



Location Intelligence  
Infrastructure Asset Management

# Confirm<sup>®</sup>

Works Management

v26.10b.AM

Information in this document is subject to change without notice and does not represent a commitment on the part of the vendor or its representatives. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, without the written permission of Confirm.

© 2026 Confirm. All rights reserved.

Products named herein may be trademarks of their respective manufacturers and are hereby recognized. Trademarked names are used editorially, to the benefit of the trademark owner, with no intent to infringe on the trademark.

## Open Source Attribution Notice

The Confirm suite of products contain the following open source software:

- Feature Data Objects v 3.5.0, which is licensed under GNU Lesser General Public License, Version 2.1, February 1999 with the unRAR restriction. The license can be downloaded from: <http://fdo.osgeo.org/licenceAndGovernance.html>. The source code for this software is available from <http://fdo.osgeo.org/content/fdo-350-downloads>
- MrSID software (specifically the mrsid32.dll) is used under license and is Copyright © 1995-2002, LizardTech, Inc., 1008 Western Ave., Suite 200, Seattle, WA 98104. All rights reserved. MrSID is protected by U.S. Patent No. 5,710,835. Foreign patents are pending. Unauthorized use or duplication prohibited.

Patented technology in the Software was developed in part through a project at the Los Alamos National Laboratory, funded by the U.S. Government and managed by the University of California. The U.S. Government has reserved rights in the technology, including a non-exclusive, nontransferable, irrevocable, paid-up license to practice or have practiced throughout the world, for or on behalf of the United States, inventions covered by the patent, and has other rights under 35 U.S.C. § 200-212 and applicable implementing regulations.

For further information, contact Lizardtech.

- NodaTime, version number 1.3.10, which is licensed under the Apache license, version number 2.0. The license can be downloaded from <http://www.apache.org/licenses/LICENSE-2.0>. The source code for this software is available from <http://nodatime.org/>.
- Chromium Embedded Framework, version 3, which is licensed under the New BSD License. The license can be downloaded from <http://opensource.org/licenses/BSD-3-Clause>. The source code for this software is available from <http://code.google.com/p/chromiumembedded/downloads/list>.
- Xilium.CefGlue, version 3, which is licensed under the MIT License (with portions licensed under the New BSD License). The licenses can be downloaded from <http://opensource.org/licenses/MIT> and <http://opensource.org/licenses/BSD-3-Clause>. The source code for this software is available from <http://xilium.bitbucket.org/cefglue/>.
- D3 Data Driven Documentation, version 3.4.1, which is licensed under the New BSD License. The license can be downloaded from <https://github.com/mboostock/d3/blob/master/LICENSE>. The source code for this software is available from <http://d3js.org/>.
- OpenLayers, version 8.1, which is licensed under the BSD 2-Clause Licence. The license which can be downloaded from <https://github.com/openlayers/openlayers/blob/master/LICENSE.md>. The source code for this software is available from <https://github.com/openlayers/openlayers>.
- Proj4js, version 1+, which is licensed under the Apache License, Version 2, January 2004. The license can be downloaded from <http://www.apache.org/licenses/LICENSE-2.0.html>. The source code for this software is available from <http://trac.osgeo.org/proj4js/>.
- requireJS, version 2.1.2, which is licensed under the MIT License or the New BSD License. The license can be downloaded from <https://github.com/jrburke/requirejs/blob/master/LICENSE>. The source code for this software is available from <http://requirejs.org/>.
- Apache Cordova, version 11.1.0, which is licensed under the Apache License, Version 2, January 2004. The license can be downloaded from <http://www.apache.org/licenses/LICENSE-2.0.html>. The source code for this software is available from <http://phonegap.com/download/>.
- Xilium.CefGlue, version 75.1, which is unlicensed. The source code for this software is available from <https://gitlab.com/xiliumhq/chromiumembedded/cefglue>.

- Chromium Embedded Framework, version 75.0, which is licensed according to the following criteria:

Copyright (c) 2008-2014 Marshall A. Greenblatt. Portions Copyright (c) 2006-2009 Google Inc. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- \* Neither the name of Google Inc. nor the name Chromium Embedded Framework nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The source code for this software is available from <http://opensource.spotify.com/cefbuilds/index.html#>

April 16, 2026

# Table of Contents

## Works Management

Work Tickets	7
Print Daily	
Tickets for	
Routine	7
Print Beat Ticket	
for Routine	8
Print Period	
Ticket for	
Routine	9
Print Period	
Ticket for Non	
Routine	10
Work Ticket Print	
Copy	11
Ticket Print	
Troubleshooting	13

Gang Allocation	14
Storing of Job	
Allocation	
Information	14
Allocate Gangs	
to Routine	16
Allocate Gangs	
to Non	
Routine	17
Re-Allocate	
Routine	
Maintenance	18
Re-Allocate Non	
Routine	
Maintenance	19
Gang	
Lookups	20
Setting up Gang	
Allocation rules -	
Step-by-step	26
Scheduling	29
Scheduling	29
Scheduling	
Lookups	33

Works Costing	37	Works Management	
Pre-requisites for		Forecasting	49
Works		Cost Details	
Costing	37	Report	49
Cost Details	37	Labour	
Prepare Cost		Requirements	49
Details	41	Plant	
Allocate		Requirements	49
Overhead		Material	
Types	42	Requirements	49
Allocate Money		Overhead	
to		Recovery	49
Overhead	43	Annual Routine	
Refresh Direct		Workload	
Cost Build		Graph	49
Up	43	Periodic Routine	
Prepare Rates		Workload	
from Cost		Graph	50
Details	44		
Print Completed		Workload Profiling	51
Bill of		Gang Allocation	
Quantities	45	Graph	51
Works Costing		Gang Allocation	
Lookups	46	By Priority	
Costing a BoQ -		Graph	51
step-by-step	47	Gang Allocation	
		by Priority	51
		Profile Gang	
		Requirements	51
		Job Costing	52
		Create Payment	
		Requests From	
		Job Costs	52
		Import Job	
		Costs	53
		Refresh Job Cost	
		Rates	54

# Works Management

The Works Management module provides tools for the direct management of the maintenance within Confirm.

The module is split into two broad areas: Gang Allocation, and Works Costing.

