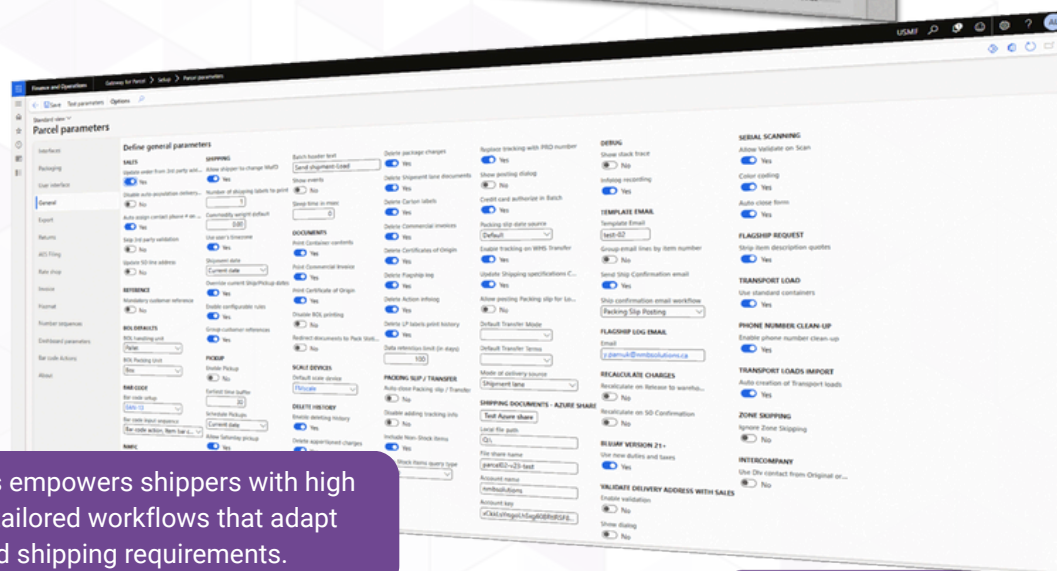
A comprehensive set of D365 parameters empowers shippers with high scalability and configurability, enabling tailored workflows that adapt seamlessly to evolving business and shipping requirements.

INTEGRATED CARRIER SHIPPING ENGINE

NMB's Gateway for Parcel comes fully integrated with **Power Parcel**, a multi-carrier shipping management system designed to meet the high-volume needs of both single and multi-location companies in countries around the world, offering numerous benefits:

Compliance with major carriers: Ensures seamless integration with leading carriers, facilitating adherence to their specific requirements and standards.

Ability to configure locations, carriers, and rateshops for customized shipment specification: Provides flexibility to tailor shipping processes according to specific business needs, optimizing cost and delivery times. This customization allows businesses to adapt quickly to changing market conditions and customer demands.

Logging feature that lets you monitor all system activities and quickly correct errors: Enhances transparency and control over shipping processes, allowing shippers to quickly troubleshoot and identify issues promptly, improving compliance and reducing operational risks.

