

2020 2ND HALF YEAR

BOYUM SOLUTIONS ROADMAP

JUNE 2020

Our vision is to **inspire companies** to achieve **sustainable growth** and a **competitive advantage**, now and in the future.



Disclaimer

The following information is being shared in order to outline some of our current product plans, but like everything else in life, even the best laid plans get put to rest.

We are hopeful that the following can shed some light on our roadmap, but it is important to understand that it is being shared for **informational purposes** only, and not as a binding commitment.

Please do not rely on this information in making purchasing decisions because ultimately, the development, release, and timing of any products, features or functionality remains at the sole discretion of Boyum IT Solutions, and is subject to change.

Contents

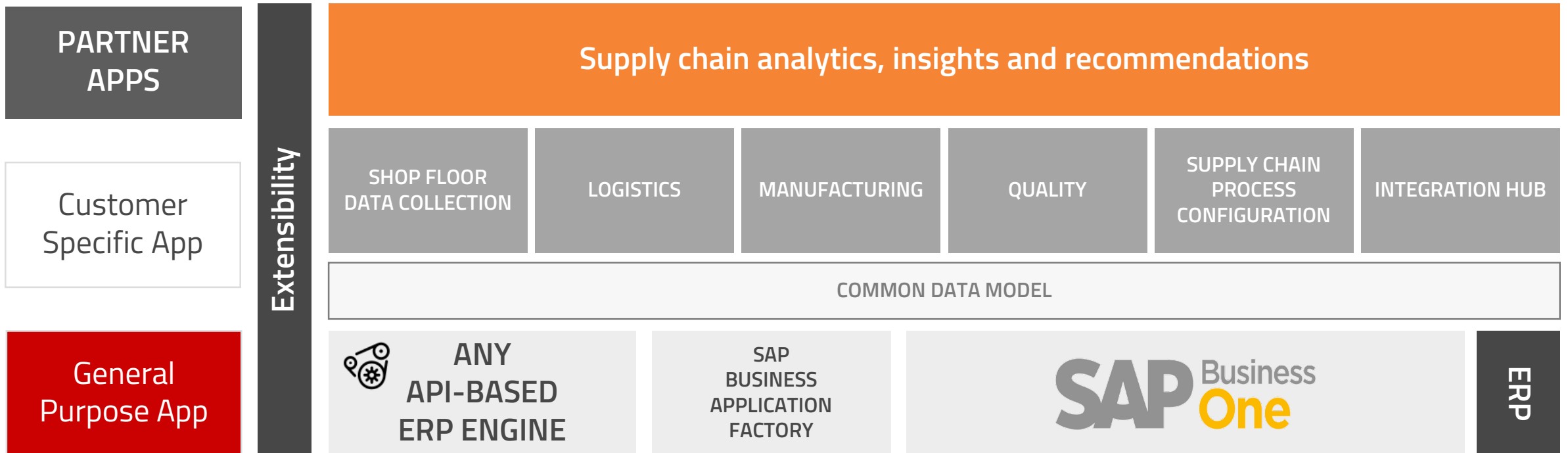
1. Product Vision
2. B1 Usability Package
3. CRM for Outlook
4. B1 iPayment
5. Beas Manufacturing
6. Produmex WMS
7. Produmex Scan
8. Boyum Cloud



OUR PRODUCT VISION

We strive to build a **meaningful** and **delightful** supply chain management suite that **integrates** and **optimizes** supply and demand management within and across small-medium businesses.

Our product **vision**





B1 USABILITY
PACKAGE



B1 PRINT
& DELIVERY



CRM FOR
OUTLOOK



PRODUMEX
SCAN



B1
MAILCHIMP



B1
iPAYMENT



BEAS
MANUFACTURING



PRODUMEX
WMS

boyumcloud

2020
Q1

2020
Q2

2020
Q3

2020
Q4

OUR FOCUS AREAS

B1 ADD-ONS

User experience

Integration across Boyum products

Ease of implementation and configuration

Support for Boyum Cloud and hybrid environments

Most voted community requests

CLOUD APPLICATIONS

Product design management

Production order processing and data collection

Quality inspection management

Resource planning and scheduling

Our product **mindset**

Quality First

Why? To keep partners and customers confident by using reliable and robust solutions.

How? Fixing product bugs, working for stability, increasing automated test coverage. Investing every day and every step on quality control.

User Experience

Why? To enable users to have a pleasant experience while completing their tasks easily and efficiently.

How? Improving languages and errors messages, improving user flows by reducing number of clicks and making screens more intuitive.

Your Voice Matters

Why? To improve our solutions based on real-life needs from SAP Business One partners and customers worldwide.

How? Sharing ideas with partners, collecting most common needs from our customers. Involving partners in co-innovation and road mapping.

You deserve **the best** from us

We work hard to deliver the best software for you.

Our reward is the benefit you take from the innovations and enhancements we design to make your life better.

So, we only ask for one thing:

Keep your software up to date.

It's not every day, so enjoy the ride

1. Go to boyum-solutions.com/download
2. Select your solution
3. Download and install the latest package available

Don't miss the chance! On top of new capabilities, updates contain essential changes to improve the performance, stability, and security of our solutions.

Your **voice** matters

You can influence the roadmap on our community site, by submitting feature requests, commenting on existing feature requests, and voting for the features that matter the most to you.

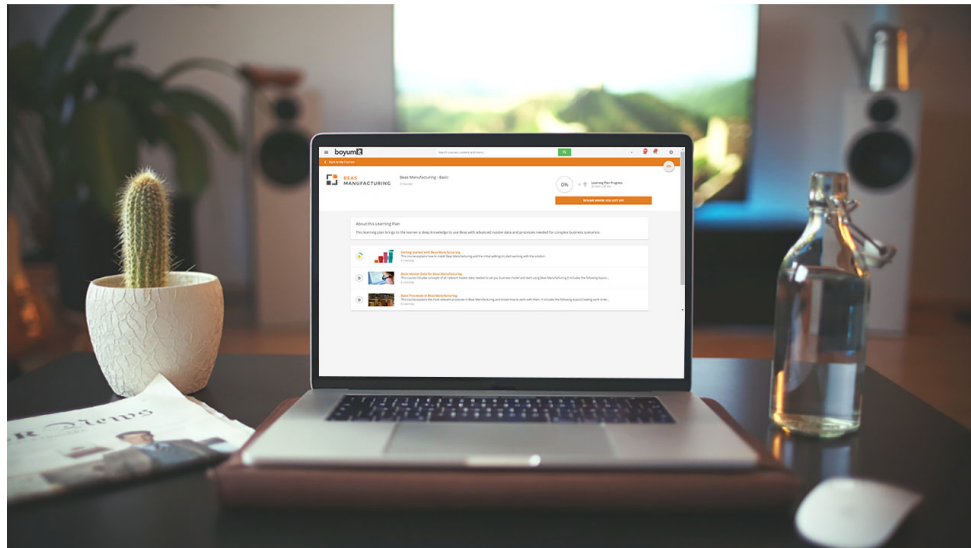
boyum-solutions.com/community

The screenshot displays the 'B1 Usability Package - Feature Requests' section of the BoyumFit community site. The page header includes the BoyumFit logo, a tagline 'Be more successful with your ERP system...', social media icons, and navigation links for 'Community', 'Submit a request', and 'Sign in'. A search bar is located in the top right. The main heading is 'B1 Usability Package - Feature Requests', with a 'New post' button. A note states 'Please note that only one vote per company will be considered'. Below this, there's a 'Follow' button and a count of '23'. The page shows a list of feature requests, each with a title, a 'Completed' status, the author's name, the time since posting, the number of votes, and the number of comments.

| Feature Request | Status | Author | Time | Votes | Comments |
|------------------------------------------------------------------------------------------------------------|-----------|------------------------|--------------|-------|----------|
| Messages and Alerts widget at Dashboard | Completed | Balakumar Viswanathan | 4 years ago | 11 | 8 |
| Macro - Prompt for values | Completed | Morten Lilbæk Pedersen | 5 years ago | 11 | 29 |
| Going forward in a report and detecting if lines are selected or not | Completed | Francisco Fabiano | 8 months ago | 10 | 3 |
| Item placement tool: add option on right-click to add right to and left to instead of only above and below | Completed | Rasmus Jensen | 2 years ago | 10 | 4 |
| Dynamic Code - Arguments or pass @STORE values | Completed | Kevin Howe | 4 years ago | 10 | 14 |

Boyum Learning

Go and start learning any of our products in our new E-learning Hub at: <https://www.boyum-solutions.com/learning/e-learning-hub/>



Join our certification program and verify your knowledge

As part of our e-learning, we offer a certification program to our partners. Currently available for **Beas Manufacturing**.

Get started today at: <https://www.boyum-solutions.com/certification>

Industry
solutions,
extensions, IoT
and mobility



BEAS
MANUFACTURING



PRODUMEX
WMS



PRODUMEX
SCAN

Efficient
business
processes



B1 USABILITY
PACKAGE



CRM FOR
OUTLOOK



B1
iPAYMENT

SAP Business
One®

MICROSOFT SQL

SAP HANA DB

ON PREMISE & CLOUD

Release Schedule

| 2019 | | 2020 Q1 | | | 2020 Q2 | | | 2020 Q3 | | | 2020 Q4 | | | 2021 | |
|----------------------|-----|---------|---------|---------|---------|---------|-----|---------|---------|---------|---------|---------|--|------|--|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | | |
| B1 Usability Package | | 2020.02 | 2020.03 | 2020.04 | 2020.05 | 2020.06 | | 2020.08 | 2020.09 | 2020.10 | 2020.11 | 2020.12 | | | |
| CRM for Outlook | | 2020.02 | 2020.03 | 2020.04 | 2020.05 | 2020.06 | | 2020.08 | 2020.09 | 2020.10 | 2020.11 | 2020.12 | | | |
| B1 iPayment | | 2020.02 | 2020.03 | 2020.04 | 2020.05 | 2020.06 | | 2020.08 | 2020.09 | 2020.10 | 2020.11 | 2020.12 | | | |
| Beas Manufacturing | | 2020.02 | 2020.03 | | 2020.05 | 2020.06 | | 2020.08 | 2020.09 | | 2020.11 | 2020.12 | | | |
| Produmex WMS | | | | 19.4 | | 2020.06 | | | 2020.09 | | | 2020.12 | | | |
| Produmex Scan | | | | | | 2020.06 | | | 2020.09 | | | 2020.12 | | | |

Schematic illustration of major deliveries according to current planning may be changed at any time.

About the **roadmaps**

The purpose of the **roadmaps** is to communicate the direction and planned activities determined to add the most value to the customers of the products. For each of the products, you will find roadmaps that describe the current and future solutions aligning against the business goals to pursue over time:

Recent innovations

Where are our solutions today?



Planned innovations

Upcoming features



Future direction

A proposal for growth throughout the product life cycle



PRODUCT ROADMAP

2020 | 2nd half year



B1 USABILITY
PACKAGE

Product **summary**

B1 Usability Package, or simply **B1UP**, is an **award-winning** solution designed to **tailor and automate** SAP Business One, Beas Manufacturing and Produmex WMS effortlessly, making them ready to face the most diverse scenarios and challenges.

PRODUCT VISION FOR B1 USABILITY PACKAGE

Deliver the best user experience in SAP Business One

Recent innovations

General Innovations

Further SAP Business One 10 tweaks based on latest SBO 10 Feature Set (support for Add and New/View/Close buttons).

B1 Dashboard – Calendar Widget ★

New Calendar widget for visualizing date and time related data and deadlines.

B1 Dashboard – Process Flow Widget ★

Process Flow are editable (Tweak existing flows and make your own).

B1 Dashboard – Open Items List Widget

More objects in Open Items List Widget (Service Contracts, Return Request + Goods Return Request).

B1 Print and Delivery

Support for Modern Authentication on Microsoft Exchange 365.

B1 Print and Delivery

More complete Export Experience (More sub-objects and settings like SMTP Settings, Base Configs and Dynamic Syntax Mapping).