The Works Costing section allows the client Bill of Quantities to be accessed, and for each SOR Item contained in the BoQ to be priced using a combination of Labour, Plant, Materials and Overhead costs. A Standard Minute Value is applied to each SOR Item, and this information is used to calculate to SOR Item cost based on the costing quantities supplied in the BoQ.

The Gang Allocation section allows a set of rules to be set up which will be automatically applied to allocate Routine Work to the appropriate Gang as soon as it is committed within the system. Allocations may be carried out on an ad-hoc basis for Non Routine Works, and allocations may be changed. Work Tickets can then be produced which route the work for each gang.

## In this section

---

Work Tickets	7
Gang Allocation	14
Scheduling	29
Works Costing	37
Works Management Forecasting	49
Workload Profiling	51
Job Costing	52

## Work Tickets

Work Tickets will provide each Gang with details of the SORs that must be carried out, in each Site that is allocated to them, in Route order.

In order for Tickets to be printed, work must be committed, and an allocation of work to Gangs must have taken place. This may have happened automatically on committal of Routine Work, or the allocation may have taken place manually for Non Routine Work.

Beat Tickets for Routine have a different appearance from Period and Daily tickets for Routine:

Beat Tickets will display the Site and SOR on the same line, thus reducing the length of the ticket, they will also provide SOR summaries giving measurement totals for each SOR.

Period and Daily tickets will show the site, and list beneath the Feature/Maintenance Regime, and SORs with their associated quantities and occasions.

### Print Daily Tickets for Routine

The Daily ticket will print out committed Routine Work that is programmed in Maintenance Regimes for days of the week.

Contract	<input type="text"/>	<input type="text"/>	...
Finance Period	<input type="text"/>	<input type="text"/>	...
Week From	<input type="text"/>	▼	To <input type="text"/>
Day	No day specified ▼		
Site	<input type="text"/>	<input type="text"/>	...
Team Like	<input type="text"/>	<input type="text"/>	...
Include From	<input type="text"/>	<input type="text"/>	...
To	<input type="text"/>	<input type="text"/>	...
Print From Copy	<input type="text"/>	<input type="text"/>	...
To	<input type="text"/>	<input type="text"/>	...
Ticket Type(s)	New & Variance ▼		
Collate details	by Team ▼		Ignore Beat details <input checked="" type="checkbox"/>

The top half of the filter is used to restrict the data returned by the Ticket Print Filter.

The bottom half tells Confirm how to present the data returned. There are the following options:

Print Copy From / To: Select a range of Print Copies to print. If these fields are left blank one ticket will be printed in each Print Copy stored in the **Print Copy library**.

Ticket Types: Select from:  
 'New & Variance' - Prints all previously unprinted work, including previously unprinted Variations to work previously printed.

'Current' - Prints a ticket reflecting the currently Committed work (regardless of whether a ticket has been printed before) including any amendments because of Variations.

'Reprint' - Reprints a ticket as it appeared when last printed, ignoring any Variations to the work since the last print.

Collate Details: Select from:

'by Gang' - Each Gang will print in all Copy Types before beginning the next Gang.

'by Copy Type' - Each Copy Type will print for all the Gangs before beginning the next Copy Type.

Ignore Beat Details: Checked by default to print ticket for non-beat **Gangs** only (ignoring Beat Gangs).

### Print Beat Ticket for Routine

The Beat ticket will print out committed Routine Work that is allocated to Beat Gangs.

Contract	<input type="text"/>	<input type="text"/>	...
Finance Period	<input type="text"/>	<input type="text"/>	...
Week From	<input type="text"/>	▼ To	<input type="text"/>
Site	<input type="text"/>	<input type="text"/>	...
Team Like	<input type="text"/>	<input type="text"/>	...
Include From	<input type="text"/>	<input type="text"/>	...
To	<input type="text"/>	<input type="text"/>	...
Print From Copy	<input type="text"/>	<input type="text"/>	...
To	<input type="text"/>	<input type="text"/>	...
Ticket Type(s)	New & Variance ▼		
Collate Details	by Team ▼		
Show SOR Summary	<input checked="" type="checkbox"/>	Additional Totals on Summary	<input type="checkbox"/>
Show Overall Summary	<input type="checkbox"/>	Large Font on SOR Summary	<input type="checkbox"/>
Show SOR Detail	<input type="checkbox"/>	Combine Groups	<input checked="" type="checkbox"/>

The top half of the filter is used to restrict the data returned by the Ticket Print Filter.

The bottom half tells Confirm how to present the data returned. There are the following options:

Print Copy From / To: Select a range of Print Copies to print. If these fields are left blank one ticket will be printed in each Print Copy stored in the **Print Copy library**.

Ticket Types: Select from:

'New & Variance' - Prints all previously unprinted work, including previously unprinted Variations to work previously printed.

'Current' - Prints a ticket reflecting the currently Committed work (regardless of whether a ticket has been printed before) including any amendments because of Variations.

'Reprint' - Reprints a ticket as it appeared when last printed, ignoring any Variations to the work since the last print.

- Collate Details: Select from:
- 'by Gang' - Each Gang will print in all Copy Types before beginning the next Gang.
  - 'by Copy Type' - Each Copy Type will print for all the Gangs before beginning the next Copy Type.
- Show SOR Summary: Checked by default to provide a summary of each SOR included in the Ticket, at the end of each group\*, with the total measurement for the SOR.
- Uncheck to omit the SOR summary from the ticket.
- Additional Totals...: Check this to add totals for Income, Pay, or SMV (depending on which one is selected for the Ticket Print Copy), at the end of each group\*.
- \*Gang Routes may be divided into groups. If this is not done then the entire Route is treated as one group.
- Show SOR Detail: Checked by default to show each SOR individually. Uncheck this to remove this detail from the Ticket.
- Show Overall Summary: Check this to provide a summary of each SOR included in the Ticket, at the end of the ticket.
- Large Font on SOR Summary: Check this to increase font size for the group summaries
- Combine Groups: Check this to treat all the groups on the ticket as one group for the purpose of SOR Summary.

### Print Period Ticket for Routine

The Period ticket will print out the selected committed Routine Work, other than daily work.

