



Job Costing Manual

Version 6.4

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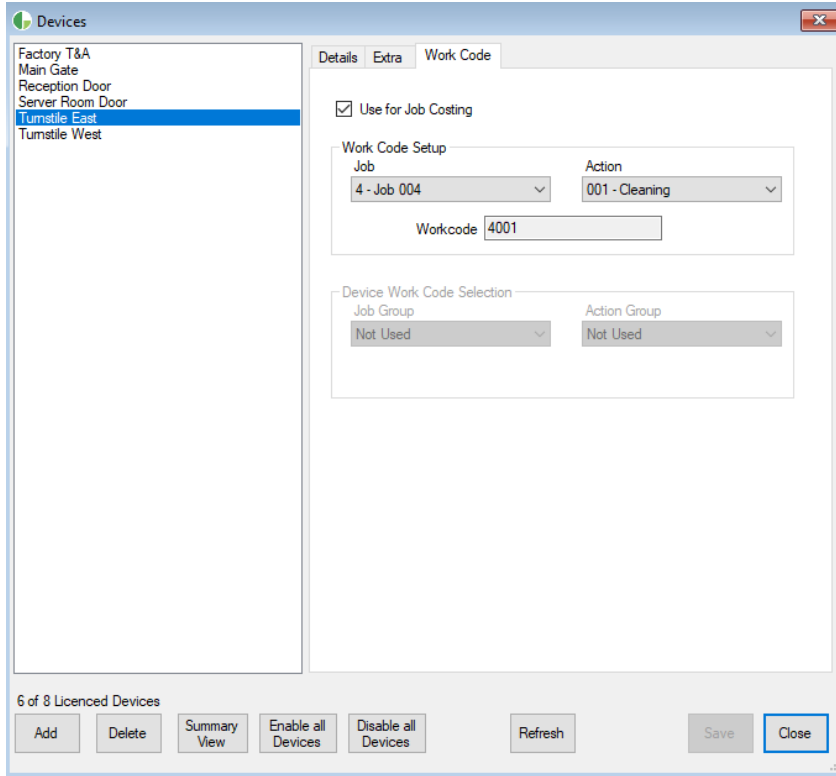
Job Costing

Job Costing is a separate module in JT that calculates **Time** spent on particular **Actions** relating to specific **Jobs**. This module can also be used to **Count** the number of times a particular task has been completed by employees.

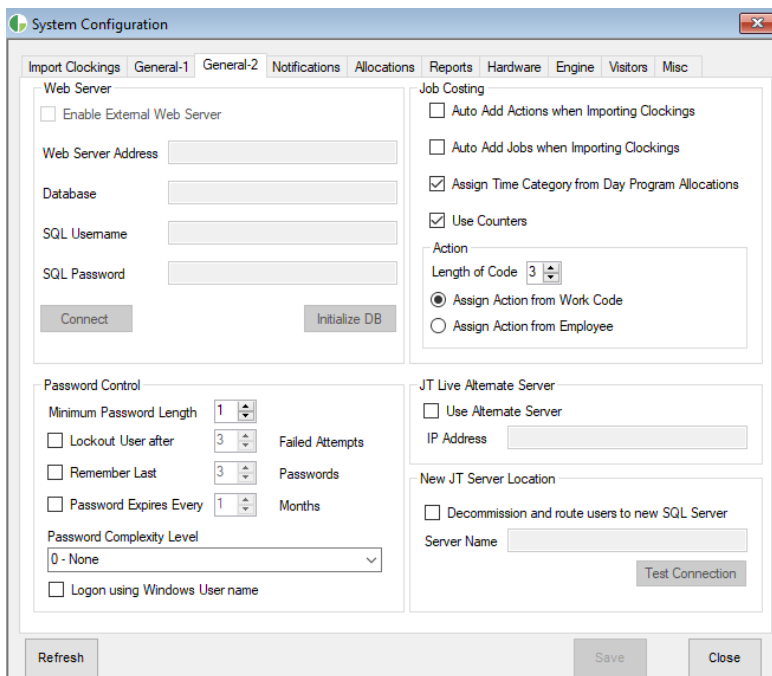
Job Costing must be enabled through '**Registration**' (under '**Setup**' on the menu bar). Once enabled the '**Job Costing**' option will appear on the menu bar.

In order for this module to work, each employee transaction needs to be accompanied by a **Workcode**. This code can be entered manually if the device permits, or devices can be set with a particular workcode (in other words, all clockings from a device would be for a particular job and action). The workcode is made up of the **Job Number** and the **Action Code** combined.

The below image shows the workcode setting applied to a device through Jarrison Time.



