LYNQ

LYNQ GEN2

Advanced User Guide

Contents

How to use this guide

LYNQ is reinventing manufacturing execution system (MES) software for small to midsize manufacturers looking for a configurable, plug-and-play offering to digitalise and drive their factory performance. Formed around international standard IEC62264, LYNQ's all-in-one solution can plan, track, automate, analyse and optimise factories to increase efficiency, productivity and profitability.

This guide is designed to cater for advanced users who require a deeper understanding of how LYNQ can be configured for execution management and data collection.

Advanced users should already be familiar with the content of:

- Training Guide
- User Guide

Other advanced user guides which may be referenced in this guide include:

- Webhooks Guide
- Factory Automation Guide

Supporting guides can be downloaded from LYNQ's Support Portal.

Importing the default profile

Save your Profile
You should regularly save your profile as you are configuring LYNQ. This will allow you to restore the profile if required.

Before configuring LYNQ for the first time, the default profile must be imported. Periodically, LYNQ may ship a newer version of the profile and on-screen elements which do not already exist in LYNQ can be appended. The default profile includes predefined data to speed up the implementation process.

Predefined data is created for:

- Actions
- Alerts
- Bookmarks
- Classification Codes
- Crews
- Custom Tracking Codes
- Data Selectors
- Diversions
- Dropdowns
- Groups
- Issue Types
- On-Screen Elements
- Periods
- Roles
- Schedulers
- Scrap Reason Codes
- Status Codes
- Tasks
- Terminals
- Transaction Rules
- Webhooks

Particular care must be taken when importing the default profile. Do NOT import the default profile against a configured production installation of LYNQ. As importing the default profile may overwrite any configuration work already completed.

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Importing the default profile

Save your Profile
You should regularly save your profile as you are configuring LYNQ. This will allow you to restore the profile if required.

To import the default profile:

1. Settings
1. Advanced Settings
2. Select Profiles
3. Select the profile that includes the version (i.e 2020 English)
4. Select Load Selected
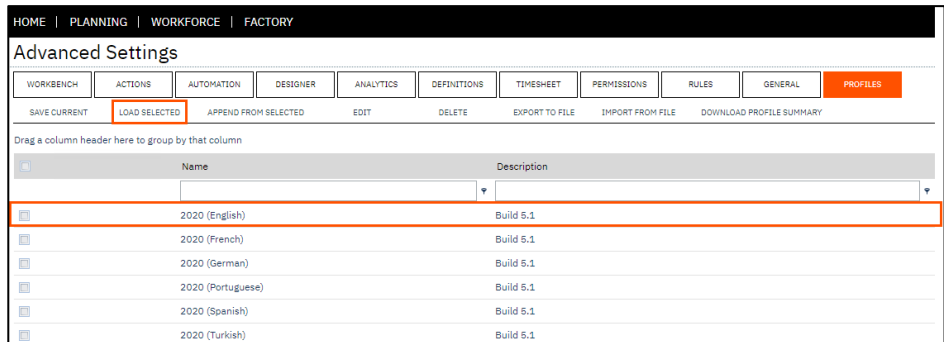
To save the current profile:

1. Settings
2. Advanced Settings
3. Select Profiles
4. Select Save Current
5. Enter and Name and Description for the Profile
6. Select Save

To load a saved profile:

1. Settings
2. Advanced Settings
3. Select Profiles
4. Select the Profile
5. Select Load Selected
6. Select OK

To append elements from a profile:

1. Settings
2. Advanced Settings
3. Select Profiles
4. Select the Profile
5. Select Appended Selected
6. Select the Elements to Import
7. Select Append Selected
8. Select OK

The workbench

The workbench feature provides real time tracking of your factory's activities. Designed to interact with manufacturing workers and equipment on the shop floor, the workbench typically runs on portable devices such as tablets and iPads but can still be run on computers and laptops. As LYNQ is a fully web enabled application, users can access the workbench from any remote location. Whether this is from a separate factory location or whilst on the move from a mobile device, the workbench is a scalable and flexible data collection solution.

The workbench layout is divided into 3 distinct sections.

- Resource section
- Job List section
- On Screen Elements (Buttons)
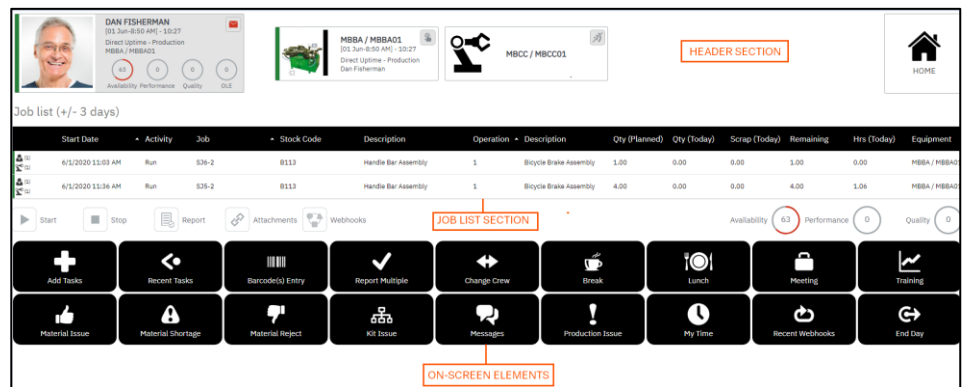
The workbench is configured using the terminals feature. The settings against the terminal will dictate the design of the workbench. It's possible to have multiple terminal designs for different areas within the production facility.

The workbench is accessed from:

1. Select Home
2. Select Workbench

Terminals can be security controlled and restricted by user and much of the functionality in the workbench is customisable.

Workbench resource section

The resource section in the workbench provides clickable plates for:

- The clocked in Employee
- Linked Equipment
- Home (Return to Clock in Screen)

A terminal may be configured for employees only, employees and equipment or equipment only.

When a user clocks into the workbench with an ID that is related to an employee seat, the employee plate is shown.

When a user clocks into the workbench with an ID that is related to an employee seat and the terminal has linked equipment, the employee plate and the equipment plate(s) are shown.
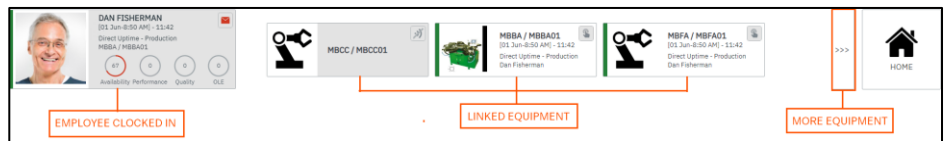
When a user clocks into the workbench with an ID that is related to an equipment seat and the terminal has linked equipment, only the equipment plate(s) are shown.
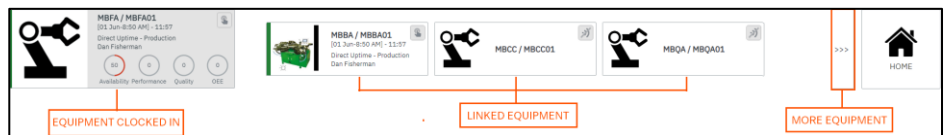
The workbench functions differently depending upon whether the equipment is activated for data collection. The active yes/no setting against the equipment seat record, will determine the functionality available to the user and the level of data that is captured for analytical and tracking purposes.

Workbench resource section

Key differences between data collection for activated resources:

Active	Behaviour
Employee Active	Activities available to support Overall Labour Effectiveness (OLE)
Equipment Active	Activities available to support Overall Equipment Effectiveness (OEE)

The plates in the resource section provide additional information relating to the resource to help the user quickly identify:

- Current status of the resource
- Date and time the resource clocked in
- Current status of the resource
- Current KPIs of the resource (Availability, Performance, Quality)
- Overall OLE or OEE KPI of the resource
- Indicator for new messages
- Indicator for equipment activation status

The vertical bar to the left of the resource plate, provides a colour coded visualisation of the type of task being performed. Setup, run, teardown, wait tasks can have different colours applied.

To customise task colours:

1. Select Settings
2. Select Advanced Settings
3. Definitions
4. Diversions
5. Default
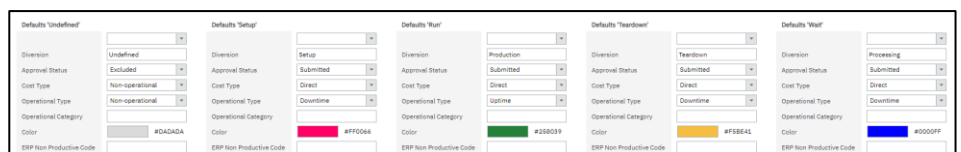
Workbench resource section

Equipment plates include indicators to help identify:

- Manual data collection is enabled
- Manual data collection is disabled
- Automation is enabled for data collection
- The health and state of automation data

The indicators appear in the top right hand corner of the plate.
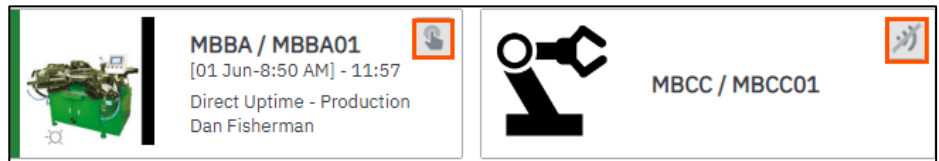
Equipment Activation Status

Colour/Image Code	Meaning	
Finger	Manual data collection is enabled	
WIFI Grey with Diagonal Line	Manual data collection is disabled	
WIFI Grey	Device is activated for Automation, but no data has been received	
WIFI Green	Device is activated for Automation and valid data has been received on the accounting day	
WIFI Red	Device is activated for Automation and unresolved invalid data has been received on the accounting day	

To enable a resource for manual data collection:

1. Select Home
2. Select Seat Maintenance
3. Using the check box, select the Resource (category equipment)
4. Select Activate

Refer to the Factory Automation Guide to setup resources for automation.

Workbench job list section

The Job List section in the Workbench provides visibility of:

- Job list applied filter values
- Grid view of scheduled tasks
- Grid view of current active tasks
- Controls for start, stop, report, attachments and attachments
- KPI dials for availability, performance and quality
- Colour coded task Indicator
- Number of employees or equipment clocked into the job

The job list can be customised to show, specific filtered data, customised columns, controls and KPIs. In addition, the job list displayed when clicking on the employee plate can have a different design to the job list displayed when clicking on a linked equipment plate. We will discuss this further in the Creating a Custom Terminal section.

To customise task colours:

1. Select Settings
2. Select Advanced Settings
3. Definitions
4. Diversions
5. Default

Workbench button section

The section below the job list area is reserved for displaying on-screen elements that include the button function. On-screen elements must be assigned to the terminal for them to appear and they must be configured to show for each status required. For example, an on-screen element that is configured with a function that changes the status of a user to lunch, can be configured to show only when the user is clocked in. This area of the workbench is fully customisable and will be discussed further in the section creating custom on-screen elements and creating custom terminals.

The workbench can show different buttons for employees and equipment.

Buttons relevant to an employee:
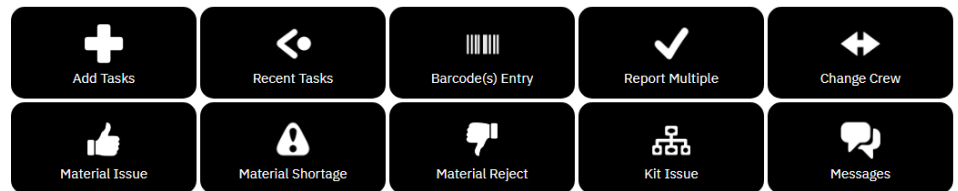
Buttons relevant to equipment:
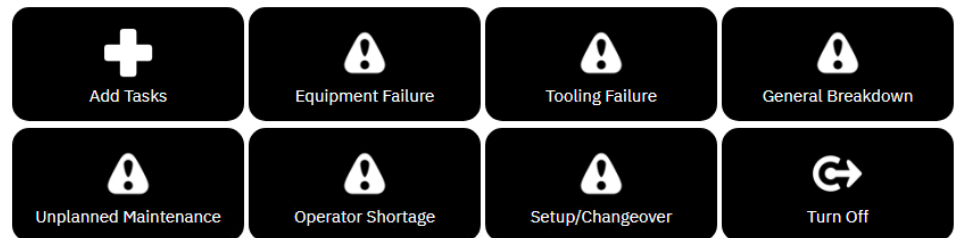
Configuring user access

To open the workbench, users must have appropriate permissions. Permissions are granted using roles and groups. LYNQ provides a workers role which is assigned by default, to the different workers groups, in the hierarchy. The workers role allows access to only the workbench and documents and is best suited for users on the shop floor that do not require full access to LYNQ.

Configuring user access

To assign the workers group to an existing user:

1. Select Home
2. Select Seat Maintenance
3. Filter the seats by User
4. Select the User
5. Select Edit
6. Select the relevant workers group in the Group Ownership Tab
7. Select Save

To configure a new user:

1. Select Home
2. Select Seat Maintenance
3. Select New
4. Select New User
5. Enter the Windows Login Name
6. Select Find
7. Select Save
8. Select the relevant group in the Group Ownership Tab and Save

Configuring user access

Generic Users
You may have hundreds on users on the shop floor accessing the workbench. By using Terminal Access, there is no need to generate a "Generic" full user seat. The generic windows account is declared as a Terminal Access user (no cost in seat allocation). Anyone logging in as that user will have access to whichever Terminals have been assigned to it.

In environments where multiple terminals are configured, it is often a requirement to filter terminals that are not appropriate to specific users. By default, a user will see a list of all active terminals unless terminal access has been restricted.

To restrict access to terminals by user:

1. Select Settings
2. Select Advanced Settings
3. Select Workbench
4. Select Access
5. Select New
6. Enter the Windows Login Account Name
7. Select Find
8. Select the relevant terminals for the user (i.e. Advanced)
9. Select Save

When the user selects the terminal option from the workbench logon screen, the terminal list is filtered.

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Basic terminal settings

Let's take a look at each terminal setting and see how they affect the behaviour in the workbench.

1. Select Settings
2. Select Advanced Settings
3. Select Workbench
4. Select Terminals
5. Select 3 - Advanced and select Edit

From the edit window you can configure these general settings:

Setting Name : *Enabled*

When enabled, the terminal will be visible in the terminal list when opening the workbench. When disabled, the terminal will not be visible.

Setting Name: *Terminal name and description*

The terminal name is the name that appears in the terminal list. The description is for display purposes only and will appear in the terminal setting screen.