SHIPPING ANALYTICS

Disaggregated shipping data leads to bottlenecks and equates to missed opportunities for corporate growth. NMB's Shipping Analytics dashboard seamlessly connects with the Packing Workbench, leveraging Microsoft's Power BI to transform and decipher vast amounts of supply chain data into digestible shipping KPIs and visuals. Using NMB-extended data tables, it provides shippers with the information they need to make better, data-driven decisions, based on:
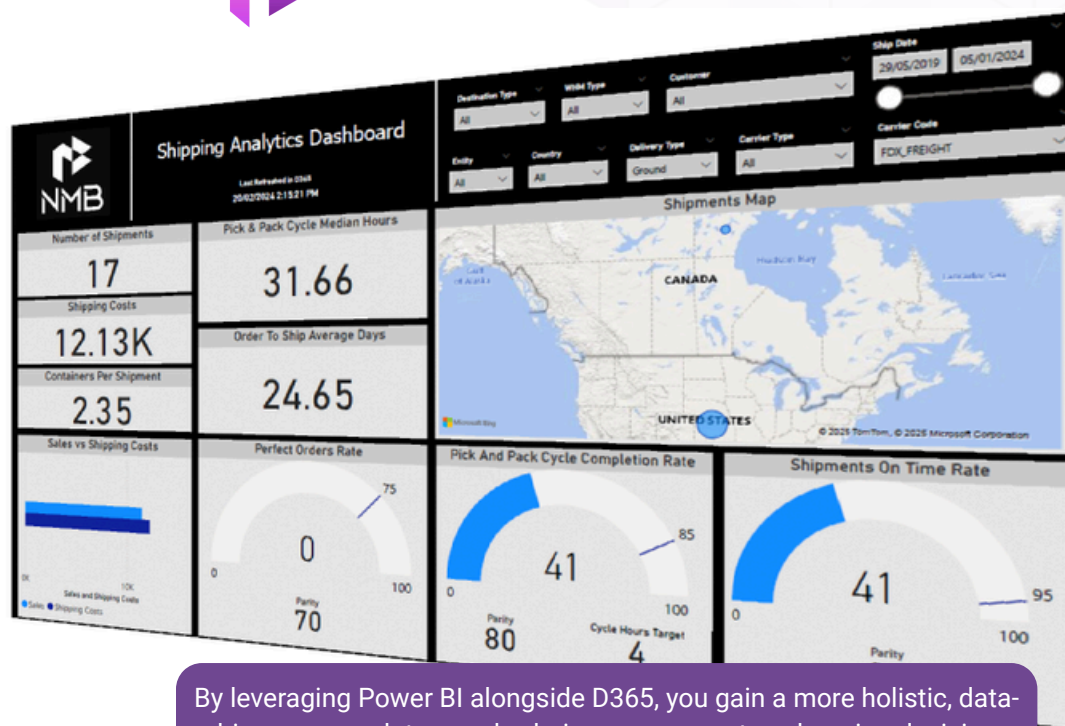
- Shipping costs
- Pick and Pack completion rate
- Containers per shipment
- Order to ship averages

By leveraging Power BI alongside D365, you gain a more holistic, data-driven approach to supply chain management—enhancing decision-making and KPI monitoring via an easy integration process.
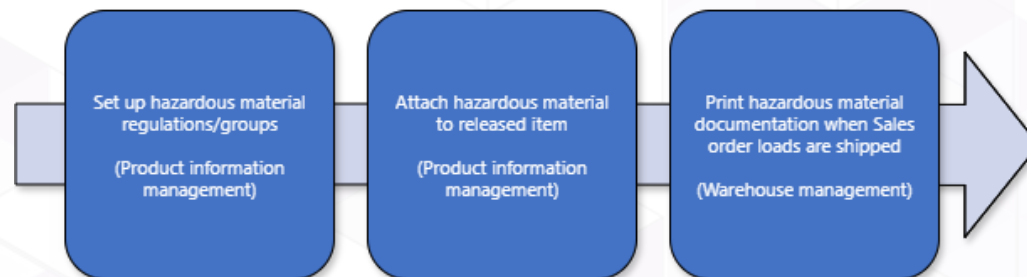
Standard HazMat Shipping

Microsoft Dynamics 365 Finance and Supply Chain provides a fundamental hazardous materials feature that enables organizations to store information related to released items and generate essential shipping documentation to meet regulatory requirements. However, this functionality primarily facilitates document creation and requires shippers to establish their own processes, rules, and procedures for managing the transportation of dangerous goods. Consequently, companies often need to employ hazardous shipping specialists to ensure compliance—an expense that could be mitigated by implementing specialized shipping solutions that include HazMat shipping capabilities.

THE STANDARD PROCESS

Shipping hazardous materials in D365 involves several critical steps to ensure compliance and safety. First and foremost, users need to set up hazardous material specifications for their products in the Product Information Management module. This includes defining regulation codes and material codes that apply to each hazardous item. Once products are configured, users can manage stock limits to prevent overstocking and ensure safe storage. When creating Sales orders that include hazardous materials, the standard system uses the predefined hazardous material information to generate the necessary shipping documentation.