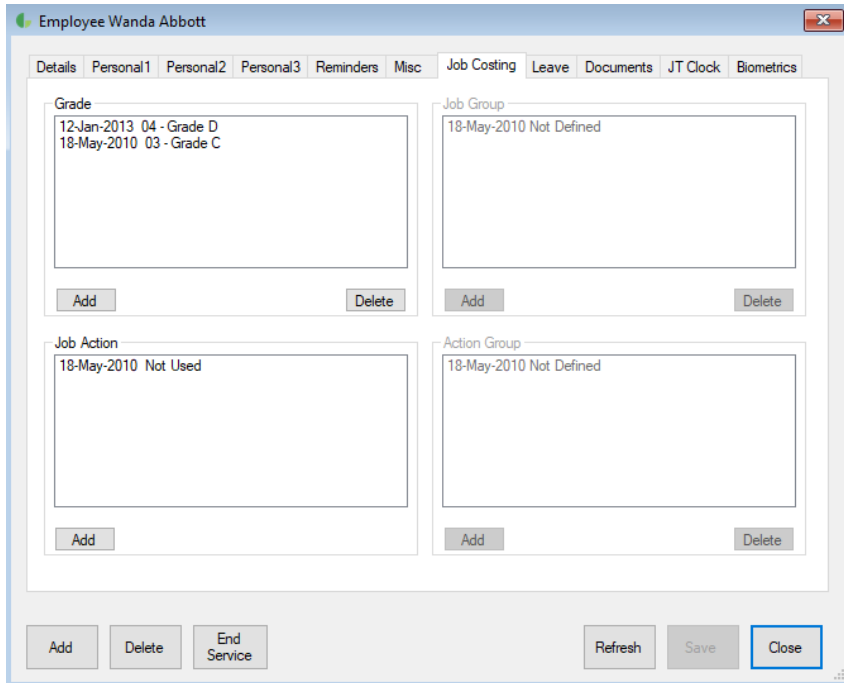
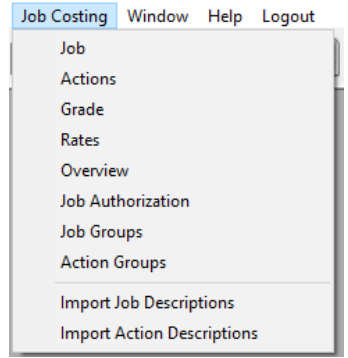
To manually transact on the device for Cleaning (001) on Job 004, an employee would need to enter or select workcode 4001 (or the device must be set with this workcode, as above). The length of the workcode can vary according to requirement. The length of the Action Code can be changed by going to '**Setup**', '**System Configuration**' and the '**General-2**' tab, then setting the '**Length of Action portion of Workcode**' number. From this tab you can also set whether Jobs and Actions will be automatically added to JT during the import of transactions. If counters are required for job costing they can be enabled from here too.



It is possible to use Job Costing clockings to generate the same time category allocations that would be generated by normal clockings. Select the option '**Assign Time Category from Day Program Allocations**' from the **General-2** tab if this is desired. If this option is enabled, a '**Job Authorization**' option will be added to the **Job Costing** menu, allowing for processing of unauthorized time categories generated by job clockings. Note that results generated from job transactions will not display in **Daily Details** or other T&A views, they will only show under '**Job Costing**', '**View Transactions**' and '**Job Costing**', '**Job Authorization**'.

This window will only display allocated unauthorized times generated by job costing clockings.

From the **General-2** window a selection can be made as to whether the action is assigned from the work code (via clocking) or if an action is assigned to an employee. In the latter case the action will be assigned from the **Employee Details** window, as below.



Jobs

Job No	Job Description
1	Job 001
2	Job 002
3	Job 003
4	Job 004
5	Job 005
6	Job 006
7	Job 007
8	Job 008
9	Job 009
10	Job 010
11	Job 011
12	Job 012

Job Details

Job Number: 1

Description: Job 001

Short Name: Job 001

Start Date: 11 Jun 2014

End Date: 31 Dec 9998

Estimate Hrs: 0

Estimate Kg: 0

Units: 3.0000

Single: 1.0000

Disabled

Buttons: Add, Delete, Refresh, Export, Save, Close

From 'Job Costing' on the menu bar, go to 'Job' and enter the details of each job you would like the system to track. Note that the 'Job', 'Job Costing' and 'Unit' labels (crate, bag etc.) can be customized by going to 'Setup', 'Custom Fields', and then the 'Job Costing' tab. (Only Units which have a label entered will be available in Job Costing.)

The 'Export' button can be used to generate a file listing of all captured jobs. The 'Refresh' button is of use when importing actions from devices and the list needs to be updated.

Job Groups

If JT Clock is enabled, once jobs have been setup they can be grouped together to form groups, which can later be assigned to users, devices, or used for JT Clock. 'Job Groups' is available under the Job Costing menu option. See the User Profiles section of the Configuration manual for more on restricting user accounts.

Job Groups

All Jobs

Jobs 1-10

Details

Name: Jobs 1-10

Job

- 1 - Job 001
- 2 - Job 002
- 3 - Job 003
- 4 - Job 004
- 5 - Job 005
- 6 - Job 006
- 7 - Job 007
- 8 - Job 008
- 9 - Job 009
- 10 - Job 010
- 11 - Job 011
- 12 - Job 012
- 13 - Job 013

Disabled

Buttons: Add, Delete, Save, Close

Actions

The 'Actions' dialog box displays a list of actions on the left and a 'Details' section on the right. The selected action is '024 - Bolt Preparation'. The details include: Code (024), Name (Bolt Preparation), Short Name (Bolt Pre), Action Type (Counter), Time Category (Default), Counter (Bolts), and Unit (Crate). A 'Disabled' checkbox is present at the bottom right of the details section. Buttons for 'Add', 'Delete', 'Refresh', 'Export', 'Save', and 'Close' are located at the bottom of the dialog.

From 'Job Costing' on the menu bar, go to 'Actions'. An action can either be a **Time** or a **Counter**. The 'Refresh' button is of use when importing actions from devices and the list needs to be updated.

Time Action

A Time Action is used to calculate the amount of time worked on a particular job. (e.g. sweeping the floor) You will need to select a **Time Category** for the amount of time worked to be allocated to. Any number of Time Categories can be added beforehand by clicking 'Setup' then 'Time Categories' from the menu bar.

When setting up a Time Category to be used for job costing purposes, a ratio can be entered that will be used as a multiplier when calculating rates. The option applies to allocations when 'Assign Time Category from Day Program Allocations' is selected from the **General-2** tab of **System**.

The 'Time Categories' dialog box displays a list of time categories on the left and a details section on the right. The selected category is 'OT 1.5'. The details include: Name (OT 1.5), Short Name (OT 1.5), 'Set default as Allow auto break deduction for allocations' (unchecked), 'Use in Overview' (checked), 'Fore Colour' and 'Back Colour' buttons, and Job Costing Ratio (1.5). Buttons for 'Add', 'Delete', 'Save', and 'Close' are located at the bottom of the dialog.