Setting Name: *Linked Equipment*

Terminals that are configured for data collection can be linked to equipment. When equipment is linked, the user will see the jobs scheduled to the equipment and will have ability to perform equipment activities when clicking on the equipment record.   The activities available is controlled by the configuration of the Equipment Terminal. This terminal is fully customisable.
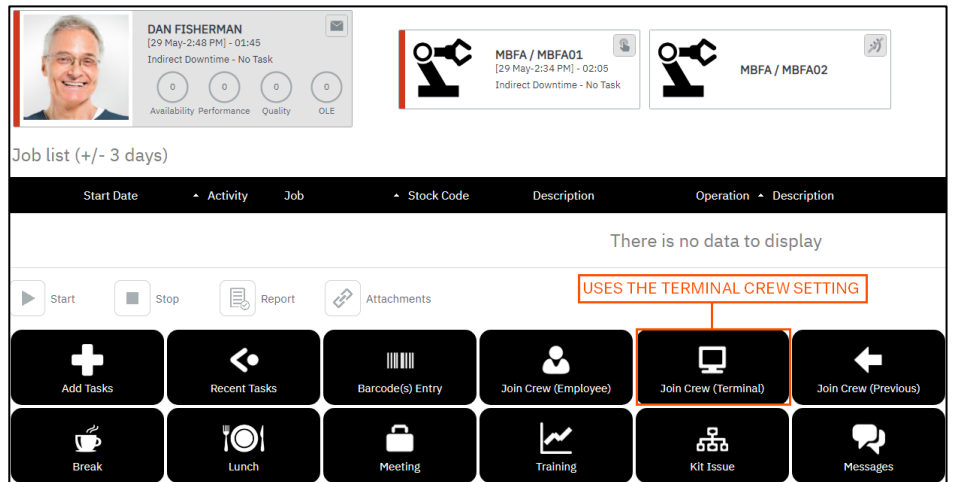
Basic terminal settings

When a terminal is configured for linked equipment, the terminal will display the equipment in the workbench resource section as illustrated below. By enabling this setting, users are able to capture data to support the Overall Equipment Effectiveness (OEE) key performance indicator.
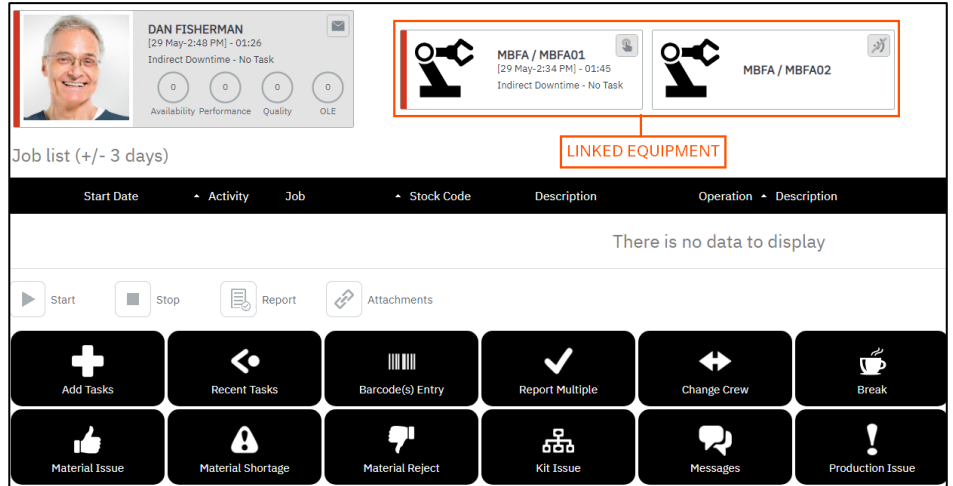
Setting Name: *Crew*

Workbench operators can be configured to work in a crew. The Join Crew (Terminal) button on the workbench uses this value to determine which crew the operator will join. The Join Crew (Terminal) button is a default button on the Crew Terminal Template.

The Join Crew (Employee) button will use the crew setting stored against the employee seat record.

Basic terminal settings

Setting Name: *Use Timeout*

When the Use Timeout setting is enabled, the workbench screen will return the user back to the clock in screen. This setting is similar to the functionality of a Windows screen saver. The workbench will perform this action when the inactivity period exceeds the Terminal timeout after (secs) value defined in Advanced Settings > General Settings.

Setting Name: *Equipment Terminal*

When the terminal has the linked equipment setting defined, the terminal can be configured to display a specific terminal design. This allows users to control by equipment, which buttons and functions are available to the user when they click on the equipment, in the workbench resource section. By default, LYNQ provides one equipment terminal template (6 – Equipment) as an example.

Basic terminal settings

From the edit window you can configure these User Access settings:

Setting Name : *Access Control*

Terminals can have restricted access by group. Employee and equipment seats can be assigned to groups in Seat Maintenance. When the terminal is configured with access control and the employee or equipment does not belong to a group the terminal is configured to use, the seat will receive the following message when clocking in.
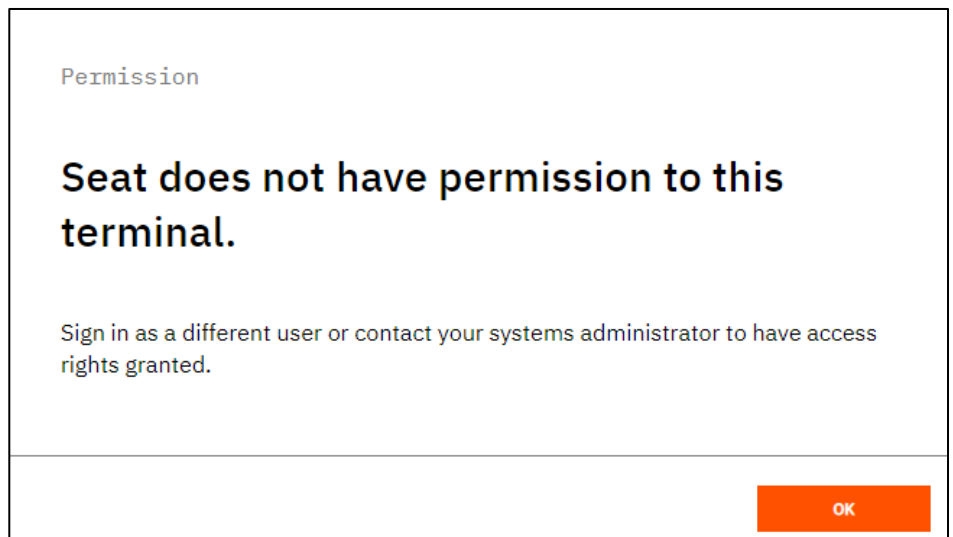
Setting Name *: Password*

For additional control, a password can be specified against a terminal. The password is requested when selecting the terminal from the terminal list.
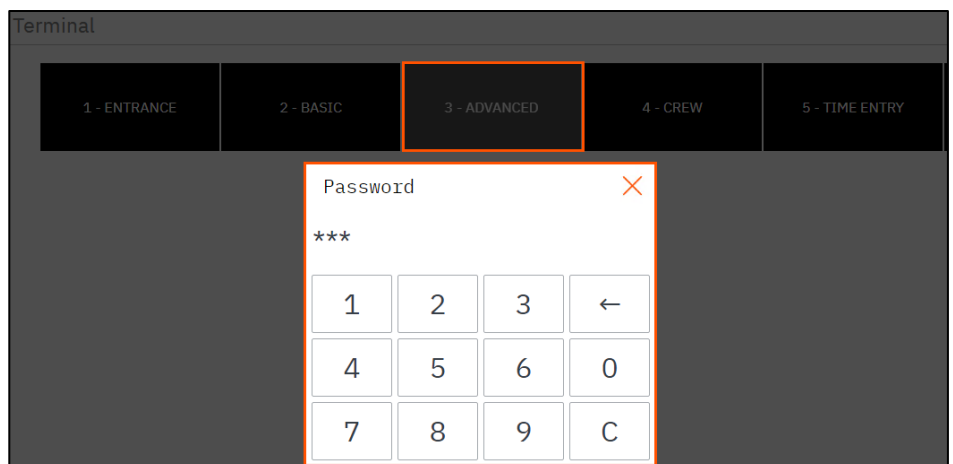
Basic terminal settings

From the edit window you can configure these terminal filter settings:

Setting Name : *Data Filters*

Jobs can be filtered by using the data filter option. It's possible to filter the data by a date period and also by field values. It's important to note, data filters can also be applied to on-screen elements. On-screen elements are enabled against each terminal and define which functions are available to the user. On screen elements can have their own data filters which will override any terminal data filters defined.

Basic terminal settings

From the edit window you can select which On-Screen Elements to show:

Setting Name : *On-Screen Elements*

On-screen elements are linked to functions. Functions allow companies to define a workflow to suit a specific manufacturing process. On-screen elements may contain functions are visible to the user from the workbench. For example, an on-screen element may include the button function, which tells the on-screen element that it will be visible on the workbench. The button can be clicked to perform other functions such as change the employees status to lunch or break or change equipment status to off or breakdown.

Additionally, an on-screen element may include functions that execute in the background which the user doesn't see from the workbench.

LYNQ provides a default set of on-screen elements. You can learn how to create custom on-screen elements further in this guide.

Let's take a look at the different functions that are provided by default to understand the behaviour in the workbench.

On-screen elements

LYNQ includes a range of on-screen elements to help manufacturers quickly build terminals. These on-screen elements may be edited or copied to create custom on-screen elements. On-screen elements may include single or multiple functions. Default on-screen elements are created initially during implementation, when the import profile function is run against a new installation of LYNQ. If this process has not been run, you will not see the on-screen elements when going to:

1. Settings
2. Advanced Settings
3. Select Workbench
4. Select Elements

In addition, if the profile has not been imported, you will not see the default terminals that are also provided, when going to:

1. Settings
2. Advanced Settings
3. Select Workbench
4. Select Terminals

If you do not see the data in the images above, refer to the section Importing the default profile.

On-screen elements

Let's take a look at the settings of the break on-screen element to learn how elements are structured.

1. Select Settings
2. Advanced Settings
3. Select Workbench
4. Select Elements
5. Double click on the 'Break' on-screen element.

At the top of the screen, general settings allow control of:

- Status Active/Not Active
- Unique ID of the On-Screen Element
- Sequence of the On-Screen Element
- Code and Description values
- Apply to (Employee and/or Equipment)
- Access control (by group)

Tab Name : *Functions*

The functions tab is where you define the functions that the on-screen element will perform. Functions are executed in sequence. Each function allows additional settings to be defined by clicking on settings.

On-screen elements

Tab Name : *Statues*

The statuses tab is where you define which statues the on-screen element will apply to. You must select a single or range or statues for the on-screen element to appear in the workbench terminal.

On-screen elements

Tab Name : *Terminals*

The terminals tab is where you define which terminals the on-screen element will apply to.

You can also enable on-screen elements for a terminal, directly from terminal maintenance.

Functions

LYNQ includes a range of functions which can be associated to on-screen elements. New functions cannot be created by the user. They are included when LYNQ is installed. From time to time, LYNQ may release new functions in upgrades to the software. New functions are automatically applied and the user does not need to append from profile to see them.

This guide describes the purpose of each function and how these are visualised in the workbench. When designing custom terminals, it is helpful to learn the purpose of each function and the settings that can be applied. This will in turn help you to design more sophisticated terminals and greatly increase the user experience.

You can only see which functions are available from the on-screen element edit screen.

Active task function

Function Name : *Active Tasks*

The active tasks function displays active tasks that are running. When a terminal is configured to use the workbench on-screen element, this function does not need to be added to the terminal. The workbench on-screen element has its own controls for showing active tasks.

How this function is visualised in the workbench

Function settings allow you to:

- Show attachments
- Select which columns to display
- Sequence the order of the columns
- Set a default column sort order

Alerts and issues function

Function Name : *Alerts and Issues*

The alerts and issues function provides users with the ability to immediately generate a pre-defined email, message, alert and/or production issue from the workbench. The function can be triggered before or after execution of other functions or it can be configured to execute separately against a workbench button.

How this function is visualised in the workbench

Function settings allow you to:

- Send message
- Send alert
- Send email
- Create production issue

Barcode selection function

Function Name : *Barcode Selection*

The barcode selection function allows you to use barcode scanning when selecting tasks.

How this function is visualised in the workbench

Function settings allow you to:

- Auto-start first scan
- Allow comments to be added
- Use classification codes
- Split time evenly, full or proportionally when multi jobbing
- Set advanced scan options to remove, replace or add characters
- Set hide/show operation preferences
- Trigger employee or equipment activity
- Select which columns to show
- Select the column sequence
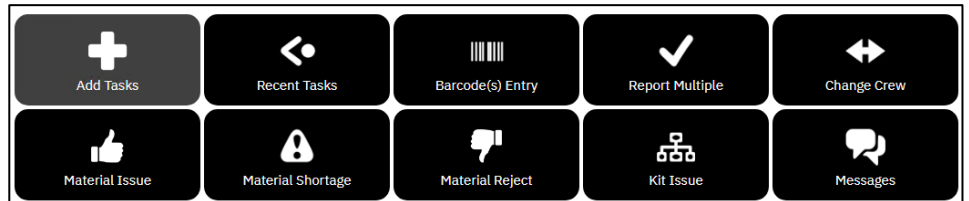- Select the default column sort order

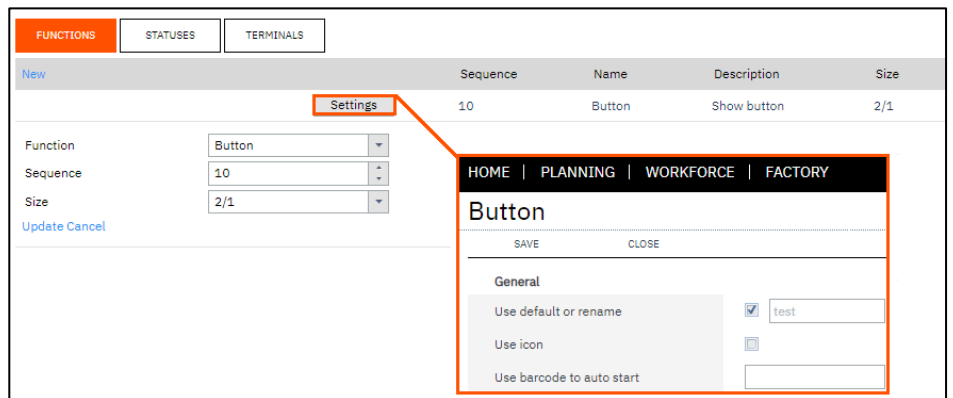# Button function

Function Name : *Button*

The button function is used to place an actual button on the workbench that the user can click on to perform other functions.

How this function is visualised in the workbench

Function settings allow you to:

- Select the button sequence
- Select a button size
- Select a custom button name
- Select an icon image
- Specify a barcode to use to auto start

Change crew function

Function Name : *Change Crew*

The change crew function allows users to change or leave the crew they are logged in to. A range of settings are available to customise the desired behaviour of the change crew function.

