Ostendo Update 211 Notes – What's New - November 2015

Summary of Enhancements

Update 211 is a major update from 180 with a large number of incremental improvements and some significant functional enhancements, such as the new mobility platform and assignment board to name a few. We have also dramatically improved speed in a number of areas (i.e. Replenishment can be up to 20 times faster than 180) and have included a minor update routine that ensures any fixes or small enhancements will automatically be applied without the need for a major update.

These release notes have been broken down into 7 sections for ease of reading:



Assignment Board

•The new Assignment Board, in its simplest form, is designed to replace the traditional planning board



Technical & Utilities

New workflow, automatied Ostendo updates and data collection screens



Servicing (Recurring & Predictive)

•The service area has not only been enhanced by the introduction of recurring and predictive events, but with the inclusion of the assignment board, mobility, it has taken a huge step forward



Synchronising Job, Project & Assembly Documents

•We added the ability to synchronise files in a folder with linked documents for a Job, Project or Assembly order



Freeway Mobility

•Ostendo Freeway is our new mobility app that allows remote users to operate while not only out of the office, but also completely out of range



Enhancements by Module

•There have been hundreds of various enhancements across all modules within Ostendo. The enhancements listed in this section don't include what is already covered in the preceding sections.



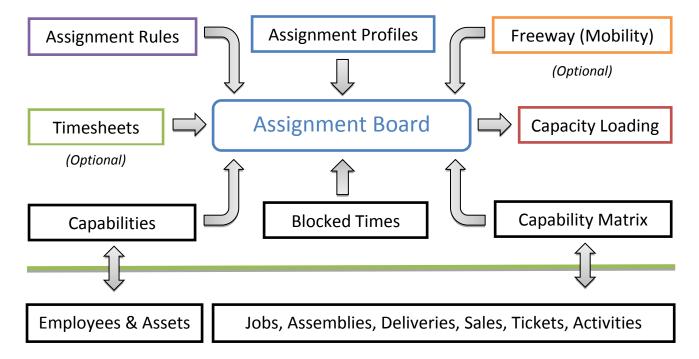
Future Roadmap & Links

•We would like share with you some our major plans for the 2016/2017 period

Assignment Board

The new Assignment Board, in its simplest form, is designed to replace the traditional planning board, while providing a dynamic graphical view, real-time data feedback and smart automatic loading that can only be achieved through a software solution.

The Possible Elements that make up the Assignment Board Solution are:



Assignment Profiles



The Assignment Profile defines what resources, orders, date horizon, time scale and display attributes when running the assignment board. There can be an unlimited number of profiles defined that are used to focus on different areas of the business (i.e. Manufacturing, Service or Distribution) or down to specific departments and/or resources. A Profile Name can be associated with the user, therefore defaulting to that profile when running the board.

Resources

Employees and Assets can be selected to appear (*Note*: *If the No Scheduling flag is set against either the employee or asset then they will not appear on the board*). Further conditions can be defined in the Conditions tab allowing for such restrictions as (Departments, Specific Employees or Assets)

<u>Horizon</u>

This defaults the number of days, both back and forward, for assignments that are loaded on to the board. This can also be changed when in the Assignment Board.

Display

These options allow for either displaying or not displaying images (image selection is found in the Employees and Company Assets screens) and/or extra information about the resource within the Assignment Board.

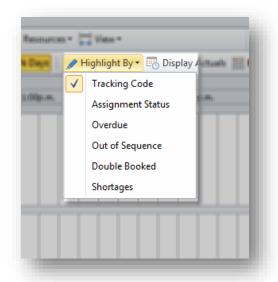
There is also the ability to narrow the orders/activities down to a specific site.

Bookings

Bookings are the orders and activities that can be assigned to resources (employees or assets). There is also the option to hide the bookings panel (likely only used when the profile has been designed for read-only purposes – i.e. an auto-refreshed display).

Warnings

The warning selections provide the ability to flag what type of warning is applicable to that profile. This determines what menu options are available within the 'Highlight By' sub menu in the Assignment Board, and will also determine what warnings are run when the option 'Check for Warning on Load' is selected.



Auto Refresh

By entering a number greater than 0, the Assignment Board using this profile will automatically refresh the contents of the board for that interval (in minutes).

The Check for Warnings on Load will automatically run the warning checks when the board is first loaded (except for the Shortages – which is run within the board, and requires a start time).

Scale Buttons

These define the 3 scales linked to buttons in the Assignment Board (i.e. Days, Weeks & Months). Graduations, widths and captions are all definable (*Note:* the scale can also be adjusted manually within the 'View' menu of the Assignment Board).

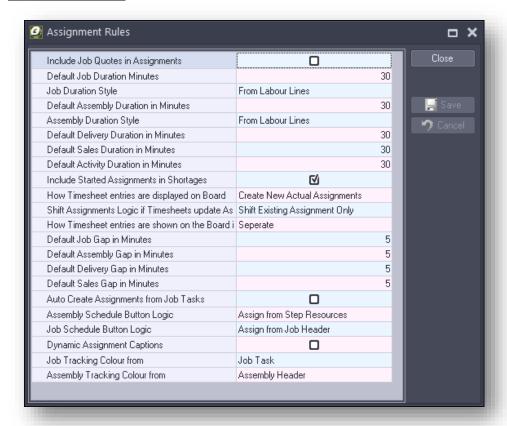


Conditions Tab

The conditions tab allows inclusions or exclusions to further refine both the resources and the available bookings. Examples of use might be:

- Only include employees from a specific department
- Only make available Jobs for certain types
- Only make available Sales Deliveries for a specific zone

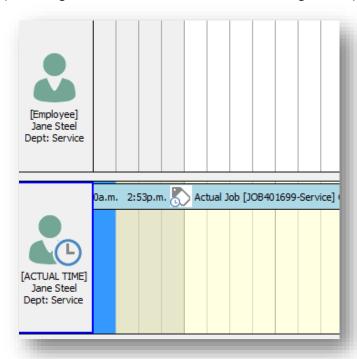
Assignment Rules



The Assignment Rules define the behaviour of the Assignment Board. Following are the rules and their meanings:

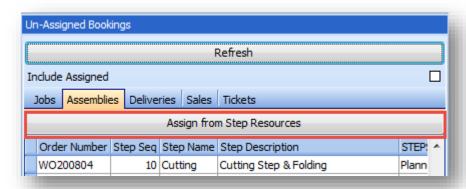
- Include Job Quotes in Assignments: If selected this will included Jobs with a Quote Status in the Jobs Booking list.
- Default Job Duration Minutes: This sets the default duration of an assignment for a Job Task if the Job Duration Style is set to 'Default Minutes'.
- Job Duration Style: This defines how the length of the assignment is calculated
 - o 'From Task' Use the Job Task Duration
 - o 'From Labour Lines' Sums the labour time for the Job Task
 - o 'Default Minutes' Uses the Default Minutes as defined in the above rule
- Default Assembly Duration in Minutes: This sets the default duration of an assignment for an Assembly Step if the Assembly Duration Style is set to 'Default Minutes'.
- Assembly Duration Style: This defines how the length of the assignment is calculated
 - 'From Labour Lines' Sums the labour time for the Job Task
 - o 'Default Minutes' Uses the Default Minutes as defined in the above rule
- Default Delivery Duration in Minutes: This sets the default duration of an assignment for a Sales Delivery
- Default Sales Duration in Minutes: This sets the default duration of an assignment for a Sales Order (non-delivery type)
- Default Activity Duration in Minutes: This sets the default duration of an assignment for an Activity Event (CRM-Activity Events)