Counter Action

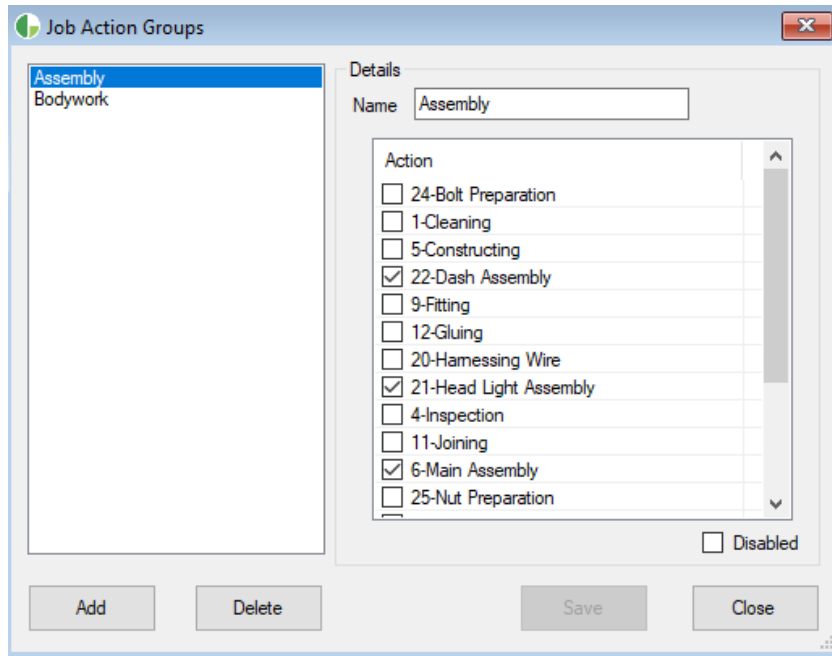
An action which is set as a Counter will need to have a **Counter** and **Unit** selected. Any number of Counters can be added beforehand by clicking 'Setup' then 'Counters' from the menu bar. For example to count how many times an employee assembles something, they will need to transact on that workcode before they start assembling the first one. Then each time they have an assembled product they need to transact again. So at the end of the day an employee with seven transactions would have assembled six products as the first one was used as a 'Start' of the assembling duty. Counters must be enabled from 'Setup', 'System Configuration', **General-2** tab. Units can be customized from 'Configuration', 'Custom', 'Exceptions and labels'.

Job costing time categories and counters can be manipulated through Day Program rules and formulas like any other time categories or counters, if needs be.

The 'Export' button can be used to generate a file listing of all captured jobs.

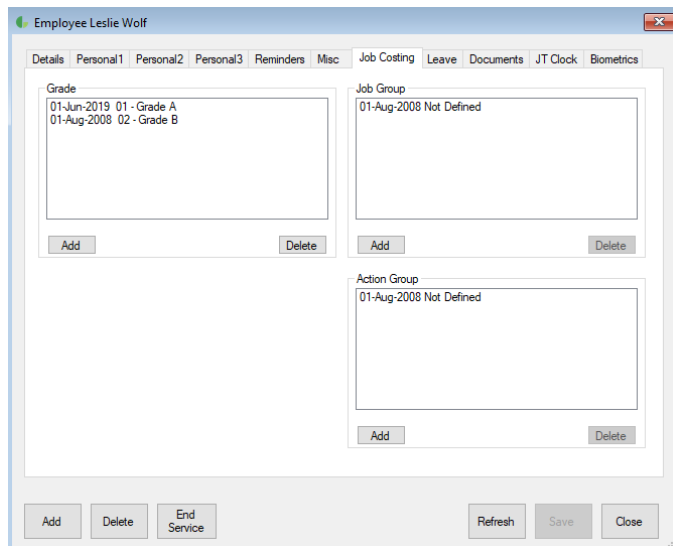
Action Groups

If JT Clock is enabled, once actions are setup they can be grouped together to form groups, which can later be assigned to users or used for JT Clock. 'Action Groups' is available under the **Job Costing** menu option. Please see the **User Profiles** section of the Configuration manual for more on restricting user accounts.



Job Groups and **Action Groups** must then be applied on job-costing-compatible devices, through the **Devices** window, in order to transfer them to the devices. In this way each device will have the job and action options required by it.

If JT Clock is in use and Job Costing is selected in the **JT Clock Settings** group that the employee is assigned to, there will also be options to apply a **Job Group** and **Action Group** on the **Job Costing** tab of **Employee Details**, thus limiting their available jobs and actions.



Importing Jobs and Actions

On the Job Costing menu there are options to import **Job** and **Action Descriptions**. This will allow importing of a text/csv file for populating the respective fields.

The templates for the files can be found at **C:\Program Files (x86)\Jarrison Systems\Jarrison Time**.

Grade

From 'Job Costing' on the menu bar, click on 'Grades'. Here you can setup grades for employees if needed. Grades can be linked with Rates (see below) to generate costing results.

The 'Grade' dialog box contains a list of grades on the left and a form on the right for editing a selected grade. The list shows grades 01 through 05. The form on the right has the following fields:

- Grade Code: 01
- Name: Grade A
- Short Name: Grade A
- Disabled:

Buttons at the bottom include Add, Delete, Save, and Close.

Rates

The 'Rates' dialog box contains a list of grade-action combinations on the left and a form on the right for editing a selected rate. The list shows various actions for grades 01 and 02. The form on the right has the following fields:

- Grade: 02 - Grade B
- Action: Painting
- Rate / Hour: 25.0000
- Rate / Unit: 0.0000

A table below the form shows rate periods:

From	To	Rate/Hour	Rate/Unit
01-01-2000	01-11-2020	20.0000	0.0000
> 02-11-2020	31-12-9999	25.0000	0.0000

Buttons at the bottom include Add, Delete, Save, and Close.