How this function is visualised in the workbench

Crew change					
CREW A	CREW B	CREW C	GROUP 1	GROUP 2	GROUP 3
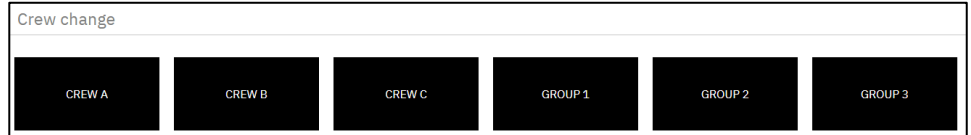
Function settings allow you to:

- Leave crew
- Return to previous crew
- Join crew linked to the terminal
- Join crew linked to the employee
- Select a specific crew value
- Apply filters
- Auto stop jobs when the last crew member leaves
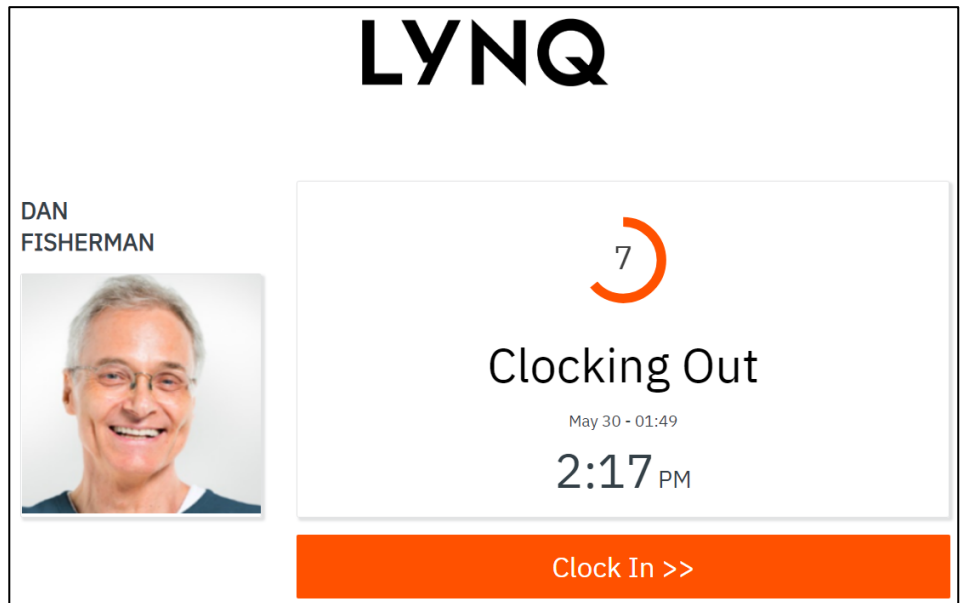- Trigger employee or equipment activity
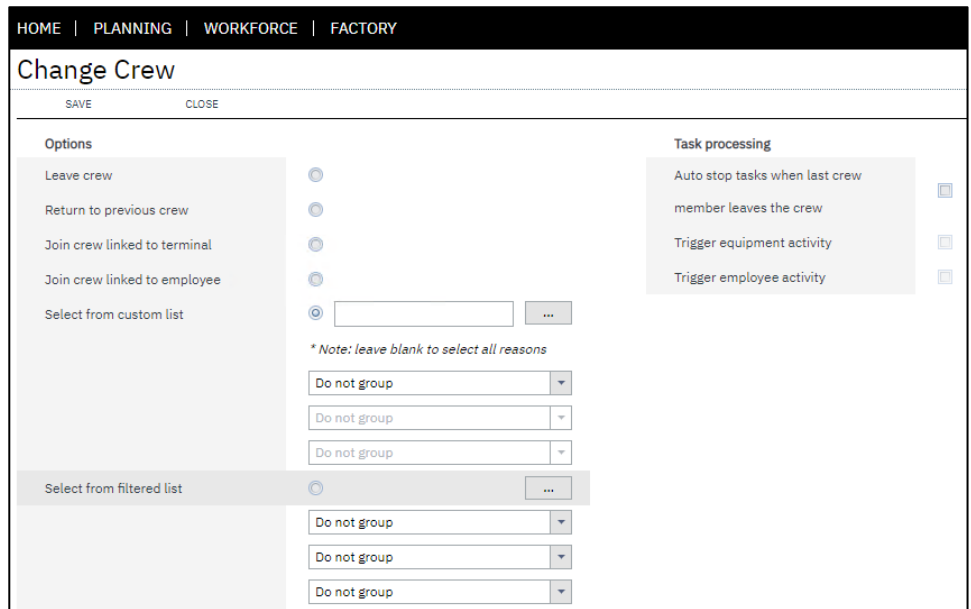
Clocking function

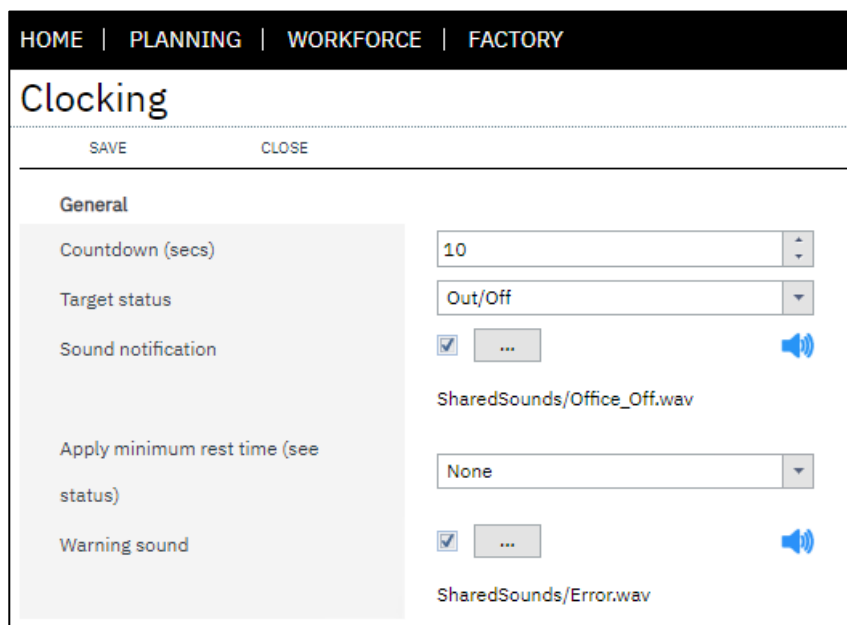Function Name : *Clocking*

The clocking function allows users to manage options for clocking in and out of the workbench.

How this function is visualised in the workbench

Function settings allow you to:

- Select a countdown timer in seconds
- Select the target status (i.e. out/off)
- Select a sound to play
- Select a minimum rest time
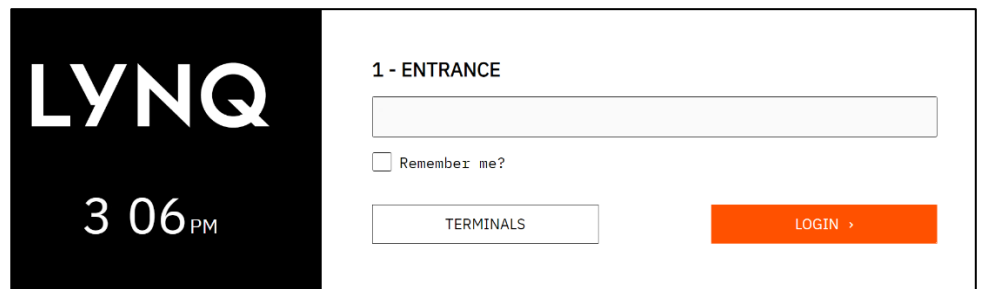- Select a minimum rest time warning sound

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Close function

Function Name : *Close*

The close function is used to close the screen and return the user to the workbench clock in screen.

How this function is visualised in the workbench

The close function does not have any configurable settings.

Custom tracking function

Function Name : *Custom Tracking*

The custom tracking function provides the ability to enter custom tracking values for a task and can be configured to request input for any custom tracking code defined under Advanced Settings > Definitions > Custom. Custom tracking data is stored against the transaction when reported.

How this function is visualised in the workbench

Function settings allow you to:

- Select a label for value 1 and value 2
- Enable Comments
- Select whether a task must be started
- Select number of items to show per page
- Select which view to show data from
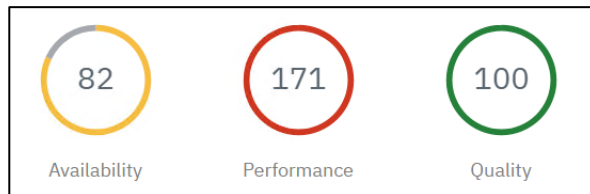- Filter data
- Set the tracking code to use
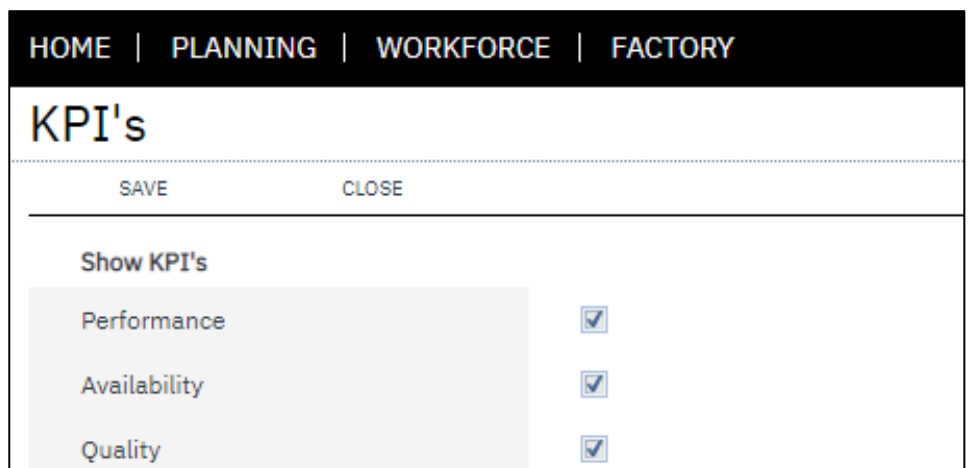
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KPI function

Function Name : *KPI's*

The KPI's function provides the ability to display key performance indicator dials on the workbench.

How this function is visualised in the workbench

Function settings allow you to:

- Show Performance KPI
- Show Availability KPI
- Show Quality KPI

Leave crew function

Function Name : *Leave Crew*

The leave crew function allows users to leave the crew they are logged in to. A range of settings are available to customise the desired behaviour of the leave crew function.

How this function is visualised in the workbench

Function settings allow you to:

- Auto stop tasks when the last crew member leaves the crew
- Trigger equipment activity
- Trigger employee activity

Material issues (active tasks) function

Function Name : *Material Issues (Active Tasks)*

The material issues (Active Tasks) function provides ability to issue materials when the user selects an active task.

How this function is visualised in the workbench

Function settings allow you to:

- Enable comments
- Show extended details
- Use validation rules
- Allow issuing over the quantity required
- Select which columns to show (task and capture BOM)
- Select the column sequence (task and capture BOM)
- Select the default column sort order (task and capture BOM)

Material issues (jobs) function

Function Name : *Material Issues (Jobs)*

The material issues (Jobs) function provides ability to issue materials for multiple jobs from the same screen.

How this function is visualised in the workbench

Function settings allow you to:

- Enable comments
- Show extended details
- Use validation rules
- Allow issuing over the quantity required
- Allow multi-jobbing
- Select number of items to show per page
- Select which data view to use
- Select which columns to show
- Select the column sequence
- Select the default column sort order

Material reject function

Function Name : *Material Reject*

The material reject function provides ability to reject materials for multiple jobs from the same screen.

How this function is visualised in the workbench

Function settings allow you to:

- Enable comments
- Show extended details
- Use validation rules
- Select which columns to show (task and capture (BOM))
- Select the column sequence (task and capture (BOM))
- Select the default column sort order (task and capture (BOM))

Message function

Function Name : *Message*

The message function provides ability to compose, read and view messages from the workbench.

How this function is visualised in the workbench
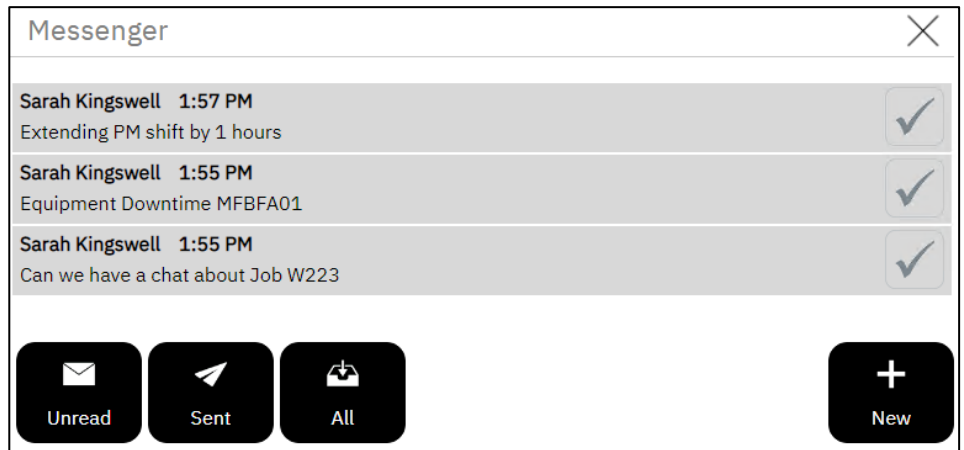
Function settings allow you to:

- Send the message by email
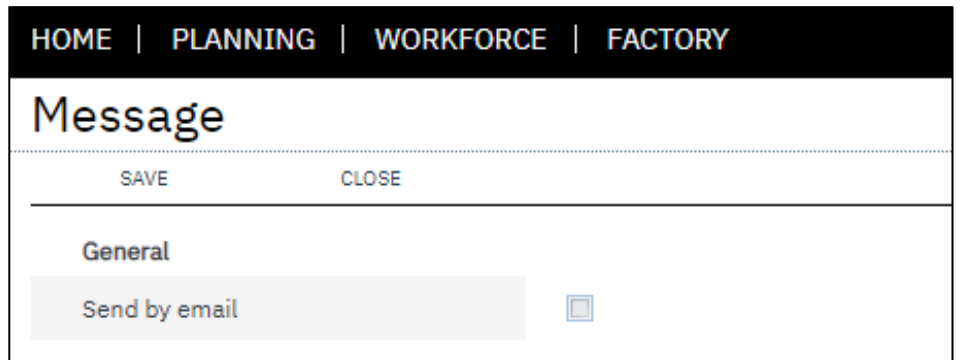
Open URL function

Function Name : *Open URL*

The open URL function provides ability to open a predefined URL from the workbench.

How this function is visualised in the workbench

Function settings allow you to:

- Open in a new tab
- Specify a URL link

Password protect function

Function Name : *Password Protect*

The password protect function provides ability to password protect the execution of any on-screen element. For example, let's say you have a terminal where you want to limit access to the material issues button by way of password.

How this function is visualised in the workbench

Function settings allow you to:

- Set character length
- Specify a password

Process data function

Function Name : *Process Data*

The process data function determines what types of transactions are generated/processed when the operator selects a button on the workbench. The settings can be enabled for all transaction types, selective transaction types or no transaction types. Therefore, providing flexibility on the frequency when transactions are generated within the data collection process. If the process data function is not included for the on screen element, no processing happens when the on screen element is selected from the workbench.

This function executes in the background and not visualised in the workbench.

For example, let's assume an operator is working an 8 hour shift. The operator arrives at the factory at 9:00 and leaves at 17:00 and goes to lunch for 1 hour at 12:30. During this time the operator is working on Job 123 for the entire day.

You expect LYNQ to capture:

- 7 hours productive labour against job 123
- 1 hour non-productive time for lunch

The process data setting is enabled for the lunch on screen element. LYNQ will generate the following transactions.

- 3.5 hours productive labour against Job 123
- 1 hour non-productive time for lunch
- 3.5 hours productive labour against Job 123

Function settings allow you to:

- Select which transactions will be processed
- Select with employee or equipment activity will be triggered

Production issues function

Function Name : *Production Issues*

The production issues function provides the ability to raise production issues from the workbench. Users can quickly raise issues using the predefined issue types. Production issues are visible form the issue log screen and any other relevant screens that the issue relates to.

How this function is visualised in the workbench
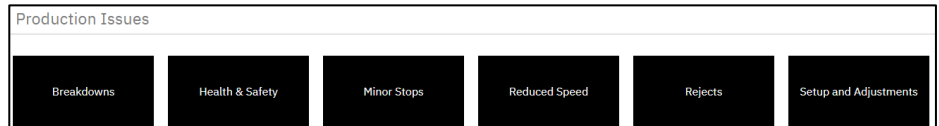
Function settings allow you to:

- Enable comments
- Enable field for quantity and/or hours
- Select which data view to use
- Select number of items to show per page
- Filter data
- Select default reasons

Production issues function

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Production Issues

SAVE   CLOSE

General

Show field for comments	☑
Show field for quantity	☐
Show field for hours	☑
Show data from	Operation Selection ▾
Number of items per page	10
Filter data by	...
Select reason from	...

