Microsoft Dynamics NAV 2013
Assembly Management Enhancements*
Brought to you by Microsoft Services

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* Level Beginner to Intermediate

AGENDA

- ❑ Assembly Management – new feature
    - ❑ What is it about?
    - ❑ Who is it for?
    - ❑ Why is it useful?

- ❑ Demos - highlights of design and functionality
- ❑ Kitting (NA/FR/APAC) versus Assembly

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Assembly Management

Overview

To support companies that supply products to their customers by combining components in simple processes without the need of manufacturing functionality, Microsoft Dynamics NAV 2013 now includes a complete feature set to manage assemblies in integration with Sales, Planning, and Warehousing.

Assembly Business

This is what you store in your warehouse:

Spools
of
Cables

Connectors

Assembly Business

This is what you sell to your customers:

... and you don't want to store those end-items in your warehouse, because:

1. The same components are used in different products

2. You don't know what product configuration your customers will order

3. You will have excess inventory (inventory=   )

Assembly – define it

Many things to different companies/industries

- Final assembly, light assembly, kitting, pick-to-order, configure-to-order, light manufacturing

Assembly & Kitting	• Combine raw materials to create a finished good • **Combine finished goods into an end-item** • An *assembly* item is a physical item, that is built from components and put/withdrawn from stock as an item number.
Kitting	• Combine already finished (produced or purchased) goods into a group • A *group* item is not a real item, but a convenient way to move a set of different goods through the sales process. It does not exist physically on stock and hence does not have a balance on hand.

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Assembly- what's the attraction?

Is an attractive inventory stocking strategy due to:

Inventory Reduction

- Customization (like special labeling and packaging), assembling and "putting together" can be postponed until after the customer order is received, and/or common components have left the production plant
- Sellable items are stocked in a generic state as long as possible while "item sets" are not stocked at all

Customer Service

- Last minute customer requirements can be accommodated
- Pre-assembled promotional kits can be shipped out quickly
- Special price options and services can be offered through a "kit"

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Who shall be interested?

Any business with simple "conversion" processes …

that don't require complex setup and maintenance …

and may resist investing in more resource-demanding production modules …

Customers for Assembly

Light manufacturers, wholesalers and retailers, whose:

"production process" a part of regular warehouse operations

work/labour involved in producing a final assembly is relatively short and consists of very few simple operations

manage the conversion process through one-entry-point interface, with minimum setup effort, by employees with no university degrees in production engineering, and for affordable price

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Non-Customers for Assembly

Manufacturers who operate with:

- multi-stage production processes

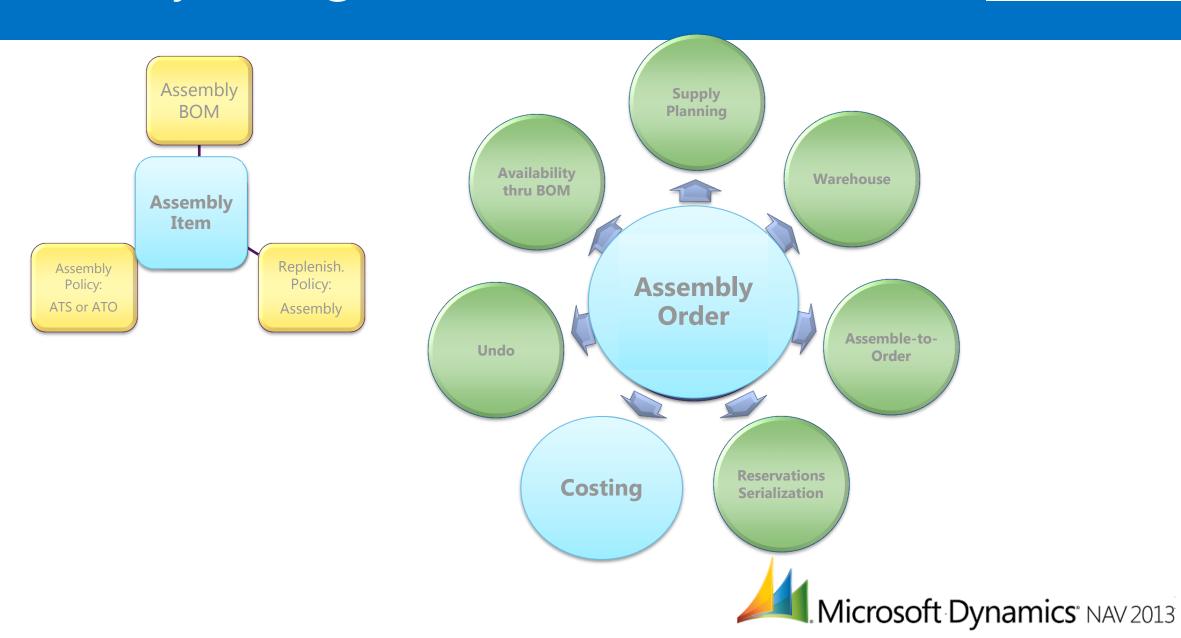- with specialized activities at each work operation, long production lead times that result in WIP