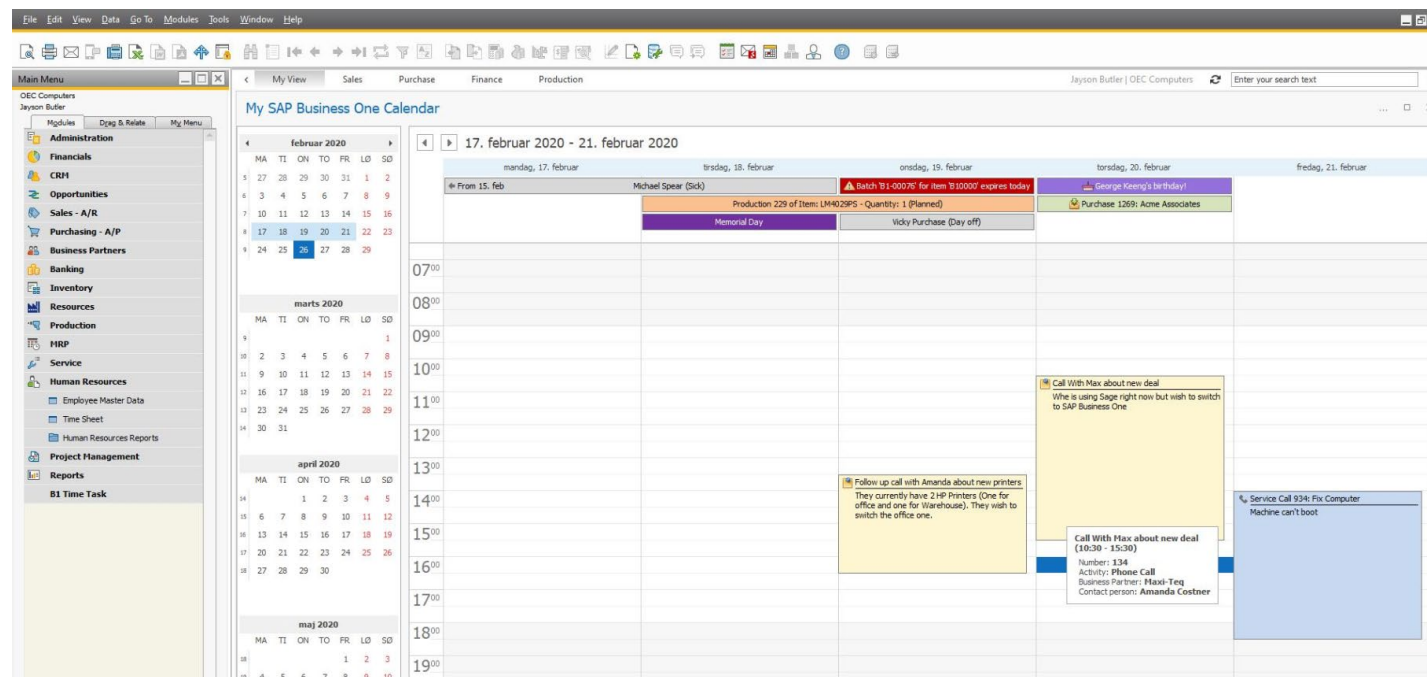
★ *Popular community requests*

Recent innovations

B1 Dashboard – Calendar Widget

Highly requested feature on the community

New Calendar widget for visualizing date and time related data and deadlines.

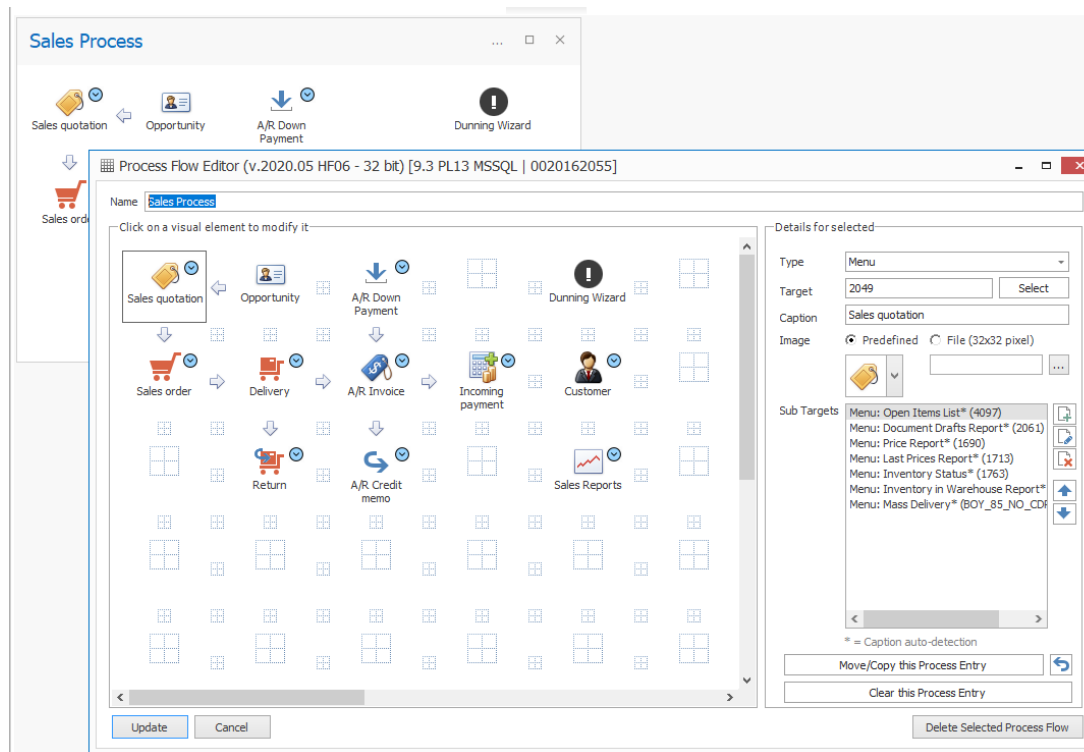


Recent innovations

B1 Dashboard – Process Flow Widget

Highly requested feature on the community

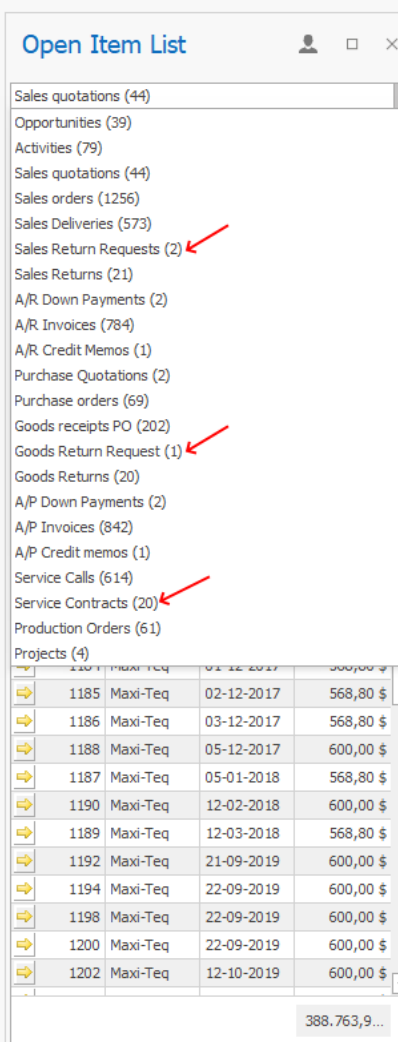
Process Flow are editable (Tweak existing flows and make your own).



Recent innovations

B1 Dashboard – Open Items List Widget

More objects in Open Items List Widget (Service Contracts, Return Request + Goods Return Request).



| |
|---------------------------|
| Sales quotations (44) |
| Opportunities (39) |
| Activities (79) |
| Sales quotations (44) |
| Sales orders (1256) |
| Sales Deliveries (573) |
| Sales Return Requests (2) |
| Sales Returns (21) |
| A/R Down Payments (2) |
| A/R Invoices (784) |
| A/R Credit Memos (1) |
| Purchase Quotations (2) |
| Purchase orders (69) |
| Goods receipts PO (202) |
| Goods Return Request (1) |
| Goods Returns (20) |
| A/P Down Payments (2) |
| A/P Invoices (842) |
| A/P Credit memos (1) |
| Service Calls (614) |
| Service Contracts (20) |
| Production Orders (61) |
| Projects (4) |

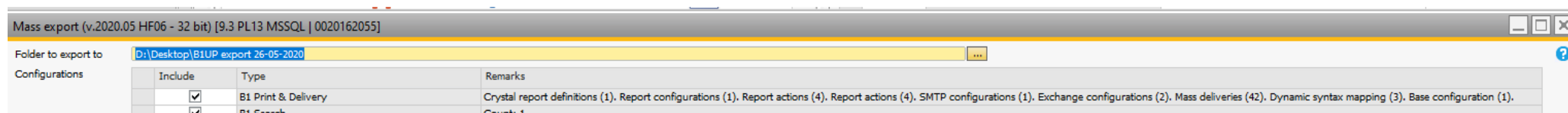
| ID | Name | Date | Amount |
|------|----------|------------|-----------|
| 1185 | Maxi-Teq | 02-12-2017 | 568,80 \$ |
| 1186 | Maxi-Teq | 03-12-2017 | 568,80 \$ |
| 1188 | Maxi-Teq | 05-12-2017 | 600,00 \$ |
| 1187 | Maxi-Teq | 05-01-2018 | 568,80 \$ |
| 1190 | Maxi-Teq | 12-02-2018 | 600,00 \$ |
| 1189 | Maxi-Teq | 12-03-2018 | 568,80 \$ |
| 1192 | Maxi-Teq | 21-09-2019 | 600,00 \$ |
| 1194 | Maxi-Teq | 22-09-2019 | 600,00 \$ |
| 1198 | Maxi-Teq | 22-09-2019 | 600,00 \$ |
| 1200 | Maxi-Teq | 22-09-2019 | 600,00 \$ |
| 1202 | Maxi-Teq | 12-10-2019 | 600,00 \$ |

388.763,9...

Recent innovations

B1 Print and Delivery

More complete Export Experience including sub-objects and settings like SMTP Settings, Base Configs and Dynamic Syntax Mapping .



Planned innovations

B1 Dashboards – General

Better out of the box experience for customers using B1 Usability Package with Produmex WMS (Dashboards, Process Flows, Open Item List and Deep Link navigation).

B1 Dashboard – Calendar Widget

More features for the calendar (Conditional Colors, Custom Start/End Times, Further Filtering, Custom Tooltips).

Exchange rates

Exchange rates via online services on Microsoft SQL (SAP Business One 10).

Server Component

Better debug and performance analysis options. This includes better options for self-help and clarity about what is done and when in the back-end services.

B1 Print and Delivery + Server Component

Support for Modern Authentication on Gmail.

"B1 Print and Delivery: Report Action – Activity" + "UF – Activity"

Better options to control Activity Start Dates.

Various ★

Best and most requested relevant features submitted in the community: boyum-solutions.com/community

★ *Popular community requests*

Future direction

SAP Business One Web-client integration

Explore the extension model of the SAP Business One 10 Web client and identify B1UP features that can be brought to the web client.

Server component

Explore further possibilities for using Service Layer on Microsoft SQL and SAP HANA.



PRODUCT ROADMAP

2020 | 2nd half year



CRM FOR
OUTLOOK

Product summary

CRM for Outlook provides instant access to **essential information** and makes it easy to **perform SAP Business One tasks from within Outlook**, enabling employees from all departments to **respond swiftly and accurately** to leads, customers and suppliers.

PRODUCT VISION FOR CRM FOR OUTLOOK

**Drive sales growth by providing useful information
and increasing productivity**

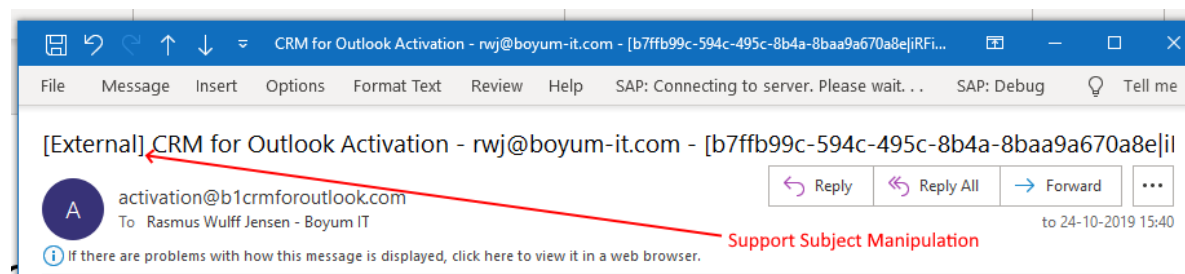
Recent innovations

User Activation

Activation-mail support for corporate systems manipulating email subjects.

Server Component

Better handling of Server Component Database List on HANA.



Planned innovations

Server Component

Better debug and performance analysis options (better options for self-help and clarity what is done and when in the back-end services).

Various ★

Best and most requested relevant features submitted in the community: boyum-solutions.com/community

★ *Popular community requests*

Recent innovations



Planned innovations



Future direction

Future direction

Server Component

Explore further possibilities for using Service Layer on Microsoft SQL and SAP HANA.



PRODUCT ROADMAP

2020 | 2nd half year



B1
iPAYMENT

Product summary

B1 iPayment makes it easy to accept **electronic payments** directly from SAP Business One, integrating it with the **best-known and most reliable** payment gateways worldwide.

PRODUCT VISION FOR B1 IPAYMENT

Provide peace of mind and improved productivity by processing fast, secure and automated electronic payments

Recent innovations

Import Token Tool

Tool is now inside SAP Business One Client providing better compatibility and user experience.