* Note: leave blank to select all reasons

Recent task(s) function

Function Name : *Recent Task(s)*

The recent task(s) function allows users to clock back into recent tasks. Especially useful when a user wants to quickly see what tasks they were working on before they went to break, lunch etc.

How this function is visualised in the workbench

Function settings allow you to:

- Enable comments
- Enable multi selection of tasks
- Show current tasks
- Select the number of tasks to show
- Use classification codes
- Split time by employee or machine
- Select which data view to use
- Filter data
- Trigger employee and/or equipment activity

Recent webhooks function

Function Name : *Recent Webhooks*

The recent webhooks function will show you the recent webhooks executed

How this function is visualised in the workbench

Function settings allow you to:

- Select the number of webhooks to show

Report multiple function

Function Name : *Report Multiple*

The report multiple function provides ability to report production (Qty, Scrap, Status) for multiple tasks from the same screen. Options include stopping all tasks, completing all tasks and reporting all tasks.

How this function is visualised in the workbench

Function settings allow you to:

General Settings

- Provide option to stop task
- Select whether to trigger employee and/or equipment activity
- Show comments field
- Report non-productive
- Track performance abnormality
- Adjust column settings
- Select validation rules

Quantity Settings

- Show quantity field
- Select if default values are based on remaining or specified amounts
- Select if quantity can be edited
- Show extended details
- Select validation rules

Status Settings

- Provide option to change status
- Select a default status
- Select if status can be edited
- Auto complete when no quantity
- Auto stop when complete
- Select validation rules

Report multiple function

Scrap Settings

- Show scrap field
- Show extended details
- Select whether to deduct scrap from good quantity
- Use validation rules

Report single function

Function Name : *Report Single*

The report single function provides ability to report production (Qty, Scrap, Status, Issue Materials) for a single task at a time. This function provides controls to skip to next running task, stop task and issue/reject materials.

How this function is visualised in the workbench

Function settings allow you to:

General Settings

- Provide option to stop task
- Select whether to trigger employee and/or equipment activity
- Show comments field
- Report non-productive
- Track performance abnormality
- Show webhook button
- Allow form submission webhooks
- Adjust column settings
- Select validation rules

Quantity Settings

- Show quantity field
- Select if default values are based on remaining or specified amounts
- Select if quantity can be edited
- Show extended details
- Show extended details on the same page
- Select validation rules

Report single function

Material Issue Settings

- Show issue button
- Allow backflush of materials
- Show extended details
- Allow issue greater than required quantity
- Adjust column settings
- Use validation rules

Status Settings

- Provide option to change status
- Select a default status
- Select if status can be edited
- Auto complete when no quantity
- Auto stop when complete
- Use validation rules

Scrap Settings

- Show scrap field
- Show extended details
- Show extended details on same page
- Select whether to deduct scrap from good quantity
- Use validation rules

Material Rejects Settings

- Show reject button
- Show extended details
- Adjust column settings
- Use validation rules

Scheduled actions function

Function Name : *Scheduled Actions*

The scheduled actions function displays information about future scheduled actions to users in the workbench.

How this function is visualised in the workbench

The scheduled options function does not have any configurable settings.

Scheduled tasks function

Function Name : *Scheduled Tasks*

The scheduled tasks function shows active tasks for employees or equipment.

How this function is visualised in the workbench
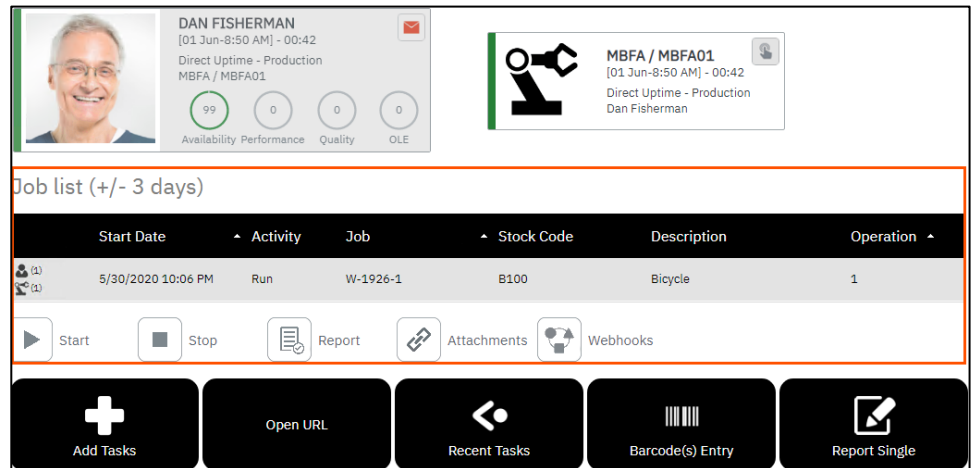
Function settings allow you to:

Control Settings

- Show start button
- Show classification button
- Show stop button
- Show report button
- Show attachments button
- Show webhook button
- Adjust column settings

Reporting Settings

- Start task before reporting
- Adjust reporting options

Job List Settings

- Allow multi-jobbing
- Select split time behaviour for multi jobbing
- Filter by period
- Adjust show/hide operations

KPI's

- Show performance KPI
- Show availability KPI
- Show quality KPI

Scheduled tasks function

Trigger Settings

- Trigger employee activity
- Trigger equipment activity

Sound message function

Function Name : *Sound Message*

The sound message function provides ability to play a sound in the workbench. Typically, this function is used in combination with other functions.

Function settings allow you to:

- Select which sound to play

Start next function

Function Name : *Start Next*

The start next function provides ability to clock the user off the current active task and clock the user into the next operation of the same job.

How this function is visualised in the workbench
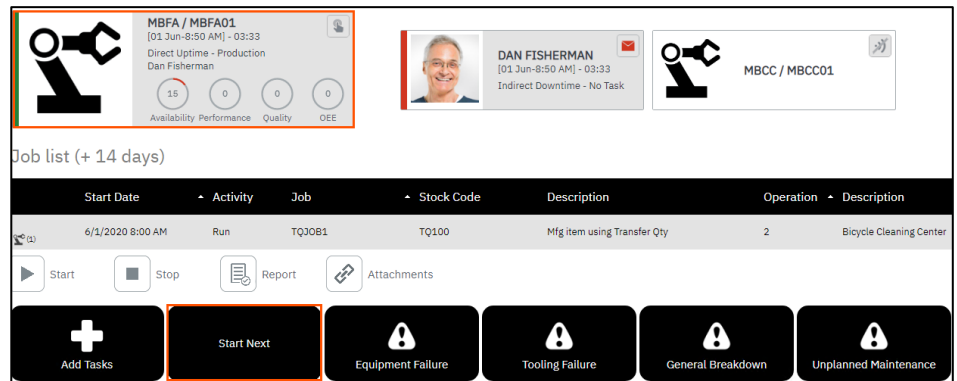
When clicking on a button which includes the start task function, the user will move to the next operation and the current operation will be stopped.
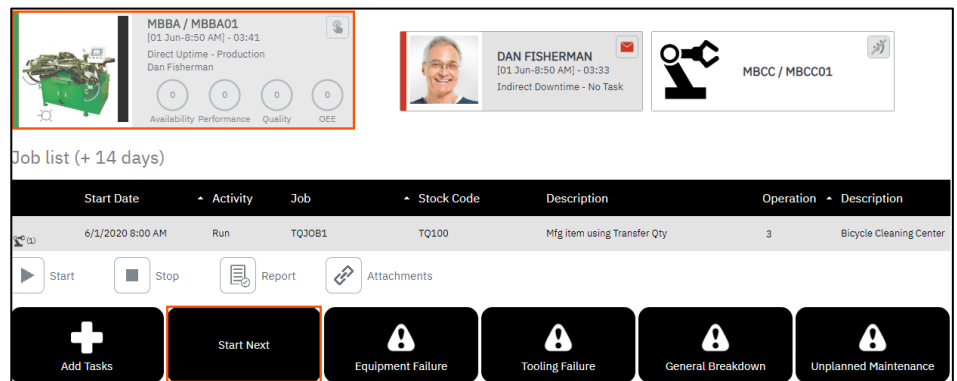
Function settings allow you to:

- Auto complete last activity
- Complete previous to start next operation
- Trigger employee activity
- Trigger equipment activity
- Adjust split time settings when multi jobbing
- Select a classification code
- Select a classification value

Start next function

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Start Next

SAVE   CLOSE

General

Auto-complete last activity	☑
Complete previous to start next (op)	☑
Trigger employee activity	☐
Trigger equipment activity	☐
Split time by employee	Split Evenly ▼
Split time by machine	Split Evenly ▼
Use classification codes	Do not use ▼
Classification value	▼

Start task function

Function Name : *Start Task*

The start task function provides ability to clock a user into a predefined task, as specified by the function settings. This function is commonly used for the reporting of non-productive time, especially when the labour time should be posted against a job in Enterprise Resource Planning.

How this function is visualised in the workbench

Function settings allow you to:

- Select a classification code
- Select a classification value
- Select how to split time when multi-jobbing
- Trigger employee and/or equipment activity

Status change function

Function Name : *Status Change*

The status change function provides ability to change the status of employees or equipment. For example, from being clocked in to being at lunch or clocked off).

How this function is visualised in the workbench

Function settings allow you to:

- Remain in current status
- Enable Back to previous status
- Select a target status
- Reset accounting date
- Record clock in/out (payroll)
- Apply status change to whole crew
- Apply minimum rest time

Stop current task(s) function

Function Name : *Stop Current Task(s)*

The stop current task(s) function provides ability to clock off employees or equipment from all current active tasks. This function is typically associated to the end day on-screen element but may be associated to a button for other purposes.

How this function is visualised in the workbench

When clicking on a button which includes the stop current task(s) function, all running jobs will be stopped.

Function settings allow you to:

- Trigger employee activity
- Trigger employee activity

Task(s) selection function

Function Name : *Task(s) Selection*

The task(s) selection function provides ability for users to start a task by selecting it from a task list

How this function is visualised in the workbench

Function settings allow you to:

- Enable comments
- Enable multi-jobbing
- Select number of items to show per page
- Select the split time behaviour for multi-jobbing
- Select which data view to use
- Filter data
- Trigger employee and/or equipment activity

Timesheet function

Function Name : *Timesheet*

The timesheet function provides the ability for users to report production in a timesheet entry format. This function also displays all transactions entered or generated by the user with options to edit the transaction.

How this function is visualised in the workbench

Function settings allow you to:

General Settings

- Show labour hours
- Show status
- Enable comments
- Enable equipment hours
- Allow transactions to be edited
- Allow transactions to be deleted
- Enable custom tracking

Task Selection Settings

- Select which data view to use
- Select number of items to show per page
- Enable classification codes

Quantity Settings

- Show quantity
- Show extended details

Scrap Settings

- Show scrap
- Show extended details

Timesheet function

Issue Settings

- Show issues
- Show extended details

Reject Settings

- Show rejects
- Show extended details

Expanded and Collapsed Settings

- Select which columns to show
- Select the column sequence
- Select the default column sort order

Workbench notification function

Function Name : *Workbench Notification*

The workbench notification function is used to present additional information on the workbench. The function can be triggered before or after execution of other functions or it can be configured to execute separately against a workbench button.

How this function is visualised in the workbench
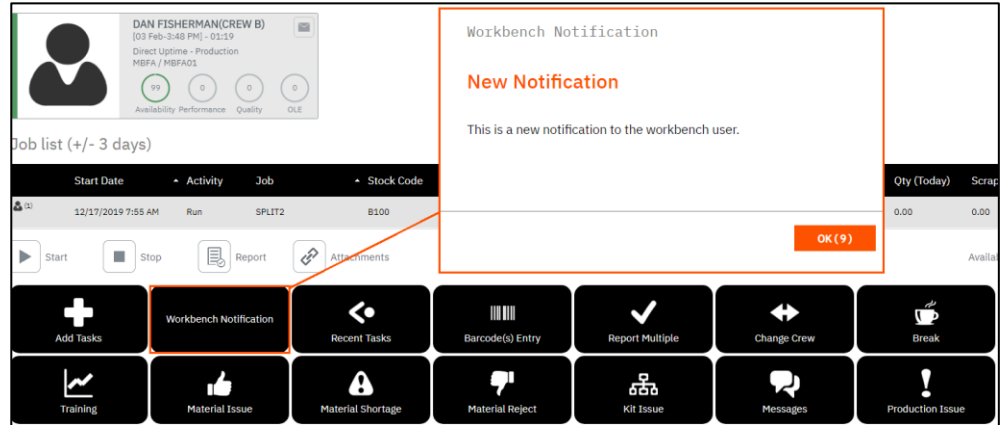
Function settings allow you to:

- Enter header text
- Select header text colour
- Enter notification text
- Select notification text colour
- Select dialog timeout (secs)
- Select which sound to play
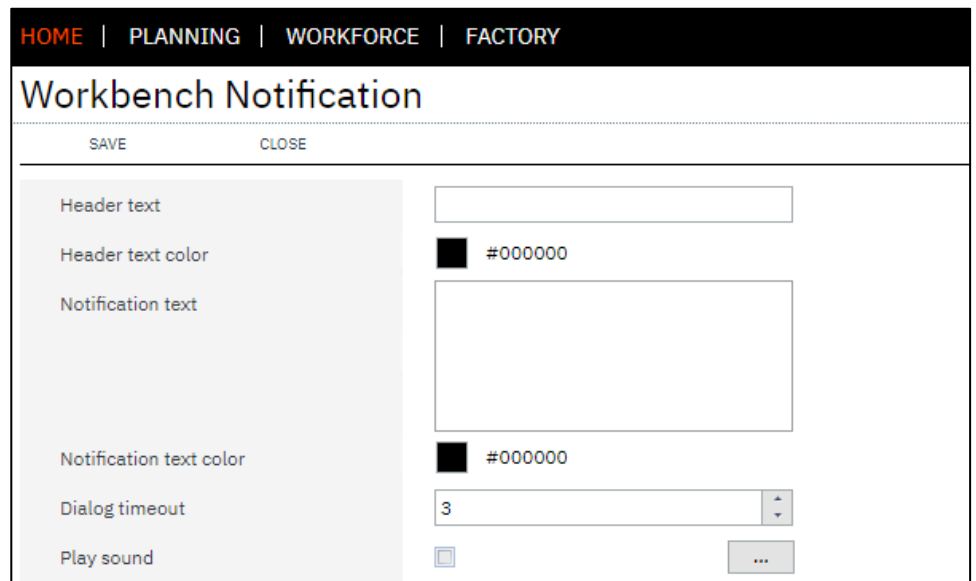
Common function settings

Each function includes a range of different settings that can be configured by the user. In most cases the settings are self-explanatory. There are some settings that require further explanation. In this section, we will learn some of the common settings that are most frequently used across multiple functions.

Function Setting : *Trigger Employee or Equipment Activity.*

It's possible to configure the workbench so the employee is automatically clocked into the job when the job is started on equipment. Or to automatically start the job on equipment when an employee starts a job.

When a user starts a job without the trigger equipment activity enabled, time is only clocked against the employee and a corresponding labour transaction is generated. With trigger equipment activity enabled, the job is automatically started on the scheduled or planned equipment (if unscheduled). This results in a labour transaction and a machine time transaction being generated once the user stops the job.

Function Setting : *Split Time*

Split time applies in scenarios where multiple jobs are running. When a user is running multiple job orders, the time split settings against the function will determine how labour transactions are calculated. Time split settings can be configured differently for employees and equipment.

Let's take a look at how LYNQ will calculate labour time using the split even, full split and split proportionally options.

When configured for split even, the labour is distributed equally across the jobs that are running. For example, an employee runs Job Order A and Job Order B at 2PM for 1 hour In this example, the labour time calculated for each Job Order is 30 minutes.

