



Microsoft Corporation

Microsoft Dynamics® NAV 2013

White Paper

Feature Highlights

Date: July 8, 2012

www.microsoft.com/dynamics

This document previews the key features and enhancements in Microsoft Dynamics® NAV 2013, scheduled for release 2012.

CONTENT

| | |
|---|----|
| INTRODUCTION..... | 4 |
| SUMMARY | 4 |
| COMPELLING APPLICATION FUNCTIONALITY | 4 |
| FINANCIAL MANAGEMENT COST ACCOUNTING..... | 4 |
| FINANCIAL MANAGEMENT CASH FLOW FORECAST..... | 5 |
| ASSEMBLY MANAGEMENT..... | 6 |
| REPORTING ENHANCEMENTS | 7 |
| ITEM AVAILABILITY BY TIMELINE..... | 7 |
| ITEM AVAILABILITY BY EVENT | 7 |
| SUPPLY PLANNING ENHANCEMENT | 7 |
| ENHANCED WAREHOUSE | 8 |
| JOB AND SERVICE MANAGEMENT..... | 9 |
| ONENOTE INTEGRATION..... | 10 |
| MORE USERS MORE PRODUCTIVE | 11 |
| MICROSOFT DYNAMICS NAV WEB CLIENT..... | 11 |
| ROLETAILORED CLIENT ADOPTION EFFORT | 12 |
| END-USER CHARTING..... | 15 |
| GROUPING ON PAGES..... | 15 |
| QUERY..... | 15 |
| ODATA..... | 16 |
| NEW IMPROVED SERVER..... | 17 |
| VISUAL UPDATE OF CLIENT TO OFFICE 2010..... | 17 |
| CUSTOMER PRODUCTIVITY IMPROVEMENTS..... | 17 |
| FINANCIAL MANAGEMENT G/L ENTRY TABLE LOCKING AND DIMENSION POSTING AND STORING REDESIGN..... | 18 |
| REDUCED TIME TO VALUE..... | 19 |
| REPORTING ON THE MS STACK..... | 19 |
| REPORT DATASET DESIGNER | 20 |
| UNICODE | 20 |
| NAV DEPLOYMENT | 20 |
| NAV MANAGEMENT..... | 21 |
| NAS SERVICES..... | 21 |
| RAPID START FOR MICROSOFT DYNAMICS NAV | 22 |
| FINANCIAL MANAGEMENT VAT RATE CHANGE TOOL | 22 |
| IMPROVED PARTNER PRODUCTIVITY AND NEW BUSINESS OPPORTUNITIES..... | 23 |
| MICROSOFT .NET FRAMEWORK INTEROPERABILITY | 23 |
| C/AL DEBUGGING..... | 23 |
| C/AL PAGE TESTING..... | 24 |
| VISUAL PAGE PREVIEWER..... | 24 |
| BUSINESS CHART ADD-IN | 24 |
| ADD-IN FRAMEWORK..... | 24 |
| XMLPORT..... | 25 |
| ADSC USING WEB SERVICES..... | 25 |

| | |
|-----------------------------------|----|
| CODE COVERAGE FOR NAV SERVER..... | 25 |
| HELPTOOLKIT | 26 |

INTRODUCTION

This document provides an introduction to some of the key features and enhancements included in NAV 2013– the latest version of Microsoft Dynamics® NAV.

SUMMARY

Today, more than ever, SMB customers need and want solutions that can help them drive business success. NAV 2013 builds on the new technology platform released in Microsoft Dynamics NAV 2009 and delivers new features and enhancements to help customers gain greater control, increase their margins, and grow their business.

Compelling application functionality, such as Cash Flow Forecast, Cost Accounting, Assembly Management, Timeline Visualization, Excel Integration to Query, and other features, enable greater efficiency for customers, while providing a stronger application for partners to extend their own solutions and grow their business.

More users in the company can be more productive with features like the NAV Web Client. The NAV Web Client allows more users to access NAV from virtually any device with an Internet browser. The new NAV Portal Framework (NPF) makes it possible to build web portals with Microsoft SharePoint 2010. Powerful query and improved charting capabilities enable access to more data for more users and more compelling ways to analyze and display data. NAV 2013 delivers new enhancements to extend and improve the RoleTailored user experience so power users as well as new or infrequent users of Microsoft Dynamics NAV are able to work with greater efficiency, confidence, and satisfaction.

NAV 2013 provides new possibilities for customers to realize a faster time to value. It's easier to be up and running fast – whether NAV is deployed on premise or in the cloud. NAV 2013 will run on Microsoft SQL Azure, providing lots of flexibility about how customers choose to deploy the product. NAV 2013 also drives value in other ways, with new reporting enhancements, improvements to the migration tool, partner development tools, and close interoperability with Microsoft technologies.

There are significant partner productivity improvements, too. NAV 2013 builds on the role-based developer experience, enables easier deployment, configuration, and installation. For example, new enhancements related to the Microsoft .NET Framework and applications, such as support for events, and I-serialization enable partners to build high-performing, powerful add-ons, extend and integrate their existing Microsoft Dynamics NAV solutions, and share data more easily with other applications and systems already in place at the customer.

COMPELLING APPLICATION FUNCTIONALITY

This section addresses the key compelling core business functionality included in NAV 2013.

FINANCIAL MANAGEMENT COST ACCOUNTING

Microsoft Dynamics NAV 2013 delivers compelling application functionality that helps businesses gain greater control of their business through increased visibility and insight into how the business is performing. Financial Management Cost Accounting in NAV 2013 gives companies an efficient way to control their costs by providing visibility and insight into budgeted and actual costs of operations, departments, products, and projects.

Companies need the ability to identify budget deviations as soon as they occur and take the appropriate action. Synchronizing cost information with the General Ledger and then allocating that information into

different costs centers and cost objects, Cost Accounting in NAV 2013 provides management with an accurate and immediate overview of the company's expenditures, including from where the costs are coming, which departments, projects and items, and how much they are spending. Managers can see how the company is doing – whether the company is profitable or not – and have this analysis available at any time rather than at the end of the year. They are able to make informed decisions faster and more efficiently regarding performance, reducing and managing costs, adjusting sales prices for goods and services, or deciding to discontinue a product or project.

The Cost Accounting functionality has different possibilities to manage costs:

- Transfer costs from G/L
- Enter and post internal charges and allocations directly in the Cost Accounting Cost journal
- Predefine recurring cost allocation rules on Cost Allocation cards and execute in a batch job
- Undo allocations
- Cost budgets and transfer cost budget entries to actual entries

The Cost Accounting functionality retrieves data from the G/L but works independently. Therefore transactions posted in Cost Accounting will not affect the data in the G/L.

Cost Accounting in NAV 2013 includes other functionalities, which have been added to align the feature with the overall application, including a budget feature for cost accounting which works like the budget feature for G/L. Also included is the ability to import and export cost accounting budget data to Excel, create reports, aligning to multiple dimensions, and other enhancements.

FINANCIAL MANAGEMENT CASH FLOW FORECAST

For most companies, cash is king – and essential for running a successful business. Business owners must be able to understand their cash flow and have the capability to look ahead and predict the highs and lows in their cash balance to help improve margins and ensure profitability. But getting insight into cash flow is not always easy. Microsoft Dynamics NAV 2013 provides tools to make this easier.