- Include Started Assignments in Shortages: If set this will include assignments that have been started (based on the start time of the assignment) when determining material shortages (using the Highlight By within the Assignment Board)
- How Timesheet Entries are displayed on the Board: This rule determines if Timesheet entries
 are displayed on the Assignment Board, and if so, whether they update the assignment the
 entry was linked to, or whether a new actual assignment is automatically created and
 displayed on the board.
 - o 'No Actuals' Timesheet entries are not displayed on the Assignment Board
 - 'Update Existing Assignments' The originating assignment that the time sheet entry was linked to is updated with actual duration (currently only applicable if using Freeway Mobility)
 - 'Create New Actual Assignments' Timesheet entries create new actual assignments
- Shift Assignment Logic if Timesheets Update Assignments: This rule applies if the rule 'How Timesheet Entries are displayed on the Board' is set to 'Update Existing Assignments' and provides for the following:
 - Shift Existing Assignments Only
 - Shift Existing and Following Assignments
- How Timesheets entries are shown on the board if displayed: This rule can be set to either 'Separate' or 'Combined'. If 'Combined' the actual assignments are displayed in the same band as the planned assignments, otherwise a new band is displayed for the resource (indicating it as an actual time band – see the image below)



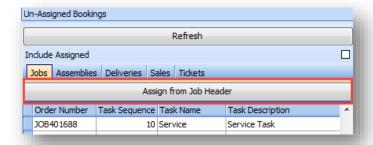
 Default Job Gap in Minutes: When dragging multiple Job Tasks onto the board (either manually or via the Assign Button), this defaults the gap between assignments (Zone to Zone times will apply if a service zone has been defined against the Job and times have been defined against each zone-zone combination in General-Settings-Service Zone Times)

- Default Assembly Gap in Minutes: When dragging multiple Assembly Steps onto the board (either manually or via the Assign Button), this defaults the gap between assignments.
- Default Delivery Gap in Minutes: When dragging multiple Deliveries onto the board, this
 defaults the gap between assignments (Zone to Zone times will apply if a service zone has
 been defined against the Delivery and times have been defined against each zone-zone
 combination in General-Settings-Service Zone Times)
- Default Sales Gap in Minutes: When dragging multiple Sales Orders onto the board, this
 defaults the gap between assignments (Zone to Zone times will apply if a service zone has
 been defined against the Sales Orders and times have been defined against each zone-zone
 combination in General-Settings-Service Zone Times)
- Auto Create Assignments from Jobs Tasks: This rule determines if assignments are
 automatically created when a Job Task has a resource linked to it (via the Job Task Resources
 screen). This can also be automated if a service job is created via the 'Service Orders
 Required' screen and the planned, recurring or predictive service event is linked to a Job
 Template with one or more resources.
- Assembly Schedule Button Logic: ('No Button', 'Assign from Step Resources') This rule
 determines whether a button appears at the top of the Assembly booking list that allows the
 user to create the assignments based on the resources linked to the specific assembly step
 (see image) assemblies are first selected, and then on clicking the button the assignments
 are created (if 'No Button' then manual drag & drop is required to schedule)

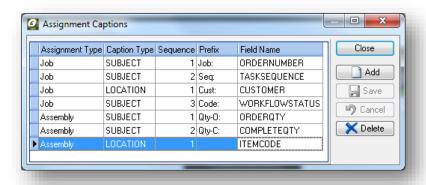


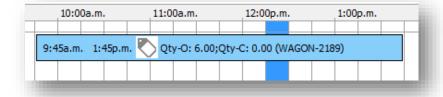
• Job Schedule Button Logic: ('No Button', 'Assign from Task Resources', 'Assign from Job Header') This rule determines whether a button appears at the top of the Jobs booking list that allows the user to create the assignments based on the resources linked to the specific job task or the employee/mobility team selected in the Job Header (see image) – jobs are first selected, and then on clicking the button the assignments are created (if 'No Button'

then manual drag & drop is required to schedule).

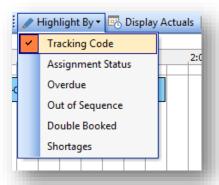


• Dynamic Assignment Captions: this rule determines whether the captions displayed against the assignment are dynamically refreshed when the board is refreshed (board refreshing can be automatic) – an example of this is as follows (the fields that make up the caption can be defined in the 'Requirements-Settings-Assignment Captions' screen) – you'll see that 2 of the fields that make up the caption are quantity values that will, over the course of time change, so therefore if any fields that make up the caption are likely to change – this rule should be set.





• Job Tracking Colour from: This rule determines whether the 'Tracking Colour' (that displays



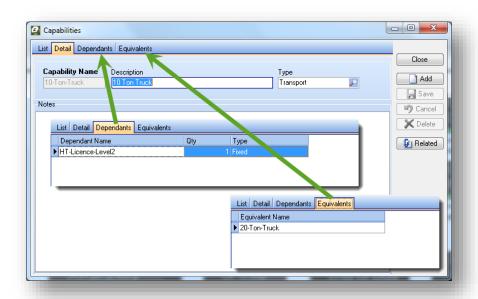
in the background of the assignment bar if the 'Highlight by' is set to Tracking Code in the Assignment Board – see image) comes from the Job Header or the Job Task

• Assembly Tracking Colour from: This rule determines whether the 'Tracking Colour' (that displays in the background of the assignment bar if the 'Highlight by' is set to Tracking Code in the Assignment Board – see image) comes from the Assembly Header or Assembly Step

Capabilities & Capability Matrix (Compliance)

Capabilities are the skills, certifications or specifications of an employee or asset, and the capability matrix is where the capability (and quantity of) can then be assigned to a customer, job type, job task or assembly step to ensure the right resource is allocated to the right job.

Capabilities (in the Labour Menu)



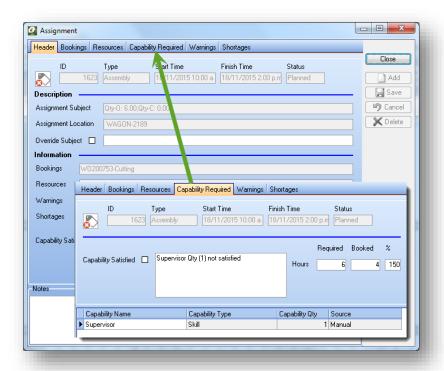
When capabilities are defined, they can be setup with both dependants and equivalents. Dependants are other capabilities that are needed when this capability is selected (i.e. if a 10 ton loading capacity is defined for a truck, then an employee with a heavy truck licence (capability) is also required). Equivalents are other capabilities that are equivalent to the one defined (i.e. a 20 ton loading capacity can be an equivalent capability for a 10 ton loading capacity). These are just as applicable for skills and certifications held at an employee level.

Capability Matrix (in the Labour menu)

The capability matrix allows default required capabilities to be defined against (Customers, Job Types, Assembly Steps & Job Tasks). When an assignment is created these rules are used to then insert required capabilities, and are then matched off against the capabilities of the resources for that assignment. If the requirements are not met, the assignment is flagged as 'Planned' and a list of the capabilities not satisfied is displayed (if the assignment is flagged as 'Planned' it is not available for Freeway mobility users) and the assignment bar visually stands

out by displaying a different icon (). Capabilities required can also be manually added or subtracted through the assignment board directly; where a

hard coded rule is not possible, or a new compliance requirement has been determined for the job (see image).



Assignment Board

This is the main screen for creating and scheduling assignments for Jobs, Assemblies, Sale Deliveries, Sales Orders, Ticket Actions, and Activities.

For example, Job or Assembly tasks can be assigned to resources like employees, contractors, plant equipment, vehicles, etc. These assignments can be scheduled or re-scheduled when required.

As mentioned, the capabilities facility evaluates the requirements of an assignment against the capabilities of the resource or resources to ensure compliance.

For example, if a job requires the use of a 10 ton truck which in turn requires a driver with a Class 2 license, then these capability requirements are evaluated against the resources assigned. If the requirements are not met, the assignment is flagged as Planned (the assignment bar is highlighted) and is deemed not available for dispatch until these issues are resolved.

Blocked Times can also be setup for any resource (e.g. vacation time, system maintenance etc...). The Assignment Board will not allow tasks to be assigned to a resource during their blocked times.

When you run the Assignment Board, you will first be prompted to select a Profile Name.