From 'Job Costing' on the menu bar, click on 'Rates'. Here you can save the 'Rate per hour' for time actions and 'Rate per unit' for counter actions. Each rate is made up of a combination of a grade with the particular action.

Multiple Action Options

- Employee Activate / Deactivate
- Employee Service Status
- Fingerprint Database
- Job Action Change
- Grade Change
- Job Group Change
- Action Group Change
- Job Adjustments
- Leave Scheme Change

Under 'Multiple Actions' on the menu bar there are options for Job Costing bulk actions. Note 'Job Action Change' only becomes available if the option for assigning actions from employees in System Configuration is applied. Job Group Change and Action Group Change are only possible if JT Clock is enabled.

Viewing Transactions

Job Overview

Date Range: From 23-Sep-2020 To 30-Sep-2020

Selection: All Jobs, All Actions

Only for employees in list

Job No	Job Description	EmpId	Employee	Action	Date	Time Category	Hours	Count	Unit Wht	Rate/Hr	Rate/Unit	Total Cost	Total Weight
1	Job 001	3024	Andile Banda	Bolt Preparation	28-Sep-2020		5.44	11	3.0000	0.0000	20.0000	220.00	33.00
10	Job 010	401	Betsy Chang	Steering Assembly	30-Sep-2020		5.34	11	1.0000	0.0000	20.0000	220.00	11.00
10	Job 010	521	Godfrey Khanyile	Head Light Assembly	30-Sep-2020		6.08	12	1.0000	0.0000	20.0000	240.00	12.00
10	Job 010	3073	Steven Ballard	Welding	29-Sep-2020		1.27	0	0	10.0000	0.0000	14.50	0.00
10	Job 010	3066	Phil Cele	Main Assembly	28-Sep-2020		1.23	0	0	40.0000	0.0000	55.33	0.00
10	Job 010	3095	Kathy Pollard	Painting	28-Sep-2020		1.30	0	0	20.0000	0.0000	30.00	0.00
10	Job 010	568	Sipho Ngwema	Inspection	28-Sep-2020		1:11	0	0	20.0000	0.0000	23.67	0.00
10	Job 010	574	Edward Chiwamba	Fitting	28-Sep-2020		1:21	0	0	20.0000	0.0000	27.00	0.00
10	Job 010	571	Mandy Hamis	Inspection	25-Sep-2020		1:34	0	0	20.0000	0.0000	31.33	0.00
10	Job 010	3066	Phil Cele	Main Assembly	25-Sep-2020		1:43	0	0	40.0000	0.0000	68.67	0.00
10	Job 010	3066	Phil Cele	Painting	24-Sep-2020		1:47	0	0	40.0000	0.0000	71.33	0.00
10	Job 010	3079	Lia Billy	Joining	24-Sep-2020		0:55	0	0	10.0000	0.0000	9.17	0.00
10	Job 010	3058	Jean Garrett	Steering Assembly	23-Sep-2020		8:17	14	1.0000	0.0000	20.0000	280.00	14.00
10	Job 010	575	Mduduzi Soko	Joining	23-Sep-2020		1:35	0	0	20.0000	0.0000	31.67	0.00
11	Job 011	575	Mduduzi Soko	Sanding	29-Sep-2020		1:11	0	0	20.0000	0.0000	23.67	0.00

444 Items displayed

Excel Refresh Close

From 'View Transactions' under 'Job Costing' on the menu bar, users will be able to view job costing transaction history, filtered by job, action and/or date range. Clicking a column header will sort the list by that column. The 'Excel' button at the bottom right of the window will export the presented data to Excel if so desired.

Using Job Clockings as T&A Clockings

Once the Job Costing module is enabled, Day Programs will have additional options in the **Clockings** tab, as depicted below.

Day Programs

5S Mon-Fri Aft Quick Change

5S Mon-Fri Afternoon

5S Mon-Fri Afternoon PH

5S Mon-Fri Mom Quick Change

5S Mon-Fri Morning 12Hr

5S Mon-Fri Morning 8 Hr PH

5S Mon-Fri Morning 8Hr

5S Mon-Fri Night 12 Hr

5S Mon-Fri Night 8 Hr

5S Mon-Fri Night 8 Hr PH

5S Mon-Fri Night Quick Change

5S Sat Afternoon

5S Sat Afternoon PH

5S Sat Morning

5S Sat Morning PH

5S Sat Night

5S Sat Night PH

5S Sun Afternoon

5S Sun Morning

5S Sun Night

Admin Friday

Admin Friday PH

Admin Mon-Thu

Admin Mon-Thu PH

Admin Sat

Admin Sat PH

Admin Sun

Profile Clockings Bouncing Revisions Allocation Breaks Rules Short Time Counters Day Change Bonus Notes

Assortment

First & Last clocking only

Exclude First & Last clockings

Single clocking

Enforce Paired Clockings

Lockout From 00:00 to 00:00

Enable specific allocations past midnight

Use First & last Job Transactions for T&A

Use All Job Transactions for T&A

Dynamic

Reduce Day Frame hours by 1

Extend Day Frame hours by 6

Extend bounce search into next day by 6

Only if first clocking in next day is 'Out'

Use Shift Pattern for next days

Duplicates

Ignore Duplicate Clockings

Roundings

Rounding Group Not Used

(To round time categories separately, use a formula)

Add Delete Copy Day Program Refresh Excel Save Close

Tick the 'Use First & last Job Transactions for T&A' option to use only the first in job clocking and last out job clocking as T&A in and out clockings, or tick 'Use All Job Transactions for T&A' to use all job clockings as T&A..

Working with Job Clockings

Job Costing transactions and results will appear under the **Job Costing** tab in **Daily Details**.