Split Even	1PM	2PM	3PM	4PM	5PM	Job Labour Time
	Job A	Job A				1.5 Hours
		Job B	Job B	Job B		2.5 Hours
				Job C	Job C	1.5 Hours
Employee Labour Time	1 Hour	1 Hour	1 Hour	1 Hour	1 Hour	

When configured for full split, each job order will receive the full time the employee was running the job. For example, an employee runs Job Order B and Job Order C at 4PM for 1 hour. In this example, the labour time calculated for each Job Order is 1 hour.

Full Split	1PM	2PM	3PM	4PM	5PM	Job Labour Time
	Job A	Job A				2 Hours
		Job B	Job B	Job B		3 Hours
				Job C	Job C	2 Hours
Employee Labour Time	1 Hour	2 Hours	1 Hour	2 Hours	1 Hour	

Common function settings

When configured for proportional split, the labour time is distributed based upon the product definition's planned runtime . For example, an employee runs Job Order D and Job Order E at 2PM for 1 hour. Job Order D expects 1 unit to be produced in 1 hour. Job Order E expects 2 units to be produced in 1 hour. In this example, the labour time calculated for Job Order is D is 40 minutes and Job E is 20 minutes.

Proportional Split	1PM	2PM	3PM	4PM	5PM	Job Labour Time
	Job D	Job D				1 Hour 40 Mins
		Job E	Job E	Job E		2 Hours 20 Mins
Employee Labour Time	1 Hour	1 Hour	1 Hour	1 Hour	1 Hour	

Function Setting : *Show/Hide Operations*

The show/hide operations setting, allows you to refine what the user can see in the workbench. The hide options may differ depending on the Enterprise Resource Planning application LYNQ is integrated with.

Function Setting *: Validation Rules*

Validation rules can be used to control whether a user action should be followed by a warning or a prevent error message. Validation rules help to improve the accuracy and flow of data collection. It is recommended that these rules are enabled where possible.

Generally, validation rules apply to:

- Quantity reporting
- Scrap reporting
- Status reporting
- Material issue reporting
- Material reject reporting

Common function settings

Validation rules can be set as either:

- Do not validate
- Warn
- Prevent

Function Setting : *Track Performance Abnormality*

Track performance abnormality can be enabled to immediately raise issues when performance differs to the planned execution time defined within the operation. When enabled, you can define the acceptable run rate thresholds and provide the user with a list of reason types to select as they are reporting in the workbench.

Function Setting : *Reset Accounting Date*

Reset accounting date is typically used when employees or equipment clock in and out of LYNQ on different calendar days. For example, an employee clocks into the workbench at the start of their shift at 10PM and clocks out (end day) on the following day at 6AM. Without this setting enabled, labour time is associated to the day the user clocked in.

Common function settings

If the employee was running a job for 8 hours, a labour transaction would be generated on the day the user clocked in, for 8 hours. For reporting purposes, this may not be an accurate account of their time. By enabling the reset accounting date setting, LYNQ will generate a transaction for 2 hours on the day the employee started the shift and a transaction for 6 hours on the day the employee ended the shift.

This setting can also be enabled for equipment.

Function Setting : *Filter*

Task filters are used to filter the data that is displayed in the workbench. For example, let's assume you currently have a terminal configured to display all tasks by regardless of the job order status. You decide that you only want your users to see tasks where the order status is equal to incomplete. By using the task filter this can be achieved.

Condition Examples:

Condition	Filter Value	Column Name
Where Product equals B100	B100	Item
Where Product equals B100 or B200	B100; B200	Item
Where Product equals B100 AND Operation equals 10	B100	Item
	10	Operation
Where Product equals B100 and Operation is not equal 10	B100	Item
	!10	Operation
Where Product is not equal to B100 or B110	!B100; B110	Item

Default on-screen elements

The table below describes the predefined on-screen elements provided by the default profile and their associated functions in sequence.

OSE Name	Functions in Sequence
Active Tasks	Active Tasks
Add Tasks	Button Task(s) Selection Process Data
Admin Issue	Button Production Issues
Back to Previous	Button Process Data Status Change
Barcode Entry	Button Report Single Stop Current Task(s) Process Data Barcode Selection
Barcode(s) Entry	Button Barcode Selection Process Data
Break	Button Status Change Process Data
Change Crew	Button Change Crew Process Data
Crew Break	Button Status Change Process Data
End Day	Button Stop Current Task(s) Process Data Clocking Close
Equipment Failure	Button Status Change Process Data
General Breakdown	Button Status Change Process Data
Join Crew (Employee)	Button Change Crew Process Data
Join Crew (Previous)	Button Change Crew Process Data

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Default on-screen elements

OSE Name	Functions in Sequence
Join Crew (Terminal)	Button Change Crew Process Data
Kit Issue	Button Material Issue (Jobs) Process Data
Leave Crew	Button Change Crew Process Data
Lunch	Button Status Change Process Data
Major Adjustment	Button Status Change Process Data
Material Issue	Button Material Issue (Active Tasks) Process Data
Material Reject	Button Material Reject Process Data
Material Shortage	Button Status Change Process Data
Meeting	Button Status Change Process Data
Messages	Button Message
My Time	Button Timesheet
Operator Shortage	Button Status Change Process Data
Production Issue	Button Production Issues
Project	Button Status Change Process Data
Recent Tasks	Button Recent Task(s) Process Data
Recent Webhooks	Button Recent Webhooks
Report Multiple	Button Report Multiple Process Data
Report Single	Button Report Single Process Data

Default on-screen elements

OSE Name	Functions in Sequence
Scheduled Actions	Scheduled Actions
Setup/Changeover	Button Status Change Process Data
Start Day	Button Clocking
Start Day (Entrance)	Clocking Close
Stop All Tasks	Button Stop Current Task(s) Process Data
Stop/Start Task	Button Report Single Stop Current Task(s) Process Data Task(s) Selection
Timesheet Terminal Entry	Timesheet Close
Tooling Failure	Button Status Change Process Data
Training	Button Status Change Process Data
Turn Off	Button Stop Current Task(s) Status Change Process Data
Turn On	Button Status Change
Unplanned Maintenance	Button Status Change Process Data
Warm-Up	Button Status Change Process Data
Workbench (Employee)	Scheduled Tasks
Workbench (Equipment)	Scheduled Tasks

Workbench matrix

The matrix can be used to quickly enabled or disable which statues an on-screen element applies to.

To configure the applicable statuses of an on-screen element:

1. Select Settings
2. Advanced Settings
3. Select Workbench
4. Select Matrix
5. Check the relevant check box
6. Changes are immediately saved

LYNQ

Creating custom terminals

To create a custom workbench terminal from scratch:

1. Select Terminal Maintenance
2. Select New
3. Select Enable
4. Enter a suitable value in the Name field (i.e. Work Centre B)
5. Enter a description value in the description field (i.e. Work Centre B)
6. Select [...] in the Linked Equipment field
7. Select the work units to appear as linked equipment (i.e MBFA, MBCC)
8. Select [...] in the Crew field (if applicable)
9. Select the relevant Crew code (if applicable)
10. Select Use Timeout
11. Select EQUIPMENT from the Equipment Terminal lookup
12. Select Access Control if you want to restrict access to the terminal (if applicable)
13. Select [...] in the Access Control field (if applicable)
14. Specify a Password (if applicable)
15. Specify Data Filters (if applicable)
16. As an example, select the following on-screen elements to allow the user to clock in and out and report labour, quantity, scrap against scheduled jobs.
17. Back to Previous
18. Start Day
19. End Day
20. Break
21. Workbench (employee)
22. Click Save

To test the new terminal:

1. Click Workbench
2. Click Terminals
3. Select your new terminal created earlier (i.e Work Centre B)
4. Enter an active employee ID that is not already clocked in
5. Click Login

When you clock into the workbench, you will see the employee plate, equipment plates and the start day button. Select start day to advance to the workbench.
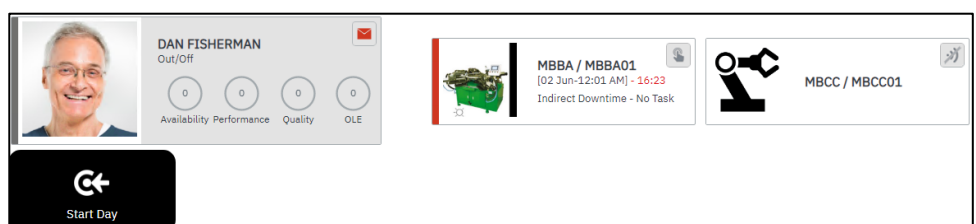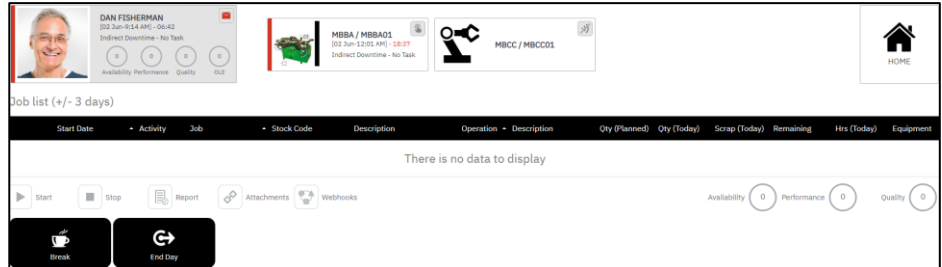
Creating custom terminals

After start day, the workbench displays the job list (which is part of the workbench (employee) on-screen element), the break and end day buttons. Notice that the employee's status is Indirect Downtime – No Task. This is because the employee has not selected any tasks to run at this point.


Next, click the break button. Notice that the employee's status has changed to Indirect Downtime - Break. You will see the button 'return to previous' and the 'End Day' button, to allow the user to either return back from break or to end the day whilst on break.

Next, click the 'return to previous' button. Notice that the employee's status has changed back to Indirect Downtime – No Task.

If jobs are scheduled in Visual APS to the linked equipment and the task start date is within the Job List +/- days filter, you will see the task by clicking on the equipment plate. If the equipment is not turned on, then click on the turn on button.
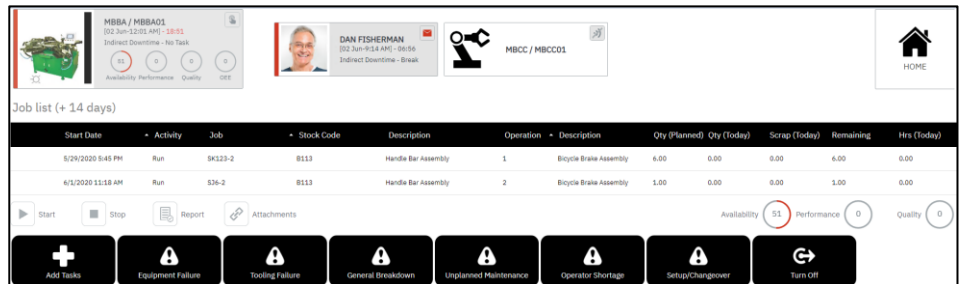

Notice how the workbench changes to show different buttons which are relevant to equipment, instead of an employee. These buttons are read from the equipment terminal that is specified in terminal settings.
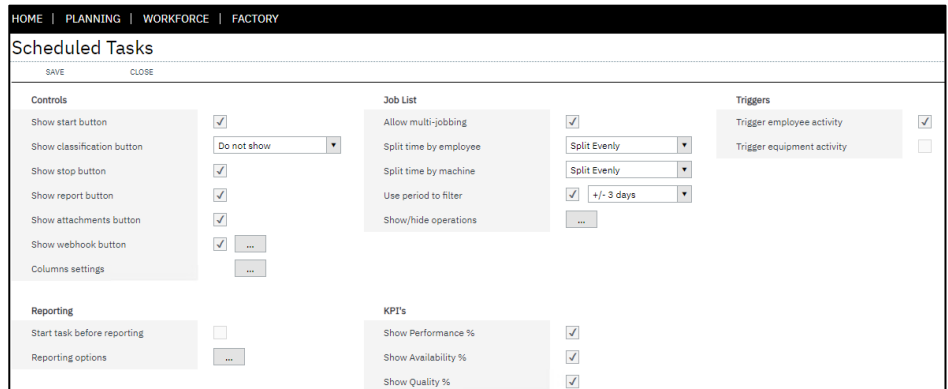
Creating custom terminals

Click on a task from the job list and click start. Notice that the status for both equipment and employee change to Direct Uptime – Production and the vertical status indicator bar changes colour. The vertical status indicator bar is also displayed to the left of the job list before the start date and will show the number of equipment and employees clocked into the job.
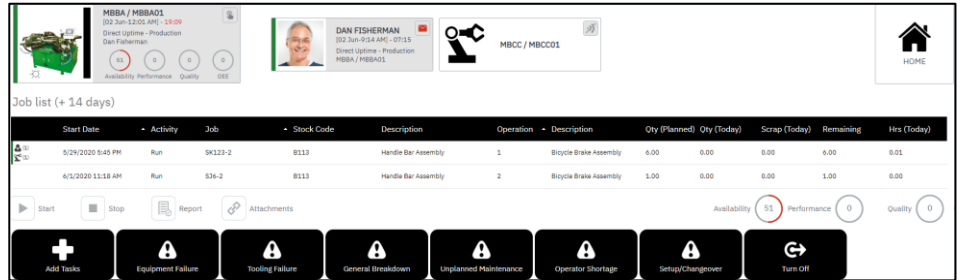
It's possible to configure the workbench so the employee is automatically clocked into the job when the job is started on equipment. In addition, a job may be started automatically on the scheduled equipment when an employee clocks into the job.

The trigger settings in the scheduled tasks function which is associated to the workbench (employee) and workbench (equipment) on-screen element, enables this behaviour. Trigger settings are also available in other on-screen functions that are designed to capture data.

Click on the task in the job list and click stop. To clock out of the workbench, click on the end day button.

Creating custom terminals

In situations where the workbench terminal templates provided are not suitable for the manufacturing process, custom terminals can be created. Depending on the requirements, it may be quicker and easier to copy an existing terminal, than building a new workbench terminal from scratch. This guide covers both scenarios. Before creating a custom workbench terminal, you should have read the sections:

- Terminals
- Functions
- On-Screen Elements
- Importing the Default Profile
- Default On-Screen Elements

Let's start by learning how we can build a custom terminal by copying an existing terminal template first. When a terminal is copied, all settings relating to the source terminal are copied to the new terminal. It is important to note that the copy process does not create a separate copy of the on-screen elements. Therefore, both terminals will be referencing the same on-screen elements. In cases where a terminal needs to be associated to an existing on-screen element but you want to apply different on-screen element properties, the existing on-screen element should be copied and the properties edited or created from scratch.

To copy a terminal:

1. Select Terminal Maintenance
2. Tick the 'Advanced' predefined terminal
3. Select Copy
4. Enter a suitable value in the Name field (i.e. Work Centre A)
5. Enter a description value in the description field (i.e. Work Centre A)
6. Select [...] in the Linked Equipment field
7. Select the work units to appear as linked equipment (i.e MBFA, MBCC)
8. Uncheck or check the on-screen elements that are required
9. Select Save

Creating custom on-screen elements

In situations where the default On-Screen Elements provided are not suitable for the manufacturing process, custom on-screen elements can be created. New on-screen elements are typically created when:

- Different terminals require the same on-screen element but with different settings
- On screen elements provided are insufficient for the requirements

To successfully create custom on-screen elements, you must have a good understanding of the different functions included in LYNQ. Functions ultimately determine how the user interacts with the workbench. Refer to the 'Functions' section before starting this section.