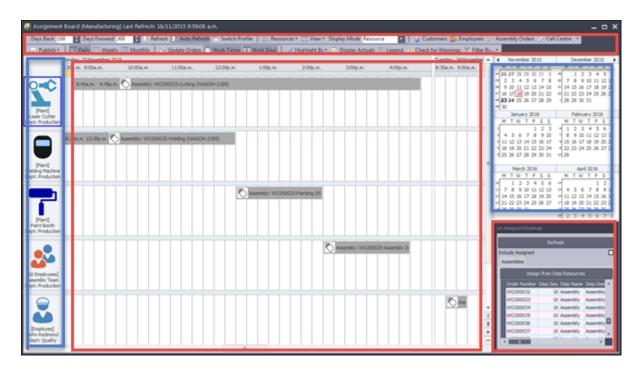
Profile Names are set up under the Assignment Profiles screen. This allows you to define what appears on the assignment board (see the previous section on Assignment Profiles for more detail).

When the Assignment Board screen is displayed, the title of the screen is Assignment Board with the Profile name in brackets and the last time the board was refreshed.

The Assignment Board screen is split into five main sections

- The Toolbars at the top of the screen
- The left panel shows the Resources (employees and assets)
- The main panel in the middle shows the assignments scheduled for each resource
- The upper-right panel shows a calendar for you to select the displayed time periods
- The lower-right panel (Un-Assigned Bookings) shows all Jobs/Tasks/Tickets/etc. yet to be assigned

You can resize the panels by clicking on the panel boundaries and dragging them to the required position



Toolbars

General

- Days Back: Assignments will be displayed up to the specified number of days back.
- Days Forward: Assignments will be displayed up to the specified number of days forward.
- Refresh: Click this button to refresh the assignment board contents.
- Auto Refresh: This toggles the activation of the auto refresh feature
- Switch Profile: Allows the user to switch to another assignment profile

Resources

- Group By None / Resource / Date
- Resources Layout Editor This allows you to select or de-select any resource and place them in the desired order.
- Resources per Page Select how many resources to be displayed per page.
- Employee Tick to display Employees
- Asset Tick to display Assets

View

- TimeLine Scale
 - 1. Major Unit can be Day / Week / Month / Quarter / Year
 - 2. Minor Unit can be Hour / Day / Month / Quarter

- 3. Time Step (in Minutes) (applies only when minor scale is in Hours) can be 1/5/6/10/15/30/60 minutes (affects the number of segments in an hour)
- Hour Width: Width of the Hour scale (in pixels)
- Day Width: Width of the Day scale (in pixels)
- Month Width: Width of the Month scale (in pixels)
- Quarter Width: Width of the Quarter scale (in pixels)
- Assignment Bar Detail: if selected this will expand the height of the bar to display any notes and /or the full captions.
- View Position This gives the option to place the main panel either to the left or to the right of the Calendar and To-Be-Assigned panels.

Display Mode

- Resource: Displays the board with the employees or assets order based on the department sequence and then the resource calendar order
- Order: Displays the board grouped by order number
- Project: Displays the board grouped by project
- Zone: Displays the board grouped by service zone

Publish

- Print: the Assignment Board graphical screen
- Email: the Assignment Board screen in various formats
- Export: the Assignment Board screen in various formats
- Reports: View and print related reports. Additional reports can be defined in the Report and View developer and linked to the Assignment Board via the specific screen drop down

Scale Buttons Shortcuts

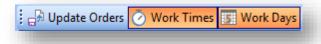
These three buttons are shortcuts for what is set in the Assignment profile (Time scales, Steps, widths and captions are defined).



Update Orders

This button when clicked updates any changes made to orders (dates and times). Unless this button is clicked changes to dates and times will not be

reflected in the Job and Assemblies order screens.



Work Times

This toggles between displaying only work times or all times. The work times are defined in the General-Settings-Work Times screen.

Work Days

This toggles between displaying only work days or all days. The work days are defined in the General-Settings-Work Times screen.

Highlight By

- Tracking Code: this will show the current Tracking Code colour for each assignment
- Assignment Status: Blue = In-progress, Green = Completed, Red = capability not met, White = active assignment
- Overdue: this will highlight the assignment bars in a yellow highlight colour that are overdue
- Out of Sequence: this will highlight the assignment bars in a yellow highlight colour where the tasks/steps are out of sequence as defined in either the Job Tasks or Assembly Steps
- Double Booked: this will highlight the assignment bars in a yellow highlight colour where the resource has been double booked
- Shortages: this will highlight the assignment bars in a yellow highlight
 colour where there are material shortages for the orders they are
 linked to. A time picker will be popped up for the user to select a start
 date and time to be used as the starting point for the accumulative
 shortage check for assignments. There is also a tab in the Assignment
 popup screen displaying all shortages (Note: the shortage check uses
 the current stock on hand).

Display Actuals

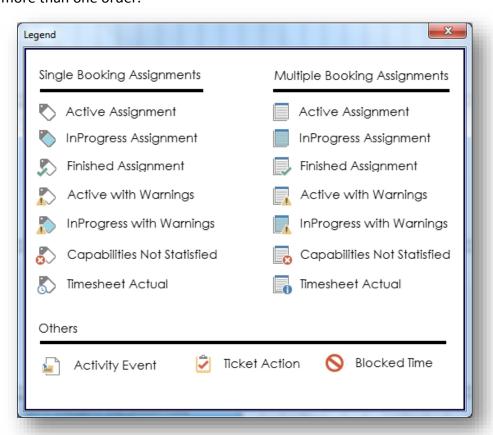
This function allows you to display the actual times as read in from the Timesheet lines. There are a few options for actuals as determined via the Assignment Rules screen. The options are as follows:

 Create New Actual Assignments: if this is set, then completely new assignment bars are created and displayed on the board, they are identified by a unique bar icon and are always green in colour. These actual bars are either displayed in the same row as all other current

- assignments for that resource, or are displayed in their own row as determined by the Assignment Rule 'How Timesheet Entries are shown on the board if displayed'.
- Update Existing Assignments: if this is set then the specific assignment bar is updated in duration and status (completed) by the timesheet posting. There is another rule that can be set if this option is used, and that is the shift assignments logic. There is the ability to have all subsequent assignments for the same resource to shift by the same offset that the updated assignment was either late or early.

Legend

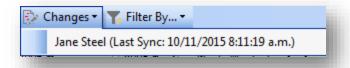
This displays a legend of the possible icons shown on the assignment bars and what they indicate. You'll also notice that there are 'Single' and 'Multiple' sets of icons – the multiple icons indicate that the assignment is linked to more than one order.

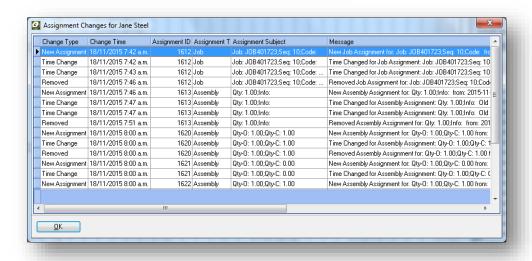


Changes

This button will only appear if the mobility module is being used (by defining employees in Employees Mobility Settings screen – making sure the Service Sheet is activated), the employee has synchronized at least once with Ostendo Freeway, and there have been changes to his or her schedule since they last synchronized. On clicking the button a dropdown of the employees

where changes have occurred since they last synchronized – with ability to display those changes.





Filter By

Use this function to filter assignments by Customer / Job Order / Sales Order / Assembly Order. For example – filtering by Customer allows you to focus on all assignments related to a particular Customer. Filtering will prompt you to enter the specific customer name or order number for the above. There is also the ability to filter the board by Resources with or without assignments (a date range is prompted if this option is selected); this is useful where there are a large number or employees or assets and filtering out who has or has not got work assigned could be very time consuming otherwise.