They can also be seen from the **Standard View** on the **Time & Attendance** tab. Job costing clockings are presented with a # symbol, to differentiate them from regular clockings.

In the image to the right, presented with the **Standard** view under Time & Attendance, there are two T&A clocking and six job costing clockings.

Time Category

Hours & Counters	Time	Commer
Normal Time	09:00	
Late Arrival	00:59	
Unauthorised 1.5	00:01	
Welding	00:41	
Fitting	03:24	
Late Arrival	1	
...	1	

Clockings (Standard View)

Calculated	Active	
07:59 In	07:59:18	
17:00 Out	# 09:02:38	
	# 10:13:23	
	# 11:43:29	
	# 12:24:38	
	# 13:55:45	
	# 16:08:25	
	16:59:10	

Common Adjustments

Sick Paid, Annual Leave, Paternity, Sick Unpaid, IOD, Allow Late, AWP, AWOL, Maternity, Strike, Manual NT, Comp Leave, Add a Custom Adjustment

Date Navigator

Wednesday 4 November 2020

Previous Day, Recalc, Next Day

Daily Comment

Day Program: Factory M-F (07:00 - 17:00)
Shift Pattern: Factory (Day 3 of 7)

In the next image the Job Costing tab has been selected, allowing details of the job costing clockings to be viewed. It can be seen that from 09:02 to 10:13 the 'Fitting' task was performed for job 12, then from 11:43 to 12:24 'Welding' was performed for job 10. From 13:55 to 16:08 the person was busy once again with 'Fitting'. By the end of the day a total (seen above) of 3h24m Fitting time and 41m Welding time was generated.

Job Results

Job No	JobDesc	Action	Hours	Comment
10	Job 010	Welding	0:41	
12	Job 012	Fitting	1:11	
27	Job 027	Fitting	2:13	

Job Transactions

Time	I/O	Type	Job	Action	User Re
09:02:38	In	Orig	12	Fitting	
10:13:23	Out	Orig	12	Fitting	
11:43:29	In	Orig	10	Welding	
12:24:38	Out	Orig	10	Welding	
13:55:45	In	Orig	27	Fitting	
16:08:25	Out	Orig	27	Fitting	

Manual Job Adjustments

Job: [Dropdown], Action: [Dropdown], Hours: [Input], Comment: [Dropdown]

Date Navigator

Wednesday 4 November 2020

Previous Day, Recalculate, Next Day

Daily Comment

Day Program: Factory M-F (07:00 - 17:00)
Shift Pattern: Factory (Day 3 of 7)

In the below image there are six job costing clockings of 'Bolt Preparation' for job 10, resulting in a count of five for Bolts (The first clock for a counter initializes, there is no out clock required).

Note that a counter for missing job clockings need to be set under '**Setup**', '**System Configuration**', '**Allocations**' tab in order for missing job clocking exceptions to be generated.

Manual Clockings

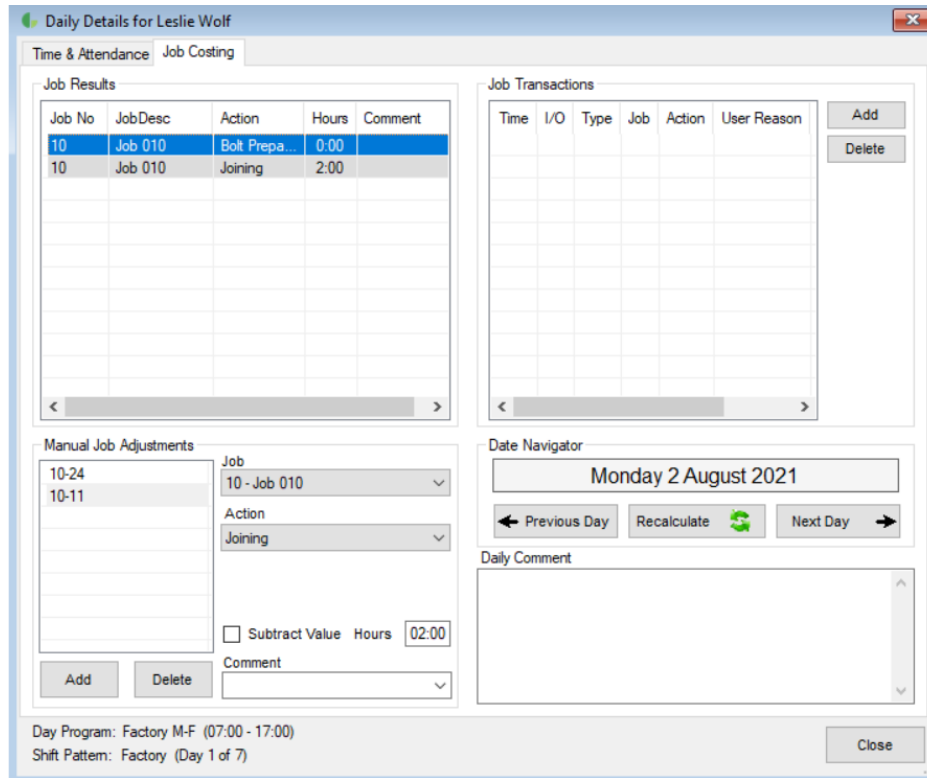
Click '**Add**' on the upper right of **Daily Details** to add a job costing transaction. Select a time (and reason, if applicable) and then from the dropdown menu select the **Job Number** the transaction should link with.

From the **Action** dropdown menu select the activity being undertaken towards the selected job.