Once again, while shipping hazardous materials is possible using standard D365 pages and modules, the process is mostly manual.

| Set up hazardous material regulations/groups (Product information management) | Attach hazardous material to released item (Product information management) | Print hazardous material documentation when Sales order loads are shipped (Warehouse management) |

In standard D365, hazardous materials pages allow organizations to create regulations that define how shipping documentation is generated for items classified as dangerous goods. It's an entirely manual process that requires users to perform the following repetitive tasks for each item and shipment:

During the shipment process, additional paperwork, such as Material Safety Data Sheets (MSDS) and shipping labels can be manually prepared and printed through the Warehouse Management module. These documents ensure that all regulatory requirements are met for the transportation of dangerous goods.

① **Regulation/group setup:** Users can create item-based regulations using the standard warehouse management parameters page. These regulations correspond to specific printer setups, modes of transport (such as road (ADR), sea (IMDG), or air (IATA)), and can be associated with modes of delivery to facilitate the printing of necessary shipping texts such as HazMat declaration reports and Carriage of Merchandise reports.

② **Attach hazardous material to release item:** Users must manually associate items with the required classifications.

③ **Print hazardous material documentation:** A last manual step means printing the required documentation once the order has been packed and prepared for shipping.

NMB Gateway for Parcel enables users to set predefined HazMat defaults at the item, container, or shipment level.

While this setup provides a foundational framework for managing hazardous materials, it has several clear limitations:

MANUAL COMPLIANCE MANAGEMENT

D365 requires manual handling of item-based regulations and compliance documentation, increasing the risk of non-compliance and potential fines.

COMPLEX CLASSIFICATION

Managing the complex classification and labelling requirements for different types of hazardous materials can be challenging.

STOCK LIMITS

Setting and managing stock limits for hazardous materials to prevent overstocking and ensure safe storage can be difficult.

Limited Automation

The native functionality offers basic automation but lacks advanced features for fully automated workflows, such as dynamic rate shopping and automated packing.

CARRIER INTEGRATION

Limited integration with carriers that specialize in hazmat shipping can affect the efficiency and safety of the shipping process. It's also impossible to receive carrier charges for hazmat shipping without an integrated shipping carrier engine —requiring additional development(s).

REAL-TIME UPDATES

D365 may lack real-time updates and alerts, which are crucial for maintaining compliance with constantly changing regulations.

HazMat in NMB Gateway for Parcel

NMB Gateway for Parcel enhances the hazmat shipping process in D365 by automating many of the steps needed to configure, pack, ship, and generate associated regulatory documentation. Its an integral component that works seamlessly within the Packing Workbench, providing:

☑ **AUTOMATED COMPLIANCE CHECKS**
Ensures that shipping methods align with the regulatory requirements of the hazardous materials being shipped, reducing the risk of non-compliance.

☑ **CARRIER-APPROVED LABEL GENERATION**
Leverages carrier connectivity through the dedicated shipping engine to automatically produce shipping labels that meet carrier specifications for hazardous materials, streamlining the shipping process.
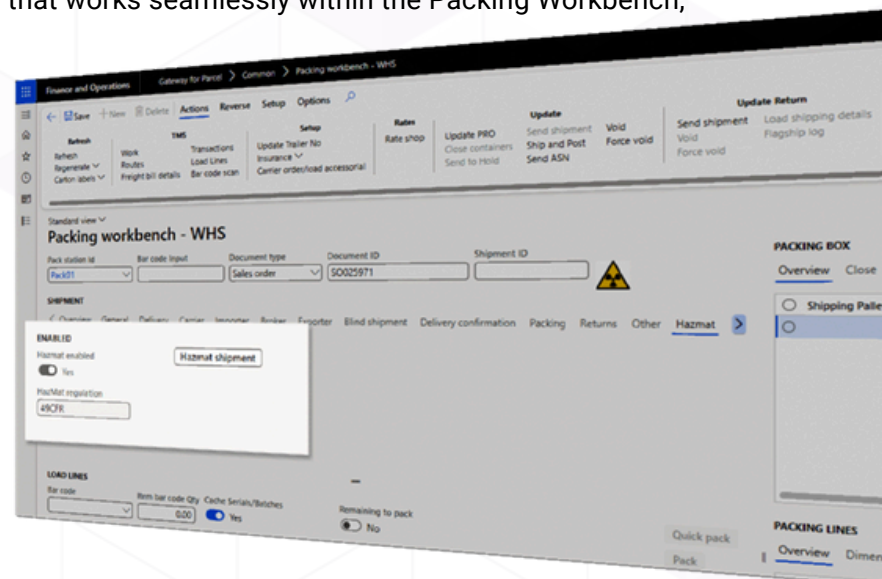
☑ **REAL-TIME INTEGRATION WITH CARRIERS**
Facilitates seamless communication with carriers, providing accurate shipping rates and delivery options tailored to hazardous goods.