Cash Flow Forecast in NAV 2013 gives companies an efficient way to forecast short-term cash flow. This feature enables businesses to perform better monitoring of cash receipts and cash disbursements and use the information to take preemptive steps.

Cash Flow Forecast in NAV 2013 provides a prediction of how a company's liquidity – cash and other treasure positions – will evolve over time. It consists of two things – cash receipts and cash disbursements – the money you expect to receive and the cash you expect to pay out – plus the liquid funds you have available. These elements together show you a direct cash flow forecast.

The cash flow forecast is simple to set up. Users generate a cash flow forecast worksheet which draws data from the various sources within NAV – open orders, receivables, payables, etc. The user decides what data to include, and can choose from a variety of options that control or set how to handle discounts, payment terms, and so on.

NAV makes a suggestion, which the user can edit. Once the user is satisfied with the suggestion, the worksheet is registered, and reports and charts can be created and exported to Excel. The worksheet registers the data but does not update or change the source data so it's possible to use it as a kind of "work area" where you can change the data to create various cash flow scenarios.

It's possible to create a number of cash flow forecasts. For example, you can have different forecasts for different months to compare. You can also keep a history of your cash flow forecasts for future reference and analyses. And, it's also possible to use the account schedule and analysis by dimension functionality to easily create cash flow reports and charts. Intuitive navigation capabilities allow you to drill down to the source data to see more detailed information.

Cash Flow Forecast in NAV 2013 offers flexible on-screen viewing options. For example, you can select and show a cash flow forecast in a chart on the Role Center so you have updated cash flow information at hand. Statistics FactBox and matrix overview are also available for on-screen viewing of Cash Flow Forecast.

Cash Flow Forecast delivers new business opportunities for partners. Several enhancements have been made to align the feature with the overall application, including eliminating duplicated functionality by merging GDL liquidity functionality, making terminology changes (for example, liquidity journal is now called cash flow worksheet), and adding charting and improved navigation capabilities. It provides a solid foundation on which to build additional cash flow forecast enhancements and features.

ASSEMBLY MANAGEMENT

Assembly Management is a new set of features in NAV 2013 that give companies a cost-efficient way to reduce inventory while providing superior customer service. It is designed to support companies that supply products to their customers by combining components in simple processes that don't require complex setup and maintenance, such as assembly, light manufacturing, and kitting. Companies that run assemble-to-order and assemble-to-stock processes can benefit from using Assembly Management.

With Assembly Management, customers can:

- **Reduce inventory** – Activities such as, special labeling and packaging, kitting, assembling, and late-stage product completion, can be postponed until after the customer order is received. Sellable items can be stocked in a generic state as long as possible while assembled products and kits are not stocked at all.
- **Boost customer service** – Assembly Management enables companies to improve efficiency while remaining agile enough to respond to changing customer demands. Last minute customer requirements can be accommodated more easily; pre-assembled promotional kits can be shipped out quickly and special price options and service can be offered through a kit.

Assembly Management delivers integrated functionality with the entire NAV supply chain suite – including Sales, Supply Planning, Warehousing, Inventory Management and Item Tracking – to streamline operations, reduce costs and speed order fulfillment. For example, the sales order processor can customize composition of assembly items on the fly, promise delivery dates according to component availability, reserve components and post output and shipment of the assembled item directly from the sales order interface. Likewise, warehouse personnel can handle such tasks as picking components for the assembly items and registering their serial and lot numbers using the same documents and processes as for all other warehouse operations; the planner can plan the optimal supply for assembly items and their components with all the existing supply planning tools.

The integrated functionality in Assembly Management helps partners improve productivity by decreasing the time and resources they spend on making and maintaining add-ons for assembly and kitting – functionality that is generic across industries and geographies. It also provides new opportunities for

partners to expand their business by attracting more customers, such as companies who need light manufacturing and kitting capabilities but may resist investing in more resource-demanding production modules.

REPORTING ENHANCEMENTS

Microsoft Dynamics NAV 2013 provides several new reporting enhancements that take advantage of the tight integration with Microsoft Excel and other Microsoft technologies to help boost productivity among more users and drive decision-making processes for better control. These enhancements include:

EXCEL ADD-IN FOR AD-HOC REPORTING

This is a smart new Excel Add-In that is an extension to the existing send-to-Excel functionality in NAV. A new refresh capability is available when creating ad-hoc reports in Excel. You can integrate with Microsoft Excel to produce Excel-based reports that use Microsoft Dynamics NAV pages as data sources. The data in Excel is provided in a data region format so that you can create PivotTables and reports. You can refresh the data in your Excel report to reflect updates that are made in Microsoft Dynamics NAV. This makes it easier for more users to take advantage of the rich data in NAV and the powerful analytical capabilities of Excel to create ad-hoc reports.

EXCEL INTEGRATION TO QUERY

New OData Web services capabilities in NAV 2013 enables customers and partners to take advantage of the robust analytical tools in Excel, such as PowerPivot and other tools, to perform more advanced business data analysis scenarios by extracting complicated data sets using queries. NAV 2013 delivers some standard queries out of the box, but the Excel integration to query and OData Web services in NAV 2013 enables partners to more easily build new queries to suit the specific reporting and analytical needs of their customers.

ITEM AVAILABILITY BY TIMELINE

Microsoft Dynamics NAV 2013 delivers new business data visualization capabilities, including Timeline Visualization, which provides a unique way to view and analyze business data in Microsoft Dynamics NAV, such as Item Availability.

The Item Availability by Timeline window shows a graphical view of the expected inventory level for a specific item or stockkeeping unit over time. Users are able to get an immediate overview of projected inventory and quickly understand the planning suggestions. Drag and drop functionality enables users to optimize suggestions easily. Item Availability by Timeline functionality gives customers an effective way to optimize ordering and inventory cost for improved control and better margins. A flexible tool, this feature helps customers to respond quickly to changes in demand.

ITEM AVAILABILITY BY EVENT

The Item Availability by Event window shows projected inventory figures by demand or supply event. The window only has information about the dates when figures change because of an event, such as a sales order or purchase order. You can filter the Item Availability by Event window to also include forecasted figures and planning suggestions. Users have much easier access to and visibility of data and the event changes when they occur, enabling greater control.

SUPPLY PLANNING ENHANCEMENT

Effective production and supply planning is a careful balancing act. The goal for most production companies is to optimize supply planning to avoid stockout and backorders, and reduce ordering and

inventory costs. This requires agility to handle changes in demand as well as visibility into and control of the supply and demand of materials to ensure a high order fulfillment and low ordering cost.

NAV 2013 delivers an enhanced supply planning setup that gives users an effective way to control planning suggestions and optimize supply according to inventory and ordering cost. Enhancements include extra parameters on the item and SKU chart, enabling the user to create a more specific setup to support their demanded supply profile. Customers can have an optimized inventory profile and can avoid unnecessary and costly changes. These enhancements give customers more control of their inventory, purchasing and production. With increased planning options out of the box, NAV 2013 helps partners attract new customers and speed implementations.

The specific enhancements comprise five new reorder period fields which have been added to the item card planning parameters to help optimize when and how much to reorder:

- Time Bucket
- Rescheduling Period
- Lot Accumulation Period
- Overflow Level

In addition, a new reorder quantity field has been added to the item card planning parameters to help optimize how much to reorder.