To remove a job costing clocking simply select it in the Job Transactions column and click '**Delete**'

Manual Adjustments

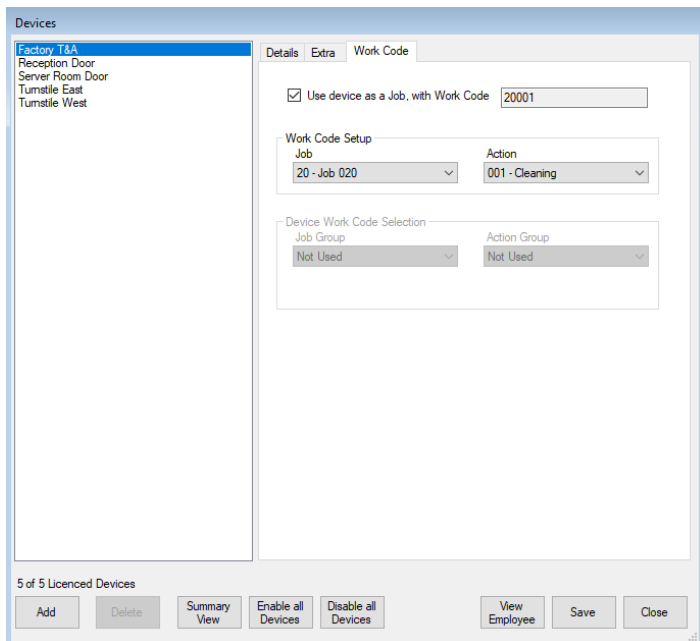
Time and/or counters can be applied for job costing as with T&A. Click **'Add'** in the lower left to add a job costing adjustment, then select the appropriate Job and Action, and a comment if required. Multiple adjustments may be added on the same day. To remove an adjustment, select it and click **'Delete'**.



In the above image the employee has been awarded two job costing adjustments, one for 2 hours of 'Joining' time, and a count of 2 for 'Bolt Preparation'.

Devices

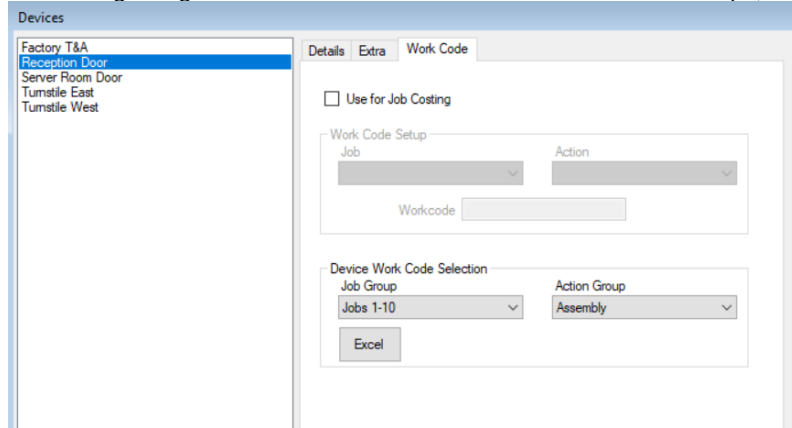
Once Job Costing is enabled JT allows any device to be treated as a dedicated job costing device, meaning a device can be assigned a Job and Action and all clockings received from the device are for that job and action.



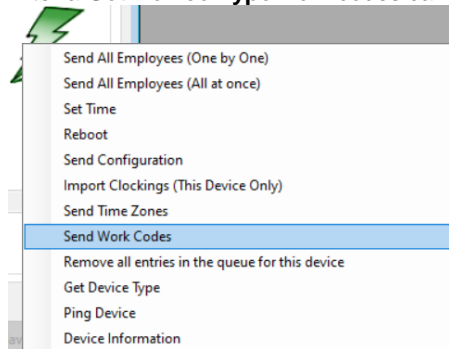
To designate a device for job costing, go to **'Devices'** from the **'Access'** menu., then select a device and go to the **'Work Code'** tab. Check the box to **'Use for Job Costing'**, and then from the dropdown menus below select the appropriate Job and Action for the selected device.

Note that if importing from an external system, it is similarly possible to designate jobs and actions to readers from the 'T&A Setup' window under 'Access'.

If not designating the device it can be added to Job and Action Groups, which will permit necessary work codes on each device.



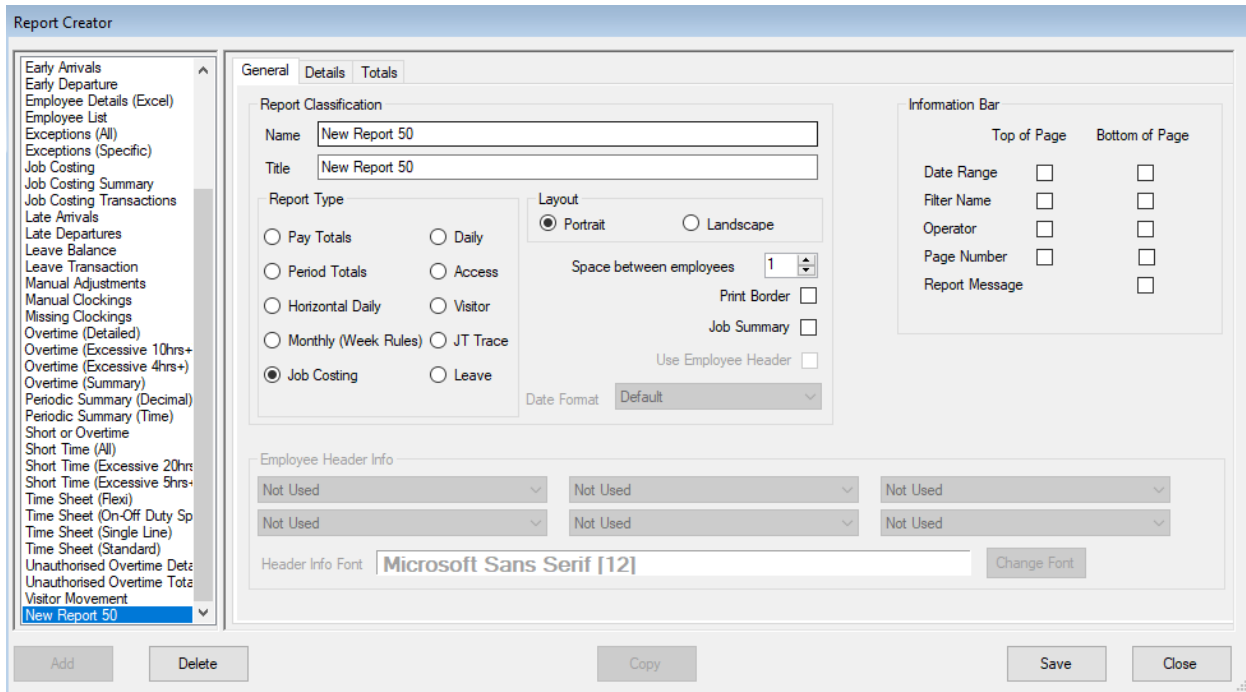
After a **Get Device Type** work codes can be sent to devices via right-click menu option.