Trust Payments (Secure Trading)

Support for the US Based branch.

CyberSource

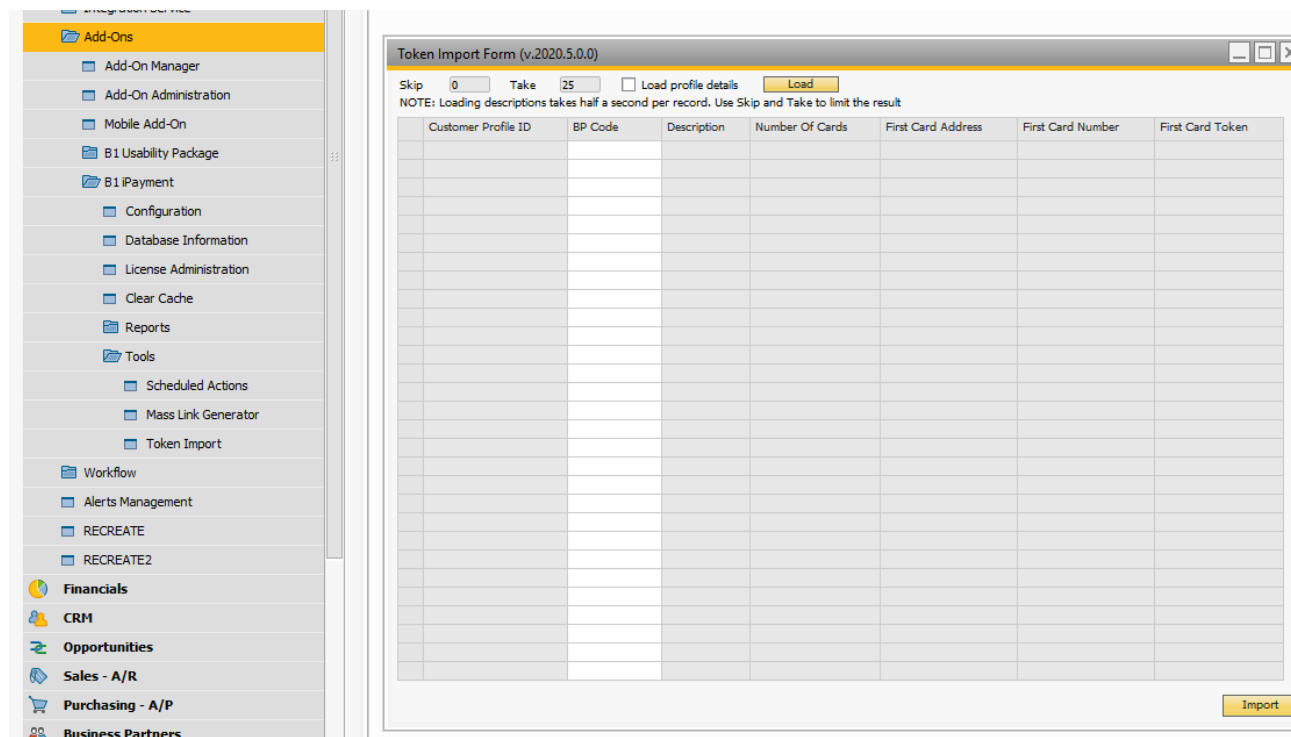
Support for Level 3 Data using Chase Paymentech Solutions as the underlying provider.

Better Ticket Log Experience (Easier support cases)

Ticket Log System now gives better and more precise info to help with support cases

Import Token Tool

Tool is now inside SAP Business One Client
providing better compatibility and user experience.



Recent innovations

Trust Payments (Secure Trading)

Support for the US Based branch

Gateway selection (v.2020.5.0.0)

Gateway: Secure Trading
Site reference: ?
User:
Password:
Site security:
[Validate credentials](#) [Demo Mode is not supported for this gateway](#)

Endpoint: Secure Trading UK
Secure Trading UK
TruPayMe US

When you are ready to go out of Demo-mode and into Production-mode (go-live), be sure you confirm you have prepared all below steps

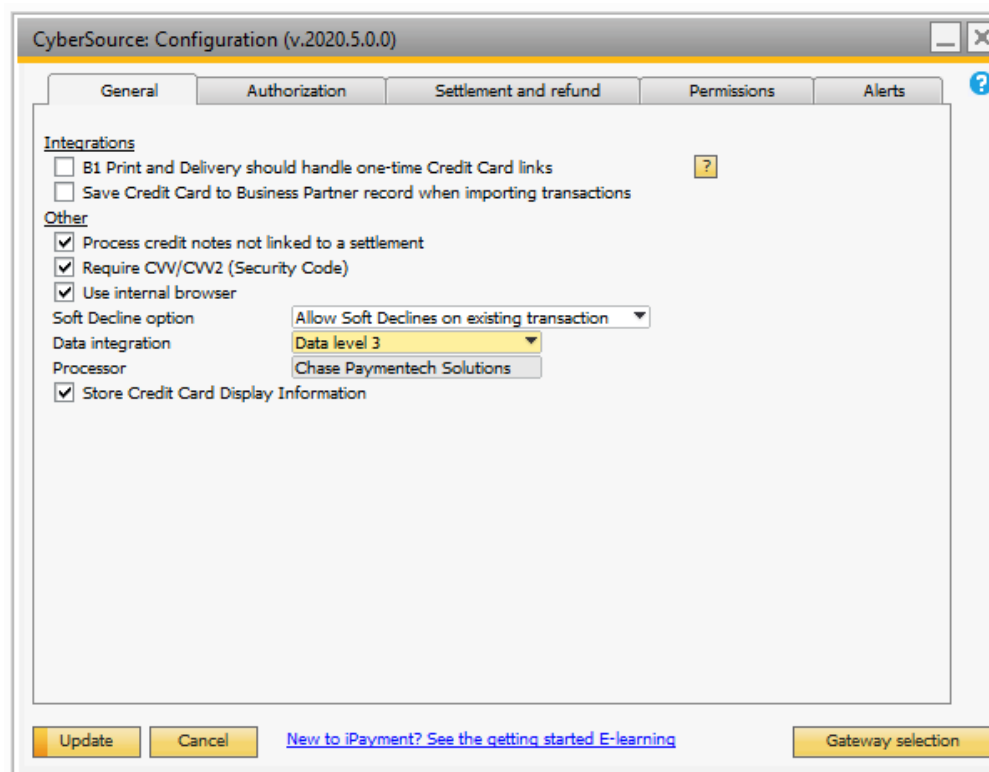
| Done | Task | Where | Description |
|--------------------------|--------------------------------------------------------------------------|-----------------|----------------------------------------------------------------|
| <input type="checkbox"/> | ⇒ Install Server component | SAP Server | The iPayment server component is mandatory to install as it ta |
| <input type="checkbox"/> | ⇒ Verify Configuration is correct | iPayment Add-on | Go through each of the configuration setting and ensure ever |
| <input type="checkbox"/> | ⇒ Get a Merchant Account with Secure Trading and enter credentials above | Gateway | If you do not already have a Gateway account please get one |
| <input type="checkbox"/> | ⇒ Share site security key with Secure Trading support | Gateway | Press the golden arrow to read more about what you need to |
| <input type="checkbox"/> | ⇒ Enable "Cardholder Funds Transfer" (CTF) | Gateway | Have Secure Trading support enable CFT on the site (Needed |
| <input type="checkbox"/> | ⇒ Enable "Enhanced POST" | Gateway | Have Secure Trading support enable this feature as it is neede |
| <input type="checkbox"/> | ⇒ Ensure you have read the Go-Live Checklist | Manual | Above checklist make sure the product is technically ready bu |

[OK](#) [Cancel](#) [New to iPayment? See the getting started E-learning](#) [Learn more about going live](#)

Recent innovations

CyberSource

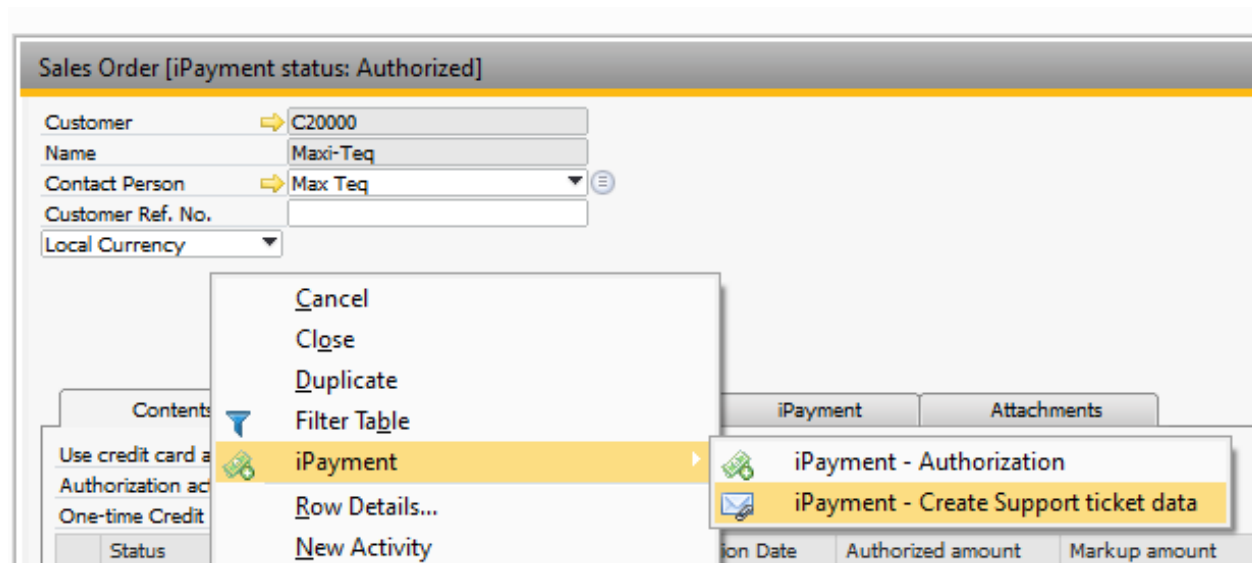
Support for Level 3 Data using Chase Paymentech Solutions as the underlying provider.



Recent innovations

Better Ticket Log Experience

Ticket Log System now gives better, easier and more precise info to help with support cases.



Planned innovations

Server Component

Better debug and performance analysis options (better options for self-help and clarity what is done and when in the back-end services).

Server Component

Support for Modern Authentication on Gmail

Various

Best and most requested relevant features submitted in the community: boyum-solutions.com/community.

Future direction

Server component

Explore further possibilities for using Service Layer on Microsoft SQL and SAP HANA.



PRODUCT ROADMAP

2020 | 2nd half year



BEAS
MANUFACTURING

Product summary

Beas Manufacturing, or simply **Beas**, is a manufacturing solution for small to medium-sized businesses who needs support in managing their **manufacturing processes** with **comprehensive features** for scheduling, planning and integration.

PRODUCT VISION OF BEAS MANUFACTURING

Being the most **comprehensive** and **value-adding** manufacturing solution for small-medium businesses

Recent innovations

Installation

Lightweight Installer support

Web Apps 2.1

Enable Asynchronous working

Reservation app reserves raw material for work orders

Reservation List app uses list of material reservations

Allocation app transfers material for work orders

QC apps: QC orders by sample or by test and transfer

Cookies support for the login process

SAP Business One 10 Support

64 bits installer for SAP Business One 10

NDB connection support for HANA

"Belize Deep" skin for HANA

SAP Business One and Produmex WMS Support

Triggering Beas Quality Orders in SAP transactions for incoming goods or goods receipt in Produmex WMS.

System Initialization

Support to SAP Business One 9.3 font size field

Possibility of summing a string field (with numeric values) at the windows setting options

Sales

Support for item version in Blanket agreements

Inventory Transactions

Batch Transfer: SAP/WMS Bin Management Support

Validation of "Inventory management by warehouse" Field on DB managed by branches

Human Resource

Validation of the Deletion of personnel in Beas and in SAP Employee

Personnel synchronization corrections

Default Period rule

Beas Service Layer

New aggregate functions

New field "ForRoutingId" was added > Work orders and WebApp "WO Start

Login improvements

Asynchronous service

Define Valuation date in Time Receipt

New Objects (Transfer, Stock transfer and quality control entity)

Recent innovations

Production

Precheck function improvements for more validations before work order creation

Own Report: Production improvements, filter review and new filter by resource

MS Project fields disabled

Serial number reservation: Edit serial numbers in work order structure

Additional validation at the I-version assignment in item master data for non-version managed items to allow only when there are no open work orders for the item.

MRP

Purchase request creation type: new parameters in Configuration Wizard.