On item and SKU level, the user can setup specific dampeners with the following two parameters, ensuring that minor order changes are avoided:

- Dampener Period
- Dampener Quantity

And, two new global setup fields – Default Dampener and Quantity Blank Overflow Level – have been added to the Manufacturing Setup window to determine how to reorder when item cards do not have a specific planning parameter.

ENHANCED WAREHOUSE

Enhanced integration between Manufacturing and Warehouse Management, Service Management and Assembly Management delivers key benefits for customers and partners. Through enhanced integration and better utilization of warehouse functionality, NAV 2013 enables companies to ensure more accurate inventory, confidence in processes and lower stock, thereby freeing capital for other investments. Better integration also means partners can realize faster implementations and focus their resources on revenue-generating activities rather than working on integrations.

INVENTORY MOVEMENTS

Inventory Movement is a new warehouse activity document, added for the non-Warehouse Management System locations that is used to move items to and from internal departments, such as production and service departments, where posting of the items happens as consumption, shipment, or other. Inventory movements help streamline warehouse operations by giving warehouse employees an easier and more accurate way to register the actual movement of items and materials, without having to remember to do a journal posting. Companies gain accurate insight into inventory and stock levels, the location of items in the warehouse, and can avoid ordering materials that may already be in stock.

Inventory movements resemble existing inventory picks and inventory put-aways, but they differ in the following ways:

- Each inventory movement includes both a pick and a put-away, which are represented by a take line and a place line.
- Inventory movements cannot be posted. They can only be registered as warehouse entries. However, the related source document is updated when an inventory movement is registered.
- Inventory movements can be made without a source document through an internal movement.

When you assemble an item to a sales order right before shipping it in basic warehouse installations, then an inventory movement is automatically created to move the components to the assembly area. This happens when the inventory pick for the assemble-to-order item is posted as sold, assembled, and shipped.

ADDITIONAL DEFAULT BINS AND DEDICATED BINS

New integration enhancements extend warehouse functionality into the production area to improve the inbound and outbound flow from production, and provide companies with greater flexibility in setting up warehouse activities to match production.

Dedicated Bins enable users to better manage the flow of items in and out of an internal operation area. It's possible to set up locations or machine and work centers with a default bin structure that communicates to warehouse workers where to place components for a particular operation.

Although the items are placed in bins in internal operation areas, they are still part of availability until consumed. To secure bin content for the particular machine center where they have been placed, such as avoiding that they are picked by another internal resource, you can set the bin to Dedicated, which makes it unavailable to picks for other resources.

Making a bin dedicated provides similar functionality to using bin types, which is only available in advanced warehousing.

ENHANCED INTEGRATION TO SERVICE MANAGEMENT

Integration enhancements to Service Management streamline operations by aligning the process of shipping service items with the warehouse.

Service lines are recognized as outbound document lines and therefore they are released and function as source document lines for picking to shipment. After a service line is released to shipment, the warehouse handling involved in picking and then shipment posting the service order follows the same flow as for other warehouse source documents. This makes both warehouse and service process operations smoother and gives users a better overview of items and service orders.

JOB AND SERVICE MANAGEMENT

Greater control is about having visibility and insight into how your business is performing—it's about knowing your system will help drive the decision-making processes, enabling your people to be more proactive and productive. NAV 2013 delivers compelling application functionality that enhances the core capabilities in Job and Service Management to give customers more control over their business and help partners improve productivity.

JOBS WIP CALCULATION COMPLIANCE

Microsoft Dynamics NAV 2013 includes enhancements that give customers insight into and control over work in process (WIP) calculations. It's now easier for customers to get a complete overview of WIP, including monitoring how WIP calculations are performed, viewing posting accounts, and tracking changes in calculations. A dashboard enables users to see the full WIP calculation for any jobs they have active.

These improvements make monitoring of WIP processes simpler and improve the interaction with financial reporting:

- You can create and define a job WIP method, to supplement the five system-defined choices.
- Jobs setup has been expanded to include options to control the treatment of WIP in all jobs. For example, you can specify that a WIP method that you have defined be the default for your organization.
- WIP amounts can now be posted separately for G/L, Items and Resources
- Users can now track and perform WIP calculations in a new location. From here, you can calculate and post WIP to the general ledger and show any warnings if there are problems with a WIP calculation.
- Better insight into the Job Costs Applied Account is enabled by splitting the WIP Cost entries for Items, resources and for G/L Accounts

OVERVIEW: PLANNING AND DISPATCHING OF MATERIALS

NAV 2013 helps companies work more efficiently and provide better service for their customers with enhancements that provide increased visibility into and control of service processes.

It's possible to see whether an item that you need to fulfill an order is in stock and available for your use – without scrolling through lots of information. A demand overview window allows you to see all supply and demand that is associated with the item. Businesses can provide specific and accurate information about delivery to their customers. And, if you want to make sure that an item is linked to your order, then you can reserve it.

LINKING USAGE IN JOBS AND SERVICES

Usage Links helps to improve performance by enabling support for Real Time Estimate-To-Complete and Estimate at Completion.

There is improved alignment in how jobs and services each track usage and consumption related to jobs and services. It makes it easier for a project manager to get accurate insight into what work remains to be done to complete a service task or a job. A key update is adding a field that indicates whether you want to create and maintain a relationship in usage between job planning lines and the job ledger. This gives companies the ability to track inventory consumption on a single job more easily and thereby improve planning accuracy.

ONENOTE INTEGRATION

Microsoft Dynamics NAV 2013 supports integration with Microsoft OneNote, a flexible productivity tool that enables you to gather and organize text, pictures, digital handwriting, audio and video recordings, and more — all in one digital notebook on your computer. You can enable OneNote integration on a per-role basis in profiles.

There are two powerful ways customers and partners can use OneNote with NAV 2013.

- Create solution-specific or company-specific Help and Information

You can set up notes for records and pages in the NAV application. For example, customers can provide their employees with company-specific help, guidance or policies about how to handle a sales order. The information is easily accessible as page notes in Help – right there when and where the employee needs it.

It's also possible to create company-specific user guides. Employees can also use OneNote to save notes and information in NAV to refer to later on – from their PC, mobile or other device that is synchronized with OneNote.

- Share information more efficiently

With Linked OneNote, Users can use OneNote to extend notes that contain photos, directions, videos or other “unstructured” information to an Item page or other pages in NAV. For example, if you can take a photo with a smart phone and save it in OneNote, you can link it to an item in NAV. You can set it up so the photo is available to all roles in the company or just a few. Users can also use OneNote to copy and paste links to and from NAV. OneNote integration in NAV 2013 enables more and better collaboration and sharing of information with other Microsoft devices and applications, and other products with Microsoft OneNote.

MORE USERS MORE PRODUCTIVE

NAV 2013 contains exciting new features and enhancements that extend the value of Microsoft Dynamics NAV throughout the organization by making more users more productive.

MICROSOFT DYNAMICS NAV WEB CLIENT

Microsoft Dynamics NAV 2013 includes a new Web client that enables users to access NAV from virtually any device with an Internet browser. This web browser capability enables many exciting possibilities for customers and partners to provide NAV access to more users without the need to install SharePoint. It also gives customers more flexibility about how they choose to deploy the product and provides their employees with an interface that makes sense and adds value in the context of their job roles.