Reports

Job costing reports can be created once the module is active.

From the **Report Creator**, click **'Add'** and then select **Job Costing** as the **Type** of report. Various job costing options will now become available.



The **'Job Summary'** checkbox should be ticked if job costing details are not desired on the report (just totals per job/action).

Worked Hours and **Worked Counter** are the two field options used to display time or counters accumulated from Job Costing on a report.

Under the **Details** tab when adding Items to the job costing report there will be an additional option available for Time Categories, called **'Job Cost'**. Placing a check here will print cost of hours worked instead of hours worked. If selected the format should be **Decimal(2)** or **Decimal(4)**.

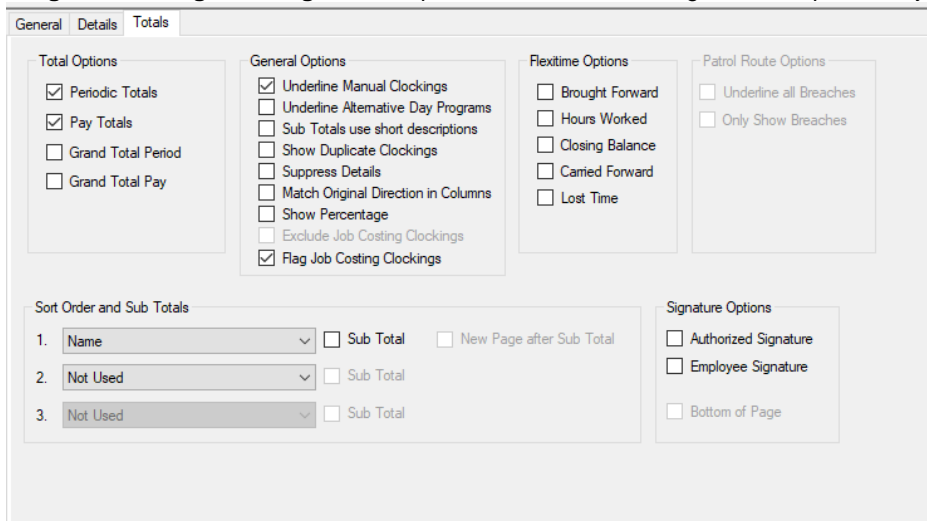
Item	Field	Format	Alignment	Length	Caption	Job Cost	Vertical Line	Print Trigger	Blank Zero	Hide Empty
9	Normal Time - Hrs	Decimal(4)	Left	4	NT	Yes		Yes		Yes
10	OT 1.5 - Hrs	Decimal(4)	Left	4	OT 1.5	Yes		Yes		Yes
11	OT 2.0 - Hrs	Decimal(4)	Left	4	OT 2.0	Yes		Yes		Yes

Field	Format	Alignment	Length	Caption	Vertical Line	Print Trigger	Blank Zero	Hide Empty	Job Cost
OT 1.5 - Hrs	Decimal(4)	Left	4	OT 1.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

On the **Totals** tab there are some additional settings once the job costing module is enabled.

'Exclude Job Costing Clockings' - Apply to create a "pure" T&A report, without job costing transactions.

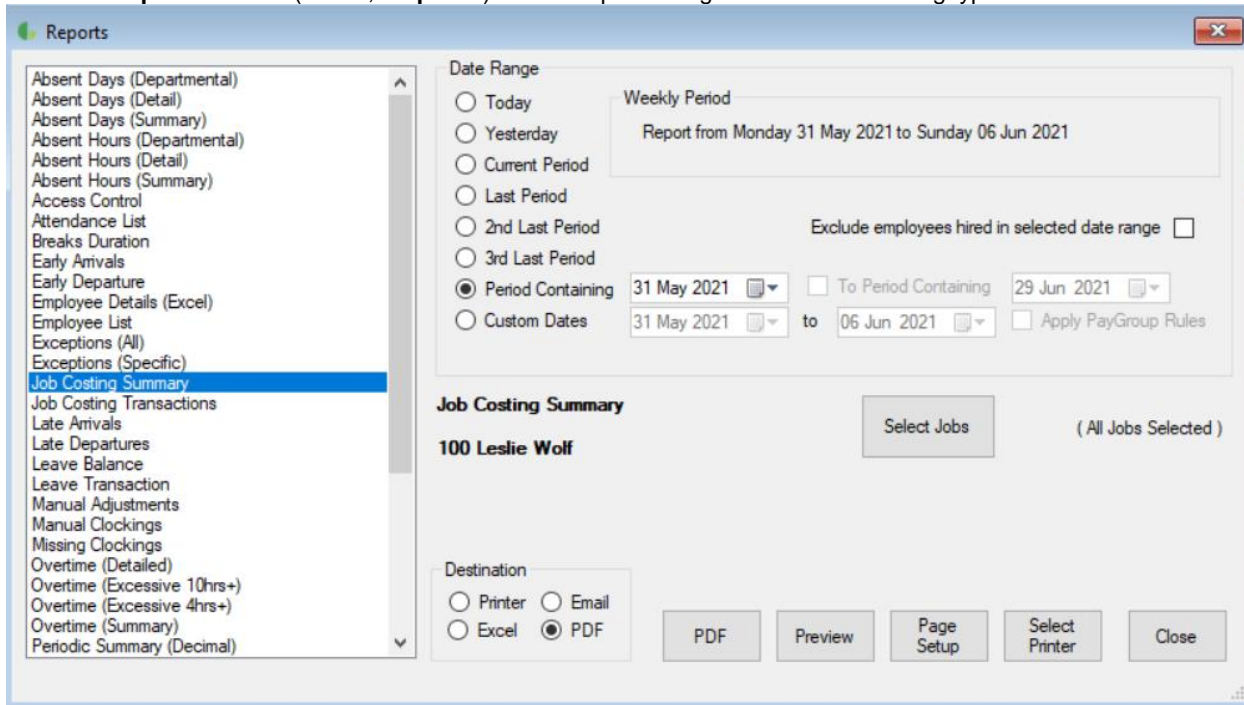
'Flag Job Costing Clockings' - This option will show all clockings on the report, with job costing clockings indicated by a # symbol.