Business Performance

Labor cost is now included in the absorption cost calculation

Cost Schema

Pre-calculation: Multiple schema to be displayed and calculated

Item Management

Tooltip shows full AG_ID name in the item structure

Performance

Optimization of SAP Business One transaction

Saving precalculated values to avoid recalculating every time that data is queried

General

Additional field "Calculation Price "in Journal of entries report

User field with format date does now work properly

Better translation concept

Supports 25 chars in all Internal User Information fields

MSSQL 2017 and later: All ntext fields have been changed to nvarchar(max)

Document types aligned with the same name as SAP

Customization

Improved user events in work order management and stock management processes

JSON format improvement on all placeholders

Recent innovations

System

Add support for SLDServer Property in DI-API Connection

Tools, Window and Help menu entries: Punctuation and text alignment corrections

SQL HANA Converter improvement

Reconnecting to HANA database automatically when connection is lost due to HAN server restart or network issues.

Beas Service allowing Server definition and Trusted connection.

Support Tool

Debug log Improvement and new debug to file

More information on debug windows about capacity planning calculations

Recent innovations

Installation

Lightweight Installer support

New support for lightweight installation. The installer is included in the standard installation of Beas.



- AddOn_LightWeight
- AddOn_x32
- AddOn_x64
- Client
- Conf
- Project
- unins000.dat
- unins000.exe

| | | |
|------------------|-------------|--------|
| 12/02/2020 17:54 | File folder | |
| 12/02/2020 17:54 | File folder | |
| 12/02/2020 17:54 | File folder | |
| 12/02/2020 17:54 | File folder | |
| 12/02/2020 17:54 | File folder | |
| 26/01/2020 3:25 | File folder | |
| 12/02/2020 17:54 | DAT File | 192 KB |
| 12/02/2020 17:53 | Application | 705 KB |

Recent innovations

Web Apps 2.1

Reservation app to reserve raw material for work orders.

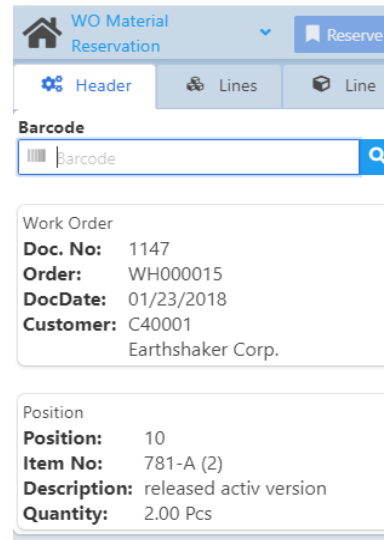
With this app you can display and create a material reservation for a work order in Beas.

Reserve material quantities by selecting or scanning the work order position in the barcode field.

The Lines tab contains the open work order positions of the selected work order.

Click on a line (position) to add quantities to be reserved. If there is any previously reserved quantity, it will also be visible.

After adding the quantity, click on Reserve. The reservation is created, and the app switches back to the Lines tab. The reserved quantity is indicated in a secondary line below the main one.



WO Material Reservation

Header

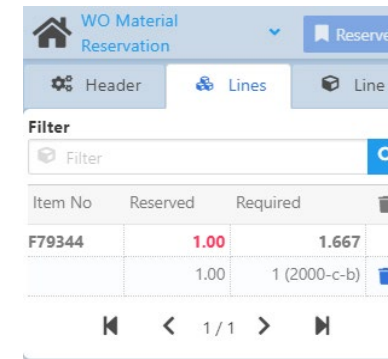
Barcode

Work Order

Doc. No: 1147
Order: WH000015
DocDate: 01/23/2018
Customer: C40001 Earthshaker Corp.

Position

Position: 10
Item No: 781-A (2)
Description: released activ version
Quantity: 2.00 Pcs

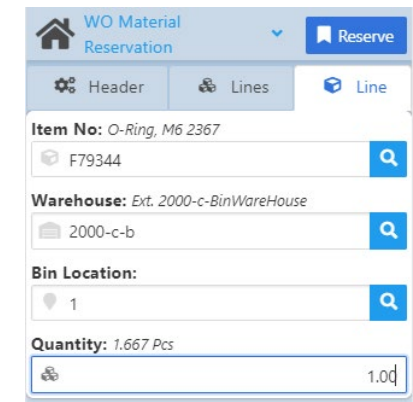


WO Material Reservation

Lines

Filter

| Item No | Reserved | Required |
|----------|----------|--------------|
| F79344 | 1.00 | 1.667 |
| 2000-c-b | 1.00 | 1 (2000-c-b) |



WO Material Reservation

Line

Item No: O-Ring, M6 2367
 F79344

Warehouse: Ext. 2000-c-BinWareHouse
 2000-c-b

Bin Location:
 1

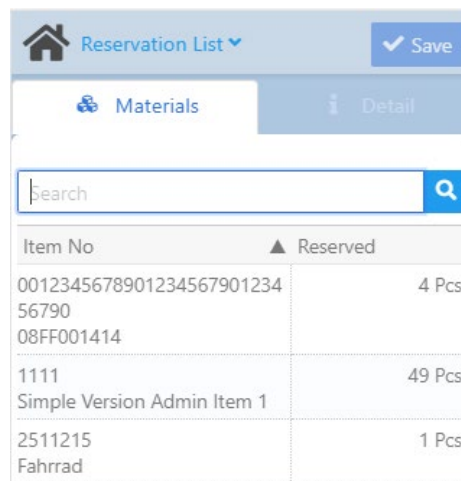
Quantity: 1.667 Pcs

Recent innovations

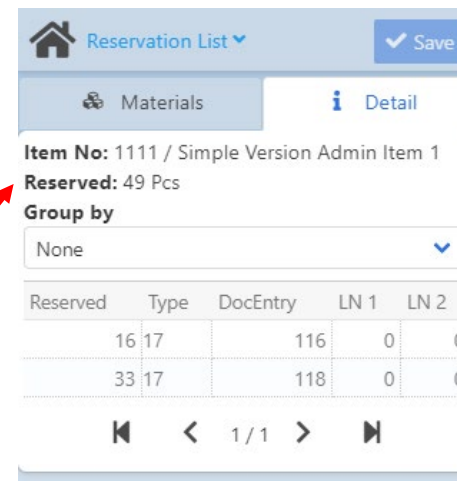
Web Apps 2.1

Reservation List app to view the list of all material reservations.

With this app you can view a list of all material reservations and check all relevant details. Use the Search filter or scroll the list to select an item reservation to view. In the Detail tab you can list reservations grouped by warehouses, batch-serial information, and bin locations.



| Item No | Reserved |
|-------------------------------------|----------|
| 001234567890123456790 08FF001414 | 4 Pcs |
| 1111 Simple Version Admin Item 1 | 49 Pcs |
| 2511215 Fahrrad | 1 Pcs |



Item No: 1111 / Simple Version Admin Item 1
Reserved: 49 Pcs
Group by: None

| Reserved | Type | DocEntry | LN 1 | LN 2 |
|----------|------|----------|------|------|
| 16 17 | | 116 | 0 | 0 |
| 33 17 | | 118 | 0 | 0 |

Recent innovations

Web Apps 2.1

Allocation app to transfer material for a work order

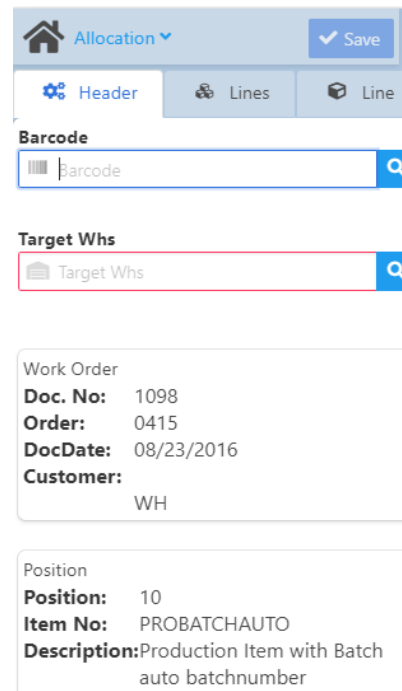
With the new Allocation app you can create an allocation and transfer the quantities to the allocation warehouse. It contains 3 tabs: Header, Lines, Line.

Header: Scan the Bar code of the work order position or use the magnifying glass icon to select a position from the list in the "WO Position Search" filter. Then, you can select the Target warehouse for the allocation transfer.

Lines: Select an item to add the quantities to allocate.

Line: This tab opens automatically when you select an item in the Lines tab.

After inserting all required information, click the Save button to finalize and create the allocation.



Allocation ▾ Save

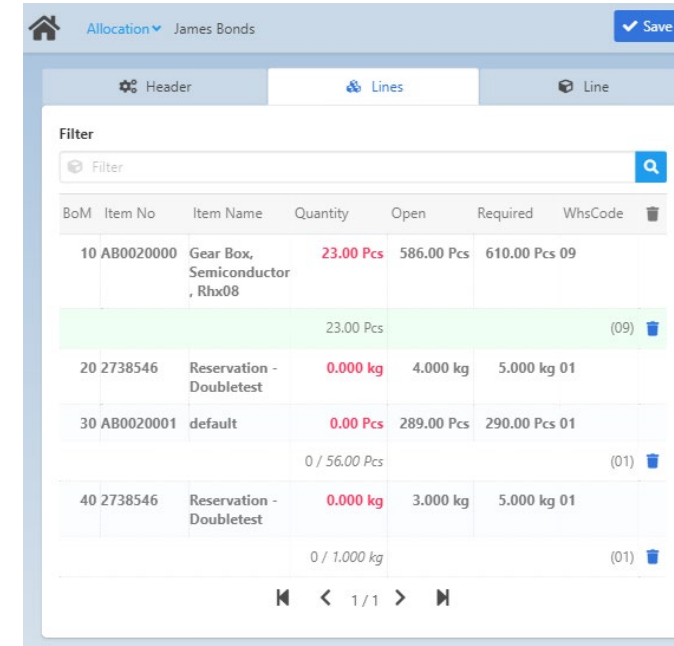
Header Lines Line

Barcode

Target Whs

Work Order
Doc. No: 1098
Order: 0415
DocDate: 08/23/2016
Customer: WH

Position
Position: 10
Item No: PROBATCHAUTO
Description: Production Item with Batch auto batchnumber



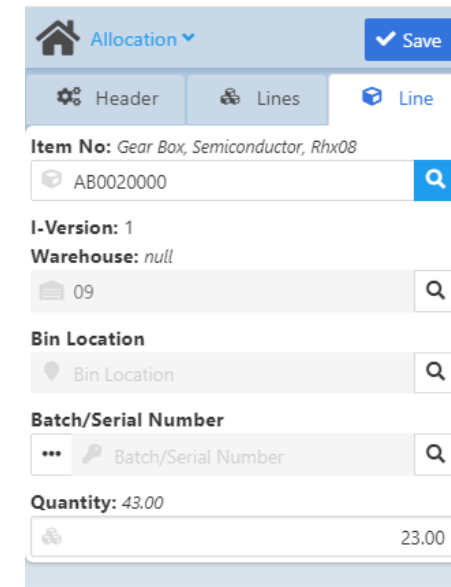
Allocation ▾ James Bonds Save

Header Lines Line

Filter

| BoM | Item No | Item Name | Quantity | Open | Required | WhsCode | |
|-----|-----------|--------------------------------|---------------|------------|------------|---------|--|
| 10 | AB0020000 | Gear Box, Semiconductor, Rhx08 | 23.00 Pcs | 586.00 Pcs | 610.00 Pcs | 09 | |
| | | | 23.00 Pcs | | | (09) | |
| 20 | 2738546 | Reservation - Doubletest | 0.000 kg | 4.000 kg | 5.000 kg | 01 | |
| 30 | AB0020001 | default | 0.00 Pcs | 289.00 Pcs | 290.00 Pcs | 01 | |
| | | | 0 / 56.00 Pcs | | | (01) | |
| 40 | 2738546 | Reservation - Doubletest | 0.000 kg | 3.000 kg | 5.000 kg | 01 | |
| | | | 0 / 1.000 kg | | | (01) | |

⏮ < 1 / 1 > ⏭



Allocation ▾ Save

Header Lines Line

Item No: Gear Box, Semiconductor, Rhx08

I-Version: 1
Warehouse: null

Bin Location

Batch/Serial Number

Quantity: 43.00

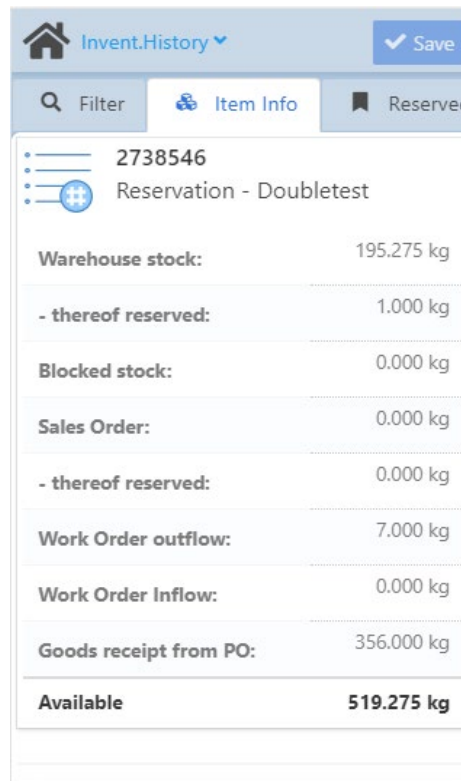
Recent innovations

Web Apps 2.1

Reservation list information

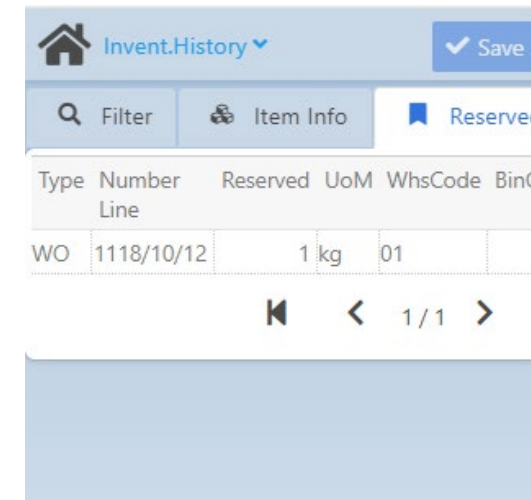
New tab "Reserved" in Invent.History app:

This new tab displays all existing reservations for the selected item.