The NAV Web Client helps partners and customers realize more value from their technology investments. It's a simplified version of the RoleTailored client, with the same look, feel and basic functionality, but it is designed to give more employees – especially light or occasional users– easy, simple and secure access to relevant information and data in NAV, without having to invest in complex customizations and technology.

Partners who have invested in NAV can realize more from the solutions they have already developed because now they can easily extend them to the web. For example, all the content already created on pages can be made available on the web via the NAV Web client. NAV“7” comes with several access profiles, such as time registration and expense reporting, already built in. Partners can build on top of these or develop new compelling access profiles for their customers based on the solutions they already have, and without having to make new investments or learn new technology.

MICROSOFT DYNAMICS NAV PORTAL FRAMEWORK FOR MICROSOFT SHAREPOINT 2010: BUILDING PORTALS AND CONNECTING WEB PARTS

A key feature in Microsoft Dynamics NAV 2013 is the Microsoft Dynamics NAV Portal Framework (NPF). NPF enables closer interoperability with Microsoft SharePoint 2010 and gives partners a powerful way to take advantage of the business productivity benefits in Microsoft SharePoint – such as enabling partners to provide increased collaboration by using SharePoint search and workflows– with the rich data and innovative functionality in Dynamics NAV. NPF provides functionality similar to the Dynamics NAV Web Client with additional integration capabilities with SharePoint. With NPF, partners are also able to build portals, connect web parts and customize NAV for Microsoft SharePoint access in an easier way.

BUILDING PORTALS WITH NPF AND MICROSOFT SHAREPOINT 2010

Customers who already have Microsoft SharePoint 2010 installed can set up web sites as they wish to share NAV data and information, such as pages and reports, with more people inside and outside the company. Partners can use the familiar Microsoft SharePoint functionality to build and customize powerful SharePoint sites with NAV functionality and according to the needs of their customers.

CONNECTING WEB PARTS WITH NPF AND MICROSOFT SHAREPOINT 2010

Microsoft Dynamics NAV Portal Framework for Microsoft SharePoint 2010 makes it easy to set up and connect web parts in SharePoint showing NAV pages and data, leveraging existing SharePoint investments in branding, themeing and advanced SharePoint customizations. Among other things, it's possible to:

- Display Microsoft Dynamics NAV pages and reports on SharePoint sites using a URL.
- Add a page by using a Microsoft Dynamics NAV Web Part and connect the Web Part to other Web Parts on a SharePoint page.
- Edit data on pages in web applications and update the changes in the Microsoft Dynamics NAV 2013 database by using the same metadata and business logic that is rendered in the RoleTailored client without complex setup steps.
- Display a Microsoft Dynamics NAV page in a Web Part on a SharePoint Site
- Connect a Microsoft Dynamics NAV Web Part to other Web Parts.
- Edit Microsoft Dynamics NAV pages on a SharePoint site. Changes are updated in the Microsoft Dynamics NAV database by using the same metadata and business logic that is rendered in the RoleTailored client without complex setup steps.

ROLETAILORED CLIENT ADOPTION EFFORT

The RoleTailored User Experience in Microsoft Dynamics NAV empowers people to work smarter and more effectively so businesses can boost productivity and maximize their effectiveness. The RTC Adoption Effort in NAV 2013 comprises a variety of application improvements that extend and improve on the RoleTailored Client innovations introduced in Microsoft Dynamics NAV 2009. The improvements enable more NAV users in a company – power users as well as new or infrequent users – to work with greater efficiency, confidence and satisfaction. (Please note that the features described in this section may also be described in other areas of this document.) The RoleTailored Adoption effort covers the following areas:

IMPROVED CHARTING CAPABILITIES

Companies need the ability to quickly understand what is going on in their business. Unique charting and visualization capabilities in NAV 2013 support on-demand Business Intelligence requirements, giving companies a powerful way to see and understand business information, processes and data – and use the information wisely. NAV 2013 delivers:

- Generic Charts/End-User Charting

NAV 2013 gives users a simple way to configure charts for improved analysis and better control. With the new chart configuration page and more chart types available in the RoleTailored client, it's possible to add a chart to the RoleCenter, pages, and lists, or add FactBoxes that display charts on a page in the RoleTailored client. Users can personalize or configure their chart, change the chart definition, show it in three dimensions, flip its axis, and print it. User can also save their configuration and share among all users of the company, including a dedicated description of what the chart depicts how it's built and how it should be used.

- Business Charts

Business Chart Visualization Add-in enables partners to create complex custom charts. Business charts utilize the generic chart component but provide partners and C/AL developers with an enhanced alternative to the default chart capabilities in the RoleTailored client. Pre-set filters and actions on drill down can be defined allowing the users to have a rich experience. Most of the out-of-the-box Role Centers now have Business Charts on them, providing the insight which is critical for the role. Some of the Business Charts are included out-of-the-box, and are built on such features like Cash Flow, Accounts Schedule and Sales Analysis. It allows end-users create charts displaying finance, sales, purchase and inventory KPIs without having to involve partners and developers.

- Add-in Charts

Partners and developers can create interactive charts and more advanced visualizations in the application using the Add-In Framework. For example, Timeline Visualization has been integrated into the application to view and analyze business data such as Item Availability, but the same add-in could be used by a partner or ISV to enable other visualizations.

- TimeLine Charts

The TimeLine Visualization add-in chart has been integrated into the product and is used to show a graphical view of the expected inventory level for a specific item or stockkeeping unit over time. Users are able to get an immediate overview of projected inventory and quickly understand the planning suggestions and are able to optimize suggestions easily.

PRODUCTIVITY ENHANCEMENTS

A key benefit of the RoleTailored user experience is increased productivity. Employees with little or no experience with NAV can quickly start using the application, often with minimal or even no training, meaning companies can save considerably on training costs. Plus, the high degree of familiarity with Microsoft Office products makes navigation easier and faster. Users are able to find the information they need to do their work faster. NAV 2013 includes many new productivity enhancements to boost productivity for partners and customers even more, including:

- Visual Update of Client to Office 2010

The Action Pane has been redesigned and is now referred to as the *ribbon*. Similar to the ribbon in Microsoft Office 2010, the redesign optimizes the use of the actions and commands by providing easier access to them. The ribbon is organized into tabs and groups and contains commands that are important to the user in a given context. It's easy to collapse and expand the ribbon. On pages in parts, such as FastTabs and FactBoxes, actions are now available from a toolbar that is located at the top of the part. Partners and users can customize the ribbon to suit individual needs. For example, you can add, remove, and rename actions, menus, and tabs or you can customize the size of an action.