☑ **COMPREHENSIVE PARAMETERS**
A robust set of hazardous material-related parameters allow users to configure defaults at the shipment, package, and item level.

While D365 offers basic tools for hazardous materials documentation, NMB Gateway for Parcel delivers a more robust and integrated approach to managing the complexities of shipping dangerous goods. It consolidates key hazmat regulations and shipping information. As a specialized shipping solution, it provides several additional layers of detail when configuring hazmat items.

The enhanced system allows users to define HazMat UN Master numbers used for marking dangerous goods or hazardous substances—indicating item packing group, unit of measure, and designated shipping name – all mandatory classifications when generating hazmat documentation. Users can also set and define HazMat attributes and pack types, which are used to determine any unique requirements when shipping hazmat items. Assigned attributes allow shippers to apply miscellaneous regulations, classifications, and packaging attributes to items, while pack types allow users to set specific rules for how containers need to be packed based on the associated rule.

At the item-level, users can apply carrier-specific instructions and designations, which will auto-populate during the shipping process. Finally, the Packing Workbench includes a tab dedicated to managing and overriding any default information at the time of shipping.
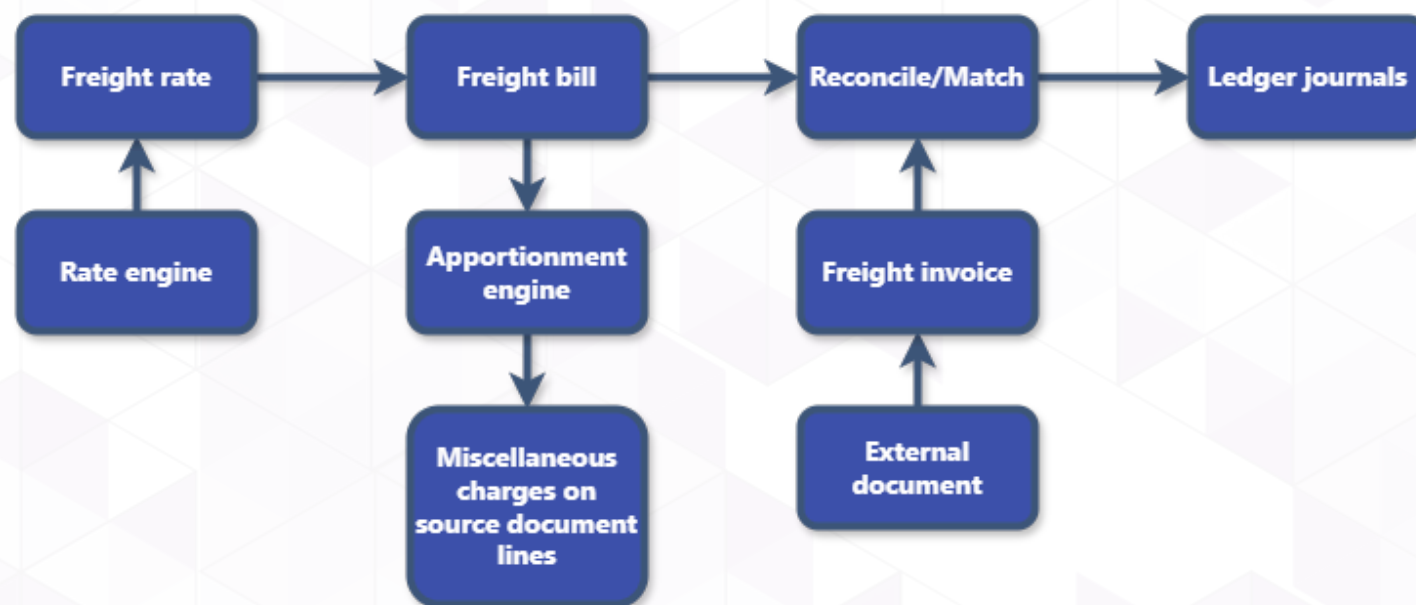
Freight invoice management