Contract	<input type="text"/>	<input type="text"/>	...
Finance Period	<input type="text"/>	<input type="text"/>	...
Week From	<input type="text"/>	▼	To <input type="text"/>
Site	<input type="text"/>	<input type="text"/>	...
Team Like	<input type="text"/>	<input type="text"/>	...
Include From	<input type="text"/>	<input type="text"/>	...
To	<input type="text"/>	<input type="text"/>	...
Print From Copy	<input type="text"/>	<input type="text"/>	...
To	<input type="text"/>	<input type="text"/>	...
Ticket Type(s)	New & Variance ▼		
Collate details	by Team ▼		Ignore Beat details <input checked="" type="checkbox"/>

The top half of the filter is used to restrict the data returned by the Ticket Print Filter.

The bottom half tells Confirm how to present the data returned. There are the following options:

Print Copy From / To: Select a range of Print Copies to print. If these fields are left blank one ticket will be printed in each Print Copy stored in the **Print Copy library**.

- Ticket Types:** Select from:
- 'New & Variance' - Prints all previously unprinted work, including previously unprinted Variations to work previously printed.
  - 'Current' - Prints a ticket reflecting the currently Committed work (regardless of whether a ticket has been printed before) including any amendments because of Variations.
  - 'Reprint' - Reprints a ticket as it appeared when last printed, ignoring any Variations to the work since the last print.
- Collate Details:** Select from:
- 'by Gang' - Each Gang will print in all Copy Types before beginning the next Gang.
  - 'by Copy Type' - Each Copy Type will print for all the Gangs before beginning the next Copy Type.
- Ignore Beat Details:** Checked by default to print ticket for non-beat gangs only (ignoring Beat Gangs).
- Clear the check box to print Period Tickets for Beat Gangs as well as non-beat Gangs.

### Print Period Ticket for Non Routine

The Period ticket for Non Routine will print out the selected committed Non Routine Work that has been allocated to Gangs.

Contract	<input type="text"/>	<input type="text"/>	...
Site	<input type="text"/>	<input type="text"/>	...
Job Number	<input type="text"/>	To <input type="text"/>	Status <input type="text" value="Live"/> ▾
Priority	<input type="text"/>		▾
Status From	<input type="text"/>	<input type="text"/>	...
To	<input type="text"/>	<input type="text"/>	...
Booking Date	<input type="text" value="00/00/0000 00:00:00"/>	To <input type="text" value="00/00/0000 00:00:00"/>	
Team Like	<input type="text"/>	<input type="text"/>	...
Include From	<input type="checkbox"/>	<input type="text"/>	...
To	<input type="checkbox"/>	<input type="text"/>	...
Print From Copy	<input type="text"/>	<input type="text"/>	...
To	<input type="text"/>	<input type="text"/>	...
Ticket Type(s)	<input type="text" value="New"/>		▾
Collate Details	<input type="text" value="by Team"/>		▾
Page Break	<input type="text" value="None"/>		▾

The top half of the filter is used to restrict the data returned by the Ticket Print Filter.

The bottom half tells Confirm how to present the data returned. There are the following options:

**Print from Copy / To:** Select a range of Print Copies to print. If these fields are left blank one ticket will be printed in each Print Copy stored in the **Print Copy library**.

- Ticket Types:** Select from:
- 'New' - Prints out all work not printed before.
  - 'Variance' - Prints out Variations not printed before.
  - 'New & Variance' - Prints all previously unprinted work, including previously unprinted Variations to work previously printed.
  - 'Reprint (Current)' - Prints a ticket reflecting the currently Committed work (regardless of whether a ticket has been printed before) including any amendments because of Variations.
  - 'Reprint (Original)' - Reprints a ticket as it appeared when last printed, ignoring any Variations to the work since the last print.
- Collate Details:** Select from:
- 'by Gang' - Each Gang will print in all Copy Types before beginning the next Gang.
  - 'by Copy Type' - Each Copy Type will print for all the Gangs before beginning the next Copy Type.
- Page Break:** Select from:
- 'None' - Jobs will print continuously without a hard page break.
  - 'Break By Job' - Each Job will start a new page
  - 'Break by Site' - All the Jobs on a Site will print without a hard page break. A new page is started for a Job on a different Site.

**Note:** Jobs that have been scheduled in ConfirmWorkzone and Jobs raised using Repeating Routine Jobs will not be available for printing.

### Work Ticket Print Copy

At least one ticket print copy, defining the print parameters, must be created before a Ticket can be printed.

Ticket Copy Code	<input type="text" value="NON"/>
Name	<input type="text" value="Non Routine Print"/>
Type of Rate Shown	<input type="text" value="Total SMV"/>
Aggregates Show	<input type="text" value="Regime Code &amp; Name"/>
Non-Aggregates Show	<input type="text" value="Asset Id &amp; Location"/>
Feature Show	<input type="text" value="Plot No"/>
Show Authorisation Box	<input checked="" type="checkbox"/> Show Item Dimensions <input checked="" type="checkbox"/>
Show Signature Box	<input checked="" type="checkbox"/> Show Long Description <input checked="" type="checkbox"/>
Show Supplementary Header	<input checked="" type="checkbox"/> Show Totals <input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/> <input type="text" value="Include Work for Period"/>

Ticket Copy Code: Up to four alphanumeric characters.

Name:	Up to 30 characters.
Type of Rate Shown:	<p>The ticket may display rates for each SOR Item. To set the type of rate shown select from:</p> <p>'None' - to leave the column blank</p> <p>'Total Income' - to display a figure based on the Contract rates and the measurement for which the work is carried out - totalled for all the occasions on which the work appears.</p> <p>'Per Occasion Income' - as above - for a single occasion</p> <p>'Total Pay' - to display a figure based on the Pay Rates (as stored against the SOR in the Cost Details library) and the measurement for which the work is carried out - totalled for all the occasions on which the work appears.</p> <p>'Per Occasion Pay' - as above - for a single occasion</p> <p>'Total SMV' - to display a figure (in Standard Hours) based on the Standard Minute Value (as stored against the SOR in the Cost Details library) and the measurement for which the work is carried out - totalled for all the occasions on which the work appears.</p> <p>'Per Occasion SMV' - as above - for a single occasion</p>
Aggregates Show:	Select from Regime Name, Regime Code, or Regime Code and Name. This selection will be used for work on tickets for which the Regime is flagged 'Aggregate'. See "Asset Maintenance\Maintenance Regime" for information on aggregating work.
Non-Aggregates Show:	Select from Regime Name, Regime Code, Regime Code and Name, Feature Id & Location, or Feature Type. This selection will be used for work on tickets for which the Regime is not flagged 'Aggregate'. See <b>Asset Maintenance\Maintenance Regime</b> for information on aggregating work
Feature Show:	Select Plot No or Feature Id. The ticket will then identify Features in the way selected in this field.
Show Authorisation box:	Check to show signature box at the bottom of the last page of the Ticket. The box is labelled 'Authorisation Date'.
Show Signature Box:	Check to show signature box at the end of the ticket
Show Supplementary Header:	Check to print with Supplementary header. A supplementary header appears at the beginning of the ticket and provides space for entering the Gang member's names and hours.
Show item dimensions:	Check to show item dimensions (where measurements are entered as length and width for instance)
Show Long Description:	Check to show the long description in place of the short description for each SOR.
Show Totals:	<p>Check to show totals for each Site.</p> <p><b>Note:</b> These are totals of rates, and therefore will reflect the 'Type of Rate' selected. Where 'None' has been selected, no totals can be displayed.</p>
Include Work for Period:	Check this to include work with Period occasions (as well as work with weekly and daily occasions)