- versions of BOMs

- have a need for capacity load optimization and control

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Assembly Design

Assembly BOM

Assembly Item

Assembly Policy:
ATS or ATO

Replenish. Policy:
Assembly

Supply Planning

Availability thru BOM

Warehouse

Assembly Order

Undo

Assemble-to-Order

Costing

Reservations Serialization

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Assembly for NAV 2013

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IS NOT

A downscaled version of manufacturing module:

- no routings/capacity
- no Work in Progress
- no versioning

A configurator in disguise

Assembly-to-order manufacturing feature

IS

Assembly
 to stock
 to order

Instant Production

A warehouse operation

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Assembly Item

Assembly
Item

- ❑ Assembly BOM
- ❑ Replenishment Policy: *Assembly*
- ❑ Assembly Policy:
    - ❑ Assemble-to-Stock
    - ❑ Assemble-to-Order
- ❑ Roll-up standard cost across Assembly and Production BOMs
- ❑ Price roll-up on demand

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Demo:

- ❖ Assembly Item
- ❖ To explode an assembly BOM within an assembly BOM
- ❖ To assemble an item

Assembly Order

Assembly Order

- ❑ Design foundation for:
  - ❑ Assemble-to-Stock
  - ❑ Assemble-to-Order

- ❑ Seamless integration to inventory, planning and warehouse

- ❑ Flexibility

- ❑ Posting through order management (instead of journals)

- ❑ Historic record of posted assembly order

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Demo:

❖ Assembly Order
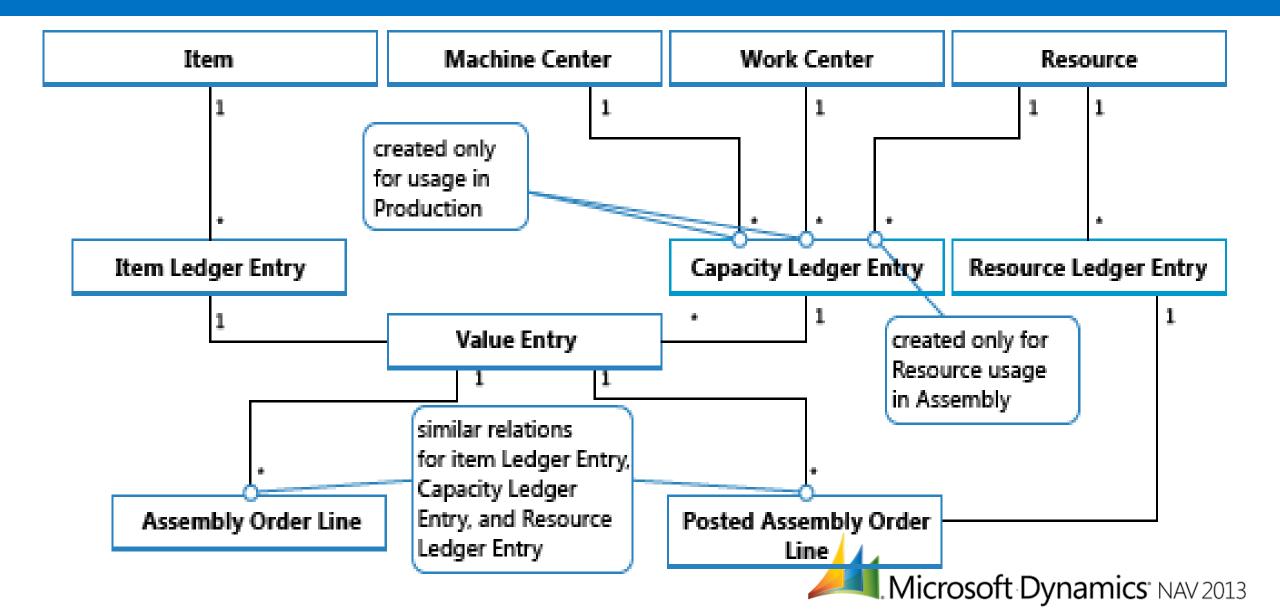
Assembly Costing

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- ❑ New Item Ledger Entry Types:
  - ❑ Assembly Consumption
  - ❑ Assembly Output
- ❑ No WIP
- ❑ Capacity Ledger Entries for resources
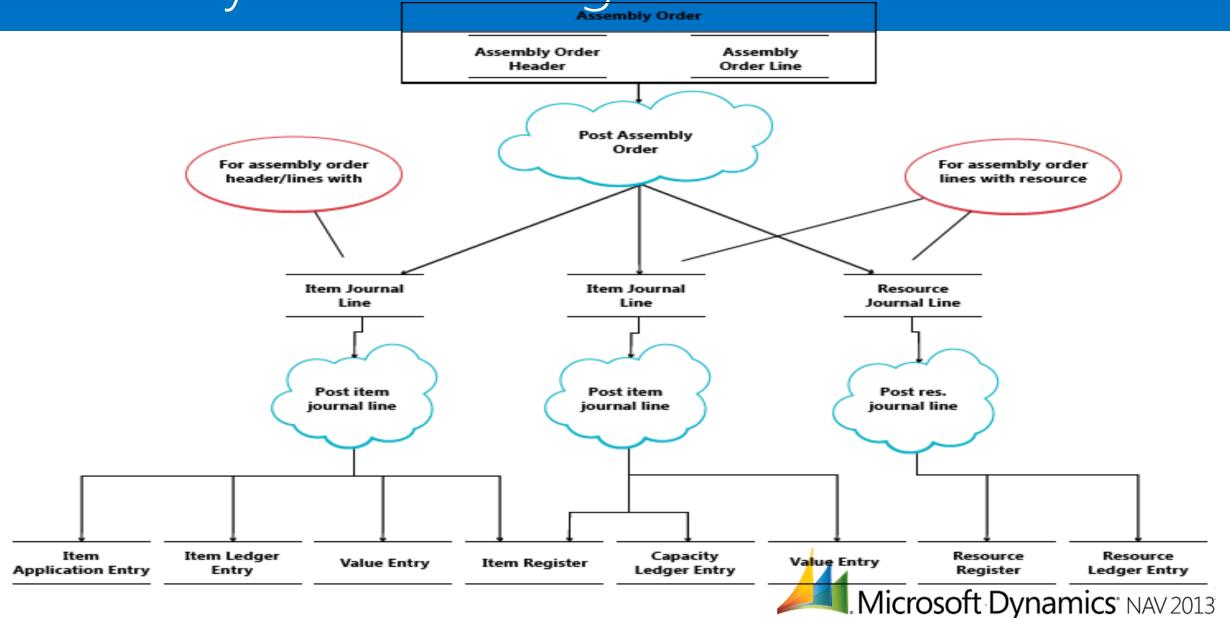- ❑ Standard Cost Worksheet

Costing

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Assembly Order Posting
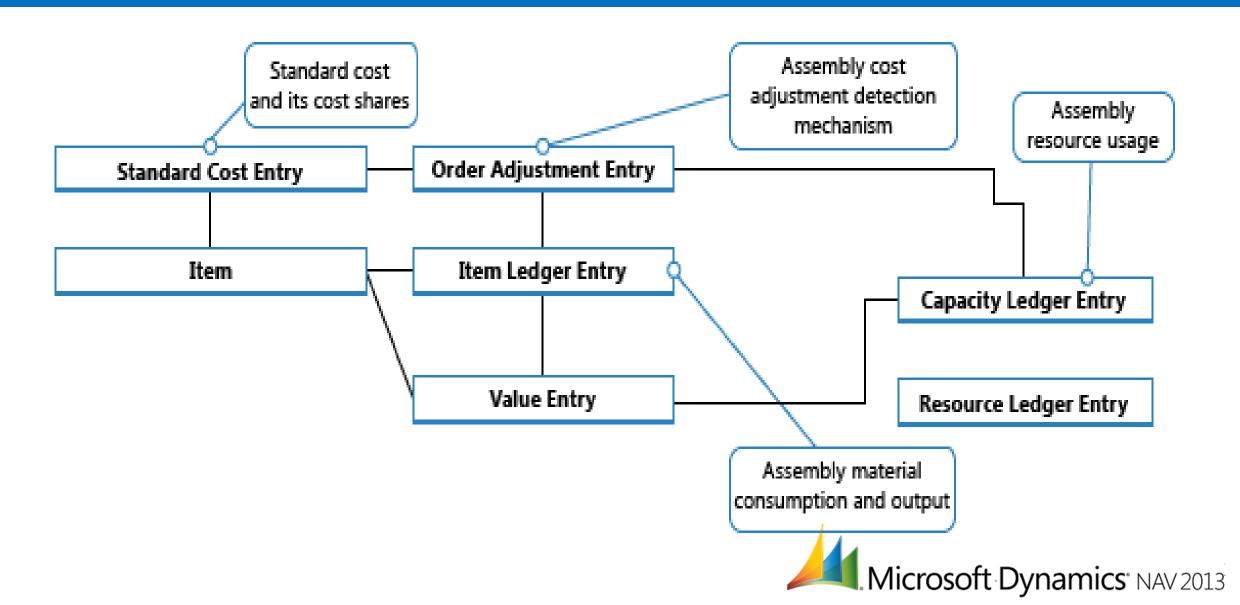
Assembly Order Posting