It's possible to create custom on screen elements by:

- Copying an existing on-screen element
- Creating the on-screen element from scratch

Both scenarios will be covered in this guide.

Let's assume you have two terminals configured. Work Centre A and Work Centre B and both terminals are using the material issue on-screen element. You decide that in Work Centre B you want to disable the 'allow over issue setting' but in Work Centre A the 'allow over issue setting' is enabled.

This can be achieved by:

1. Creating a copy of the existing on-screen element
2. Amend the default settings
3. Associate the new on-screen element to Work Centre B
4. Disassociate the original on-screen element from Work Centre B

To copy an existing on-screen element

1. Select Settings
2. Select Advanced Settings
3. Select Workbench
4. Select Elements
5. Select the on-screen element (i.e Material Issues) using the check box
6. Select Copy
7. Change the value in the code field (i.e 'Material Issue - Work Centre B')
8. Select settings against the Material Issue (Active Tasks) function
9. Deselect the option to 'allow over issue'
10. From the Statuses Tab, ensure the 'clocked in status' is selected
11. From the Terminals Tab, select which terminal this will apply to (i.e Work Centre B)
12. Select Save

Creating custom on-screen elements

To remove an on-screen element from a terminal:

1. Select Settings
2. Select Advanced Settings
3. Select Workbench
4. Select Terminals
5. Select the Terminal (i.e Work Centre B) using the check box
6. Select Edit
7. Select the Functions Tab
8. Uncheck the Material Issue on-screen element
9. Select Save

To create a new on-screen element from scratch:

1. Select Settings
2. Select Advanced Settings
3. Select Workbench
4. Select Elements
5. Select New
6. Specify values in fields
   a. Code
   b. Description
7. Select which type of resource from the Apply to field
8. Select a control access group value (if applicable)
9. Select Save

Creating custom on-screen elements

By default, LYNQ will automatically add the button function. You can adjust the size of the button by clicking on Edit and then clicking on Update.
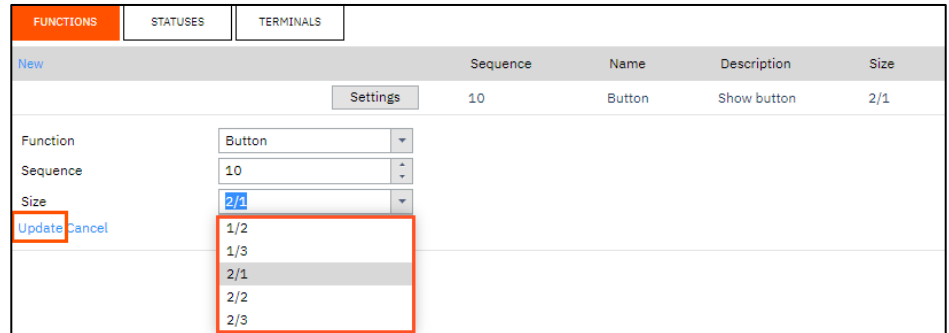
To add additional functions:

1. Select Functions
2. Select New
3. Select the function (i.e Material Issue (Active Tasks)
4. Select a sequence
5. Select Update
6. Select New
7. Select the function (i.e. Process Data)
8. Select a sequence
9. Select Update
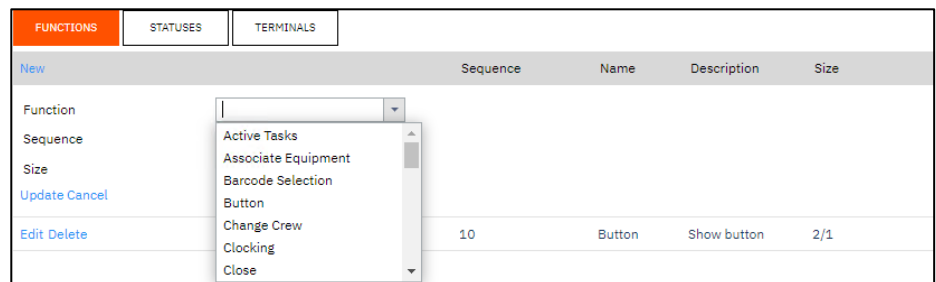
To select which statuses the on-screen element will apply to:

1. Select the Statuses Tab
2. Check the relevant Statuses (i.e. clocked in)

To select which terminals the on-screen element will apply to:

1. Select the Terminals Tab
2. Check the relevant Terminals

Click Save when you are ready to save the new on-screen element.

Creating custom on-screen elements

In the previous steps you have learnt how to create on-screen elements, manually. LYNQ also includes a quick setup feature that can be used to create and configure a new on-screen element quickly from one screen. This feature is limited to creating on-screen elements for non-productive activity only.

By using the quick setup feature you can easily:

- Associate the on-screen element with an existing/new diversion
- Associate the on-screen element to statuses
- Select which on-screen elements this will show when active
- Associate on-screen element to terminals
- Apply to either employees and/or equipment and specific resources
- Apply to a specific transaction rule

To use the quick setup feature:

1. Select Settings
2. Select Advanced Settings
3. Select Workbench
4. Select Elements
5. Select Quick Setup
6. Select Non Productive Activity
7. Enter a name in the Activity field (i.e. QA Meeting)
8. Enter a description in the Description field (i.e. QA Meeting)
9. Select the diversion it will apply (i.e Add New)
10. Select a colour
11. Select a Type (i.e. Indirect Downtime)
12. Leave ERP non-production code blank
13. Select the relevant transaction rule (i.e. excluded)
14. Select the statuses the on-screen element will apply to (i.e clocked in)
15. Select with on-screen elements should also show in this activity (i.e. back to previous)
16. Select the terminals this should display on
17. Select which resources this can be available to (i.e. Employees Only)
18. Select Save

Creating custom on-screen elements

The new on-screen element is now available as a button on the workbench.

Configuring roles and groups

User seats are assigned to groups in seat maintenance and determine which permissions the user will inherit. You assign a role to group(s) and the role is configured with the functional areas of LYNQ that the user will have access to.

By default, a selection of roles are provided when the default profile is imported. Additional roles can be created as required.

Double click on the role to see which rights are enabled.

Configuring roles and groups

Click on the groups tab to see which groups the role is assigned to.

To configure a new group:

1. Select Home
2. Select Seat Maintenance
3. Select Groups
4. Select New
5. Enter Name and Description for the Group (i.e. Line 3)
6. Select the Parent Group (i.e. Production)
7. Select which users should belong to the group from the Owners Tab
8. Select Save

To configure a new role:

1. Select Home
2. Select Seat Maintenance
3. Select Roles
4. Select New
5. Enter Name and Description for the Role (i.e. Limited Factory)
6. Select the Rights the role includes from the Rights Tab
7. Select the Groups the role is associated to from the Groups Tab
8. Select Save

Configuring crews

Crews can be used in environments where companies want to track and control activity of multiple operators working on the same activities. Crew data collection activities such as reporting good and bad quantities, are performed no differently to when an employee is using the workbench, outside a crew. Transactions generated whilst working in a crew, will capture the crew name. When the button 'Crew Break' is selected all crew members will go on break at the same time.

LYNQ includes predefined crew codes which can be edited or deleted as required.

To create a new Crew Code:

1. Select Home
2. Select Seat Maintenance
3. Select Crews
4. Select New
5. Enter a Name in the Code Field
6. Enter a Description in the Description Field
7. Select Save

Configuring crews

A default crew code can be configured against either:

- Employee Seat
- Terminal
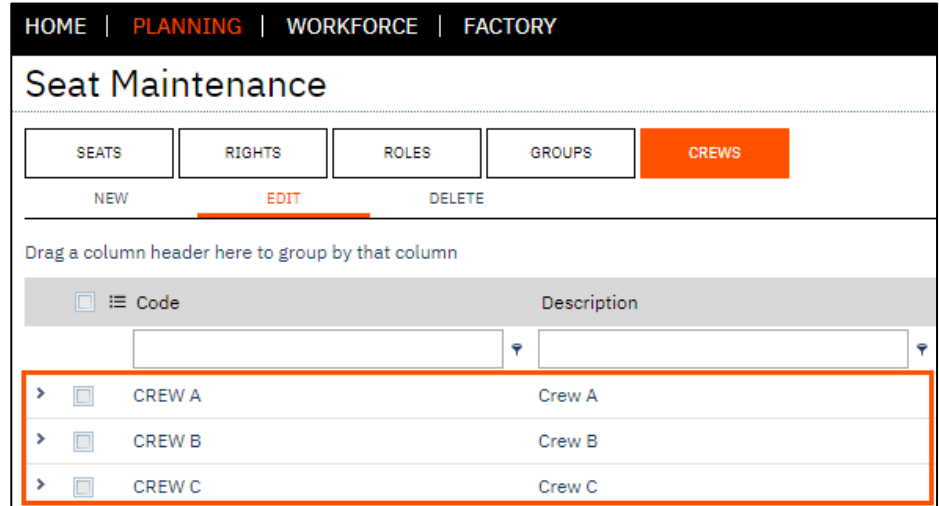
To assign a default crew to an employee seat:

1. Select Home
2. Select Seat Maintenance
3. Select Seats
4. Edit the Employee Seat
5. In the Crew field select the [...] lookup to choose a crew (i.e. Crew D)
6. Select Save
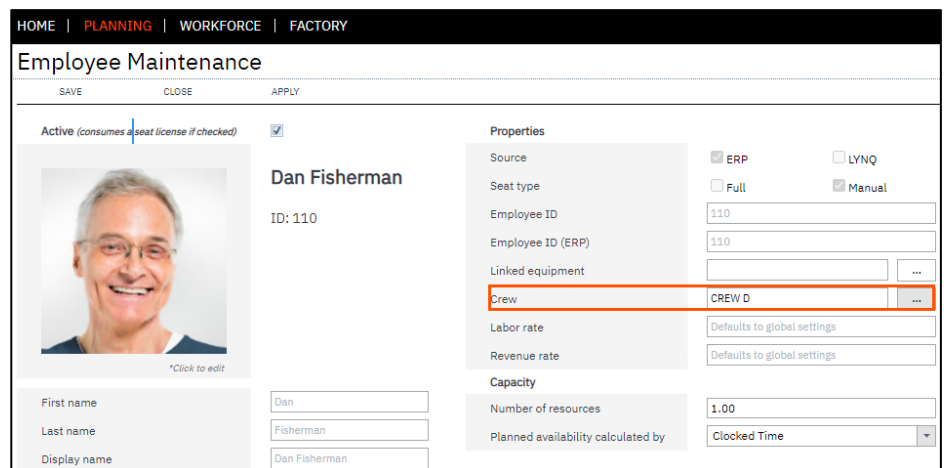
When the user clocks into the workbench that has the join crew (Employee) button enabled, they will clock into the crew that is specified against their employee seat.

Configuring crews

To assign a default crew to a terminal:

1. Select Home
2. Select Terminal Maintenance
3. Select the Terminal (i.e Crew)
4. Select Edit
5. In the Crew field select the [...] lookup to choose a crew (i.e. Crew C)
6. Select Save

When a user clocks into the workbench that has the join crew (Terminal) button enabled, they will clock into the crew that is specified against the terminal.

The employee plate will indicate to the user, which crew they are working in.

Crew codes can be configured within these functions:

- Change crew
- Leave crew
- Status change

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Configuring custom tracking codes

Custom tracking can be used to capture custom data during the manufacturing process. Custom tracking must be configured in LYNQ to use the custom tracking function in the workbench. LYNQ includes 2 predefined custom tracking types which can be edited or deleted as required.

- Pressure
- Weight
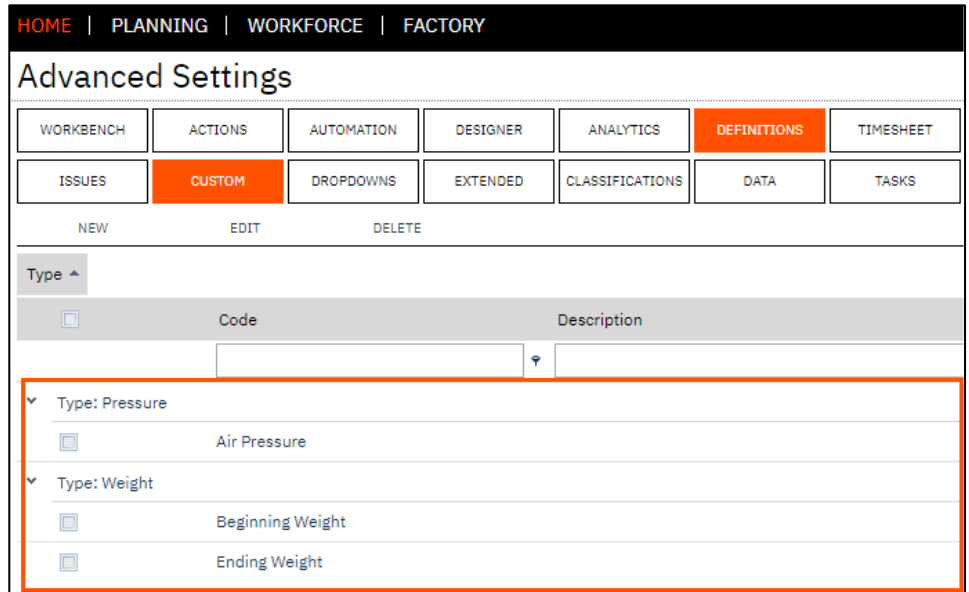
When a terminal is configured to use the custom tracking function, users are given the option to enter values against the custom tracking type.
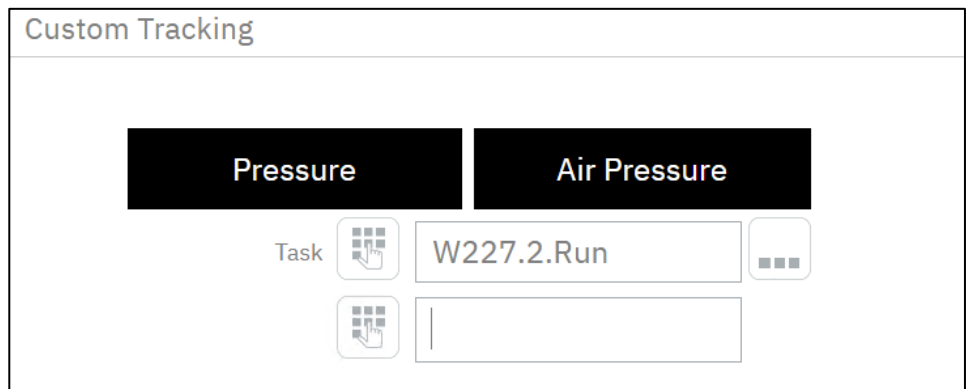
Transactions in transaction review can be analysed by custom tracking type.

The default profile does not include a default on-screen element that includes the custom tracking function. A new on-screen element will need to be created to use this feature.

Configuring custom tracking codes

To add a new custom tracking type:

1. Select Settings
2. Select Advanced Settings
3. Select Definitions
4. Select Custom
5. Select New
6. Enter a name in the Type field
7. Enter a name in the Issue field
8. Enter a description in the description field
9. Select Save

Configuring classification codes

Classification codes can be used to capture custom data during the manufacturing process. Classification codes are configured with predefined lookup values, unlike custom tracking which allows a user to manually enter a value, without validation. Classification codes must be configured in LYNQ to use the classification function in the workbench. LYNQ includes 2 predefined custom tracking types which can be edited or deleted as required.

- Classification Code 1
- Classification Code 2

To add a new Classification Code:

1. Select Settings
2. Select Advanced Settings
3. Select Definitions
4. Select Classifications
5. Select New
6. Enter a name in the Code field
7. Enter a value in the Value field
8. Enter a description in the description field
9. Select Save

Configuring classification codes

Repeat steps 1 to 9 to create additional lookup values.