## Ticket Print Troubleshooting

At least one **Print Copy** must be in place before tickets can be printed.

Creating the Allocation rules (in the Gang Lookups) is NOT to carry out an allocation. Once the rules are in place, automatic allocation for Routine Work will take place when Routine work is committed.

Therefore: if no Routine work has been committed since the Allocation rules were set up - no allocation has been done, and no tickets can be printed.

To allocate work on a Routine Maintenance Works Order which was committed prior to the allocation rules being set up use **Allocate Gangs to Routine** on page 16 - where no default Gang is in place, or **Re-Allocate Routine Maintenance** on page 18 - where a dummy Gang is in place (and so all Routine Work will have been allocated to the dummy Gang by default)

Select the correct Print Option for the work you want to print:

- Entering a Beat gang in the Period Ticket Print filter will return 'No Records Found' unless 'Ignore Beat Details' is checked.
- Entering a non-Beat gang in the Beat ticket print filter will return 'No Records Found'. Use the Print Beat Ticket for Routine option.

Select the correct Ticket Type in the print filter:

- New & Variance prints work that is 'New' - i.e. hasn't been printed before.
- Current prints the 'current' situation - i.e. all the work, new and already printed.
- Reprint reprints a ticket in as it appeared when last printed.

Selecting New & Variance, when this ticket has already been printed, will return 'No Records Found'.

Tickets for Beat Gangs will only print the Sites that are in their Gang Route. Therefore, if Beat Gangs have been created, and given an allocation of work, but not assigned a Gang Route, an attempt to print a ticket for Beat Gangs will return 'No Records Found'

The **Un-Routed Beat Sites report** will highlight Sites that are in a Beat Gang's allocation of work, but not in their Gang Route.

Gang allocations have been carried out, but a Work Ticket Print returns 'No Records Found'

## Gang Allocation

Gang allocation assigns to each Gang the work that they will be responsible for at each Site. The work is defined as SOR Items, so an allocation is of a particular SOR Item (or group of SOR Items) on a particular Site. The gang may then go to another Site and carry out a different set of SOR Items. It's the combination of Site and SOR Item(s) that precisely defines a Gang's work.

Gangs may be responsible for a large variety of SOR items on a small number of Sites (or only one Site), or may be responsible for a small range of SOR Items, across a great many Sites. The latter (lots of Sites, few tasks) will usually be considered as Beat Gangs.

Gangs will have the Sites in which they have work allocated Routed to provide a logical order in which to visit the Sites. Gang Routes are not obligatory for Non Beat gangs (where no Gang Route is in place - the Sites will list alphabetically on the ticket), but Gang Routes are essential for Beat gangs since Sites not in their Gang Route will simply not appear in the Beat ticket.

Allocation may be carried out in two ways:

1. According to rules set in the Gang Lookups, which define which Gang will do which SORs on which Sites. This is usually most appropriate to Routine Work, and the system will carry out the allocation automatically when Routine Work is Committed if 'Rules' are in place.
2. On an Ad hoc basis, assigning the work to the gangs as the work is committed. This is usually most appropriate to Non Routine work, although rules may be used to help in allocating work. Automatic allocation is not carried out on committal of Non Routine work - regardless of whether rules are in place or not.

The Gang Allocation Folder is in two sections:

1. Allocation and re-allocation filters to carry out the allocation and re-allocation of committed work.
2. Gang Lookups folder contains the tools and libraries for setting up Gangs and assigning them their Gang Routes, and for setting up the allocation rules which will define the allocation of Routine Work on committal, and may be used to allocate Non routine work.

### Storing of Job Allocation Information

*This information can be used when writing reports on current and historical Job allocation.*

Allocation information for Jobs is stored in the `gang_job` and `allocated_task` table in the database. Information in the `gang_job` table is primarily used by the allocation functionality in the Confirm desktop client:

- The 'Allocate' option access on the Job screen via the 'Other' button
- The 'Scheduling' screen
- 'Allocate Work Crews to Non-Routine' and 'Re-Allocate Non-Routine Maintenance' screens

Information in the `allocated_task` table is primarily used by ConfirmWorkzone.

The information in both tables will be kept in sync, meaning that both can be reported on.

However, there are differences in the information that is stored in each table which may affect which table is more suitable for reporting. Here is a summary of the information stored in each table, and how that information is updated.

#### The `allocated_task` table

- Multiple records can exist for a single Job:

- There will be a maximum of one 'current' allocated task per Job. A 'current' allocated task is one where the end\_date is blank, and represents a Job that has been scheduled.
- Multiple 'closed' allocated\_task entries can exist for a single Job. A 'closed' allocated task is one that has an end\_date. Each 'closed' allocated task shows a portion of work that has been completed for the Job, so a Job that has been paused or suspended several times may have several closed allocated tasks.
- Suspending/rejecting a Job (e.g. by clicking the 'Remove' button on a Job in ConfirmConnect) before starting work on it will cause the Job's current allocated task to be deleted (i.e. no work done). In ConfirmWorkzone, this Job will now appear back on the list for re-scheduling.
- Suspending/rejecting a Job (e.g. by clicking the 'Remove' button on a Job in ConfirmConnect) after work has been done on a Job will cause the Job's current allocated task to be closed (end-dated). In ConfirmWorkzone, this Job will now appear back on the list for re-scheduling.
- Pausing a Job will cause the Job's current allocated task to be closed (end-dated) and a new one created and scheduled for the time at which the Job was paused. This means that, in ConfirmWorkzone, the Job will remain on the schedule allocated to its original Gang, but scheduled for the time at which it was paused. The Job can be re-allocated if required.
- Completing a Job will cause the Job's current allocated task to be closed (end-dated).