The role of a supply chain operator extends beyond procurement and delivery management; it often includes reconciling freight invoices and accrued totals as they align with corporate financial goals. A structured and automated freight reconciliation process is therefore essential for shippers as it helps prevent losses from shipping errors and supports AP and AR teams in accurately passing on freight costs to customers. Effective freight reconciliation supports accuracy, accountability, and efficiency across all industries.

"Difficulties within Intercompany orders and invoice matching Lack of good Master Data management between different legal entities As D365 is cloud based it takes a little longer to process data, the performance from time to time isn't good enough." -Gartner

The process involves comparing the carrier charges on an invoice to the carrier charges on the shipping documents (or invoice files). If those charges are not in agreement, the discrepancy must be reconciled in order to ensure accurate and timely payment to the vendor. The process may also involve working with vendors to ensure that the freight charges are accurate and that they are applied correctly to the invoice. For high-volume shippers, automating this process is a necessity.

It ensures accurate record-keeping, billing, timely deliveries, and customer satisfaction. Retailers, for example, need to verifywhether goods are received undamaged and complete, addressing discrepancies between items shipped and received quantities. In manufacturing, accurate freight reconciliation confirms the quality and quantity of shipped goods, resolving issues with suppliers as needed.

According to a 2017 survey by the Global Supply Chain Council, **61%** of supply chain professionals said that invoice matching was the most challenging process in their accounts payable department. The survey also found that **63%** of respondents experienced invoice matching errors due to discrepancies between purchase orders and invoices. Additionally, the survey reported that only **21%** of respondents had a fully automated invoice matching process within their organization.[4]

THE STANDARD PROCESS

Without an integrated shipping solution, the Carrier Invoice Reconciliation process remains a tedious, manual process.

Freight rates are calculated by a rate engine linked to a shipping carrier, generating a freight bill upon load confirmation. These rates are allocated to source documents like purchase, sales, or transfer orders. The Freight reconciliation process begins when a carrier invoice is received (either electronically or on paper).

The rest of the reconciliation and accrual process requires manually uploading shipment invoice files, creating vendor invoice journals—debiting and crediting each transaction accordingly using standard financial processes within D365. This laborious process can produce accurate billing and allocation of freight charges, however for shippers, the functional gaps as obvious:

1. Carrier invoice files must be **manually uploaded** – requiring manual data entry for every transaction, across multiple screens. For medium-sized supply chain operations, this could equate to thousands of entries per month.

2. The system **cannot determine expected charges** (including freight, fuel, handling etc.) without the implementation of a shipping carrier rate engine.

3. **All invoices need to be addressed manually**, regardless of whether or not the totals align with expected charges received from the carrier.

4. No **carrier-specific parameters** or tolerance rules for defining how expected invoice charges will be compared, approved, or rejected.