The screenshot shows the 'Reserved' tab selected in the 'Invent.History' app. The item selected is 2738546, 'Reservation - Doubletest'. The table displays various stock and reservation details:

| | |
|------------------------|-------------------|
| Warehouse stock: | 195.275 kg |
| - thereof reserved: | 1.000 kg |
| Blocked stock: | 0.000 kg |
| Sales Order: | 0.000 kg |
| - thereof reserved: | 0.000 kg |
| Work Order outflow: | 7.000 kg |
| Work Order Inflow: | 0.000 kg |
| Goods receipt from PO: | 356.000 kg |
| Available | 519.275 kg |



The screenshot shows the 'Reserved' tab selected in the 'Invent.History' app. The table displays a list of reservations:

| Type | Number | Reserved | UoM | WhsCode | BinC |
|------|------------|----------|-----|---------|------|
| Line | | | | | |
| WO | 1118/10/12 | 1 | kg | 01 | |

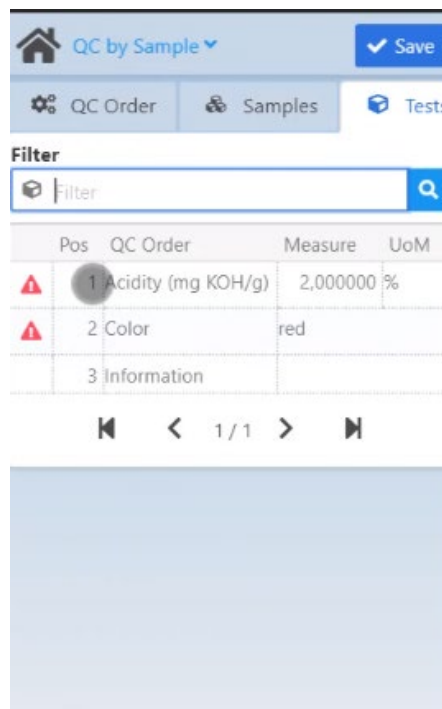
Navigation controls at the bottom show 1 / 1.

Recent innovations

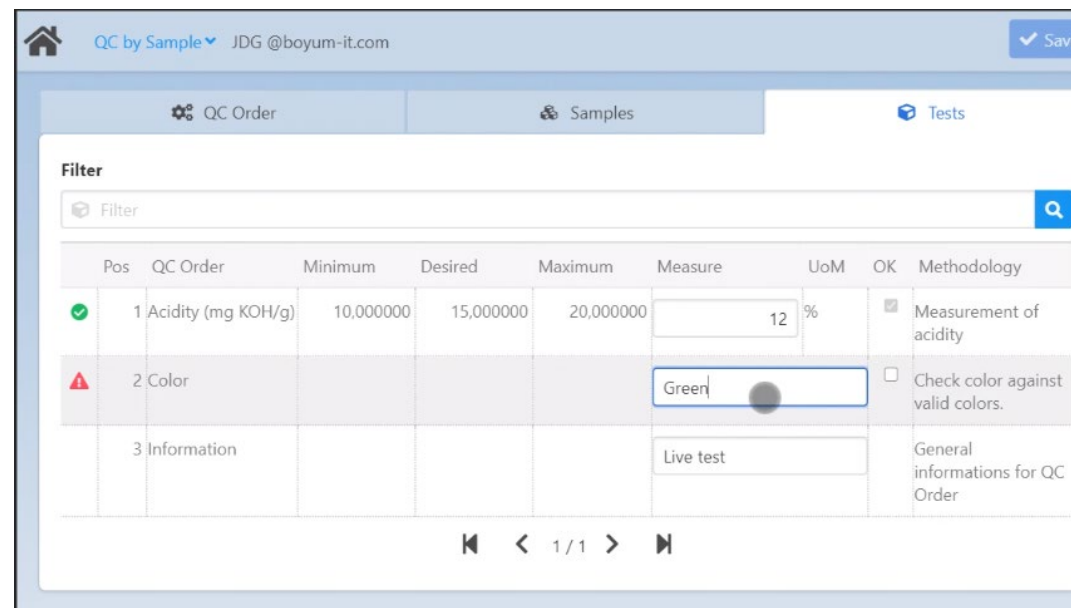
Web Apps 2.1

QC apps: QC Orders by sample or by test and transfer.

With this apps, users can select an opened QC Order and provide the values of the testing by sample or by test.



| Pos | QC Order | Measure | UoM |
|-----|--------------------|----------|-----|
| 1 | Acidity (mg KOH/g) | 2,000000 | % |
| 2 | Color | red | % |
| 3 | Information | | |



| Pos | QC Order | Minimum | Desired | Maximum | Measure | UoM | OK | Methodology |
|-----|--------------------|-----------|-----------|-----------|-----------|-----|-------------------------------------|-----------------------------------|
| 1 | Acidity (mg KOH/g) | 10,000000 | 15,000000 | 20,000000 | 12 | % | <input checked="" type="checkbox"/> | Measurement of acidity |
| 2 | Color | | | | Green | | <input type="checkbox"/> | Check color against valid colors. |
| 3 | Information | | | | Live test | | | General informations for QC Order |

Recent innovations

Production

Own Report: Production improvements, filter review and new filter by resource

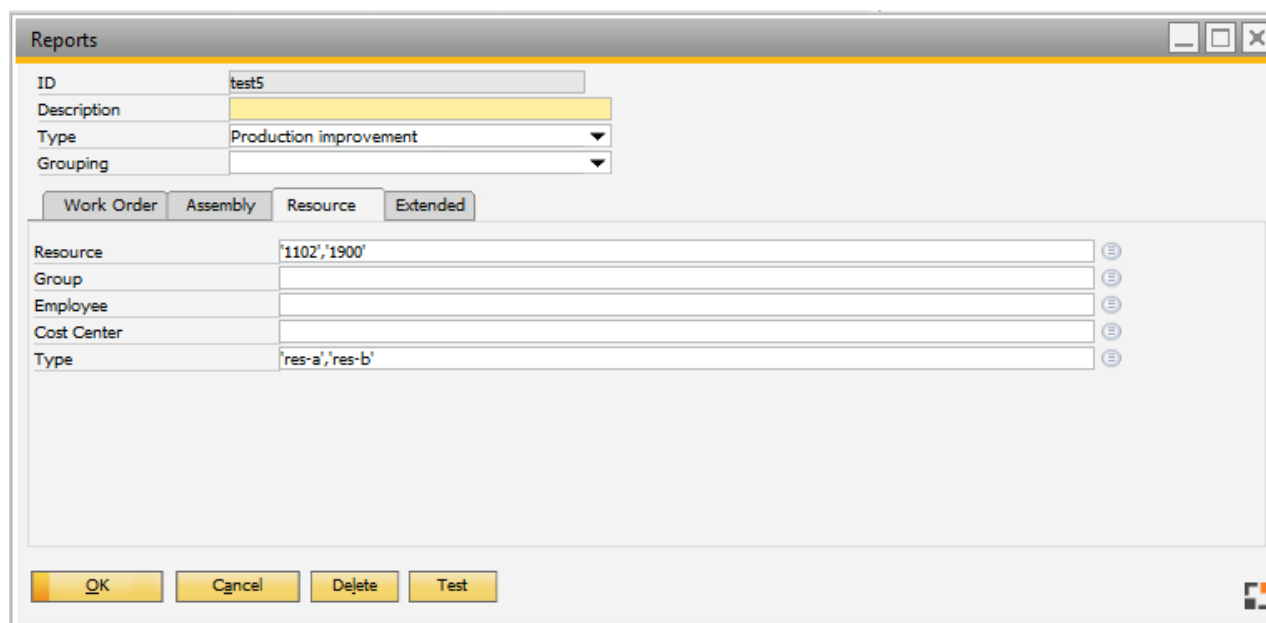
New: Now you can define filter by resource.

The system will only display a work order position, if one of the defined Resources is inside the routing plan.

For all own reports with Tab Resource:

1. New Filter "Type"
2. List icon for Cost center was missing.

Now the list icon is available.



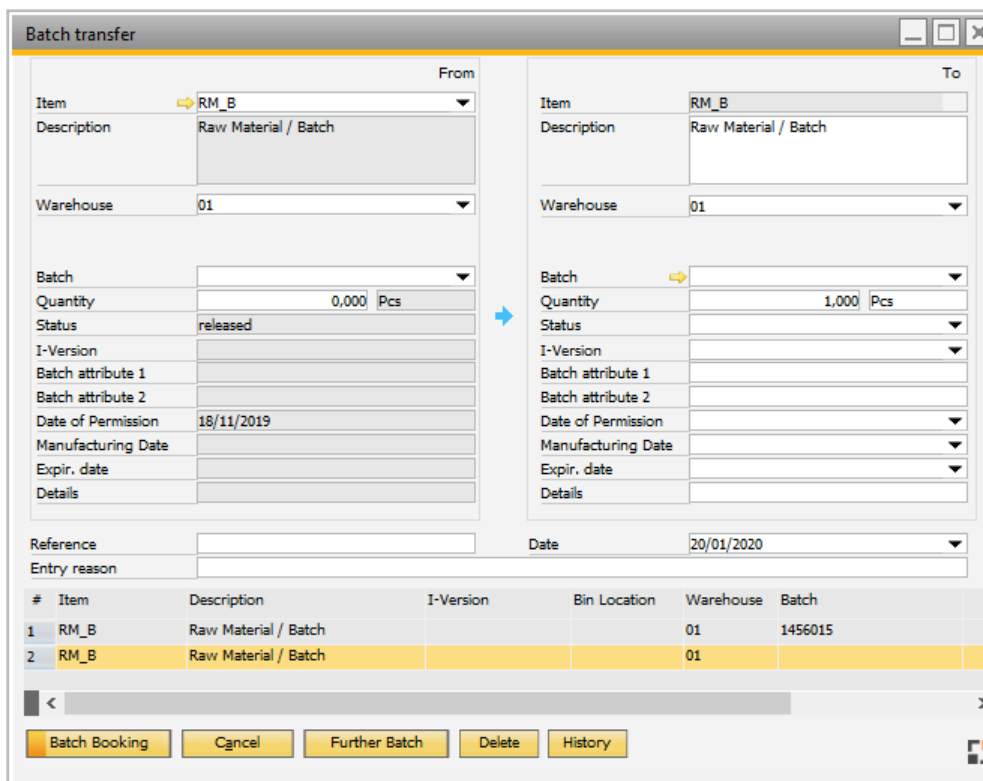
Recent innovations

Stock transactions

Batch Transfer: SAP/WMS Bin Management Support

New:

- Better usability
- Supports Beas and (new) SAP / WMS Bin Management
- Supports Beas Bin - RFID Field
- Status of target Batch number is changeable
- If you have the same item and warehouse on source side with different batch numbers, the system creates only one document line with all batches
- Many small corrections



Batch transfer

From

Item: RM_B
Description: Raw Material / Batch
Warehouse: 01
Batch:
Quantity: 0,000 Pcs
Status: released
I-Version:
Batch attribute 1:
Batch attribute 2:
Date of Permission: 18/11/2019
Manufacturing Date:
Expir. date:
Details:
Reference:
Entry reason:
Date: 20/01/2020