Classification codes can be enabled within these functions:

- Scheduled Tasks
- Barcode Selection
- Production issues
- Start next
- Start task
- Timesheet

Scheduled tasks function visualisation

Transactions in transaction review can be analysed by the classification code.

Configuring extended tracking

Extended tracking details are used to provide additional tracking information when reporting:

- Material Issues
- Material Rejects
- Scrap
- Operational Quantity

Extended tracking details may include data such as:

- Location
- Warehouse
- Bin Number
- Lot Number
- Serial Number
- Scrap Reason Code

Extended tracking details can be enabled within these functions.

- Scheduled Tasks
- Material Issues (Active Task)
- Material Issues (Jobs)
- Material Reject
- Report Multiple
- Report Single
- Timesheet

Extended Tracking Details Button

Click on the extended tracking details button to add tracking information. The extended tracking details screen will only display the tracking columns that are required to be entered. Extended tracking details must be entered when Enterprise Resource Planning requires this data.

Configuring extended tracking
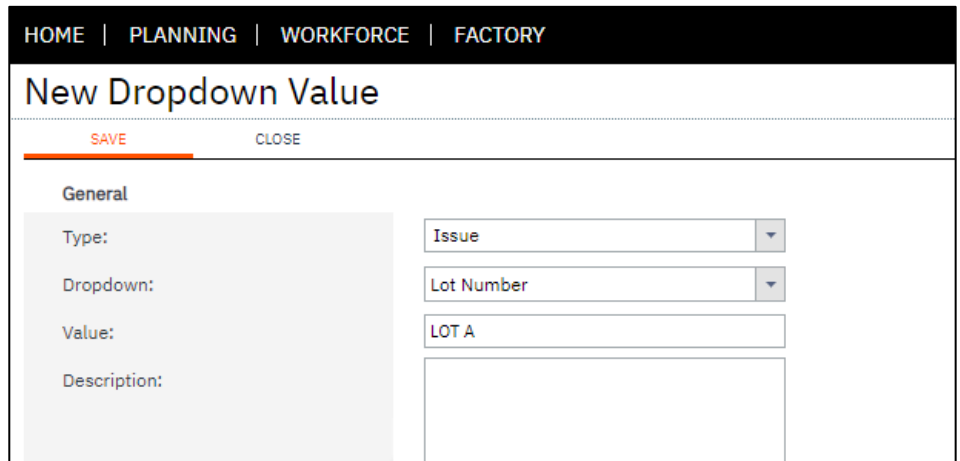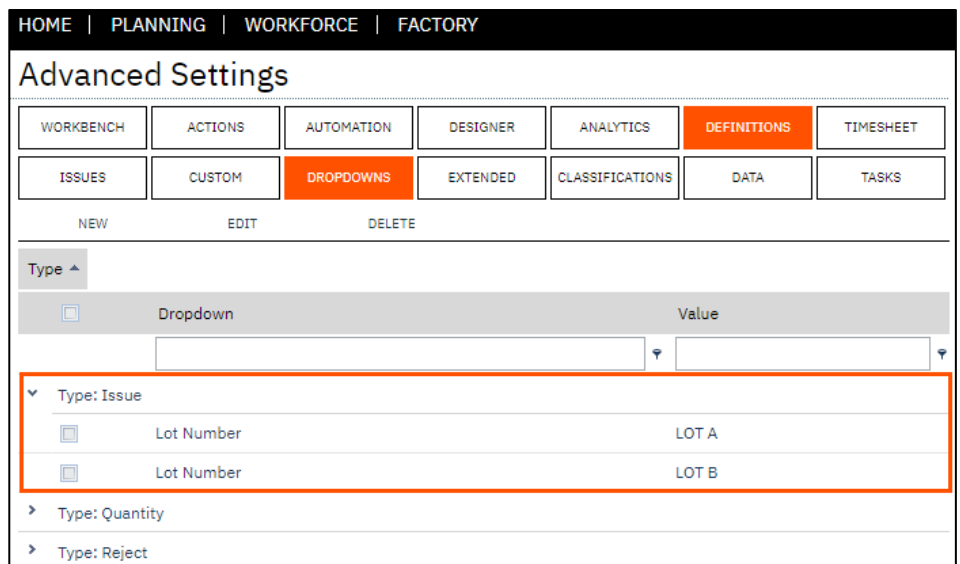
It's possible to configure default dropdown values for extended tracking to improve accuracy and/or reduce the amount of data the user must enter when reporting, material issues, material rejects, scrap and quantity. At the time of publishing this guide, LYNQ does not automatically retrieve tracking data from Enterprise Resource Planning. The data must be entered manually.

To create new dropdown values:

1. Select Settings
2. Select Advanced Settings
3. Select Definitions
4. Select Dropdowns
5. Select New
6. Select Type (i.e Issue)
7. Enter Lot Number in the Dropdown Field
8. Enter the Lot value in the Value Field (i.e LOT A)
9. Select Save
10. Repeat steps 1 to 9 to create a second dropdown value (i.e. LOT B)

Configuring extended tracking

To configure extended tracking default dropdown values:

1. Select Settings
2. Select Advanced Settings
3. Select Definitions
4. Select Extend
5. Expand the Issue row
6. Double click on Material Issue Details
7. Set the dropdown value to Lot Number
8. Set the Default Dropdown value to LOT A
9. Select Save

When performing a material issue for a lotted component, the extended tracking details screen will automatically default the dropdown value (i.e. LOT A). The user can overwrite this value with another value from the dropdown list.

Configuring data selectors

Data selectors are used to display a grid view of values based upon pre-selected columns, column sequence and sort order. A data selector can include one or more group levels for a better user experience. By default, the following data selectors are included.

- Administration
- Job Order Selection
- Job Order to Operation Selection
- Operation Selection

Data selectors are required for these functions.

- Material Issues (Jobs)
- Production Issues
- Tasks(s) Selection
- Timesheet

Let's take a look at the task(s) selection function which uses the operation selection data selector. The task(s) selection function is included in the add task on-screen element. When a user clicks on the add task button in the workbench, the user can select a task to start from the grid. The data selector determines the number of group levels and the columns included in the grid view. The operation selection data selector only has one group.

LYNQ

Configuring data selectors

Operation Selection Data Selector

To edit a data selector:

1. Select Settings
2. Select Advanced Settings
3. Select Definitions
4. Select Data
5. Select the relevant Data Selector
6. Edit the sector as required
7. Select Save

To create a new single group data selector:

1. Select Settings
2. Select Advanced Settings
3. Select Definitions
4. Select Data
5. Select New
6. Enter a name in the Name field
7. Enter a description in the Description field
8. Select the columns required
9. Change the sort order as required
10. Select Save

Configuring data selectors

Let's assume you want to provide a better user experience and display the data grid in the add tasks button differently. You would like the users to able to select the stock code first, and then the job or task.

To achieve this, you would need to configure a new multi group data selector.

To create a new multi group data selector:

1. Select Settings
2. Select Advanced Settings
3. Select Definitions
4. Select Data
5. Select New
6. Enter a name in the Name field (i.e Tasks by Stock Code/Job)
7. Enter a description in the Description field (i.e. Tasks by Stock Code/Job)
8. Select the Job, Description, Operation, Activity, Description and Equipment columns
9. Change the sort order as below
10. Click on the + symbol to the right of the Group 1 Tab
11. Select the Stock Code column
12. Select Save

Data Selector Group 1

Configuring data selectors

Data Selector Group 2

To apply the new data selector to the add tasks button, you will need to amend the add tasks on-screen element.

1. Select Settings
2. Select Advanced Settings
3. Select Definitions
4. Select Elements
5. Select the Add Tasks element
6. Select Edit
7. Select Settings in the Task(s) Selection row
8. Change the value in the Show Data from field to Tasks by Stock Code/Job
9. Select Save

Now clock into a workbench that includes the add tasks on-screen element to see how the new data selector is presented.

Configuring data selectors

Data Selector Group 2 displays first

	Stock Code
⊕	
	B711
✓	B100
	Q103
49 Item(s)	Next Last

Data Selector Group 1 displays second

	Job	Description	Operation	Activity	Description	Equipment
⊕	▽	▽	▽	▽	▽	▽
	W227	Bicycle	2	Run	Quality & Inspection	MBQA01
	W228	Bicycle	2	Run	Quality & Inspection	MBQA01
	W229	Bicycle	2	Run	Quality & Inspection	MBQA01
	W23	Bicycle	2	Run	Quality & Inspection	MBQA01
	W230	Bicycle	2	Run	Quality & Inspection	MBQA01
160 Item(s)	Next Last				Prev	OK

Configuring statuses

LYNQ includes a number of different status codes which determine the status of employees or equipment. For example, when a user clocks in to the workbench in the morning and no jobs are running, their status will be displayed as Indirect Downtime -No Task. If the user clicks on the meeting button, their status will change to Indirect Downtime – Meeting. Throughout LYNQ you will see references to employee and equipment status.

Statuses are required for these functions:

- Clocking
- Change Status

A status includes settings that define whether the clocked in time will be counted and whether the task time will be counted. Statuses can be configured to show other on-screen elements. For example, when the user changes their status to meeting by clicking on the meeting button in the workbench, the back to previous, messages and end day elements are displayed. This helps you to build a process workflow for employees and equipment into the workbench.

LYNQ

Configuring statuses

Depending on where your employees are located, you may be required under state law to provide minimum rest periods. You can configure a status to include a minimum rest time.

To configure a minimum rest time for breaks:

1. Select Settings
2. Select Advanced Settings
3. Select Workbench
4. Select Statuses
5. Select a Status (i.e break)
6. Select Edit
7. Select the Minimum Rest Time checkbox
8. Enter a value in the Minimum Rest Time field. (i.e 00:15)
9. Select Save

Next you will need to turn on the checking of minimum rest times for any on-screen elements that appear when the user clicks on the break on-screen element. (i.e back to previous and end day)

To enable a minimum rest time for related on-screen elements:

1. Select Settings
2. Select Advanced Settings
3. Select Workbench
4. Select Elements
5. Select the Back to Previous on-screen element

Configuring statuses

6. Select Edit
7. In the Status Change row click on the Settings button
8. Change the value in the Apply Minimum Rest Time from None to either Warning or Prevent
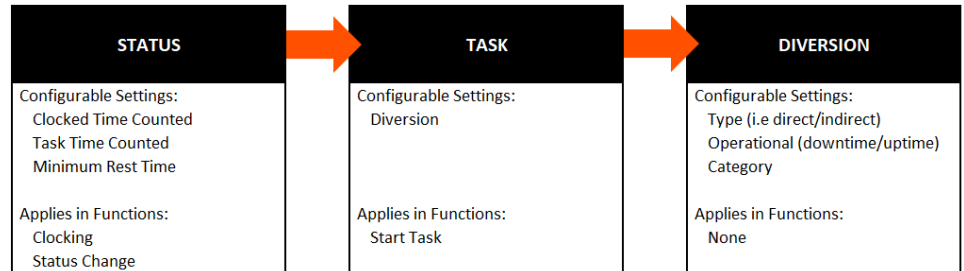9. Select Save

Now when the user returns from break before the minimum rest time, the appropriate warning or prevent message is displayed in the workbench.

Configuring statuses

To properly configure additional status codes, it is important to understand the relationships between statuses, tasks and diversions. Statuses have a relationship with a task code. A task code has a relationship with a diversion code. It is advisable to configure these in reverse order. Starting with diversions then tasks then statuses.

STATUS	TASK	DIVERSION
Configurable Settings: Clocked Time Counted Task Time Counted Minimum Rest Time Applies in Functions: Clocking Status Change	Configurable Settings: Diversion Applies in Functions: Start Task	Configurable Settings: Type (i.e direct/indirect) Operational (downtime/uptime) Category Applies in Functions: None

To create a new status:

1. Select Settings
2. Select Advanced Settings
3. Select Workbench
4. Select Statuses
5. Select New
6. Enter name in the status field (i.e. Team Meeting)
7. Enter a description in the description field
8. Select the relevant predefined task code (i.e Team Meeting)
9. Select if a minimum rest time is applicable
10. Select Clocked Time Counted
11. Select which on-screen elements this status will show when active
12. Select Save

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Configuring predefined tasks

Users can perform data collection activities against predefined tasks. By default, a range of predefined tasks are included. In situations where the default predefined tasks provided are not suitable for the manufacturing process, custom predefined tasks can be created.

It is important to remember that statuses have a relationship to a predefined task and a predefined task has a relationship to a diversion. Therefore, when creating new predefined tasks, it is recommended to create the diversion first.
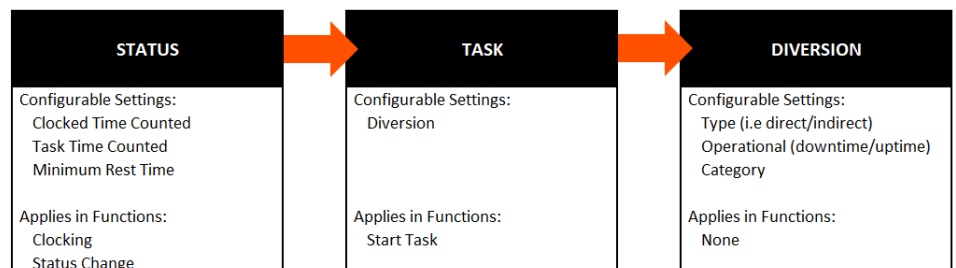
To create a new predefined task:

1. Select Settings
2. Select Advanced Settings
3. Select Definitions
4. Select Tasks
5. Select New
6. Enter a name in the Code and Description field (i.e Team Meeting)
7. Select a Diversion the predefined task relates to (i.e. Team Meeting)
8. Select Save

Configuring predefined tasks

HOME | PLANNING | WORKFORCE | FACTORY

Edit Predefined Task

SAVE   CLOSE

General

Code	Team Meeting
Description	Team Meeting
Diversion	Team Meeting

Configuring diversions

Diversions are used extensively in LYNQ and used to properly calculate key performance indicators such as:

- Availability
- Performance
- Overall Employee Effectiveness (OLE)
- Overall Equipment Effectiveness (OEE)
- Total Effective Equipment Performance (TEEP)

When creating new custom diversions, you should carefully consider how you want to configure the diversion type and the operational type fields.

Diversion Type:

- Direct
- Indirect
- Non-operational

Direct defines activity which is engaged directly in the manufacture of a product. Indirect defines activity which is not engaged directly in the manufacture of a product. Non-operational defines activity which is neither direct or indirect.

Operational Type:

- Uptime
- Downtime
- Non-operational time

Uptime defines that the resource is engaged in activity which is directly related to the manufacture of a product. Downtime defines that the resource is engaged in activity which is not directly related to the manufacture of a product. Non-operational time defines a resource is engaged in neither uptime or downtime.

Examples of Activity:

Activity	Diversion Type	Operational Type
Setup Time	Direct	Downtime
Run Time	Direct	Uptime
Teardown	Direct	Downtime
Meeting	Indirect	Downtime
Break	Indirect	Downtime
Lunch	Non-operational	Non-operational

Configuring diversions

You will notice that a range of reports and dashboards can be analysed by diversion.

To create a new diversion:

1. Select Settings
2. Select Advanced Settings
3. Select Definitions
4. Select Diversions
5. Select Custom
6. Select New
7. Enter a name in the Code and Description field (i.e Team Meeting)
8. Select a Diversion Type from the dropdown (i.e. Indirect)
9. Select an Operational Type from the dropdown (downtime)
10. Select a Colour
11. Select Save

Configuring diversions

Once you have completed the steps in the sections below, it's time to add the new meeting status to a new on-screen element.