- **Select All/Copy/Paste**
Similar to the way you can select all in an Excel sheet, now you can select all lines in a grid and use the options in the shortcut menu on all lines. You can also copy and paste rows from NAV by using the shortcut menu. For example, you can copy lines from the General Ledger or a list in NAV and then paste the lines into Microsoft Excel. Or you can copy lines from Excel and paste them from the Clipboard into NAV.
- **Enter a Formula for Filtering Dates and Other Filter Fields**
This release provides greater flexibility in expressing dates and includes more standard date formulas and expressions. Partners can define formulas for dates, such as FY12 instead of writing out January 1, 2012 – December 31, 2012, or to enter %me or %myccustomers for filtering. This feature also makes it easier for partners to extend formulas for solution-specific terminology that suits the needs of their customers.
- **Find**
You can use "find" to position to a specific row in a list.
- **Quick Entry**
You can skip over different fields to quickly get to the field you want by pressing Enter. Partners can set up the feature according to specific customer needs and users are able to personalize it as they wish.
- **Keyboard Shortcuts**, for example, toggling between collapsing and expanding the ribbon, move to the Role Center from a task page, and others.
- **New FactBoxes** have been added. For example, there is a new FactBox that displays lot numbers per bin to give warehouse personnel a fast overview of which lot is in which bin. Cash Flow, Cost Accounting and Assembly Management features introduced in NAV 2013 have their own FactBoxes as well.
- **Grouping on pages** (for partners and developers) – A new GridLayout group type makes it possible to lay out fields in tabular layout using rows and columns, giving partners greater flexibility when designing pages.

- Styles – it has become easier to notice business data requiring immediate attention. For example, the styles are used on customer and vendor ledger entries to highlight the ones which have passed due date without being closed. Or you can see a customer’s credit limit highlighted in red when it is surpassed.
- “Save View As” - All business critical ledger entries have been added to the Departments page which makes it possible for end users to build their own views based on these entries and link these views to their Role Centers.

END-USER CHARTING

This release delivers flexible, configurable chart types and charting capabilities throughout the application making it easier for more employees to see and understand data and information quickly – and work more effectively.

End-user charting in NAV 2013 gives users a simple way to configure charts for improved analysis and better control. With the new chart configuration page and more chart types available in the RoleTailored client, it’s possible to add a chart to the RoleCenter, or other areas within the application, change the chart definition, show it in three dimensions, flip its axis, and print it. From any list place, you can change the view of the data to display it in a chart format. And you can add a FactBox that contains a chart, which can be customized.

GROUPING ON PAGES

A new GridLayout group type makes it possible to lay out fields in tabular layout using rows and columns, giving partners greater flexibility when designing pages. You use the GridLayout control to span a field over rows or columns and show or hide field labels providing more targeted layout for information that belongs together, such as address and posting information or numbers or values that belong together.

QUERY

Query in Microsoft Dynamics NAV 2013 provides customers and partners with a powerful way to access and work with NAV data. The query object works as a kind of data pump, providing access to relevant and dynamic data to various locations within NAV, and externally, via Web services, to other applications such as Excel and [PowerPivot](#).

Similar to the other tabular designers in Microsoft Dynamics NAV, the query designer in NAV 2013 allows partners to easily create an object that combines data from multiple database tables into a single dataset. Partners can use the resulting dataset as the basis for a chart, within code, or save it a format that can be read by other systems or software.

Key benefits of Query are improved charting and faster and better ad-hoc reporting. Query dramatically improves the charting experience by making it easier to create compelling charts, KPIs, and reports. With the ability to bind charts to query, you can leverage its capabilities to create charts using complicated metrics that work on large amounts of data in a more efficient way. Because the chart specifics (such as filtering) are not hard-coded, there is more flexibility in what you can display. Based on how the partner writes the query, the user can retrieve data that is joined, aggregated, grouped, ordered, and filtered. Through an easy to use chart configurator page, the user is able to add additional filtering conditions,

change aggregation method types, and modify the grouping. Exporting data to Microsoft Excel, you have the means of creating quick ad-hoc reports in a known environment.

Partners can also take advantage of query when developing application functionality for customizations. After creating a query using the Query Designer in C/Side development environment, you can run the query and loop through its dataset from C/AL code. The NAV query object, created in the query designer, is a modeled representation of a SQL statement, which during runtime is directly translated to SQL. Not only does it provide a faster way to retrieve the data, the coding process is easier as no prior SQL knowledge is needed.

Query in NAV 2013 is OData-enabled. OData – a type of web protocol – allows you to expose and retrieve data from NAV to be used in an external application, such as Excel. With Query, it's simpler for the developer to expose large amount of related data outside of NAV in the view that you want. The user, who could be working in Excel, can choose a datasource, such as a query from NAV, to retrieve the relevant data. Using the Excel add-on, PowerPivot, the user can easily explore, analyze and visual the data – and share insights with colleagues through Excel and SharePoint 2010.

ODATA

There are several new features in Microsoft Dynamics NAV 2013 that enable partners and customers to create compelling self-service Business Intelligence (BI) solutions. OData – a type of web service – is one example.

Open Data Protocol (OData) is a REST-compliant Web protocol for querying data. The protocol allows a consumer to query a datasource over the HTTP protocol and get the data back structured as tables.

OData is a Microsoft initiated standard for web services. More and more Microsoft products use the OData protocol to expose and access data and information, making it easier to integrate with other products and tools, such as PowerPivot in Microsoft Excel.

OData makes it easier to get data from NAV enabling many exciting new capabilities for partners and customers, such as:

- Create compelling BI scenarios using tools like PowerPivot, or other tools, to extract data directly from Microsoft Dynamics NAV– without programming. The data is structured as tables and exposed as OData services.
- Expose the new Dynamics NAV Query object (which enables views on top of tables) as OData, and retrieve pre-aggregated NAV data.
- Expose Pages, such as customer list or item lists, as a SOAP or OData web service and use the same data as is used in the RTC.

Customers can dramatically increase business insight with the ability to share and expose detailed business data in a faster and easier way. Partners can create new solutions using advanced PowerPivot-driven BI scenarios, including the possibility to share data in a Microsoft SharePoint Server 2010 environment.

NEW IMPROVED SERVER

Microsoft Dynamics NAV 2013 delivers new enhancements to the Microsoft Dynamics NAV Application Server (NAS) including improved scalability, greater simplicity, and closer alignment to Microsoft SQL Server and technologies. Among the key enhancements:

- 64-bit NAV Application Server for better memory utilization
- Unicode support throughout the application. With Unicode, it's easier for companies to enter emerging markets and trade across borders. For example, you can print an invoice that contains Chinese characters or display your Arab customer's name in Arabic or other character languages.
- Easier set up. You are no longer required to manually configure to enable the RoleTailored client to communicate with SQL Server in the three-tier architecture setup. This is due in part to a change in the security model and how the NAV Application Server communicates with SQL server.
- Continued focus on aligning with the Microsoft stack, including newest versions of SQL Server.

VISUAL UPDATE OF CLIENT TO OFFICE 2010

Simplicity continues to be at the core of Microsoft Dynamics NAV, and this release is no exception. The Action Pane has been redesigned and is now referred to as the *ribbon*. Similar to the ribbon in Microsoft Office 2010, the redesign optimizes the use of the actions and commands by providing easier access to them. The ribbon is organized into tabs and groups and contains commands that are important to the user in a given context. It's easy to collapse and expand the ribbon. On pages in parts, such as FastTabs and FactBoxes, actions are now available from a toolbar that is located at the top of the part. Partners and users can customize the ribbon to suit individual needs. For example, you can add, remove, and rename actions, menus, and tabs, or you can customize the size of an action.

CUSTOMER PRODUCTIVITY IMPROVEMENTS

Microsoft Dynamics NAV 2013 delivers productivity enhancements that empower people to work smarter and more effectively and improve collaboration. Many of these improvements include the familiar functionality you find in other Microsoft products such as the Select All and Paste functions. Other improvements enable customers to communicate and collaborate more effectively using other Microsoft products, such as Microsoft Office OneNote - and making it easier for employees to find, use, and share information. Dynamics NAV 2013 also delivers productivity improvements that give partners new possibilities to extend their solutions to match specific customer needs.