To

Item: RM_B
Description: Raw Material / Batch
Warehouse: 01
Batch: 1456015
Quantity: 1,000 Pcs
Status:
I-Version:
Batch attribute 1:
Batch attribute 2:
Date of Permission:
Manufacturing Date:
Expir. date:
Details:
Reference:
Entry reason:
Date: 20/01/2020

| # | Item | Description | I-Version | Bin Location | Warehouse | Batch |
|---|------|----------------------|-----------|--------------|-----------|---------|
| 1 | RM_B | Raw Material / Batch | | | 01 | 1456015 |
| 2 | RM_B | Raw Material / Batch | | | 01 | |

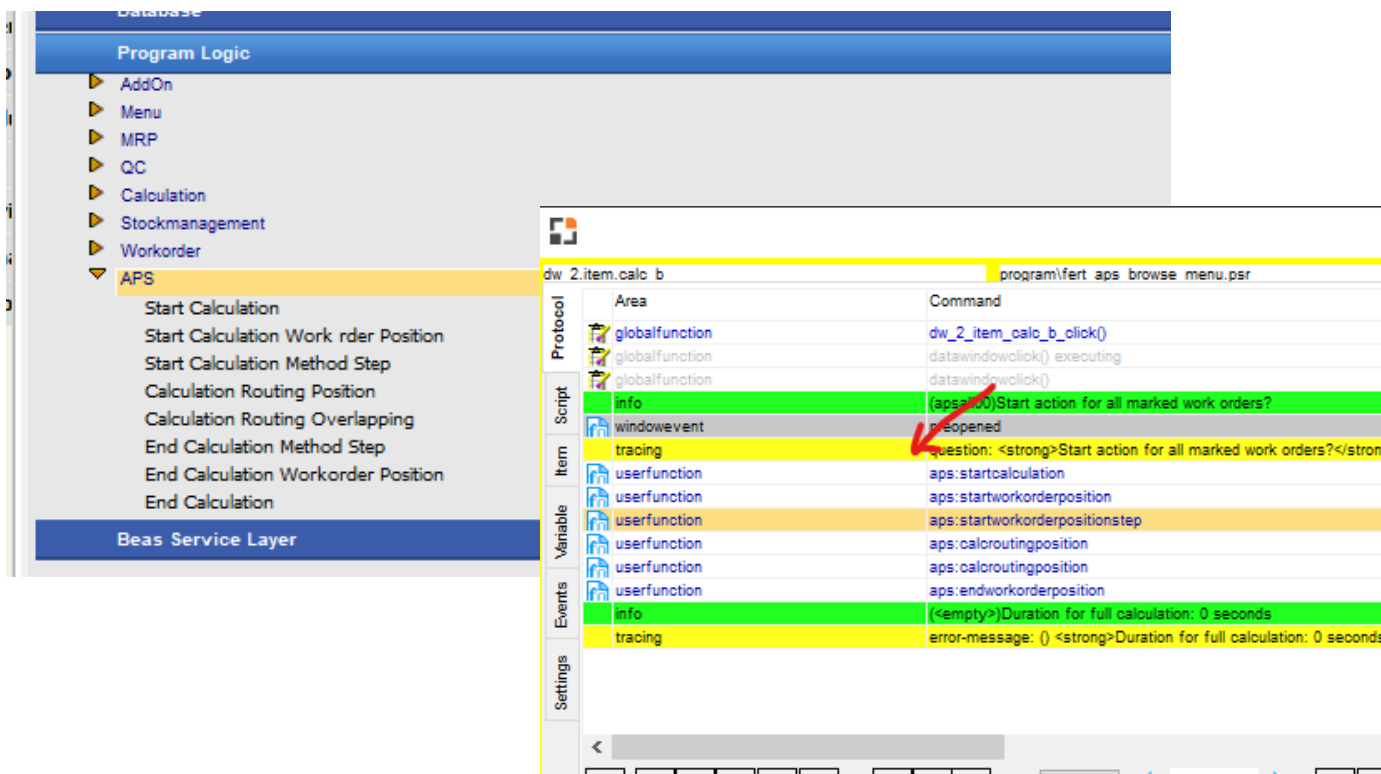
Batch Booking Cancel Further Batch Delete History

Recent innovations

Customizations

New User functions for APS process.

If you start the calculation in the APS window, now there are new user functions that are called while calculation processes are running in the background and you can use them to add to your own scripts there.



| Area | Command |
|----------------|---------------------------------------------------------------------|
| globalfunction | dw_2_item_calc_b_click() |
| globalfunction | datawindowclick() executing |
| globalfunction | datawindowclick() |
| info | (aps:00)Start action for all marked work orders? |
| info | opened |
| tracing | question: Start action for all marked work orders? |
| userfunction | aps:startcalculation |
| userfunction | aps:startworkorderposition |
| userfunction | aps:startworkorderpositionstep |
| userfunction | aps:calcroutingposition |
| userfunction | aps:calcroutingposition |
| userfunction | aps:endworkorderposition |
| info | (<empty>)Duration for full calculation: 0 seconds |
| tracing | error-message: () Duration for full calculation: 0 seconds |

Recent innovations

System

SQL HANA Converter

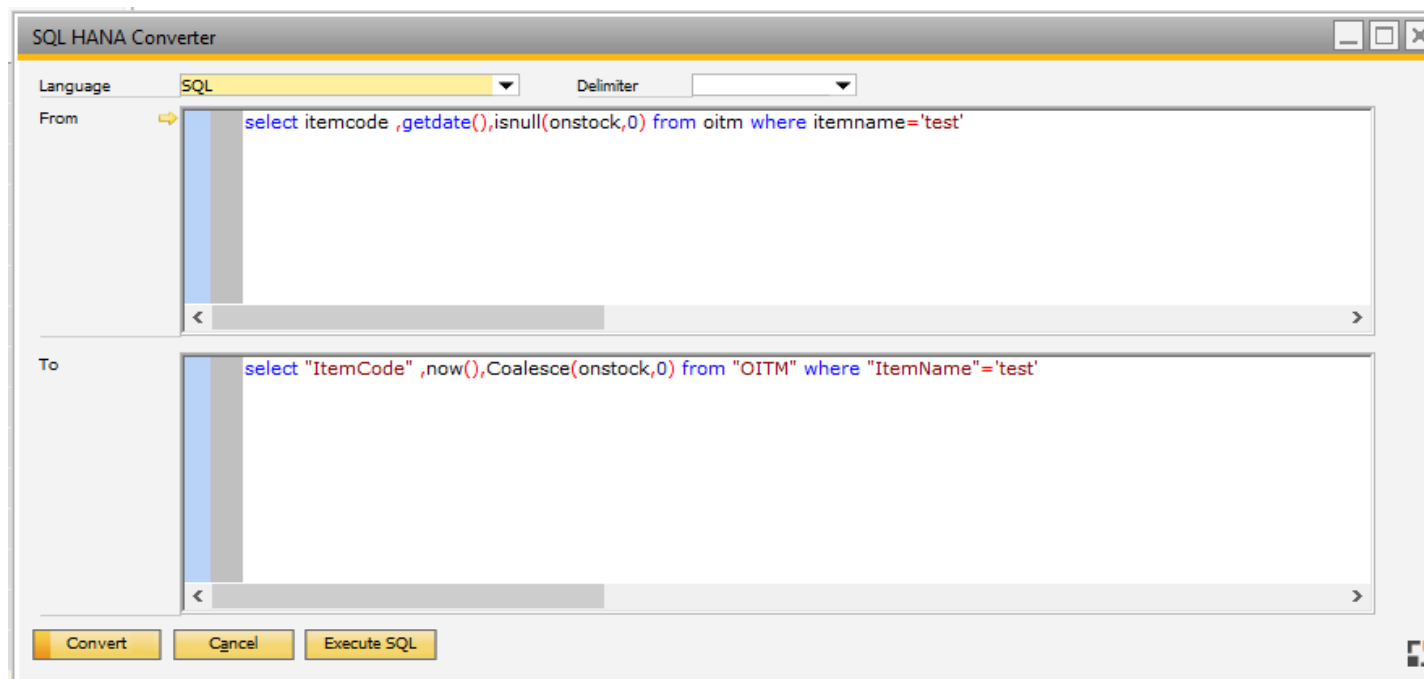
This tool allows you to convert most SQL commands to the correct HANA style

It converts commands, correct usage of upper and lower case, and many more.

The tool helps you to migrate customizations from MSSQL to HANA.

New:

- Only buttons needed for using this functionality are available
- Syntax highlighting

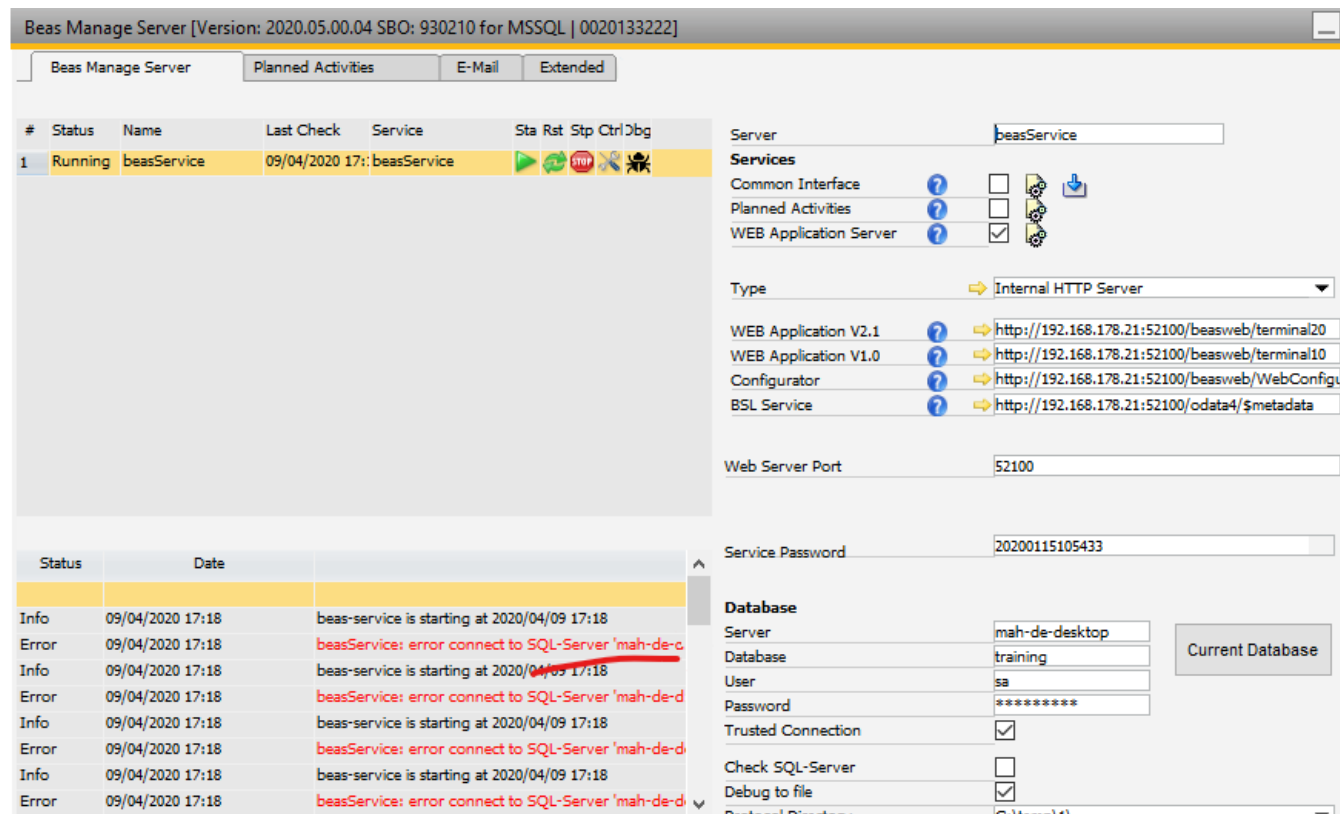


Recent innovations

System

Beas Service allowing Server definition and Trusted connection.

This allows you to create services on one machine for different SQL Servers and use trusted connection without changing passwords.