Toolbar Shortcut Buttons

These shortcut buttons allow you to open the following screens:

- Customers
- Employees
- Job Orders
- New Job
- Call Centre

Resources Panel

The resources panel displays either the employees, assets, or both (dependant on the Assignment Profile definition). The sequence of how the resources are displayed comes from the sequence against department the resource is linked to, and the calendar order number as defined against either the employee or asset.

The images displayed also come from either the employee or the asset.



The Main Panel shows all Assignments scheduled for the period displayed and the profile definition.

Creating Assignments and Resource Allocation

Assignment bookings can be created 3 ways:

 Dragging and Dropping: from the Un-Assigned Bookings list you are able to either singularly select or multi-select and then drag and drop onto the appropriate employee or asset and the booking (or bookings) will be displayed immediately. The duration of the booking is determined by the assignment rules (Job Duration style, Assembly Duration style or the default minutes for each booking type).

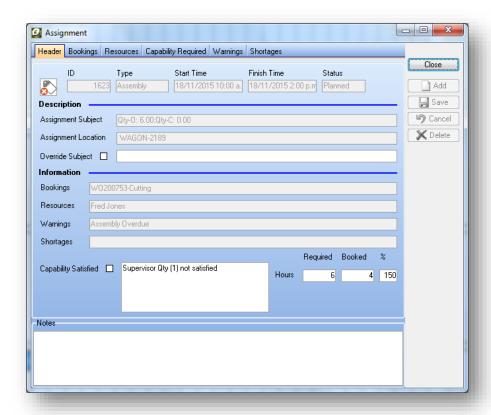
Dept: Production

Assembly Team Dept: Production

- Using the Job or Assembly Schedule Buttons: These buttons will appear at the top of either the Job or Assembly Un-Assigned lists based on the Assignment Rules Assembly Schedule Button Logic or Job Schedule Button Logic. They allow the bookings to be created either by selecting a single or multiple list items, and then clicking on the button: this will in turn create the bookings based on predetermined resources in the Job or Assembly order.
- Automatically from the Job Task Resources: Assignment bookings will be automatically created from the Job Resource tasks if the Assignment Rule – Auto Create Assignments from Job Tasks is selected.

Displaying the Booking Details

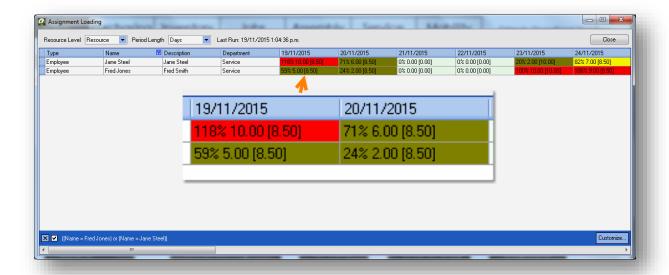
The assignment booking details can be displayed by clicking the assignment bar, where upon an Assignment screen will be displayed with the following:



- Header tab: this provides a summary of the booking and the ability to override the subject displayed in the assignment bar. Although there are default subject and location captions for all the assignment types there is the ability to define custom labels from field values (i.e. Phone number, Contact Name, Required Date etc...) via the Requirement-Settings-Assignment Captions screen.
- Bookings tab: this displays the order(s) or activity(s) that this
 assignment booking is linked to. There is the ability to add or subtract
 others (as long as they are the same assignment type) from there.
- Resources tab: this displays the resources (either employees or assets)
 and provides the ability to add or subtract others. There is also the
 ability to De-Couple the resource from the others, by this we mean if
 that resource is moved or their duration is altered it doesn't affect the
 other resources for that assignment.
- Capability Required tab: this displays the capabilities required for the assignment booking and then dynamically compares these to the capabilities held against the resources (defined against the Employees or Assets screens) and if the capabilities required are not satisfied by the linked resources then the booking is deemed to be planned (not Active) and therefore not available to be dispatched to the mobile or factory workforce (if using Ostendo Freeway planned assignments are not uploaded). The assignment bar is a red colour and displays a specific icon to highlight the issue. Required Capabilities can be added, modified and subtracted at the specific assignment booking, if required.

- Warnings tab: this displays any warnings generated for this assignment booking. The types of warnings indicated are defined against the assignment profile.
- Shortages tab: this displays any specific shortages for the assignment booking. The Highlight by-Shortages needs to be run for these to be current.

Assignment Loading



The Assignment Loading screen provides a graphical view of capacity and loading by resource, or by department, spanning 30 Days or 30 Weeks (dependant on the Period Length setting).

The capacity directly relates to the Working Times definition, and the loading is a sum of all the assignments for the specified period. The contents of the cell are as follows:

- The background colour is derived from the colour code in the 'Requirements-Settings-Loading Indicators' screen (in this example any day that has a loading above 95% is red, and any value below is green)
- The % is calculated from: (loading / capacity)
- The first number (without brackets) is the loading in hours
- The second number (with the brackets) is the available capacity in hours

Technical & Utilities

Automatic Minor Updates

Ostendo now checks daily for minor updates / fixes and will automatically apply these if applicable. This feature only works if there is an external internet connection. This check will occur only once a day and update a minor update number displayed in the 'Help-About' screen

Automatic Accounting Script Updates

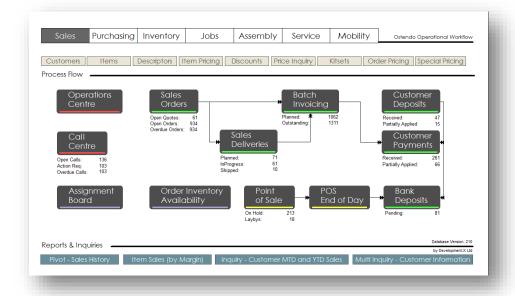
Ostendo now checks daily for any new accounting link scripts and will automatically apply these if applicable. This feature only applies if the site is linked to one of the following accounting products (Xero, MYOB AccountRight Live, Moneyworks or Sage Evolution (version 7 up), and there is an external internet



connection).

Revised Workflow

The default workflow has been changed, and now includes some of the new mobility and assignment buttons. This new workflow will automatically be loaded when an update is applied – previous workflows are untouched and appear as verticals tabs at the far right of the workflow.

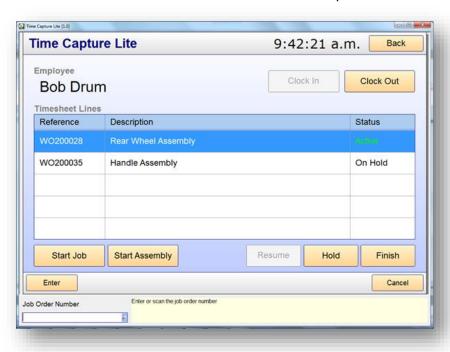


Datascreens.exe

Installed with Ostendo is a new executable called Datascreens (found in the standard Ostendo directory). This allows users to run applications built with scripting (like the Time Capture and Track screens) and reports, views or Inquiry screens only requiring 1 user licence to run as many instances as needed.

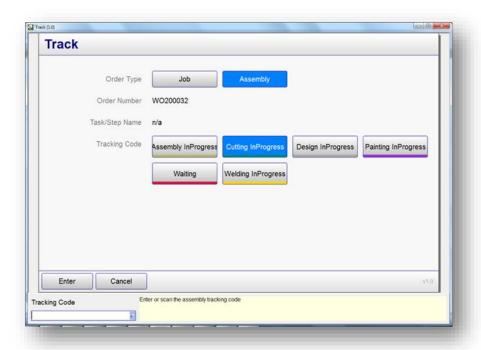
Time Capture Lite

We have bundled a light version of the advanced Time Capture product (used primarily for collecting time on the shop floor). As this has been built using the Ostendo custom data screen tools, it is seamlessly embedded with the base product. It can be found under the 'Custom-Data Screens', or via a new workflow button in either the Jobs or Assembly tabs.



Track

This screen is designed to allow the user to capture the tracking code for either Jobs or Assembly orders. The level (Header-Task/Step) the tracking code is captured for, is determined by the Assignment Rules ('Job Tracking Colour from' & 'Assembly Tracking Colour from'). This screen can be found under the 'Custom-Data Screens', or via a new workflow button in the Assembly tab.