In Summary, the allocated\_task table stores information on when a Job is currently allocated and which Gang it is allocated to. It also records all work that was completed for a Job and which Gang performed each piece of the work.

### The gang\_job table

- Multiple gang\_job records can exist for a single Job. This is where either Items on a Job have been allocated to different Gangs, or where the Items have been scheduled at different times (using the 'Scheduling' option or 'Re-Allocate Non-Routine Maintenance' options in the desktop client). Other methods of allocating (ConfirmWorkzone or the 'Allocate' option on the Job screen) will only create one gang\_job entry.

**Note:** Where Items for a Job have been allocated to multiple Gangs, the Job will not appear in ConfirmConnect.

- Suspending/rejecting a Job (e.g. by clicking the 'Remove' button on a Job in ConfirmConnect) will cause the Job's gang\_job to be deleted. This means that, once a Job is Suspended, there is no record in the gang\_job table of the Gang that Suspended it. However, if work was done on the Job, there will still be a record in the allocated\_task table.
- Pausing a Job will not change the Job's gang\_job. This means that the Job stays allocated to the Gang when the Job is paused.
- Completing a Job will not change the Job's gang\_job. This means that there is a record of which Gang completed work on the Job.
- Where multiple gang\_job records exist for a Job, only the first record will be synced to the allocated\_task table and appear in ConfirmWorkzone. However, re-allocating the Job in ConfirmWorkzone will re-allocate the entire Job and remove the additional gang\_job records.

In summary, the gang\_job table shows who a Job is allocated to or, for completed Jobs, the last Gang to work on the Job.

As the events that update the allocated\_task and gang\_job data are primarily triggered from Job Status changes, it is essential that the 'Allocated To Gang' Job Status is configured on the Contract Management System Settings screen. This Job Status should have the 'Outstanding' and 'Send Jobs to Device for Gang' checkboxes ticked, and the 'In Progress' checkbox unticked.

**Note:** Re-opening a closed Job: If a Job has been completed but needs to be re-opened and re-scheduled, this can be done by deleting the actual completion date and resetting the Job Status back to one that is available for scheduling. This can also be done when attempting to re-allocate the Job, via the Other > Allocate option on the Job screen, to a new gang.

## Allocate Gangs to Routine

To carry out an allocation of committed Routine Work where the allocation had not been carried out automatically on committal (that is - allocation 'rules' for the work in question were not in place at the time of the committal).

Where rules are now in place, this utility will use them to carry out the allocation - so it may be used to carry out an allocation where rules are now in place, but were not at the time of the committal of the Routine Works.

Where rules covering this work are not in place, the gang entered as 'Default' gang, is the one to whom the work defined in the top part of the filter will be allocated.

Contract	<input type="text"/>	<input type="text"/>	...
Site	<input type="text"/>	<input type="text"/>	...
Regime	<input type="text"/>	<input type="text"/>	...
Category	<input type="text"/>		▼
Classification	<input type="text"/>		▼
Customer	<input type="text"/>		▼
Area	<input type="text"/>		▼
Ward	<input type="text"/>		▼
SOR Item From	<input type="text"/>	<input type="text"/>	...
To	<input type="text"/>	<input type="text"/>	...
Finance Period	<input type="text"/>	<input type="text"/>	...
Short Description Only	<input type="checkbox"/>		
<hr/>			
Default Team	<input type="text"/>	<input type="text"/>	...
Include From	<input type="text"/>	<input type="text"/>	...
To	<input type="text"/>	<input type="text"/>	...

The fields above the grey line allow the selection of the work and the Sites for allocation. Fields include:

**Finance Period:** Select the Finance Period for which the allocation is to take place.

**Short Description Only:** Check this to display only the SOR short description in the allocation preview.

The fields below the grey line define how the work is to be allocated.

**Default Gang:** Enter here the Gang who will be allocated any of the work defined above, which cannot be allocated according to 'rules'.

This means that where no rules are in place to define the allocation, the Gang who will be doing the work should be entered in this field.

Where 'rules' are in place to define the allocation (rules have been put in place since the committal of the work took place for instance) the 'dummy' gang should be entered. In this case, any work for which rules are not in place will be 'caught' by the dummy gang.

**Include From \To:** Where a 'true' Gang has been entered (that is rules are not in place and the Gang is the one to whom the work will be allocated) - use these fields to limit

the allocation to the Sites in the Gang Route by entering the first and last Sites in the From and To fields.

**Note:** If these fields are left blank the work will be allocated in all Sites for which it is ordered, only limited by any filter entries in the top part of the form.

Click on OK to run the utility and display the allocation Preview. Save the preview to carry out the allocation.

### Allocate Gangs to Non Routine

To carry out an allocation of committed Non Routine Work. This may be done in two ways:

Using rules - where rules are in place, this utility will use them to carry out the allocation, and only work that cannot find a Gang according to the 'rules' will be allocated to the 'Default Gang'.

Ignoring rules - this option is only valid when the 'Processing Required' option is set to Allocated. If 'Ignore Rules' is selected the gang entered as 'Default' gang, is the one to whom the work defined in the top part of the filter will be allocated.

**Note:** Where rules have been set up such that a Job is allocated to more than one Gang, the Job will not be downloaded to ConfirmConnect®. Splitting Jobs is only valid for Work being issued using Work Tickets.

**Note:** Only Jobs that do not have an 'Actual End Date' set will be retrieved. Where a Job with an 'Actual End Date' set needs to be Reallocated or Unallocated, the 'Actual End Date' needs to be blanked.

The screenshot shows a dialog box titled "Non-Routine Maintenance - Work Crew Allocation Filter". The dialog is divided into several sections. The top section contains fields for Contract, Street, Street Section, Order No. From, Job Number, Location Contains, Notes Contain, Status From, To, Job Type, Current Gang, Priority, Classification, Area, SOR Item From, To, and Customer Ref. The bottom section contains Processing Required (set to "Allocate"), Ignore Rules (unchecked), Default Work Crew, Include From, and To. On the right side, there are buttons for OK, Cancel, and Clear, and a checked checkbox for Preview.