Cost Adjustment

Assembly-to-Order

- ❏ Based on Assemble-to-Order policy:
  - ❏ automatic creation of reserved

Assemble-to-Order

- ❏ Assembly Order linked to sales line
  - ❏ automatic synchronization of changes
- ❏ Mixed scenarios (inventory + assemble-to-order)
- ❏ Sales quotes & blanket orders (no invoices)
- ❏ Can be potentially used on other orders

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Assembly – Availability

❏ Stockout warning for *Able to Assemble*

❏ *Able to Make* view through entire BOM

❏ Valid for Production BOMs

❏ Full inventory availability integration

Availability

Reservations and Item Tracking

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Reservations Serialization

❑ Reservations for components and assembly items

❑ Item tracking on components and assembly items

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Disassembly

- ❑ Undo Assembly function
  (in line with Undo Shipment/Receipt)

- ❑ Undo Assemble-to-Order Shipment

Undo

Supply Planning

- ❑ Planning & Requisition Worksheets
- ❑ Order Planning
- ❑ Order Promising
- ❑ Order Tracking

Supply Planning

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Assembly in Warehouse

Warehouse

❑ Basic warehouse support for assembly processes, incl. *Inventory Movement* for components

❑ DPP warehouse support for assembly processes, incl. pick worksheet

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Assembly – Report and Analytics

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Assembly Analytics

❑ Reports:
  - Assemble-to-Order – Sales
  - Item – Able to Make (Timeline)
  - BOM Cost Share Distribution

❑ Views:
  - BOM Structure treeview
  - BOM Cost Shares treeview
  - Item Availability by BOM level treeview

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What about local Kitting (NA/APAC/FR)

❑ Assembly replaces Kitting

❑ Upgrade
  - Extensive data upgrade
  - The Upgrade Toolkit is ready
  - Upgrade Documentation published
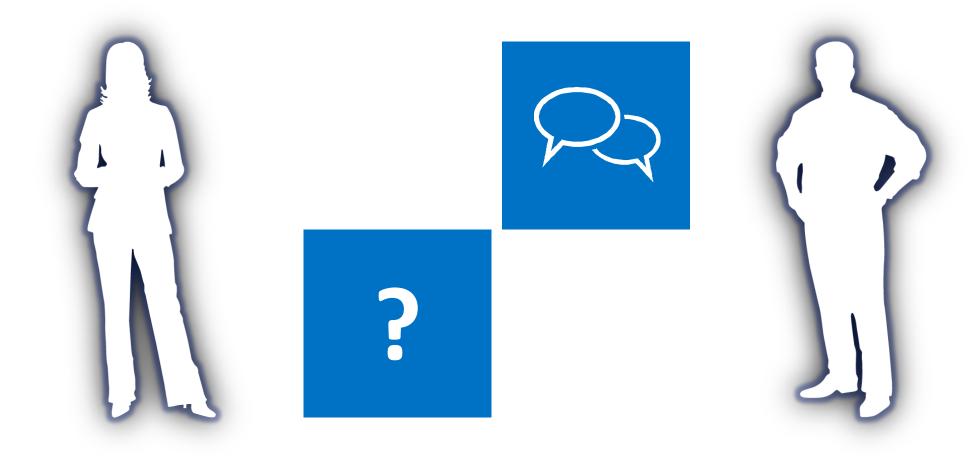
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Key Take-Aways

- ✓ New in NAV 2013
- ✓ Broad range of small- and medium-size businesses
- ✓ Broad range of conversion processes
- ✓ Inventory control & Customer service
- ✓ Tight integration to SCM framework
- ✓ Not a cheaper alternative to Manufacturing

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