- Select All
Similar to the way you can select all in an Excel sheet, now you can select all lines in a grid and use the options in the shortcut menu on all lines.
- Copy/Paste
There is easy and familiar copy/paste functionality in Microsoft Dynamics NAV 2013. You can copy and paste rows from NAV by using the shortcut menu. For example, you can copy lines from the General Ledger or a list in NAV and then paste the lines into Microsoft Excel. Or you can copy lines from Excel and paste them from the Clipboard into NAV.

- **Link Sharing/Copy Link**
You can share a link to any page, also if it includes a filter, with another user who has Microsoft Dynamics NAV installed. That user can open the link in Microsoft Word, Outlook, or OneNote. For example, on the Actions menu of a card or list, choose Copy Link to Page. Open an email message in Microsoft Outlook, and then paste the link in the body of the message. Send the email message that contains the link to another user. When the user clicks the link, the page opens in Microsoft Dynamics NAV.
- **Enter a Formula for Filtering Dates and other Filter Fields**
This release provides greater flexibility in expressing dates and includes more standard date formulas and expressions. Partners can define formulas for dates, such as FY12 instead of writing out January 1, 2012 – December 31, 2012, or to enter %me or %myccustomers for filtering. This feature also makes it easier for partners to extend formulas for solution-specific terminology that suits the needs of their customers.
- **Save variables used for views and request pages**
If you have entered “today” or “week” or any of the text filters such %user or %myitems in a request page or in a saved view, those will remain next time you invoke the request page or view.
- **Find**
You can use “find” to position to a specific row in a list.
- **Quick Entry**
You can skip over different fields to quickly get to the field you want by pressing Enter. Partners can set up the feature according to specific customer needs and users are able to personalize it as they wish.

FINANCIAL MANAGEMENT G/L ENTRY TABLE LOCKING AND DIMENSION POSTING AND STORING REDESIGN

Microsoft Dynamics NAV 2013 supports many enhancements that enable more people to use the system in a more efficient way – saving the company time and money. Two of these enhancements include a redesign of the General Ledger (G/L) Table Locking architecture and Dimensions Posting and Storing.

NAV 2013 speeds posting processes as more users can post sales and purchase orders at the same time – without locking the G/L tables. That’s because the G/L Entry table is not locked at the start of sales and purchase posting. The table remains unlocked until a lock is needed. Partners can choose to lock or unlock the G/L Entry table as an option in the General Ledger setup. Companies can easily add other users to their existing solution, without extra customizations.

In addition, enhancements to the way NAV stores dimensions allows companies to make use of the rich data in NAV and use dimensions more effectively for better and easier analyses. A new Dimension Set

Entry table has been added so dimension sets are stored once in the database, preserving database space and improving overall performance.

REDUCED TIME TO VALUE

NAV 2013 delivers enhancements that help reduce the time to value by making it even easier for customers to learn and use their solutions and less time for partners to customize and deploy solutions.

REPORTING ON THE MS STACK

Microsoft Dynamics NAV 2013 takes advantage of cross product integration to relevant Microsoft products and technologies to help partners increase productivity and customers realize a rapid time to value. Reporting on the Microsoft stack in NAV 2013 includes support for Microsoft's Report Definition Language Client (RDLC) 2008. This framework and related tools give partners and customers a powerful way to create reports.

Partners can design reports exactly how their customers want them – faster and easier – no matter how complex – saving time and resources. RDLC 2008 enables partners and customers to do more with reports – from dynamic sorting and easier KPI visualization, to custom colors on charts and more file formats for saving and exporting reports. Benefits of the new reporting functions, tools and enhancements available in this feature include:

- Greater flexibility when viewing reports saves time for partners and customers. View reports in dynamic view, print layout or print preview and toggle between views easily.
- More choice of file formats for saving and exporting reports helps customers deliver reports in the format their customers want. Now it's possible to Save as Word, Excel, PDF and Export to Word, Excel, PDF from within Report Viewer.
- Customers can deliver professional looking reports more easily with the possibility to embed fonts into PDF files so reports appear exactly the same on the screen as they do in print.
- New Tablix control gives greater flexibility for partners and customers when creating reports with multiple dynamic columns. For example, you can display data in a grid format, with layout possibilities ranging from simple tables to advanced matrices and freely mix static and dynamic columns.
- New Gauge control enables partners and customers to visualize KPIs in reports clearly.
- More chart capabilities including custom colors on charts and legends with unlimited choice of colors gives businesses more possibilities to customize reports for recipients with special requirements.
- Partners are able to add fields directly to headers and footers without referencing them in the report, helping to speed the design process.

- Reporting User Experience (UX) guidelines for Microsoft Dynamics NAV reporting outline a strategy for displaying certain reporting components and types of data helping partners and customers to create reports that are always legible, easy to read and cleanly organized.
- Updated Print on Request Page to include SaveAsPDF, SaveAsWord and SaveAsExcel eliminates extra steps when printing reports.
- Link to filtered pages saves partners and customers time when creating reports.

REPORT DATASET DESIGNER

Boosting partner productivity continues to be a key development goal for Microsoft Dynamics NAV. A new feature in NAV 2013 is the Report Dataset Designer that gives partners an easier way to define data within NAV to be used in Visual Studio to create reports, and thereby speed the process of creating reports for customers.

The Report Dataset Designer in NAV 2013 simplifies the process of creating datasets – the collection of data to be used in a report – from within NAV.

- A new drop down box that enables easy selection of data items in fewer steps – no drag and drop needed
- A complete overview of the dataset making it easier to name and view column names
- More options under print
 - Print as Word or PDF – no need to print preview
- Improved Report Editor with features like auto-alignment of report elements.

All of these improvements add up to greater speed and simplicity for partners when creating reports for customers.

UNICODE

Unicode is a computing industry standard to ensure consistent encoding, representation, and handling of text. NAV 2013 supports Unicode. This feature makes it easier for partners to attract and support new and existing customers with international operations. For example, with Unicode in NAV 2013, partners can focus on the application rather than trying to enable Unicode in their customer's application infrastructure.

Unicode can also help customers respond quickly to new opportunities and provide better service. It's possible to store, display, and print information in any local character language, such as Chinese or Arabic, making it easier for companies to enter emerging markets and trade across borders. You can print an invoice that contains Chinese characters or display your Arab customer's name in Arabic or other character languages.

NAV DEPLOYMENT

Microsoft Dynamics NAV 2013 includes enhancements and tools that simplify the setup and deployment process, helping partners to work more efficiently and allowing customers to realize a faster time to value.

The entire deployment process – from installing the product DVD, the server and clients to setting up the database – is easier. For example, you are no longer required to manually configure delegation or to

manually create SPNs to enable the RoleTailored client to communicate with SQL Server. This change is due to the implementation of a new managed data access layer to handle communications between Microsoft Dynamics NAV and SQL Server. This new interface uses ADO.NET instead of ODBC and offers less resource consumption, improved performance, and simpler deployment. Eliminating manual steps, such as configuration and validation, speeds the deployment process and frees partners to work on setting up the application, and other tasks.

Deployment in NAV 2013 also includes the option to add the Microsoft SharePoint client, if desired.