The fields above the grey line allow the selection of the work and Sites for allocation. Fields include:

Location Contains: Will find all Jobs with a matching text string in the Work Location field.

Notes Contain: Will find all Jobs with a matching text string in the Work Description field.

The fields below the grey line define how the work is to be allocated.

**Processing Re-quired:** The Allocate option will only retrieve Jobs that are not currently Allocated, match the filter criteria and do not have an Actual End Date set. This option will Allocated the Jobs retrieved to the Default Gang selected applying the allocation 'rules', if required.

The Reallocate option will only retrieve Jobs that are already Allocated, match the filter criteria and do not have an Actual End Date set. This option will move all the Jobs retrieved to the Default Gang selected.

The Unallocate option will only retrieve Jobs that are already Allocated, match the filter criteria and do not have an Actual End Date set. This option will move all the Jobs retrieved to the Default Gang selected.

**Ignore Rules:** This option is only valid when the Allocate Processing Required option is selected.

Check this to carry out the allocation without reference to the allocation 'rules'.

Clear the check box to carry out an allocation using the allocation 'rules'

**Default Gang:** Where 'Ignore Rules' is checked, the Gang who will be doing the work should be entered in this field.

Where 'Ignore Rules' has not been checked, the 'dummy' gang should be entered. In this case, any work for which rules are not in place will be 'caught' by the dummy gang.

**Include From \To:** The Site Route criteria are only valid when the Allocate Processing Required option is selected.

Where an allocation ignoring the rules is taking place - you may use these fields to limit the allocation to the Sites in the Gang Route by entering the first and last Sites in the From and To fields.

**Note:** if these fields are left blank the work will be allocated in all the Sites for which it is ordered, only limited by any filter entries in the top part of the form.

Click on OK to run the utility and display the allocation Preview. Save the preview to carry out the allocation, reallocation or unallocation.

Information on how allocation data is stored can be found here: **Storing of Job Allocation Information**. This information can be used when writing reports on current and historical Job allocations.

## Re-Allocate Routine Maintenance

Once allocated, work may be re-allocated using the Re-allocation utilities.

Contract	<input type="text"/>	<input type="text"/>	...
Site	<input type="text"/>	<input type="text"/>	...
Asset Number	<input type="text"/>	.00 <input type="text"/>	...
Regime Like	<input type="text"/>	<input type="text"/>	...
Category	<input type="text"/>		▼
Classification	<input type="text"/>		▼
Customer	<input type="text"/>		▼
Area	<input type="text"/>		▼
Ward	<input type="text"/>		▼
SOR Item From	<input type="text"/>	<input type="text"/>	...
To	<input type="text"/>	<input type="text"/>	...
Finance Period	<input type="text"/>	<input type="text"/>	...
Week	<input type="text"/>	▼	Day <input type="text"/>
Team Like	<input type="text"/>	<input type="text"/>	...
Include From	<input type="text"/>	<input type="text"/>	...
To	<input type="text"/>	<input type="text"/>	...
Re-Allocate To	<input type="text"/>	<input type="text"/>	...

The fields above the grey line allow the selection of the work and the Sites for re-allocation. Fields include:

**Finance Period:** Select a Finance Period from the pick list to limit the re-allocation to a Finance Period.

Leave the field blank to select from all available committed Routine Work.

**Week From \ To:** You may select a Week to limit the re-allocation to that Week.

The drop down list references the Week Lookup for the Weeks that are assigned to the Period.

#### **Asset Maintenance\Maintenance Lookups**

**Day:** For daily work, you may select a Day to re-allocate the work for that day. This may be done for the week and Finance Period selected, or, where no week or Finance Period is selected, for all the weeks where work is currently committed.

**Gang Like:** You may select work for only one Gang, or a range of similarly coded Gang. The pick list references the **Gang lookup**.

**Include From\ To:** You may limit the re-allocation to a range of Sites from within the selected Gang's Route. The pick list references the **Gang Route lookup** for the Route associated with the selected Gang.

**Note:** these fields will not be available if a range of Gangs has been selected in the Gang Like field.

**Re-allocate to:** Select from the pick list, the Gang to whom the work is to be re-allocated. The pick list references the **Gang lookup**.

### **Re-Allocate Non Routine Maintenance**

Once allocated, work may be re-allocated using the Re-allocation utilities.

Job No	2006490 ...		
Contract	GROUCO	Grounds Maintenance 06 - 08	Order Number 2000266
Site	47711657	ABBOTTS CLOSE	Committed
Asset No	3.00 Head Bed Maintainer		
Desc	Cut back overhanging vegetation		Location O/S Number 121
Team	FTAZ	Flytip Pickup Gang - All Areas ...	(Ticket has not been printed)

Item No.	SOR Item	Team	Allocated	
10	Cut Soft Edge - Std 3 Hway	FTAZ	605.00	<a href="#">Detail</a>

**Job No:** Enter, or select from the pick list, the Job in which work is to be reallocated. The pick list references all Committed Jobs that have been allocated to a Gang.

All the fields, other than Gang, are populated from the details on the Job, and may not be edited.

**Gang:** This field may be amended to re-allocate the whole Job to another Gang. The pick list references the **Gang lookup**.

Selecting a new Gang in this field will re-allocate all the SOR Items on this Job to the entered Gang.

(0850 - Gang Allocation & Scheduling)

If a Job has been Allocated using the Other | Allocate option on the Job screen by mistake, the items will need to be deleted from the Allocation before the Scheduling screen will display these Jobs. This can be achieved by using the 'Delete' button to remove each item from the Allocation.

Information on how allocation data is stored can be found here: **Storing of Job Allocation Information**. This information can be used when writing reports on current and historical Job allocations.

### Re-Allocate Non Routine Maintenance Item

To re-allocate SORs on the Job to different Gangs, click on the 'Detail' button to display the Gang re-allocation Items form. The Gang field will be the only editable field. Use this field to select the Gang to whom this SOR Item is to be re-allocated.

### Gang Lookups

The Gang Lookups provide libraries for creating and storing Gang details and Gang Routes.

Utilities for setting up Gang Allocation 'rules' are provided, together with reports for checking the integrity of the 'rules'.

Where only Non Routine works are carried out, and these are to be allocated on an ad-hoc basis, as the work is committed, then only Gangs and Gang Route lookups need be completed.