Standard freight invoice matching is restrictive, inefficient, error-prone, and resource-intensive, which could lead to payment delays, incorrect invoices, and data discrepancies. It increases costs, risks incorrect data entry, and can result in inaccurate taxes and surcharges, negatively impacting both businesses and customers.
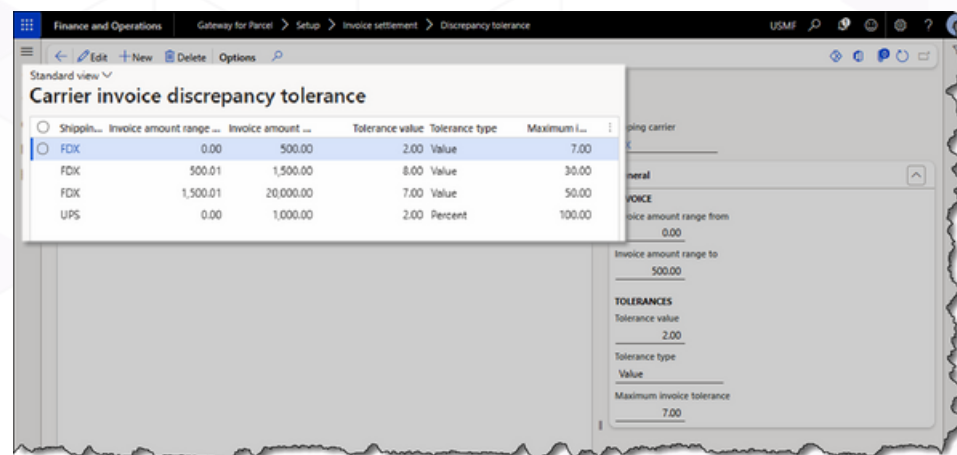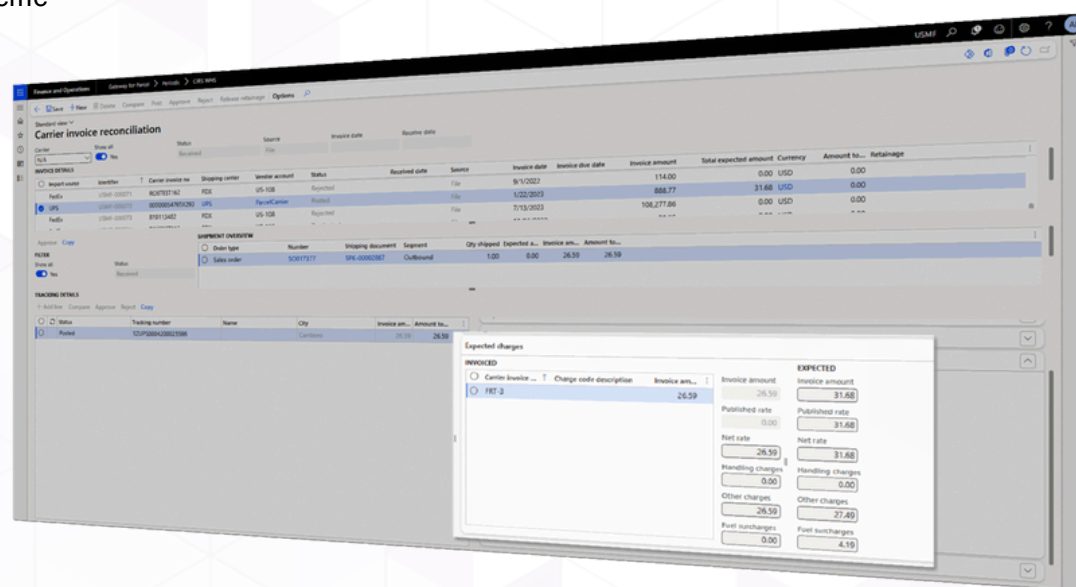
NMB's CIRS module

NMB Gateway for Parcel's Carrier Invoice Reconciliation module (CIRS) is designed to automate the entire freight invoice reconciliation process. Leveraging native D365 batch job functionality, the module automatically uploads carrier invoice files for carrier services – consolidating invoice records onto one module where users can view invoice statuses, amounts, vendor account information and more. By applying the various parameters designed to help automate the reconciliation process, users can create rules for automatically approving (or rejecting) invoices received from carriers.

The system leverages the dedicated rate engine to calculate expected freight charges, which are used to compare against the actual invoice totals received from the carrier, including amounts such as additional handling fees and fuel surcharges. Users can define discrepancy tolerance rules, which can be used to auto-approve or auto-reject invoice amounts that differ from the expected charge amounts for each shipment or line tracking number (or both). It allows shippers to investigate and mitigate overcharging discrepancies based on charge comparisons and tolerances. Users can also select carrier-specific comparison settings, indicating whether invoice charges should be compared by shipment, waybill, or charge code.

In short, integrating NMB Gateway for Parcel's CIRS module with D365 simplifies the freight invoice reconciliation process, reducing manual effort, errors, and processing time by seamlessly integrating with D365's native financial modules. It provides real-time visibility into freight charges, ensuring accuracy through automated matching, and simplifies discrepancy resolution.