Recent innovations

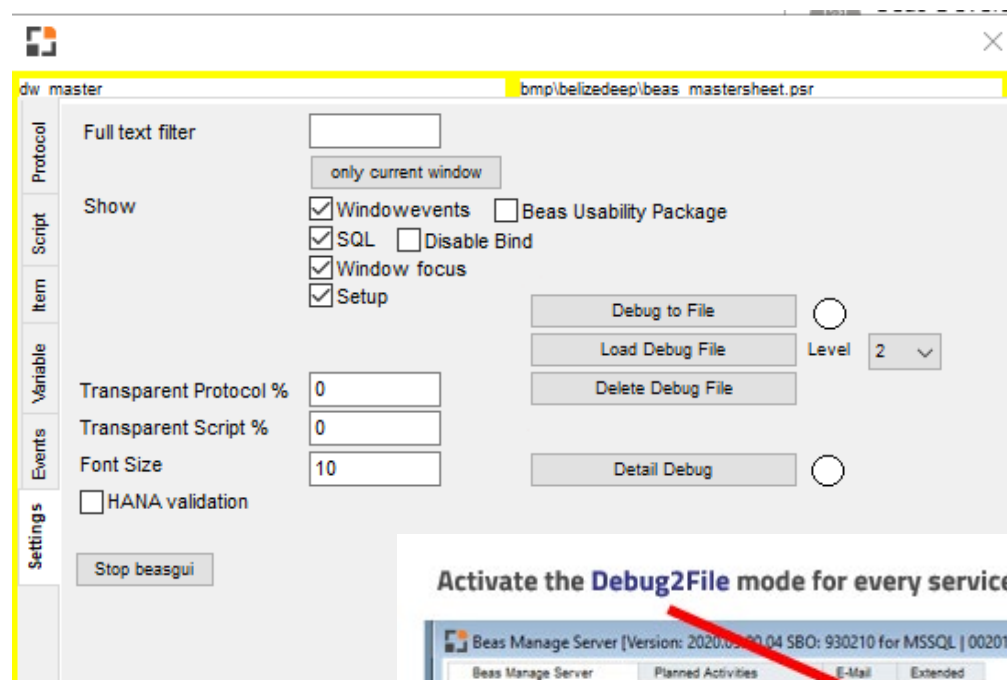
Support tool

System Information Improvement , debug to file.

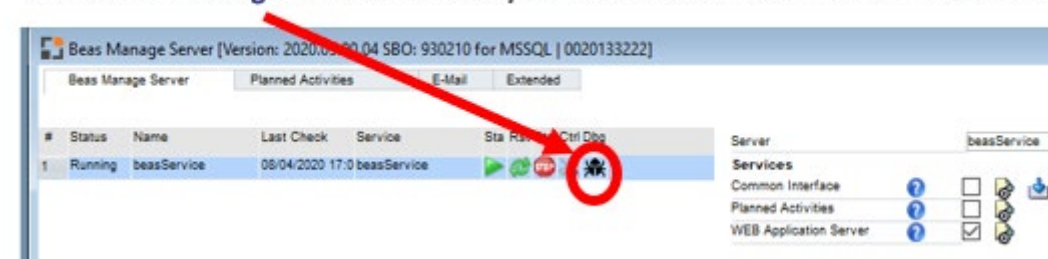
This allows you to create a debug log on file level.

Load the debug file in the debug window and export it to HTML or upload it to Boyum.

You can also use this in the web services.



Activate the **Debug2File** mode for every service in the Beas Service administration:



Recent innovations

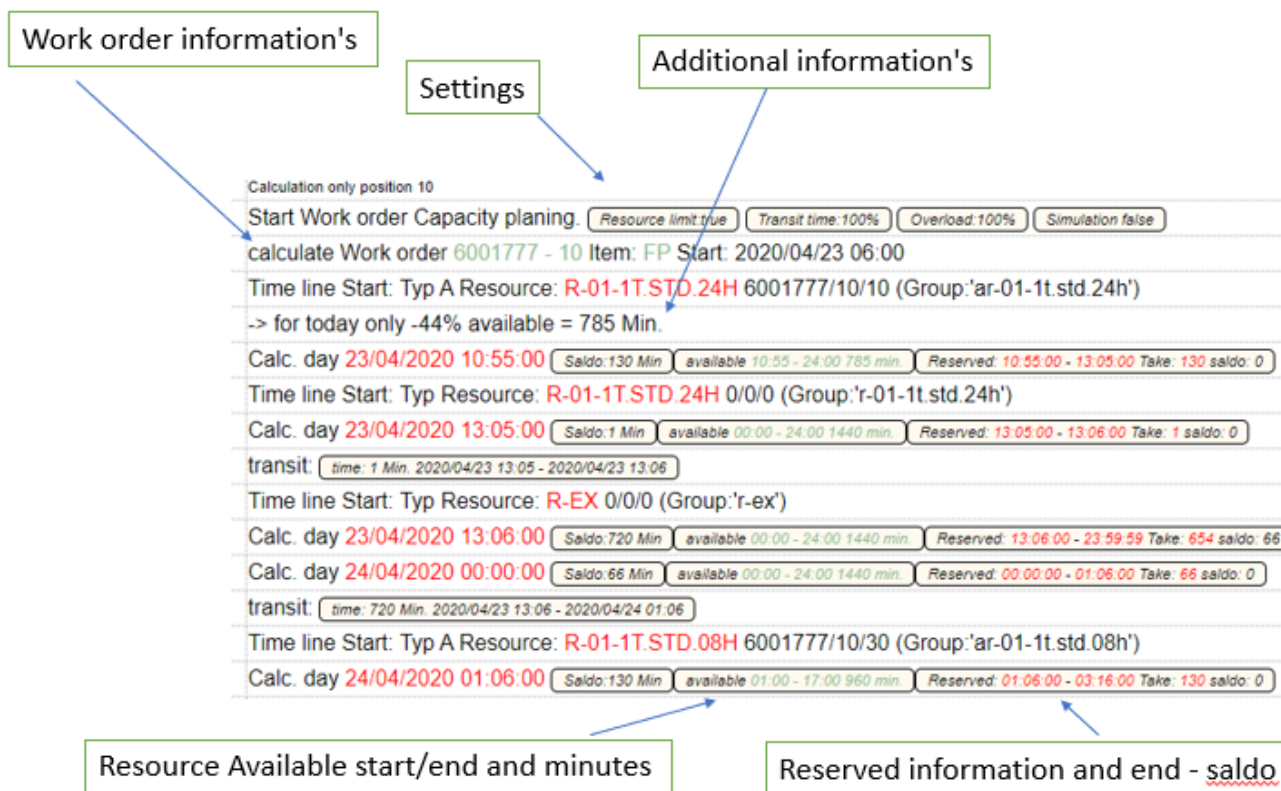
Support tool

More information on debug windows about capacity planning calculations.

The Debug window displays more detailed information on user functions and global functions, and provides the source code.

New additional information for APS:

- More work order information
- Setting information
- Clear description about special situations no double information
- Resource available time (start / end from shift) and available time (Minutes)
- Reserved (Planned) time for the current routing positions



Planned innovations

SAP Business One Integration

Improve SAP compatibility by interacting with more SAP functions.

More consistency with SAP functions or standard screen behavior.

Web Apps Terminal

New apps to support external operations process.

Support for document attachment or access documents.

System Stability

Performance improvements with coding optimization and query statements review of the most used screen.

Usability

Consistency of Beas modules, improving the usability, investigating the behavior of specific functions and determine how they can be improved and streamlined.

APS layout and better usability refreshing with latest features of the APS Gantt visual object.

Data Integration Hub review to make it easy for users to understand and use.

System

Enable the log of the changes in missing screens or functions.

A help assistant to provide better user support for errors handle.

Boyum product portfolio integration

Adding more functions to Beas usability extension for easier customizing and connecting Beas Manufacturing and Produmex WMS.

Various ★

Best and most requested relevant features submitted in the community: boyum-solutions.com/community

★ Popular community requests

Planned releases

2020.08

- Make the instruction field visible from desktop and web terminal, for users who login into an operation.
- Display additional information for MRP Minimum Inventory by warehouse in the Inflow/outflow screen area
- Web Apps 2.1 – access to the documents list of a work order or item in web apps, only possible if the document is in a shared folder
- Web Apps 2.1 attach a picture or document in QC data collection apps
- Review of the web Product configurator, including a better login protection, more filter, possibility to show non-configurable items and better support to currency.
- Support to save a log for modifications in the samples of the quality control orders (BEAS_QSFTPOS)

2020.09

- Material issue screen: UX review to make easier material validation for not enough stock or pending to select items
- Web Apps 2.1: External operation apps to support material provision and incoming goods from external supplier.
- QC transfer: Extend document types option to create Stock transfer request.
- DIH: Support QC orders samples results, with this option customers could import the result of the testing from external systems
- DIH: Include a log of the changes made by the Data Integration HUB, a user could see if a change of a field was by DIH.
- DIH: Review current targets to add fields that are missing, correct field names as they are displayed on screens, and add better descriptions in some cases.
- DIH: Assistant to provide a template file of the source data to be imported and allow and auto matching for source/target with the same column name.

Planned releases

2020.11

- SAP Business One Integration: add a extended Production Data SAP Item master data screen
- Extended Production Master data template assistant to set default values or visible fields based on procurement method.
- MRP: Review to include support for Sales BOM Components in MRP when using Forecasts.
- WMS integration: Allow partial quantities for WMS Picking to production proposal.
- Possibility to run APS calculation as a planned activity and evaluate the option to activate a background calculation.
- Enable the batch field in the Work order Logoff at the desktop terminal.
- Improvement of the program Events to display all events available and documentation review.

2020.12

- Review of the main processes (Item Master data, Bill of materials, conversions) to support SAP group of unit
- Review of APS calculation screen for an UX improvement, allowing better ways to select the work order list and display better information.
- APS layout and better usability refreshing with latest features of the APS Gantt visual object.
- Validation for a subassembly by order and its sub levels when customer want to delete it in a work order because decide purchase or replace for another item.
- Review Personnel selection of Time evaluation screen to enable windows setting, enable additional fields and template option.

Future direction

MRP

Item Versions in the MRP Calculation

Work orders

Scrap management from the time receipt, ability to send the item to a rejected warehouse – reporting scrap as finished goods that goes to a different warehouse.

Quality control

Creation of QC orders/returns/rework work orders from complaints.

Improve QC usability to finding a data entry faster for QC orders.

Boyum product portfolio integration

Discovery extended transactions for Produmex WMS

functionalities and B1UP Beas usability extension.

Industry solutions

Formulation management (BOM validation based on % weight or volume)

Material Classification as active (APIs), inactive, excipients, ingredients

BOM Potency balance (Purity of API)

Contents label report consider a standard format.

Potency by Batch. Batch report by potency information.

Work order quantity adjustment consider batch potency.

Reference designator component.

Item version authorization or approval procedures.

Dispensing process, process review and easy return of materials.

Deployment tools

Discover tools to help in deployment tasks, and a redesign of the configuration wizard to simplify the company settings

Reporting

B1UP Dashboard of additional data including costing and maintenance.

SAP Business One integration

Enable working with non-inventory items (Reservation, Issues, Post Calculation).

Review SAP Business One Human Resource and Beas Master Data.



PRODUCT ROADMAP

2020 | 2nd half year



PRODUMEX
WMS

Product summary

Produmex WMS is an SAP Business One industry solution for regulated industries such as Food and Beverage and Life Sciences designed to not only manage inbound and outbound logistics functions, and internal warehouse processes, but offering industry focused functionality supporting distributors and manufacturers to meet customer, industry and regulatory demands.

More than just a warehouse management system, Produmex WMS can be configured to operate on the shop floor managing production and packaging operations via touch screens and offers silo/tank management.

PRODUCT VISION OF PRODUMEX WMS

Provide small-medium businesses a smooth and flexible logistics operation that integrates into the supply chain.

Produmex WMS 2020 2HY

Performance

More major performance changes are implemented, and we currently have Produmex WMS running on customers processing more than 20,000 sales orders and over 15,000 delivery notes per day, using more than 100 concurrent scanners. In this environment, our Produmex Delivery Note systems can maintain a processing time under 10 seconds. Nevertheless, we keep monitoring and improving WMS performance on each release.

Customization

Produmex WMS 2020.06 delivered its first flows created in our new framework.

The framework introduces the concepts of Flow and User settings where flows can be personalized to the operator. E.g. allowing a senior picker to skip scanning the pick location, while a junior picker still needs to

confirm they picked from the correct location every time. Or, as an example, have a picking flow where the system will Autofill quantities and Auto select batch/BBD on picking and having a clone or copy of the picking flow that allows the picker to change the quantities and batches. Future versions of WMS will contain a user interface for managing these settings, but we are already using the framework behind the scenes.

In other words, this is the end of one size fits all flows. In the future, customers will be able to fine-tune multiple variations of the WMS flows and are no longer limited to having only one configuration for the picking flow.

The new framework does not apply to already existing flows, and there are no plans to retrofit previous flows. Instead, new flows will be created or expanded and in time make the old flows obsolete.

Usability

In Q3 Produmex WMS will have a much-needed facelift, this will address mostly visual items. Our new flows will be expanded to make older flows obsolete. These new flows are built with the new approach of easier configuration and fewer clicks. That means that partners will be able to tailor new flows to customers and reduce the number of interactions with the operator.