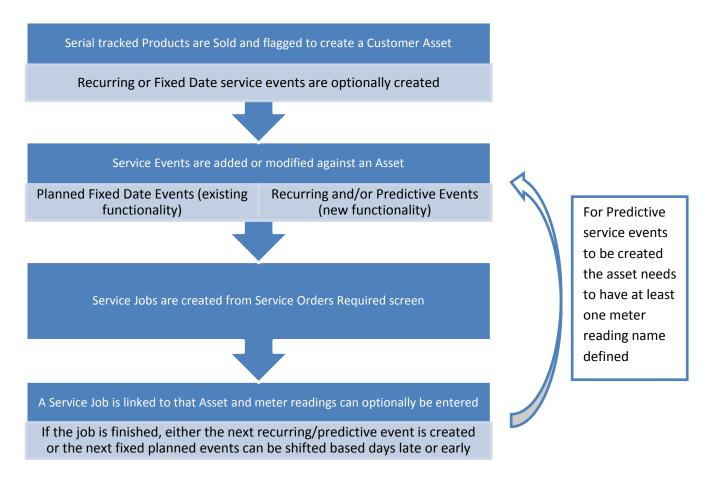
Servicing (Recurring & Predictive)

The service area has not only been enhanced by the introduction of recurring and predictive events, but with the inclusion of the assignment board and mobility functionality; the overall capability of the service module has taken a huge step forward.

Recurring service events are based on a predetermined time intervals, whereas predictive service events include a recurring component, but they also consider the interval between readings, and therefore calculate the next service date based on the earlier of the two.

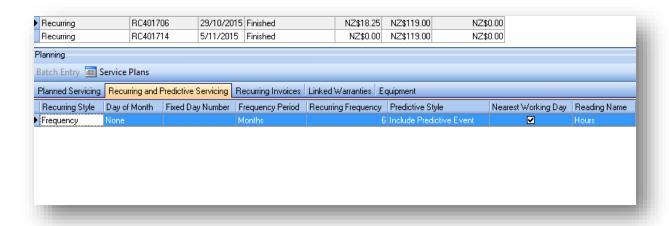
Overview of Asset Servicing Flow

The Asset is either manually created or automatically, if sold by the company and defined against the product



Customer Assets | Recurring & Predictive Servicing

We have added the ability to define Recurring or Predictive service events to Customer Assets (**Note**: Company Assets can be linked to Customer Assets therefore allowing this new functionality to be used for internal plant maintenance where required).



Recurring and Predictive events can be defined in conjunction with the existing Planned events, but it is unlikely that will be required.

Recurring Style

There are 3 styles available (Frequency, Weekday & Fixed):

- Frequency: This style of event is used where a recurring service is required on a regular number of Days, Weeks or Months; and is also the only style that supports predictive events.
- 2. Weekday: This style of event is used where a recurring service is required on a particular day within the month (i.e. Second Monday of the month for every 3 months)
- 3. Fixed: This style of event is used where a recurring service is required on a fixed day number of the month (i.e. 1st of the month every 6 months)

Day of the Month

This is only applicable if the style is 'Weekday' and provides the First to the Fourth of every day of the week (i.e. First Monday, Third Friday, etc.)

Frequency Period

This is only applicable if the style is 'Frequency', otherwise the period is always months for 'Weekday' or 'Fixed'. The options are Months, Weeks or Days.

Recurring Frequency

This is the number of Months, Weeks or Days that this event reoccurs.

Predictive Style

This is only applicable if the style is 'Frequency'. In other words there is always a recurring frequency as well as a predictive cycle (i.e. 2000 hours or every 6 months depending on which comes first). The styles are either 'No Predictive Event' or 'Include Predictive Event'.

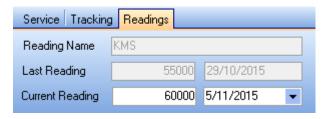
Nearest Working Day

If this option is flagged the recurring or predictive event will find the nearest working day (forward looking) based on the work times and holidays defined in the 'Work Times' and 'Holiday Dates' screens.

Reading Name

This is only applicable if the 'Predictive Style' is set to 'Include Predictive Event'. A reading name that has been defined for that asset is selected and stored for that event.

More than one reading can be



created, and more than one predictive event can also be defined, however there is only one primary reading name linked to the Job Header (and Freeway Mobility) for direct entry into the job (readings can also be entered directly into the Asset Readings screen for as many reading names as required).

Reading Cycle

This is the number of cycles for the specified Reading Name that triggers the next predictive event.

Job Type

This is the Job Type used when generating the service job. The Job Type is required to be different for each defined recurring event for that asset, and cannot be used in any other Planned events (existing logic); the reason for this, is so that non-planned jobs can also be defined for that Job Type, and Ostendo then knows which specific recurring or planned event has been carried out. To explain this further, let's consider the following scenario for a customer's front end loader that has 2 predictive service events:

Customer Asset: Yellow Front End Loader



- First Predictive Service Event: Check filters and change transmission fluid every 1000 Hours or 6 months (whichever comes first) Job Type = 'Filters'
- Second Predictive Service Event: Check air pressure and condition of tyres every 500 Hours or 3 months (whichever comes first) – Job Type = 'Air'

Now let's say that the driver of the Front End Loader complains that when cornering at high speed (5 KPH) the tyres seem soft, and also that a service had only just been carried out 100 hours / 1 month ago for the air pressure check; therefore if the loader had the pressure and condition of the tyres checked again, we would want the next predictive event to be driven from this latest unplanned service. To achieve this, we use the Job Type, and then reset any recurring, predictive and planned events accordingly.

Template

This is the Job Template used when generating the service job (**Note:** if resources are defined in the template, the assignment board is in use, and the assignment rule 'Auto Create Assignments from Job Task' has been set, then an assignment is automatically created on creation of the service job using the required date as the work date).

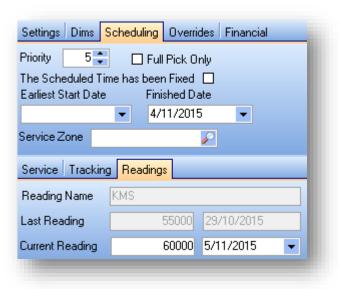
Last Event Date

This stores the last date for the recurring or predictive event.

Service | Service Rules

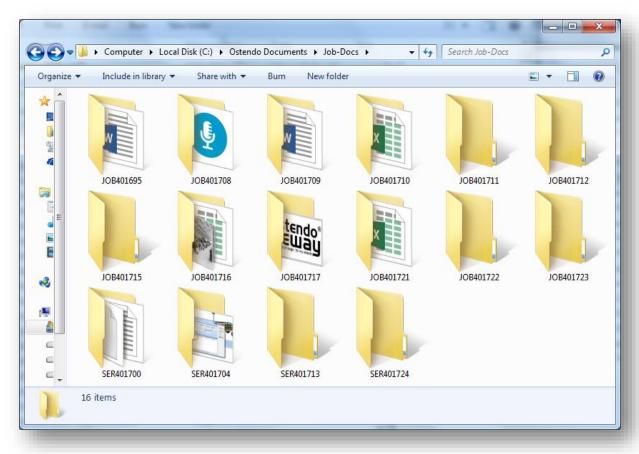
We have added this screen to allow for a new setting for planned services events.

Offset Planned Event Dates by Previous Finished Date: If set, this will shift forward or backward the next events dates (for fixed Planned Date events – not recurring or predictive) based on when the service was originally planned to occur and when it was actually finished. We added a new field in the Job Header to allow the finished date to be modified (if left, the finished date will be populated when the Job is either Finished or Closed – whichever comes first).



Synchronising Job, Project & Assembly Documents

We added the ability to synchronise files in a folder with linked documents for a Job, Project or Assembly order. What we mean by this, is that Ostendo will automatically read the contents of specific directory on the network and then update the linked documents table for the order or project (effectively creating a order/project packet). There is also the ability to state that predefined linked documents that originated from say a customer or product, can automatically be copied into the specific folder for that order or project.