NMB Gateway for Parcel's CIRS module simplifies the freight invoice reconciliation process, allowing users to set pre-defined discrepancy tolerance values—reducing invoice management errors.

A QUICK SUMMARY

There are several key differences that emerge when comparing the standard shipping process workflows in D365 to those extended by NMB's Gateway for Parcel. Standard D365 workflows typically rely on manual processes and limited automation, which lead to inefficiencies and increased risk of errors. In contrast, NMB Gateway for Parcel's extended modules introduce advanced automation, real-time updates, and enhanced carrier integration capabilities, significantly streamlining operations from order entry to last-mile delivery. NMB's parcel and LTL shipping solution consolidates large amounts of shipping data onto user-friendly pages and grids, providing extended workflows that not only improve accuracy and compliance but also offer greater visibility and control over essential shipping activities like import/export compliance, hazardous material classification, freight invoice tracking and reconciling and more.

NMB's Gateway for Parcel builds upon standard D365 functionality to deliver smarter, faster shipping options to supply chain operators.

	Packing and shipping	HazMat	Invoice Reconciliation
STANDARD D365	Manual intervention, including container creation and closing, shipment confirming, and packing slip posting Shipping via Small Parcel Shipping module (SPS) designed for low-volume shipping workflows Basic rate shopping capabilities, with rates added as miscellaneous charges on Sales orders	Classify Products as Hazardous Enter the relevant hazardous material information Manually print Shipping Documents Use Warehouse management to print the necessary shipping documents for hazardous materials Ensure the mode of delivery is associated with the shipping carrier and carrier service	Manual invoice file uploading to D365 Manual invoice reconciling via Inbound/Outbound load planning workbench Manual freight charge comparing without discrepancy tolerance filters
NMB GATEWAY FOR PARCEL	Automated shipment confirmation, container closing, label printing, and packing slip posting Seamlessly integrates with multiple carriers, including both parcel and less-than-truckload (LTL) services, through pre-configured workflows and real-time API communication Features a dynamic rate shopping engine that automatically selects the best rates and services to meet delivery timeframes and reduce costs	Automated compliance checks Carrier-compliant Label Generation	Leverage carrier rate engine to calculate expected freight charges Automatically import and compare carrier charges with expected charges when settling carrier invoices Define invoice discrepancy tolerances for defining auto-approval

USER FOCUSED

Our solutions are designed to help fill gaps in standard D365's capabilities and enhance the overall user experience. This is particularly beneficial when it comes to customizing the system to meet specific business needs. For US-based exporters, Gateway for Parcel extends upon native D365 screens to incorporate key AES filing functionality, allowing users to generate and submit consignment requests within familiar systems.

FLEXIBLE

NMB Solutions follows the same implementation lifecycle as the core D365 solution, which means we provide the same capital and resource flexibility as D365, allowing supply chain operations to focus their resources on their core business functions.

D365 COMPLIANT

Microsoft releases quarterly updates to D365 and requires customers to be no more than two releases behind at any given time. Our fully-integrated solutions are designed to be compatible with these updates, ensuring uninterrupted functionality and compliance.

Want to Learn More?

If you're interested and want to learn more about NMB's products, or if you want to see a demo of NMB Gateway for D365, contact us via email: info@nmbsolutions.ca

Or visit our website: www.nmbsolutions.ca.

ABOUT NMB SOLUTIONS INC.

NMB Solutions Inc. is a leading provider of global supply chain, transportation management and compliance solutions for Microsoft Dynamics 365 Finance, Supply Chain and Retail. We're dedicated to helping companies around the world manage, optimize, and streamline their supply chain operations by incorporating native functionality from some of the best-of-breed solution providers in the Parcel, TMS, and Compliance spaces.

NMB's Gateway for D365 combines the Enterprise level power of these solutions with the flexibility and ease of use of Microsoft D365.

As a long-standing Microsoft ISV partner celebrating 25 years in the industry, our focus is on helping customers operate efficiently and effectively with the ability to react rapidly to changes in their supply chain.

Our goal is to become the global leader in shipping integration for Microsoft Dynamics 365.

▷ NMB

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