Where Routine Works are carried out, or Non Routine Works would benefit from allocation 'by rule', Gang Allocation 'rules' may be set up which will be implemented automatically when Routine Work is committed, and may be used when Non Routine Work is being allocated.

**Note:** Although the term 'Allocation' has been used in these Lookups, it refers to allocation rules, rather than actual allocation of committed works. An allocation rule defines the Sites and SOR Items that are the responsibility of a Gang, and if this work should ever be ordered in this Site, the rules will allocate the work to this Gang.

## Gang

The Gang Lookup stored all the Gangs, and flags whether they are 'Beat' Gangs or not.

Navigation: 1 of 37 | Route Alloc.

Code: MA1

Name: Maintenance Gang North

Beat:

Contractor: Highways Quantity Contractor HWQUAN ...

Device Action Officer: ...

Scheduler requires Job Site to be on the Team route:

Home Location: Easting 278,717.23 Northing 187,103.77

Code: Up to 4 alphanumeric characters.

Name: Up to 30 characters.

Beat: Check this to indicate that the Gang is a 'Beat' Gang.

Beat Gangs are defined as those who do a small number of tasks (SOR Items), and travel to a great number of Sites.

The implications of flagging a Gang as a Beat Gang are that it provides the ability to divide the Route into Groups of Sites, and Beat Tickets may be printed.

**Note:** Gangs checked as Beat Gangs, may be unchecked at any stage, and vice-versa.

Contractor: Optionally link the current Gang to a Contractor. The pick list references the Contractor library.

### Contract Preparation\Contractors

(0850 - Gang Allocation & Scheduling module)

If the currently logged in User is a 'Contractor User' (i.e. their Confirm User is linked to an Action Officer assigned to a Contractor) then Contractor Access restriction will be enforced in ConfirmWorkzone and on the Confirm Scheduling screen.

In ConfirmWorkzone, Contractor Users may only view and schedule work for Gangs that belong to the same Contractor. If the current User is not a Contractor User, all Gangs will be available.

On the Scheduling screen, Gang Booking slots will be restricted to those where the Contractor matches the currently logged in User's Contractor. Where there is no Contractor assigned to the Gang, this restriction will not be enforced.

**Note:** If a Contractor is not entered here then Contractor Action Officers using Contract Access Direct will not see this Gang record or perform any operations against it. Contractor Action Officers can only see Gangs that are linked to their Contractor.

### Contract Preparation\Contractor Officer

Device Action Officer: (0735 - Jobs in the Field module)

Select an Action Officer from the list who will be responsible for Jobs which are assigned to this Gang. Any Job which is allocated to this Gang will be transferred to the device when this Action Officer transfers their tasks, not the Action Officer assigned to the Job itself.

When a Contractor is specified, the list of available Officers includes those who are Contractor Officers for the selected Contractor and Action Officers who are not assigned to any Contractor.

When no Contractor is specified the list is restricted to Action Officers who are not assigned to any Contractor.

### Contract Preparation\Contractors

Scheduler requires... : (0850 - Gang Allocation & Scheduling module)

Tick this to only enable Booking slots on the Scheduling screen where the Job's Site is on the Gang's Route.

**Note:** Setting this after Jobs have been Scheduled will cause the Booking Slot in the Scheduling screen to display a warning.

Route Button: Displays the Gang Route form with details of the selected Gang's Route.

Alloc button: Displays the Gang Allocation form with details of any allocation rules that are in place for the selected Gang.

Home Location: The coordinates of the location from which the Gang starts their working day. Used by ConfirmWorkzone® for route planning. The coordinates can be typed manually (if known), or can be found by clicking on the Map button and using the Georeference tool to plot the location.

## Gang Routes

Gang Routes set an order for the Sites that the Gang will visit to carry out their allocated tasks.

Gang: Select a Gang from the pick list. The pick list references the Gang Lookup.

Site: Enter the first Site in the route, or the next in the sequence of Sites for the Gang Route. The pick list references the Site Register.

### Site Register\Site

Route Order: Sites will be automatically numbered in this Route in increments of 10. Enter a Route order number to alter the Route order.

Area: Default from the Site. Cannot be edited.

- Totals Required: Check this for the Site at which an SOR Summary will be required on the ticket print.
- Group: This field is only available when 'Totals Required' is checked. Enter a Group number to group all the Sites from the end of the last Group up to this one.
- Batch button: The batch button displays the Gang Route Batch Filter

**Gang Routes - Batch button**

- Gang: The current Gang is entered by default. A different Gang may be selected
- Route: Select a Site Route from the pick list. The pick list references the Route Lookup.

**Site Register\Site Lookups\Operational Lookups**

- From\To: Select a range of Sites from the Site Route. The pick list references the Route Lookup for the selected Site Route.

**Site Register\Site Lookups\Operational Lookups**

Using a Site Route as the basis for a Gang Route provides an easy way to assign the same Route to several Gangs.

**Batch Gang Allocation**

The Batch Gang Allocation utility provides the means of setting up Gang allocation rules on a batch basis. For allocation of Routine Work, this is usually done after running the Batch Routine Allocation utility.

Site	<input type="text"/>	<input type="text"/>	...
Category	<input type="text"/>	▼	
Classification	<input type="text"/>	▼	
Customer	<input type="text"/>	▼	
Area	<input type="text"/>	▼	
Ward	<input type="text"/>	▼	
Contract Area	<input type="text"/>	▼	
SOR Item From	<input type="text"/>	<input type="text"/>	...
To	<input type="text"/>	<input type="text"/>	...
Schedule	<input type="text"/>	▼	
Team	<input type="text"/>	<input type="text"/>	...
Reference Like	<input type="text"/>		
Allocate To	<input type="text"/>	<input type="text"/>	... (Blank to Unallocate)
Include From	<input type="text"/>	<input type="text"/>	...
To	<input type="text"/>	<input type="text"/>	...
Reference	<input type="text"/>		

The fields above the grey line are used to define the work that will be assigned.

The Fields below the grey line are used to specify the Gang to whom the work is being assigned.

- Allocate to: Select a Gang from the pick list. The pick list references the **Gang lookup**.

Leave the Allocate to field blank to 'unallocate', which is to remove the selected work from the Gang to whom it is currently assigned.

**Include From \To:** You may use these fields to limit the allocation to the Sites in the Gang Route by entering the first and last Sites in the From and To fields. You may also select a range of Site from within the Gang Route.