What this means, is that people outside of Ostendo (i.e. drawing office) can add or remove files from an order/project through windows file manager, and Ostendo is then automatically updated as soon as the user pops up the linked document screen for that order/project. Following are the settings for this feature to work:

General | General Rules – Synchronise Job and Assembly Docs with Folder: This turns on the feature and requires that a Parent Folder Path is entered/selected in the next rule. This parent path determines where all the Job, Assembly and Project folders will be created/stored. Once activated a new folder is automatically created for every Job, Assembly or Project on creation of that order/project (or for existing orders/projects that were created before this feature; when the linked document screen is displayed up for that specific order/project).

General | General Rules – Parent Folder Path: This is the top level path for all the Job, Assembly and Project folders.

General | General Rules – Copy Linked Documents into Job or Assembly Folder: If set this will automatically copy any linked documents that are from a different path than that of order folder path. This is useful when there is a standard template style of document (maybe held against a product) that needs to used and modified for that specific order – also provides one place for all documentation for that order/project.

Freeway Mobility

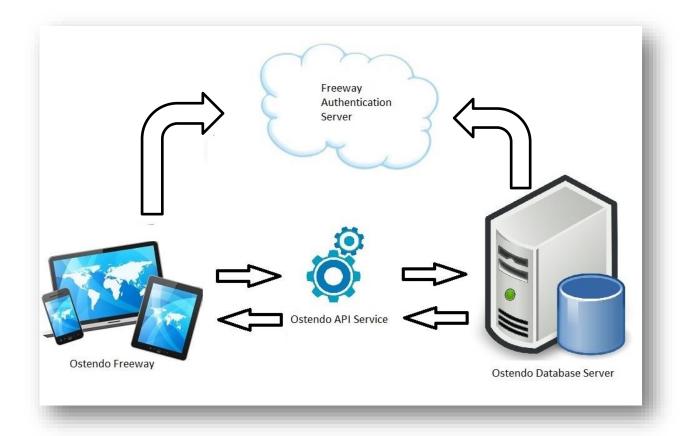
Ostendo Freeway is our new mobility app that allows remote users to operate while not only out of the office, but also completely out of range. While most mobility apps require network coverage for operation, Freeway operates as a standalone application on the mobile device and then based on network or wireless coverage can be synchronised with the office.



Our initial focus has been for the Service environment on Android devices, but over the next few months, Sales and Inventory functionality along with IOS (Windows 10 if there is enough demand) will be added to the Freeway scope.

The recommended device size ranges from 4.5 - 12 inches (for smartphones through to tablets). The Freeway screens will resize for the display area, and there is the ability to change the font sizing within the app itself.

Freeway Big Picture



The above diagram is only designed to give a simple big picture view of the Freeway environment – for more technical information of setup please refer to the separate Ostendo Freeway Tutorial paper (link provided at the end of this section and at the end of the release notes).

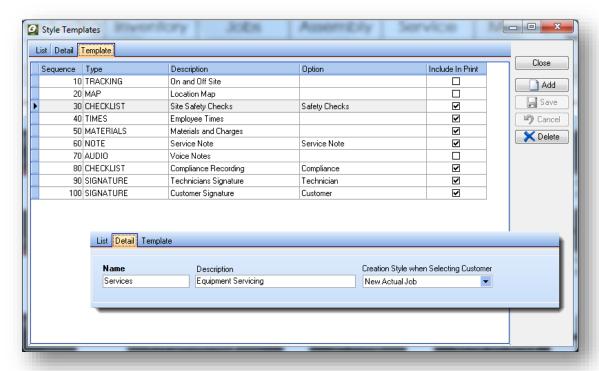
Key Components of a Freeway Solution

Freeway has been designed so that it can be tailored to suit a large number of industry verticals. In concept it is built around 2 main components - Style Templates and Checklists.

Style Templates

This is the structure of what is presented to the remote user, in other words; what information is displayed, what needs to be captured, and the sequence it's displayed in. The sheet presented to the user always starts with the Job/Customer information and ends with the option to complete the service sheet and return to the main menu. The middle is determined by the options selected for that template. These options could include any one

or more of the below:

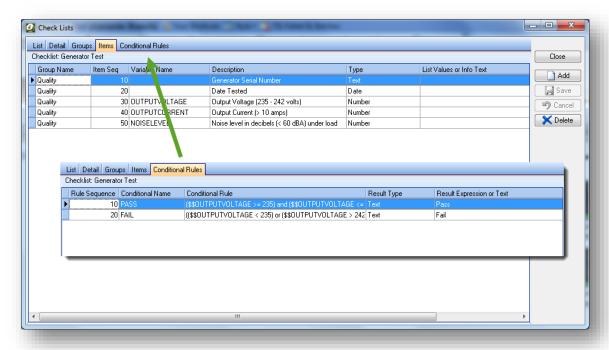


- <u>Checklists:</u> These are in effect sub forms to be used to capture data (i.e. compliance checklists, measurements, answers to questions, etc.). See the following section on Checklists for more detail.
- <u>Signatures:</u> There can be one or more different signatures allowed, and each can either be mandatory or optional (i.e. Customers Signature, Supervisors Signature, Technicians Signature, etc.)
- Notes: There can be one or more different note types (i.e. Service Notes, Next Visit Notes, etc.)
- Sketches: There can be one or more sketch types (can include background photo)
- Images: The image section can only be included once, but an unlimited number of photos can be taken in that section
- Map: This displays the physical map of where the customer is located (and allows for directions from the users current position).
- <u>Times:</u> The times section allows the user to capture times (the style of how the time is captured is determined by the 'Employee Mobility Settings' and can be one of the following:
 - **Start-Stop**: This allows the user to click on a 'Start' or 'Stop' button to record the time entry (a start time can be automatically inserted if the rule 'Auto Insert Timeline on Creation' is set in the 'Employee Mobility Settings' screen).
 - **Time of Day:** Allows the user to select exact time of day for the start and stop (a start time can be automatically inserted if the rule 'Auto Insert Timeline on Creation' is set in the 'Employee Mobility Settings' screen).
 - **Fixed Times:** Pre-populates a fixed time template (defined within Ostendo) so the user can only select the labour code for a specific time slot.

- Hours: Allows the user to enter the total number of hours for that entry.
- Materials: The materials section allows the user to enter or scan (can even use the phone or tablet camera for this) the materials used in the service. There is the ability to pre-fill standard charges or materials by using a 'Material Pre-Fill List' and the overall materials available can be restricted by two means:
 - A pre-defined Material List (using Inventory Lists)
 - The ability to define a condition for both Items and Descriptors (by employee)
- Audio: The audio section allows the user to capture an unlimited number of audio recordings out in the field and then have these played back in the office.
- <u>Ticket:</u> The ticket section allows the user to capture information for a Call Ticket to be created when the Service Sheet is synchronised. This could be used for where follow-up work is required, or a new opportunity is discovered while working with the customer.
- or 'Off-Site'; which is sent back to the office (along with the GPS co-ordinates) in real time so that the current employee locations can be displayed in the 'Employee Locations' screen. There is a rule called 'Auto On-Site When Tracked' that, if set will automatically send the location back to the office when a new service sheet is created.
- Asset: The asset section either displays the Customer Asset (if the service sheet was
 created from an existing Job) or allows the user to select the Asset from all assets for
 that customer. With the ability to have equipment linked to an asset (new feature),
 you are able to capture details against all equipment linked to that asset as well.
- O Planned Line Info: The Planned Line Info section (only applicable where service sheet have been created from jobs) displays any existing planned job lines. There is also the ability to add more fields to the display (i.e. there is an additional field that need to be displayed) via the 'Mobility-Settings-Planned Job Line Info' screen (Note: There are 2 special fields called 'MOBILELINEDIMENSIONS' & 'MOBILELINEPROPERTIES' which, if selected will display either all the line dimensions or all the line properties)
- <u>Task Status</u>: The Task Status section allows the user to flag that Job Task as being finished (and if using the assignment board can display this as a way of communicating back to the office).
- <u>Tracking Code</u>: The Tracking code section allows the user to set the tracking code for that Job Task (and if using the assignment board can display this as a way of communicating back to the office).
- Reading: The Reading section (only applicable where there is an asset involved)
 allows the user to enter the primary meter reading for the nominated asset. This can
 then be used for the next predictive service event or for billing purposes.
- <u>Print</u>: The Print section allows the user to print/email the service sheet from the device.