NAV MANAGEMENT

Microsoft Dynamics NAV 2013 provides new administration tools that make it simpler and more efficient to manage and administer Microsoft Dynamics NAV.

A new Server Administration tool for administering Microsoft Dynamics NAV Server and Microsoft Dynamics NAV sites is included. Partners and IT professionals at the company can use this tool to configure Microsoft Dynamics NAV Server. The Server Administration tool is a snap-in for the Microsoft Management Console – a familiar Microsoft framework for managing server products. Partners and administrators have a single point from which to manage Microsoft Dynamics NAV, including setting up the server, setting up instances, configuring endpoints, and so on. This helps to eliminate manual operations and makes managing administration tasks more efficient. What's more, the management console has the same look and feel as the RoleTailored client so partners can IT personnel will be familiar with the environment.

In addition to the Microsoft Management Console, partners and IT professionals can also take advantage of Windows PowerShell™ – a task-based command-line shell and scripting language designed especially for system administration. Built on the .NET Framework, Windows PowerShell™ helps IT professionals and power users control and automate the administration of the Windows operating system and applications that run on Windows. Validation input is built-in so there is less chance for errors in managing the installation– helping partners to work more effectively.

Other enhancements include improved management and easier administration for the people that work in NAV, such as super users or those users who are managing and creating users, setting permissions, etc. All of the high frequency administrative tasks can be carried out in the familiar environment of the RoleTailored client. You can now use the RoleTailored client to add users, to associate each user who has one or more permission sets, which determine access to specific objects, and to create and modify permission sets. This enables easy administration for customers and less partner involvement when managing NAV.

NEW USER CONCEPT

Microsoft Dynamics NAV 2013 also introduces a new user concept that is not Windows related and does not require Active Directory to be present when running NAV 3-tier architecture. Now users can be local NAV users. This can be helpful for smaller companies who may not have an Active Directory.

NAS SERVICES

The Microsoft Dynamics NAV Application Server, (NAS) continues in NAV 2013 but the NAS business logic will now run on the Dynamics NAV Service Tier (NST). Partners will be able to use most of the features known from the Classic NAS, with some enhancements.

New enhancements include the ability to run multiple background sessions and multiple job queues on the same instance. This speeds the posting of sales orders and invoices, for example, and makes it more efficient for users. Now it's possible to see who is posting what and when, as the security rights and name are included in the session.

(NAS services in Microsoft Dynamics NAV Server support applications such as Microsoft Dynamics NAV Job Queue and many others. You configure NAS services together with Microsoft Dynamics NAV Server Administration tool.)

RAPID START FOR MICROSOFT DYNAMICS NAV

Microsoft Dynamics NAV 2013 delivers a new way for partners and customers to speed implementations. Rapid Start for Microsoft Dynamics NAV gives partners control and overview of all the stages of the company setup process. Customers are able to configure their companies faster using the out-of-the-box configurations provided by Microsoft, and configurations provided by Microsoft partners. With Rapid Start for Microsoft Dynamics NAV, partners and customers are able to process a set of configuration tables in a few simple steps, respecting and validating internal relations between tables. NAV 7 also allows more streamlined importing of opening balances into journals and active documents with dimensions. These enhancements help partners implement their solutions faster, with fewer resources by preserving customer legacy data. Customers can be up and running fast with little disruption to their business.

FINANCIAL MANAGEMENT VAT RATE CHANGE TOOL

Microsoft Dynamics NAV helps streamline routine accounting practices with automated financial processes. Microsoft Dynamics NAV already provides multiple VAT rates through VAT and General Posting groups allowing you to easily change VAT rates in order to maintain accurate VAT reporting. But, companies often have thousands of open documents or journal lines where a manual update of the VAT and Gen. Posting groups can become cumbersome. In addition, many master data such as items need to be updated with the new default VAT and Gen. Posting groups for the new rate.

NAV 2013 delivers a new, improved tool that makes it possible for you to define what master data needs to be updated, match old to new posting groups, and implement the changes on open documents and journal lines. This tool makes it possible for customers and partners to accommodate changes in VAT rates with a minimum amount of time and costs.

The Financial Management VAT Rate Change Tool in NAV 2013 gives customers a fast and efficient way to implement new and changing VAT rules themselves – without any update or partner implementation. Changes in VAT can be centralized and carried out very quickly so companies can stay compliant with local VAT regulations, which can change at a moment's notice. When conversion is completed, VAT and general posting groups are converted and changes are implemented in general ledger accounts, customers, vendors, open documents, journal lines, and so on.

Partners can use their time on higher value projects without having to care for those regulatory changes. The Financial Management VAT Rate Change Tool in NAV 2013 includes the following functionality:

- A tool-complete field flag when the tool has completed the conversion from the old to the new rate
- Converted date on VAT Prod. Posting Group Conversion and Gen Prod Posting Group Conversion tables
- VAT Rate Change Log Entries for the user so it's possible to see what has changed and when

- General alignment with the overall application

IMPROVED PARTNER PRODUCTIVITY AND NEW BUSINESS OPPORTUNITIES

NAV 2013 ships with enhancements and tools designed to boost productivity for partners and help them grow their business.

MICROSOFT .NET FRAMEWORK INTEROPERABILITY

One of the many exciting features in Microsoft Dynamics NAV 2013 that take advantage of the Microsoft stack is Microsoft .NET Framework Interoperability. Microsoft Dynamics NAV 2013 delivers several new enhancements related to the Microsoft .NET Framework and applications. These capabilities enable partners to build high-performing, powerful add-ons, extend and integrate their existing Microsoft Dynamics NAV solutions, and share data more easily with other applications and systems already in place at the customer. For example, with .NET Framework Interoperability, it's possible to consume web services, integrate with Microsoft Office products and create .NET Framework applications that target the RoleTailored Client, among others.

The .NET capabilities available in Microsoft Dynamics NAV 2013 include:

- **The ability to use .NET types in code directly from C/AL.** This enables C/AL developers to invoke the great number of existing .NET-based APIs and take advantage of the strength of the 3-tier Microsoft Dynamics NAV platform. Partners can integrate their .NET applications with Microsoft Dynamics NAV and build compelling application programs and add-ons that are tightly integrated with Microsoft Dynamics NAV in a managed code environment. Integration with third-party assemblies is just as easy as with .NET Framework components and can expand the horizon of your Microsoft Dynamics NAV system dramatically.
- **Support for events.** Microsoft Dynamics NAV objects can subscribe to events that are published by .NET Framework types enabling easier integration with event-based applications and middleware.
- **Support for I-Serialization.** This provides a powerful way to share or stream data between the client and server, and vice versa. This capability enables partners to build data-rich business visualizations more easily.

C/AL DEBUGGING

Microsoft Dynamics NAV 2013 includes a new debugger that you can use to inspect your C/AL code and verify your application. The debugger UI runs on the RoleTailored client. This valuable new development tool gives partners, ISVs and other developers the ability to correct errors or debug C/AL code, pages, tables, reports, session types, etc. on the service tier.

The C/AL Debugger runs on the RoleTailored client, so it's familiar, easy to use and effective. It is the first of many development tools we are planning that will be accessible from within the RoleTailored Client. The C/AL Debugger helps partners, ISVs and developers realize productivity gains by making it easier to identify, diagnose and resolve application issues quickly and more easily.