- Configuring Statues
- Configuring Predefined Tasks
- Configuring Diversions

To associate a status to a new On-Screen Element:

1. Select Settings
2. Select Advanced Settings
3. Select Workbench
4. Select Elements
5. Select New
6. Specify values in fields
   a. Code (Team Meeting)
   b. Description (Team Meeting)
7. Select which type of resource from the Apply to field
8. Select a control access group value (if applicable)
9. Select Save

To add the status change function:

1. Select Functions
2. Select the function (Status Change)
3. Select a sequence (i.e 20)
4. Select Update
5. Select New
6. Select the function (i.e. Process Data)
7. Select a sequence (i.e 30)
8. Select Update
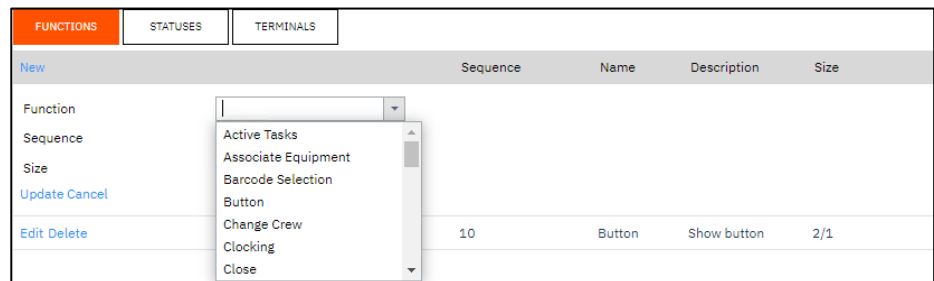
Configuring diversions

To configure the status change settings:

1. Select Functions
2. Locate the Status Change function
3. Select Settings
4. Select Team Meeting from the Target Status field
5. Select Save

To configure the process data settings:

1. Select Functions
2. Locate the Process Data function
3. Select Settings
4. Select Team Meeting from the Target Status field
5. Select the Labour Checkbox
6. Select Save

Configuring diversions

To configure the statuses the on-screen element will be available in:

1. Select Statues
2. Select Clocked In
3. Select Save

To configure the terminals the on-screen element will be available in:

1. Select Terminals
2. Select a Terminal (i.e Advanced)
3. Select Save

Configuring diversions

Now clock into the workbench as an employee and click on the new team meeting button. The employee status will change to Indirect Downtime – Team Meeting. Leave the employee in this status for a few minutes and then click back to previous.

You should also see a transaction in the transaction review screen

Configuring transaction rules

Transactions rules provide further flexibility than the default approval status settings, which do not allow conditions to be applied. Transaction rules can be configured to change the default approval status to:

- Approved
- Excluded
- Submitted

The rule can be applied to:

- Transaction type
- Conditional IF statements for quantity, labour time and issue quantity
- Task type
- Diversion
- Employee
- Equipment

To configure a new transaction rule:

- Select Advanced Settings
- Select Rules
- Select New
- Enter a name in the Code field
- Enter a description in the Description field
- Set the desired Approval Status
- Specify which types of transactions the approval status will apply to
- Specify if there conditions for setting the approval status
- Specify which task the approval status will apply to
- Specify which diversions the approval status will apply to
- Specify which employees the approval status will apply to
- Specify which equipment the approval status will apply to

Configuring periods

Periods are used within the workbench to filter data in the job list or in task lookups. By default, a range of periods are provided. In situations where the default periods provided are not suitable for the manufacturing process, custom periods can be created.

To create a new period:

1. Select Settings
2. Select Advanced Settings
3. Select Definitions
4. Select Periods
5. Select New
6. Enter a Name in the Code & Description field (i.e. Today + 60 Days)
7. Select the Task Loading Type (i.e. From Today)
8. Specify a Current Date – Days value (i.e. 0)
9. Specify a Current Date + Days value (i.e. 60)
10. Select Save

The new period can be added to functions:

- Scheduled Tasks
- Task(s) Selection
- Production Issues

LYNQ

Configuring alerts scheduler

Alerts can be triggered at a fixed time or recurring time interval. By default, a range of fixed time and recurring time schedulers are provided. In situations where the default schedulers provided are not suitable for the manufacturing process, custom schedulers can be created.

To create a new scheduler:

1. Select Settings
2. Select Advanced Settings
3. Select Definitions
4. Select Scheduler
5. Select New
6. Enter a Name in the Code & Description field (i.e. Every 4 Hours)
7. Select the Scheduler Type (i.e. Recurring)
8. Select the days the scheduler will be available
9. Select Save

The new scheduler is now available from alert maintenance.

Configuring actions

Actions allow certain data collection events to be scheduled or executed manually. For example, an action could automatically send all clocked in employees or a group of clocked in employees to lunch at a certain time. Actions could also be setup so they are only triggered manually by a user. Actions can also apply to equipment.

To configure a scheduled action:

1. Select Advanced Settings
2. Select Actions
3. Select Quick Setup
4. Enter a Name and Description (i.e. Morning Shift Break (15 Mins))
5. Select the Execute By Value (i.e Enter Manually at 10:30)
6. Select the status that employees should change to (i.e Break)
7. Select status codes to apply to (i.e clocked in, meeting, project)
8. Select the Return to Previous value (i.e. Enter Manually at 10:45)
9. Select Save

Configuring actions

Once the action has been performed, all employees will be in the status of lunch. The workbench and employee status screen will show that the employee are in the status lunch. When the employee returns from lunch they can use the back to previous button on the workbench.

Actions can be activated or deactivated and triggered manually from status pages in the application. This functionality provides a quick and easy way to perform actions against single or multiple resources. The execute by field must specify that the action is for manual execution. Actions that are setup for manual execution can be manually triggered in the employee and equipment list views.

To configure a manual action:

1. Select Advanced Settings
2. Select Actions
3. Select Quick Setup
4. Enter a Name and Description (i.e. Clock Users Out)
5. Select the Execute By Value (i.e Manual Execution)
6. Select the status that employees should change to (i.e Out/Off
7. Select Save

The action can now be executed from the employee status screen.

Configuring actions

To execute a manual action from employee status:

1. Select Employee Status
2. Select the Action button in the Employee Plate
3. Select the Action (i.e Clock Users Out)

To execute a manual action from equipment status:

1. Select Equipment Status
2. Select the Action button in the Equipment Plate
3. Select the Action (i.e Turn Off)
4. Use the list view to execute actions against multiple resources.

Configuring actions

In the previous steps you have learnt how to create actions manually. LYNQ also includes a quick setup feature that can be used to create and configure a new action quickly from one screen.

To use the quick setup feature:

1. Select Settings
2. Select Advanced Settings
3. Select Actions
4. Select Quick Setup
5. Enter a name in the Name and Description field (i.e. Break PM Shift)
6. Select the Execute By condition (i.e. Enter Manually 15:00)
7. Select the Change Status value (i.e. Break)
8. Select the Apply to Status value(s) (i.e Clocked In, Meeting, Project)
9. Select which resources the action will apply to (i.e Employees Only)
10. Select the groups this action applies to in the Control Access field
11. Select the Return to Previous status (i.e. Enter Manually 15:15)
12. Select Save

Once saved, the action is automatically activated. Resources that meet the conditions above, will automatically be put in the status of break at 15:00. Their status will return to the previous status at 15:15. The action can be deactivated from the Advanced Settings > Actions menu.

Configuring issues

LYNQ provides a range of predefined production issue codes based on Six Big Losses, for reporting and analytical purposes. Additional production issue codes can be created to meet the reporting and analytical requirements of the organisation.

Issues can be raised:

- Manually from the Issue Log feature
- By the track performance abnormality setting in the Scheduled Task(s) function
- Via an alert which is configured to trigger an issue

To configure a new issue:

1. Select Settings
2. Select Advanced Settings
3. Select Definitions
4. Select Issues
5. Select New
6. Select a Type
7. Select a Category or type a new Category Name
8. Enter a description
9. Select Save

Configuring alerts

LYNQ provides a range of predefined management alerts which can be configured to monitor performance, quality, or availability for either employees or equipment. Users that are assigned as a group owners will automatically receive management alerts for group members (employees or equipment) as defined in groups.

A management alert can be configured in such a way that an alert will be triggered when certain conditions in the organisation are not met. An alert can be configured to automatically generate an issue. You may want to consider an alert as a warning and an issue as a problem that requires root cause analysis. The problem (issue) needs investigating and to avoid any repeat issues arising, corrective action taken.

Alerts can be configured to:

- Generate a message
- Generate an email (sent externally via SMTP Mail)
- Generate a production issue

By default, all alerts are disabled and will need to be configured/activated.

Let's assume that you want to monitor the performance of your workers in Production Line 1. You'd like an alert to generate when their performance falls below 70% and when the performance goes above 130%. The alert should send a message and an email to Production Line 1 Supervisors, every hour. In addition, the alert should generate an issue that can be followed up and resolved. You'd like to configure the employee performance alert for this purpose.

LYNQ

Configuring alerts

To configure the Employee Performance alert:

1. Select Home
2. Select Alert Maintenance
3. Select the Employee Performance Alert
4. Select Edit
5. Specify the condition of acceptable tolerances. (i.e. 70 to 130).
6. Select the Execution Schedule (i.e. Every 1 Hour)
7. Select the Recipients using the {...} lookup (.i.e Production Line 1 Supervisors)
8. Select the Measured Resources type and use the {...} lookup to select the resources (i.e. Dependent)
9. Select Generate Production Issue
10. Select Generate Message Alert
11. Select Generate Production Issue
12. Select Repeat Alerts
13. Select Active
14. Select Save

Once the measured employees performance, falls outside of the acceptable tolerances, an alert will be generated, a message sent and an issue logged. The alert will continue to trigger until the employees performance is within the acceptable tolerances. The content of the message template can be configured as required.

When configuring alerts for direct or dependent resources, you will need to configure the group hierarchy in Seat Maintenance. Let's take a look at the default group hierarchy provided by LYNQ to understand how this works with Alerts.

Configuring alerts

To configuring group receivers for alerts:

1. Select Home
2. Select Seat Maintenance
3. Select Groups
4. Expand the Group Hierarchy
5. Manufacturing
6. Production
7. Line 1
8. Supervisor [1]
9. Double click on Supervisor [1]
10. Select Owners
11. Select the Owner(s) that will receive alerts
12. Select Save

To configure measured resources for alerts:

1. Expand the Group Hierarchy to
2. Manufacturing
3. Production
4. Line 1
5. Supervisor [1]
6. Workers [1]
7. Double click on Workers [1]
8. Select Members
9. Select the Resources that will be measured
10. Select Save

Configuring alerts

Measure resources options:

- Direct (direct reports Workers [1] reporting to Supervisors [1])
- Dependent (reports and reports below the direct report)
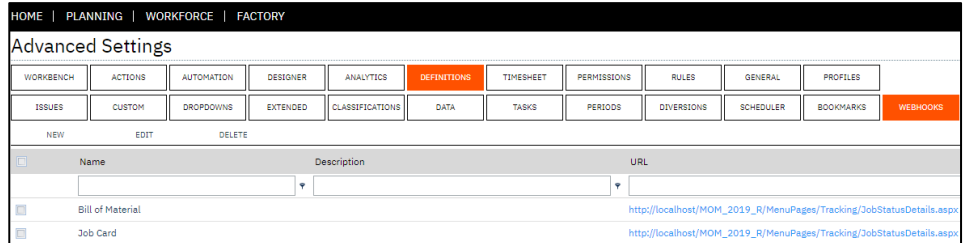- Custom (a specific range of reports)

Configuring webhooks

Webhooks in LYNQ allows parameterised query strings to be passed to any web based application where there is a common form of data. Webhooks are designed to be flexible and an understanding of the use of parameters in LYNQ and the third party application is required to configure this feature.

The Webhooks Guide explains how to use Webhooks in LYNQ to easily pass data to other third party web based applications. In addition to communicating with other external applications, Webhooks facilitate the extension of LYNQ data displayed in the workbench, workbench reporting screen and on customisable report pages.

Within this guide you will learn:

- How to recognise parameters in query strings
- How to configure parameters for webhooks
- How to configure data passed by a webhook
- Where and how webhooks can be displayed
- How to identify parameters in LYNQ
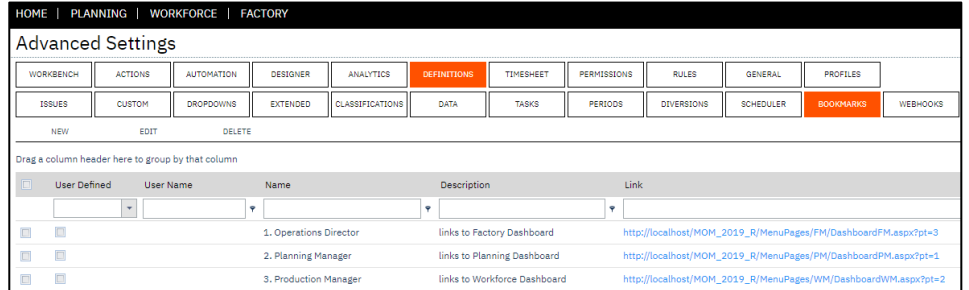- Data fields names used as parameters
- Additional webhook settings

The webhooks guide can be downloaded from here

Configuring bookmarks
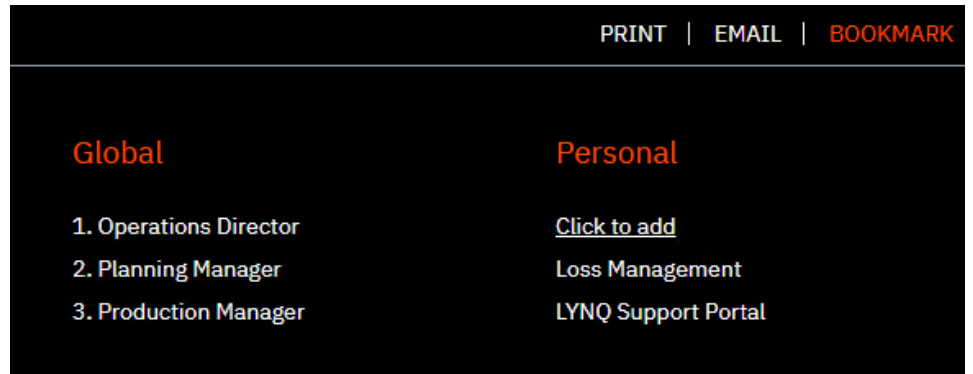
Bookmarks are used to provide quick access to URL links. By, default a range
of global bookmarks are included. These bookmarks can be edited or deleted
as required.

Bookmarks can be created personally or globally and once configured will
appear in the bookmark menu on the toolbar.

To create a global bookmark:

1. Select Settings
2. Select Advanced Settings
3. Select Definitions
4. Select Bookmarks
5. Select New
6. Enter a Category Name
7. Enter a Name
8. Enter a Description
9. Enter the URL Link
10. Select Save

Configuring bookmarks

The new bookmark will appear in the bookmark menu for all users.

To create a user specific bookmark:

1. Select Settings
2. Select Advanced Settings
3. Select Definitions
4. Select Bookmarks
5. Select New
6. Check the User Specific field and select the user
7. Enter a Category Name
8. Enter a Name
9. Enter a Description
10. Enter the URL Link
11. Select Save

The new bookmark will appear in the bookmark menu for the specified user.

Users can also add their own personal bookmarks from the bookmark option on the toolbar. When a user selects bookmark, LYNQ will automatically copy the page name and URL, if applicable.

LYNQ Your business.
Understood.