Checklists

Checklists in their simplest form, are as the name suggests, lists. They can be a straight forward list where the user ticks boxes (i.e. Compliance Checks), through to forms with conditional rules driving the user down different paths based on answers given (i.e. Diagnostic flowcharts).



The types of data that can be entered in a checklist are:

- Checkbox: a simple checked/un-checked box
- o <u>Text:</u> any text value up to 200 characters
- o Number: any numeric value
- o Date: any date value
- o <u>Integer:</u> any whole number value
- Memo: a notes style of entry
- List: This type restricts the user to a value in a pre-defined list of values
- Info: This type is designed to allow for a read-only note/comment to be inserted into the list as a help tip for the user

List items are also be grouped, with the ability to flag that group with a mandatory style as either 'All, 'Optional' or 'Any One'. Where the checklist has mandatory group(s) the service sheet will indicate that with either a **red cross** (if mandatory values are required) or a **green tick** (where all mandatory values have been filled out).

Conditional rules can also be linked to checklists that can either derive a result based on checklist values or ask more questions by concatenating another checklist to the end of the current one. Some examples demonstrating the flexibility can be found in the Freeway Tutorial and are also pre-loaded in the latest Ostendo Demo database (download link at the end of the release notes). These examples are:

- 1. <u>Car Overheating Diagnostics</u>: This leads the user down different paths (diagnostic flowchart) and based on the answers given, recommends a resolution to the overheating issue. There are numerous opportunities for this type of solution.
- 2. <u>Generator QA</u>: This example demonstrates the use in a quality control environment, where the user is prompted for voltage, current and noise values to determine whether the generator is a 'Pass' or 'Fail'.
- 3. <u>Shed Estimator</u>: This example demonstrates the ability to use the checklist as a way of capturing data required to calculate an estimate, and then presenting the user with the calculated value.
- 4. <u>Heat Pump Selector</u>: This example demonstrates the ability to use the checklist as a product selector, prompting the user for room dimensions and then suggesting an appropriate heat pump for the total volume of the rooms.

Freeway & Assignment Board

Although Freeway can run without the Assignment Board it's recommended that it's at least considered. The Assignment Board has been designed for the allocation of work to specific resources, and with the auto-refresh feature can reflect real-time feedback from the field (i.e. Time entries, Assignment Status changes, Tracking Codes changes, Meter Readings, and Job Task Completions).



For more information and how to setup Ostendo Freeway, refer to the HELP Menu Tutorial.

Enhancements by Module

There have been hundreds of various enhancements across all modules within Ostendo. The enhancements listed below don't include what is already covered in the above sections.

File

System Settings | Environment Settings - Currency Symbol Override

This allows an override currency symbol to be used in place of the regional settings currency symbol. Useful when there is more than one database on the same server for different countries.

System Settings | Accounting Link – Financial Category

Used to further define the mapping relationship from Cost Centres to GL Accounts (i.e for Xero – Tracking Codes, for MYOB – Jobs, for Evolution – Projects). Although there is a one to one relationship to the Cost Centre you are also able to override this at the order header level – found in the order detail-financial tab.

System Settings | Accounting Link – Prefix letter for Sales Invoices

This has been primarily added for MYOB AccountRight Live but can be used for any other accounting products or purposes.

System Settings | Accounting Link – AR Style

This has been added for MYOB AccountRight Live only, it will not have any effect on other accounting products. It allows companies to move from MYOB 19.X products with very little effort – in other words posting journals for Sales Invoices and Customer Payments as was the case in the older products.

System Settings | Accounting Link - Prevent Manual Payments

This prevents Ostendo users from entering Customer payments directly (although POS payments are not affected).

System Settings | Accounting Links – No External Payments Returned

This prevents any payments from the Accounting solution from being returned back to Ostendo.

General

General | Settings - Service Zones

These were moved from Service Settings to General Settings as they are now being used in the new Assignment Board and are also linked to Customers, Jobs and Assets.

General | Settings - Service Zone Times

This screen allows for travel times to be defined from one zone to another. This feature works with the new Assignment Board.

General | Budgets – Billing or Delivery

We have added the ability to select between 'Billing' or 'Delivery' (only for Sales Budgets) for where the budget is being compared to actuals (in the Budget Comparisons screen)

CRM

CRM | CRM Rules - Use Assignment Board for Ticket Actions

This new rule determines whether Ticket actions are automatically created on the Assignment Board (also requires that the 'Required Date', 'From Time' and 'To Time' have been entered)

Labour

Labour | Employee Cost Matrix

This new screen allows further refinement of employee costs based on predefined rules (i.e. special allowances and or charges). The allowable matrix options are as follows:

- 1. Order Class: Whether the rule is for both Jobs and Assembly Orders or specifically for any one
- 2. Rate Scale: The rate scale this rule applies to
- 3. Employee Level: This can be 'All Employees', 'Employee' or 'Employee Department'
- 4. <u>Employee Level Selection</u>: This field has a lookup based on the Employee Level selected
- 5. <u>Labour Level</u>: This can be 'All Labour Codes', 'Labour Code' or 'Labour Department'
- 6. Labour Level Selection: This field has a lookup based on the Labour Level selected
- 7. <u>Customer Level</u>: This can be 'All Customers', 'Customer' or 'Customer Type'
- 8. <u>Customer Level Selection</u>: This field has a lookup based on the Customer Level selected
- 9. Order Level: This can be 'All Orders', 'Project', 'Order Type' or 'Order Category'
- 10. Order Level Selection: This field has a lookup based on the Order Level selected

Labour | Special Employee Rates

This new screen allows special charge rates to be defined against one or more of the following:

- Employee
- Labour Code
- Customer

Labour | Labour Rules - Where there is no Employee-Labour Cost

This new rule allows for either one of the following options:

- Use Labour Standard Cost
- Use Employee Direct Cost

Labour | Labour Rules – Default Timesheet Style

This new rule defaults the Timesheet Style when a new timesheet is created

Inventory

Inventory | Inventory Availability - Transaction Running Total

There is a new Item Rule that can be set to turn on a running total for the quantity on hand after each transaction was applied

Inventory | Item Rules – Automatic create Unique Item Code

If set this will default the Item Code to a unique number (read from the new generator 'ITEMCODENO' – this is initialised in the System Numbering Tab)

Inventory | Inventory Adjustments – Lookups on variants

The quantity column now has an icon allowing a lookup from existing inventory records

Inventory | Location Re-stock – Blank locations

You are now able to leave the From and To locations blank in the detail tab and then have the system automatically prefill with the default locations for each item being re-stocked

Inventory | Inventory Count – Sub Category Selection

There is now the ability to further refine the item selection by using Sub-Categories

Inventory | Inventory Transfers – New Prefill Lines option

If the Inventory Site Transfer was generated from the Inventory Replenishment (Distribution Requirements Planning) we have now provided the ability to pre-fill the inventory records to be transferred based on the same logic as 'Auto Pick' in Sales Deliveries. The one exception to that, is there's also a new Item Rule called 'Site Transfer Stock Remaining Balance %' which restricts the prefill quantity so that the remaining stock quantity doesn't go below that percentage at the transfer from site.