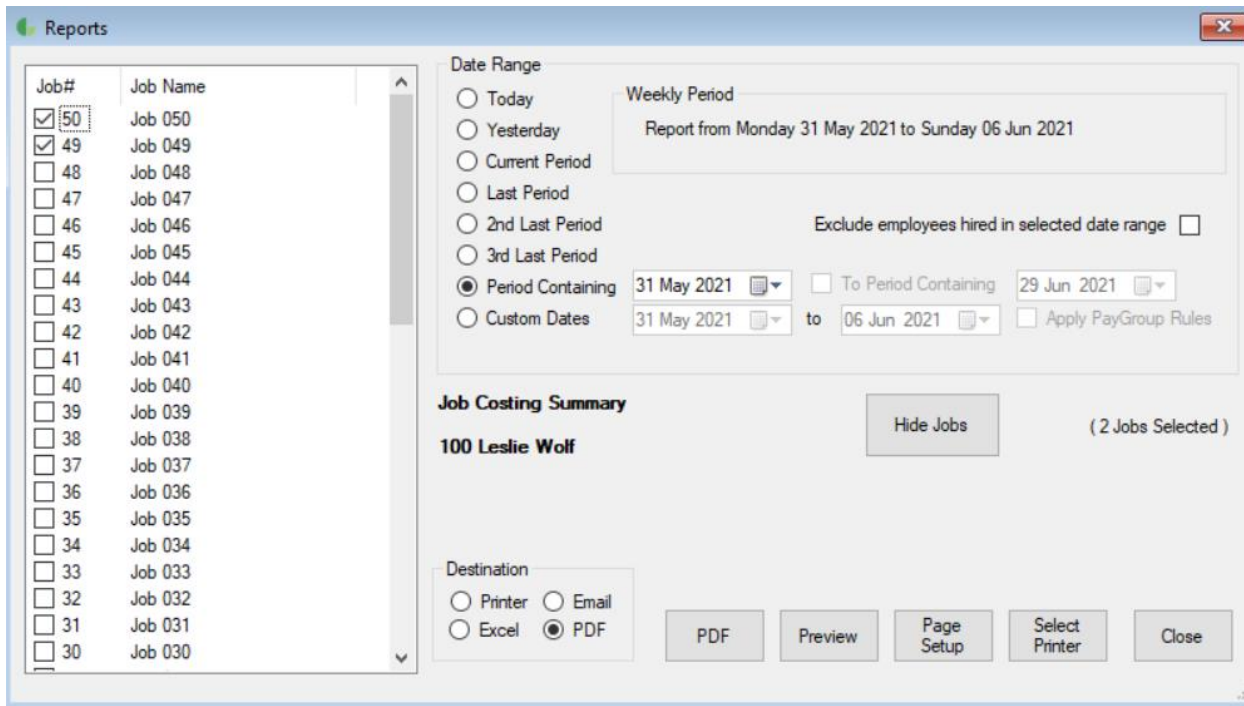
In	Out
7:33	# 8:56
# 10:15	# 11:20
# 13:06	# 14:06
# 16:00	17:06

Running a Job Costing Report

From the **Reports** window ('View', 'Reports')select a report configured as a Job Costing type.



A **'Select Jobs'** button will appear, which allows for selection of Jobs to include in the report. Note that only the last 300 added Jobs are displayed.



File Export

Export files for job costing can be created once the module is active.
From the **File Creator**, click 'Add' and then select **Job Costing** as the **Type** of file.

The screenshot shows the 'Export File Creator' application window. On the left is a list of export types, with 'Export File 24' selected. The main area is divided into several sections:

- Name:** A text box containing 'Export File 24'.
- File Export Options:** A list of checkboxes including 'Include Employees with Zero Totals', 'Multiple Records per Employee', 'Excel File', 'Column Headers', 'End of Month Date', 'CSV Format File', 'Tab Format File', 'Set Lockdown Date', 'Allow Export without Approval', and 'Except Missing Clockings'.
- Export Type:** A group of radio buttons with 'Job Costing' selected. Other options are 'Periodic', 'Daily', 'Monthly with Week Rules', and 'Leave'.
- Export Count:** A group of checkboxes for 'Prefix' and 'Suffix'.
- File Details:** Fields for 'Path' (containing 'c:') with a 'Browse' button, and 'Name' (containing 'Export.txt'). Below these are checkboxes for 'File Name uses Date Range' and 'File Name uses Period End Date'.