In Q4, we will also address support for multiple screens sizes to improve the user experience on modern scanners with larger screens.

Major flows like Picking, Receiving, and Packing/Shipping, will be part of the new framework and redesigned for efficacy, and ease of use. The operator experience will be personalized for each user and modified to allow for faster flows and minimal interactions with the screen.

Recent innovations

Box Pick & Pack Flow

Box Pick & Pack Flow allows customers to pick using a single movable location, directly into SSCCs (boxes for example), skipping the packing phase.

The flow allows picking for multiple customers in a single wave, with WMS keeping track of which boxes (SSCCs) are for which customer/address pair. SSCC (logistics units) can be created and closed on the fly, with immediate printing of their labels (both logistic and content labels).

One essential feature is the support for picking full pallets and keeping their current SSCC.

Picklist Robot Mimics Picklist Proposal

The Picklist Robot now duplicates the functionality of the Picklist Proposal Manager.

Unload Movable Locations to Dock Flow

This flow is the second part of our new picking and allows to unload the SSCCs from a movable location into one or more Docks (as assigned on the Picklists).

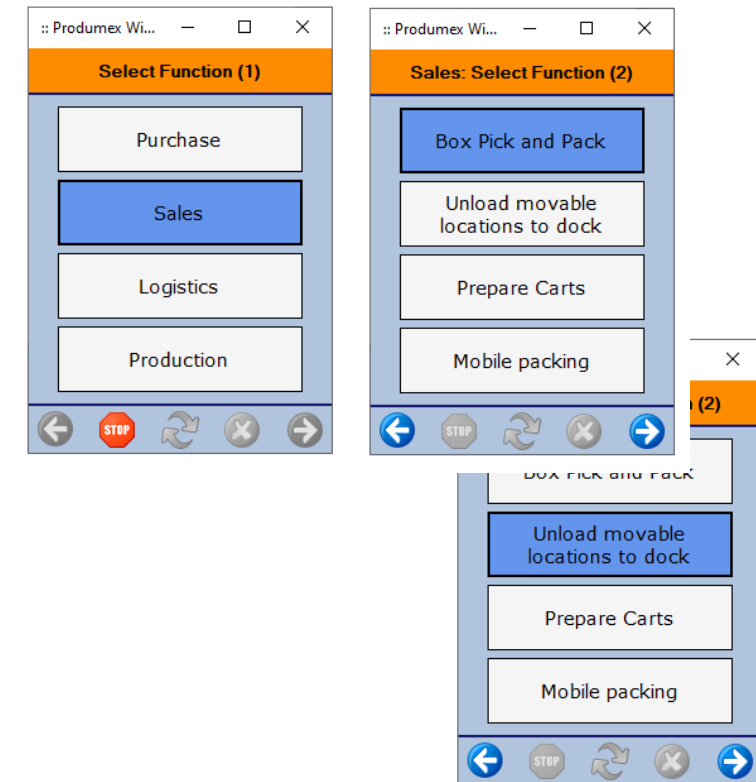
WMS knows, and enforces, to which dock each SSCC needs to be unloaded.

Argentina Localization

Produmex WMS now supports the POI field on the Goods Receipt PO screen if the SAP country database is set to Argentina.

SAP Business One 10 Support

Full support for SAP Business One 10 PL2.



Planned innovations

Expanding the Flow Framework

The Box Pick & Pack flow will allow the use of multiple movable locations and unloading to a packing station (and not only a dock), therefore making obsolete the “Multi Picking” and “Prepare Carts” flows.

It will also allow the use of preprint SSCC labels and postponing the printing of content labels until the end of the wave.

The Flow Unload Movable locations in the future will allow bulk unloading and even unloading to a non-dock location.

Consistent Experience

We are working across all flows in order to uniformized them, so that it is easier to learn WMS and reduce unexpected user experiences.

All our new flows adhere to this rule 100%.

B1UP integration

KPI dashboards in B1UP

Deep-linking from B1UP to WMS

WMS icons available in B1UP

Beas Manufacturing integration

We will continue to add more features to our integration to provide a smoother experience when using both products.

Future direction

New Features

Multitenancy support for Produmex WMS.

New Technologies

Integration with Boyum Cloud and support hybrid environments.



PRODUCT ROADMAP

2020 | 2nd half year



PRODUMEX
SCAN

Product summary

Produmex Scan is an easy-to-implement barcode scanning solution for Windows CE/Android/Mobile devices which executes and automates SAP Business One Warehouse related inventory transactions and business flows in real-time.

With rapid deployment, ease of use, and powerful customizations, it allows business to start scanning in two hours from start of the installation process, providing an accelerated return on investment.

PRODUCT VISION OF PRODUMEX SCAN

**Standalone high performance automation of
SAP Business One **inventory transactions** in
real-time using mobile devices**

Recent innovations

SAP Business One 10

Full support for SAP Business One 10 PL2

HANA 2.0 multitenancy

Support for HANA 2.0 multitenancy capability

Planned innovations

SAP Business One

Update to match most available SAP Business One documents and processes.

Support for multitenancy environment

Support for multitenancy in private clouds.

Beas Manufacturing integration

Ability to pick for production for Beas production orders and positions.

Boyum Cloud Integration

Ability to pick for production for Boyum Cloud orders.

Future direction

New User Experience

Wizard-like configuration

New User on-boarding

New flow for the picking process

PRODUCT ROADMAP

2020 | 2nd half year



boyumcloud

Product **summary**

Boyum cloud is a cloud-native product suite of meaningful enterprise solutions that enriches the functionality of SAP Business One with standardized best practice workflows for small and medium-sized manufacturing companies. Offering role-based modules with a focus on the needs of each user, Boyum Cloud is financially flexible and quick to set up.

PRODUCT VISION OF BOYUM CLOUD

Meaningful and **delightful** supply chain management suite that **integrates** and **optimizes** supply and demand management within and across small-medium businesses

Released



BUILD

Product management

Released



PRODUCE

Production order processing

boyumcloud



ANALYZE

Data driven optimization



INSPECT

Quality inspection management



PLAN

Resource planning & scheduling

Recent innovations

Release Boyum Cloud Produce - Operator

Boyum Cloud Produce helps you to manage production orders by planning, approving and tracking production steps in real-time.

Produce supports the collaboration of your production management and processing department, providing a clear overview of approved work stages, and enabling both the execution of time and material transactions and the reporting of finished products.

Produce is built up of **2 separate applications** that work seamlessly **together**.

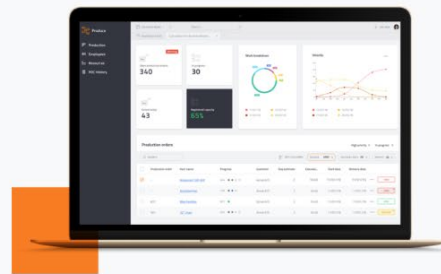


MANAGER

Plan and execute production orders, and track progress in real time

Coming Soon

KEY FEATURES

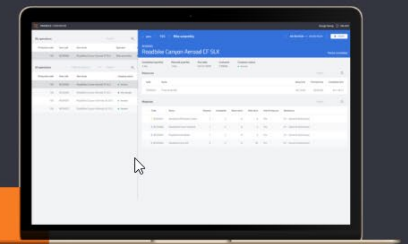


OPERATOR

View production orders, and register work done and material usage

Released

KEY FEATURES



Recent innovations

Get an overview of work stages for released production orders

Get an overview of work stages for released production orders, with information about required materials and resources.

Paperless production support.

Operations

| Production order | Item code | Item name | Operation |
|------------------|-----------|-----------------------|-------------|
| 169 | S10000 | Server Point 10000 | Operation 1 |
| 171 | A00001 | J.B. Officeprint 1420 | Operation 1 |
| 171 | A00001 | J.B. Officeprint 1420 | Operation 2 |
| 172 | S10000 | Server Point 10000 | Operation 1 |
| 172 | S10000 | Server Point 10000 | Operation 2 |
| 172 | S10000 | Server Point 10000 | Operation 3 |
| 173 | S10000 | Server Point 10000 | Operation 1 |
| 173 | S10000 | Server Point 10000 | Operation 2 |
| 173 | S10000 | Server Point 10000 | Operation 3 |
| 174 | S10000 | Server Point 10000 | Operation 1 |
| 174 | S10000 | Server Point 10000 | Operation 2 |
| 174 | S10000 | Server Point 10000 | Operation 3 |
| 169 | S10000 | Server Point 10000 | Operation 2 |
| 169 | S10000 | Server Point 10000 | Operation 3 |

10 20 30

Operations

Filter by resource Search

Order number 169 Completed quantity 47 Each Planned quantity 4 Each Due date 04/09/2020 Customer C20000

Resources

| Code | Name | Setup time | Planned time | Completed time |
|---------|-------------------|------------|--------------|----------------|
| R300006 | Senior Technician | 00:15:00 | 01:07:47 | 391:43:44 |

Materials

| Code | Name | Planned | Completed | Direct stock | Total stock | Unit of measure | Warehouse |
|--------|--------------------|---------|-----------|--------------|-------------|-----------------|------------------------|
| B10000 | Printer Label | 12 | 345354 | 1514 | 1516 | Case | 01 - General Warehouse |
| C00001 | Motherboard BTX | 20 | 514.75 | 558 | 608 | | 01 - General Warehouse |
| S10001 | Server Point 10001 | 8 | 9 | 320 | 670 | Each | 01 - General Warehouse |
| B10001 | Printer Label 2 | 16 | 0 | 0 | 0 | | 05 - Bin Warehouse |
| C00001 | Motherboard BTX | 65 | 514.75 | 0 | 608 | | 05 - Bin Warehouse |
| S10001 | Server Point 10001 | 4 | 9 | 350 | 670 | Each | 05 - Bin Warehouse |

Start and stop operations and collect time and material requirements in an efficient way.

Future direction

Planned innovations

Boyum Cloud Produce - Manager

Smart production order overview to manage the production execution like status, priority and control production progress in real time.

PDC History - Overview of executed PDC transactions, recognition and processing of faulty transactions.

Definition of priorities, automatic assignment of priorities to production orders as suggestions, handling of urgent cases.

Support external manufacturing – outsourcing of operation steps to supplier.

Shop floor instruction – in SAP Business One managed instructions can be displayed in the detail view of each operation step.

| Production orders 435 | | | | | | | | | |
|-------------------------------------|---------------|--|------------------------------------|-------------|----------|--------------------|----------------|------------------------|-------------------------------------------------------|
| SEARCH | | | | All | Started | Recently completed | Unapproved | DUE DATE Within 1 week | |
| | Production... | | Item name | Progress | Customer | Quantity | Start date | Due date | Tags |
| | | | | | | | | | |
| <input type="checkbox"/> | 23 | | Advanced CAD drill | 4/4 ● ● ● ● | Acme A/S | 40 / 40 | 11/01/19 Today | 11/01/19 Today | <input checked="" type="checkbox"/> CLOSE |
| <input checked="" type="checkbox"/> | 34 | | Autohammer | 0/3 ○ ○ ○ | Acme A/S | 20 | 11/01/19 Today | 11/01/19 Tomorrow | Blocked <input type="checkbox"/> WAITING |
| <input type="checkbox"/> | 837 | | Bike handles | 1/3 ● ● ○ | Acme A/S | 250 / 1000 | 11/01/19 Today | 11/01/19 Wednesday | <input checked="" type="checkbox"/> CLOSE |
| <input type="checkbox"/> | 367 | | 32" chain | 1/3 ● ● ○ | Acme A/S | 23 | 11/01/19 Today | 11/01/19 Next week | <input checked="" type="checkbox"/> READY |

Planned innovations

Boyum Cloud Build

Support for user defined fields (UDF) in items, bills of material and operation plans in SAP Business One.

Management of external operations in the operation plan.

Boyum Cloud Inspect

Perform inspection orders based on incoming material documents and issued from production.

Define inspection plans, test plans and parameters to guide the steps throughout inspection orders.

Set the rules to trigger inspection orders based on items, business partners, and documents.

Classify defects as they occur and find out where to act.

A set of reports to follow up on test results and defects.

Issue quality certificates by confirming procedures to your customers through the analysis documentation.

Future direction

Boyum Cloud Produce

Visualization of actual labor and material costs. Gives the production manager an overview of used material, time and costs at any time.

Visualization of material and resource availability. Makes potential issues transparent and helps to find the right decisions

Production order management – change order information and recalculate start and end date.

Boyum Cloud Inspect

Terminal-style inspection data entry application that increases the productivity of quality inspectors through an application optimized for quick and easy data entry.

Perform inspections during the manufacturing process, taking quality to the next level, inspecting not only materials and products, but also manufacturing operations.

Post inspection process automation that reduces processing time by automating post-inspection processes with stock transfers and batch status updates.

Assign authorizations and rules according to each user's profile. Gain flexibility and control over inspection processes.

Planned roadmap