C/AL PAGE TESTING

A new test feature in Dynamics NAV 2013 is page testability. Comprehensive and robust, this development tool helps to ensure that the page you are designing works as it should. You use C/AL code on a test page object to simulate various tasks such as viewing or modifying the value of a field, filtering data, navigating to different records, performing any actions that are available on the page, and so on.

This feature is tightly integrated as the testing is done in the C/AL development environment. The test is written in the C/AL development language so you don't have to leave the environment you are working in to test the page or learn a new testing environment.

The C/AL Page Testing capability in NAV 2013 is a fast, robust and efficient tool that extends the test features introduced in NAV 2009 SP1 to help partners who develop standard solutions work more efficiently.

VISUAL PAGE PREVIEWER

Microsoft Dynamics NAV 2013 provides many new features and enhancements that help simplify development tasks and boost partner productivity. Among these is Visual Page Preview, an especially useful feature for developers who are designing pages.

In Microsoft Dynamics NAV 2009, pages replaced forms as the main way to display and organize data. With Microsoft Dynamics NAV 2013, forms disappear and are no longer available. Therefore, we have made new enhancements to make it easier to work with pages.

It's now possible to see Pages as you work on them – removing the need to deploy a Page before seeing what it looks like. Visual Page Preview is similar to using the Print Preview feature in Microsoft Word. You can preview the Page and get an overview and understanding of the page structure – faster and more simply. Developers can see what they are doing, identify errors quickly – speeding page design significantly.

It's also possible to select rows in the preview pane and have the selection duplicated in the editor. This double selection enables developers to easily find their way around even complex Pages. The selection also works on Actions and will help developers navigate building page based applications faster.

BUSINESS CHART ADD-IN

Business Chart and TimeLine Visualization Add-Ins enable partners to create complex custom charts and interactive visualizations of data. As an enhanced alternative to default chart capabilities in the RoleTailored client, the Business Chart control add-in is ideal if a partner needs control in business code on displaying data over multiple measures and for visualizing data that is calculated on a page.

ADD-IN FRAMEWORK

NAV 2013 includes enhancements that help application developers grow their business by providing tools that make it easier to develop compelling solutions based on Microsoft Dynamics NAV. With NAV 2013 powerful add-in technology and tools, application developers and ISVs can develop custom Add-Ins, reuse the Add-Ins that ship with NAV and use the ones available from other partners. The Add-In Framework provides a more efficient way for developers to create unique interactive charts in the application. It's possible to expose methods and properties in a control add-in

assembly so that they can be called by C/AL code on page triggers. Add-ins can even expose events which will become new page triggers in C/AL code.

XMLPORT

Microsoft Dynamics NAV 2013 does not support Dataports; however,, we have made several enhancements to XMLport to allow all the functionality that was available from a Dataport, but now simplified with only one XMLport.

A key advantage is partners can run XMLPorts directly from Object Designer without having to write code. The XMLport runs on Microsoft Dynamics NAV Server. When you import data from an XML file by using XMLports, you can insert new records or update existing records in the database. In earlier versions of Microsoft Dynamics NAV, you could insert new records, but not update existing records. You use the AutoSave Property, AutoReplace Property, and AutoUpdate Property to determine whether records are automatically inserted, replaced, or updated.

ADSC USING WEB SERVICES

Automated Data Capture System (ADCS) is an existing module in Dynamics NAV. The connection framework has been redesigned for NAV 2013 to utilize web services instead of going through the NAS. The functionality for the end user using this in the warehouse is the same but the performance is better. The setup has also been simplified making it faster and simpler for partners to set up.

CODE COVERAGE FOR NAV SERVER

The code coverage functionality is useful for partners and developers who are customizing Microsoft Dynamics NAV and want to test their work. It provides a quick overview of the objects for which code has been executed, and it displays the code that has been logged. Previously, it was not possible to capture code coverage on the NAV Server, and thus, it was not possible to get code coverage for Pages, Web Services or other code that is executed on the Server. This functionality has now been enabled in Microsoft Dynamics NAV 2013. This helps partners to ensure the quality of their customers' solutions.

EMAIL LOGGING REFACTORING

NAV 2013 supports Microsoft Exchange Web Services which enables one centralized email set up for the whole organization making it easier to set up folders and monitor and log emails.

OPEN XML INTEGRATION

NAV 2013 utilizes Microsoft OpenXML which gives partners more and better options when creating Excel integrations. The Microsoft.Dynamics.Nav.OpenXml assembly provides the same helper logic that existed in the Excel Buffer, but at the same time, the interface is open and extensible, so you can work with the OpenXml workbook, worksheet and cell formats directly if you need to extend the scenarios provided by NAV. Microsoft OpenXML enables better performance and improved formatting capabilities for partners building solutions using the Excel buffer. NAV users can more easily share NAV data with non-NAV users using Excel.

HELPTOOLKIT

NAV 2013 delivers powerful enhancements and tools to help partners boost productivity and drive their business. Help Toolkit is one example. A separate toolset available on [PartnerSource](#), Help Toolkit contains new tools and templates that give partners an efficient way to create and customize help for NAV 2013 by making it easier to:

- Identify which application objects in their solution are missing help
- Generate help add-in project with missing topics
- Compile written help into .chm and .hh files
- Understand the process of customizing help using the NAV Help Guide

The new features include:

- Microsoft Dynamics NAV Reference Help Generator: a wizard tool that generates HTML Help project and reference topics for selected NAV objects
 - This tool replaces Generate HTML Help Batch Job (available in Help Toolkit 2009)
 - Includes additional options for detecting missing help topics and assessing „help coverage“
- A robust wizard tool that replaces Help.Builder.Gui.exe
- Changes in the Help Builder application to support new content model:
 - Inserting Boilerplate texts
 - Inserting links to open pages, reports
- NAV Help Guide: updated topics and walkthroughs
- Help Toolkit package now contains translated configuration files for supported languages

Microsoft Dynamics is a line of integrated, adaptable business management solutions that enables you and your people to make business decisions with greater confidence. Microsoft Dynamics works like and with familiar Microsoft software, automating and streamlining financial, customer relationship, and supply chain processes in a way that helps you drive business success.

U.S. and Canada Toll Free (888) 477-7989
Worldwide (1) (701) 281-6500
www.microsoft.com/dynamics

The information contained in this document represents the current view of Microsoft Corporation on the issues discussed as of the date of publication. Because Microsoft must respond to changing market conditions, this document should not be interpreted to be a commitment on the part of Microsoft, and Microsoft cannot guarantee the accuracy of any information presented after the date of publication.

This white paper is for informational purposes only. MICROSOFT MAKES NO WARRANTIES, EXPRESS, IMPLIED, OR STATUTORY, AS TO THE INFORMATION IN THIS DOCUMENT.

Complying with all applicable copyright laws is the responsibility of the user. Without limiting the rights under copyright, no part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written permission of Microsoft Corporation.

Microsoft may have patents, patent applications, trademarks, copyrights, or other intellectual property rights covering subject matter in this document. Except as expressly provided in any written license agreement from Microsoft, the furnishing of this document does not give you any license to these patents, trademarks, copyrights, or other intellectual property.

© 2012 Microsoft. All rights reserved.

Microsoft, Microsoft Dynamics, the Microsoft Dynamics logo, and are trademarks of the Microsoft group of companies.