Inventory | **Items** – Representative Budget Code

This new field allows items to be linked to a representation code for budget purposes. In other words you'll be able to setup the budget against a representative code and when doing the comparisons to actuals, all specific codes linked to that representative code (representative code) are summed and compared to the budget of that representative code (i.e. you might have an item that can be sold in 10 different colours, but at the time of budgeting all you know is the total volume for all 10 colours)

Inventory | Descriptors – Representative Budget Code

This new field allows items to be linked to a representation code for budget purposes. It operates in the same manner as the Item Representative Budget Code

Inventory | Items – Times

These new fields in the 'Times' tab relate to pick times for Sales Deliveries and Sales Orders in the Assignment Board. There is a default pick time in the Sales Rules, but these fields are for where the specific item takes longer to pick than the average (i.e. large product, safety precautions when picking etc.). The fields are as follows:

- Override Pick Time This determines whether the pick time is overridden
- Pick Minutes This is the pick time in minutes used if overridden
- Multiple Pick Time by Qty If this flag is set then the pick time is multiplied by the quantity being picked

Inventory | Item Rules - Default Inventory Availability Period

This allows the Inventory Availability period to be defaulted to either 'Days', 'Weeks' or 'Months'.

Inventory | Item Rules – Obsolete and Runout Status Control

This rule has two options:

- <u>Strict Control</u>: This adheres to the fact that 'Obsolete' items can't be used at all, and 'Runout' items can only be sold.
- <u>Allow Issues and Receipts</u>: Although Obsolete and Runout items will be hidden from lookups, they can still be issued and receipted (primarily used where old orders may have these products, or the order was placed for the item and it's status has changed before receipting)

Pricing

Pricing | Pricing Rules – Special Pricing List Style

This determines whether the opening list in the special pricing screen is grouped by contract or displays all items within the contract.

Pricing | Pricing Rules - Descriptor Price Calculation Method

This new rule defaults the Descriptor Price Calculation method when setting up a new pricing rule

Pricing | Pricing Rules - Item Price Calculation Method

This new rule defaults the Item Price Calculation method when setting up a new pricing rule

Requirements

Based on changes we have made to the replenishment routine, and the new weekly bucket option, we have found that the speed has increased dramatically on large databases (i.e. from 20 minutes to 2 minutes).

Requirements | Requirement Rules – Use Item Site Lead time for Replenishment

If item site records are being used, then this option allows the lead time held against the Item Site Master to be used rather than that against the main item record

Requirements | Inventory Replenishment – Daily or Weekly Buckets

There is now the ability to generate the replenishment results in weekly buckets (previously always produced daily buckets). When running with weekly buckets - any demand, supply or forecasts records are all pegged to the Monday of the week they fall in

Requirements | Requirement Rules – Multi-Level Explosion

This new rule defaults the Multi-Level explosion flag in the Inventory Replenishment run

Purchasing

Purchasing | Purchase Receipts - Refresh Receipt

This allows the user to add/remove or adjust purchase order lines that are linked to the current receipt and then simply click on the 'Refresh' button in the related menu to have the receipt automatically reflect those changes.

Purchasing | Purchase Shipment – Sub Charges

This new sub tab allows for sub charges to be defined against a shipment charge. Only really needed if there are more than 10 different shipment charges for that one shipment.

Purchasing | Purchase Invoices - Default Allocation Type

This new field allows the default allocation type for new invoice lines (i.e. Job Order, Assembly Order, etc.)

Purchasing | Purchase Orders – Default Allocation Type

This new field allows the default allocation type for new order lines (i.e. Job Order, Assembly Order, etc.)

Purchasing | Purchase Rules – No Self Approval of Purchase Orders Allowed

This rule prevent the creator of a purchase order (where purchase approval rules exist) from approving the order, even when they have the approval level authority.

Purchasing | Purchase Rules – Auto Purchase Line Creation Consolidation

This determines how purchase order lines are consolidated when created from 'Create Required Orders' screen. There are 3 options available:

- 1. Separate PO Lines by Source
- 2. Consolidate PO Lines by Code
- 3. Consolidate PO Lines by Code and Date

Purchasing | Purchase Rules - Default Shipment Charges Allocation

This sets the default for the Shipment Charge Allocation when a new Shipment Charge is created in a Purchase Shipment

Assembly

Assembly | Assembly Rules – Exclude Purchase BOMs in Rollup

If set, this will exclude Items that have been flagged as Purchased (even though they have a Bill of Materials) from the rollup

Assembly | Assembly Rules – Only Backflush remaining Issues

If set, this will ensure that only the remaining components are issued when the receipt is back flushed. In other words it allows users to manually issue labour or materials to an order and then have the receipt process backflush the rest of the lines.

Assembly | Bills of Material – Default Option for Features (Features & Options)

If using Features and Options you are now able to set a default option for a feature in the options tab (i.e. the trailer by default has a 'Single Axle' for the feature 'Axles')

Sales

Sales | Sales Deliveries – Refresh Delivery

This allows the user to add/remove or adjust sales order lines that are linked to the current Delivery and then simply click on the 'Refresh' button in the related menu to have the Delivery automatically reflect those changes (unless the changes are in conflict with what has already been picked – i.e. you are unable to lower the quantity of the Delivery line if there has been a picked quantity > than the revised quantity).

Sales | Batch Invoicing – New Job Selection grid and Override Consolidate Option

We have added a new option for selecting Jobs called 'Include Job Orders by Selection'. This allows the user to multi-select orders to be invoiced out (the grid is customisable) from a popup grid.

The option to override the Consolidate Invoice setting held against the customer for this specific invoice run has also been included.

Sales | Sales Rules – AVG Line Pick Time in Minutes

This rule set the average pick line for Sales Deliveries and Sales Orders in the Assignment Board. There is the ability to override this time at a product level.

Jobs

Jobs | Job Transactions - Kitsets & Task Bill Options

There are now options to Issue or Deliver at a Component Level for Kitsets and at a Task Bill Level for Task Bills.

- 1. <u>Kitset Components</u>: If selected, then you're able to issue or deliver components of Kitsets (rather than the default parent code). Then, when the Kitset code itself is picked, only the remaining components are back flushed.
- 2. <u>Task Bill Codes</u>: If this is selected then you're able to issue at the Task Bill Code level (rather than the default component level)

Jobs | Job Rules – Job Delivery Default Issue Mode

There are 3 options available for this (applicable to the Job Transactions screen):

- 1. Issue
- 2. No Issue
- 3. Never Issue

Future Roadmap

We would like share with you some our major plans for the 2016/2017 period. Although we will continue to enhance the core functionality within Ostendo, there are some key platform and technology developments that we've been working on, that will provide some significant benefits for Ostendo customers.



Some of the Key Deliverables for the new Platform 2016/2017+

- The ability for customers to choose whether they run in the cloud or on premise. This is often overlooked with web based (cloud) products not all companies will want their database in the cloud, or they may wish to have their own private cloud environment we are providing the option for any configuration.
- Web browser based user interface (native HTML5 & JavaScript)
- Dynamic screens morphed based on industry / company / user specific rules
- Screen captions and terminology user definable (i.e. different industry terminology and languages)
- Freeway mobility scope expanded to include Sales, Purchasing, Warehousing and Manufacturing. Also NFC and RFID support.
- Smart Role based screens this is a new style of screen that allows for multiple business functions to be performed without the need to open multiple screens (tailorable at customer level)

- Base industry templates that provide a customisable layer that includes the following components:
 - Industry terminology dictionary (user tailorable)
 - Screens that have the fields and logic to suit that industry (i.e. the Sales Order screen requirements are different for an engineer to order company, than they are for a company selling high volume goods)
 - Tailored HTML help text (there will be base help and tailored help that can also be customer modified)
 - Standard links/integrations that suit the industry (i.e. CAD, Industry EDI, etc.)
 - Operational flow logic that suits the industry style of operation
- Simple to Advanced Because of our ability to dynamically morph the screens based on rules, the system can be as simple, or, as advanced as necessary, for the customer and/or for a specific user. This will transform the user experience – only being presented with exactly what is needed for their industry, size of organisation and the level of complexity they require.