**Note:** if these fields are left blank the work will be assigned without reference to the Gang Route.

**Reference:** An optional free text field. See for information on setting and using allocation references.

Click on OK to view the preview. This will show the work that will be assigned to the Gang, with details of the previous Gang (if the selected work had already been assigned to another Gang), Save the preview to set up this allocation as part of the Allocation rules.

### Batch Routine Allocation

The Batch Routine Allocation will identify Routine Work in the Inventory (that is - SOR Items on Maintenance Regimes allocated to Features) within the parameters set in the filter.

This work is identified as a List of Sites, with a list of all the SORs that are carried out on that Site following each Site.

This 'Routine Allocation' is then assigned to the Gang selected in the lower part of the filter.

The work will usually be assigned to the 'dummy' gang so that it can be ensured that allocation rules will deal with all Routine Work.

Contract	<input type="text"/>	<input type="text"/>	...
Contract Area	<input type="text"/>	▼	
Site	<input type="text"/>	<input type="text"/>	...
Category	<input type="text"/>	▼	
Classification	<input type="text"/>	▼	
Customer	<input type="text"/>	▼	
Area	<input type="text"/>	▼	
Ward	<input type="text"/>	▼	
Allocate New To	<input type="text"/>	<input type="text"/>	...
Set Reference To	<input type="text"/>		

**Contract:** A Contract must be selected. The pick list references awarded Term Contracts, and Non Term Contracts.

### Contract Preparation\Contract

The middle area of the filter, between the two grey lines, allow optional filters to be applied to restrict the selection of work from within the Routine Maintenance for the selected Contract (as defined by the Contract Areas covered by that Contract.)

**Allocate New To:** Select the Gang to whom the selected Routine Work is to be assigned.

**Note:** Only 'New' work will be assigned to this Gang - that is, work which is already assigned to a Gang, will not be re-assigned to this one.

Set Reference To: An optional free text field. A reference entered here will be applied to all the Items that are allocated to the selected gang as a result of this Routine Batch Allocation. See " on page for information on setting and using allocation references.

Click on OK to view the preview. This will list all the selected Routine Work, and, where the selected work had already been assigned to another Gang, that Gang will be shown. Save the preview to assign all 'New' work (that is - work which is not already assigned to a Gang) to the selected Gang.

### Default Gang Allocation

Displays the Gang Allocation form, in which details of the allocation rules are held. The form can also be used to carry out allocations, and to reassign allocations.

Site	<input type="text" value="BERTHA PLACE"/>	<input type="text" value="47700133"/>	<input type="button" value="..."/>
	Area	<input type="text" value="Port Talbot"/>	
SOR Item	<input type="text" value="G0000592"/>	<input type="text" value="Clear Litter - Std 8 Hwy"/>	<input type="button" value="..."/>
<hr/>			
Team	<input type="text" value="GEN1"/>	<input type="text" value="East General"/>	<input type="button" value="..."/>
Reference	<input type="text"/>		

The area above the grey line defines the allocation Item - an allocation of work is for an SOR Item at a Site.

The Area below the grey line defines the Gang to whom this allocation item is assigned.

To add a Site/SOR Item to a Gang's allocation, enter the Gang in the Gang field, and the Site and SOR Item in the Site and SOR Item fields.

To change the allocation from one Gang to another, Find the record of the current allocation, and change the Gang in the Gang field to the new Gang who is to carry out this work.

**Note:** Where rules are set up such that a Job is allocated to more than one Gang, the Job will not be downloaded to ConfirmConnect®. Splitting Jobs is only valid for Work being issued using Work Tickets.

### Batch Update Reference

Site	<input type="text"/>	<input type="text"/>	...
Category	<input type="text"/>	▼	
Classification	<input type="text"/>	▼	
Customer	<input type="text"/>	▼	
Area	<input type="text"/>	▼	
Ward	<input type="text"/>	▼	
Contract Area	<input type="text"/>	▼	
SOR Item From	<input type="text"/>	<input type="text"/>	...
To	<input type="text"/>	<input type="text"/>	...
Schedule	<input type="text"/>	▼	
Team	<input type="text"/>	<input type="text"/>	...
Reference Like	<input type="text"/>	Reference is blank	<input type="checkbox"/>
New Reference	<input type="text"/>		

Use the area above the grey line to define the allocation items that will have the new reference applied.

Enter the required new reference in to the new reference field. Click OK to display the preview. This will list all the Gang allocation Items that will be updated, and displays the current Reference where one exists. Save the preview to update the references.

### Un-Routed Sites

This report will list all Sites that have been included in a Gang's work allocation rules, but not included in the Gang Route.

This will enable the missing Sites to be added to the Routes in the correct place in the Route order.

### Un-Routed Beat Sites Report

This report will list all Sites that have been included in a Beat Gang's work allocation rules, but not included in the Gang Route.

It is important that Beat Gangs have all the Sites for which they have an allocation rule included in the Route, since Beat tickets will simply ignore non-Routed Sites.

## Setting up Gang Allocation rules - Step-by-step

Allocation Rules can be set up which will determine the way in which the system will allocate work to Gangs. For Routine Maintenance, the allocation will take place automatically when Routine Work is committed. For Non-Routine Work, there is no automatic allocation on committal, but the rules can be used to allocate work once it is committed.

### Setting up Rules:

- Create Gangs. Include one 'dummy' gang - NGA No Gang Allocated - for instance. This gang will be the 'default' gang and will be used throughout to 'catch' any work that does not have a rule to allocate it to a **Gang**.
- Assign the default Gang to the Contractor. Select the Contractor form and enter the NGA default gang into the default Gang field. See **Contract Preparation Contractor** for information on setting the Default Gang.

- Create Gang Routes for each of the Gangs (other than the default gang, which does not require a Route).

**Note:** Gang Routes are optional for non-beat Gangs - their work will print out on the tickets alphabetically by Site if there is no Gang Route to provide the order.

Beat Gangs must have Routes set since only the work on Routed Sites will print on a Ticket.

- Setting up rules for Routine work only: - Run the **Routine Batch Allocation utility** assigning all the work identified to the Default (NGA) gang. The Routine Batch Allocation must be run in each Contract. This may be done consecutively, to allocate all work across all Contracts to NGA in one go, or you may prefer to work in one Contract at a time, and re-run the Batch Routine Allocation in the next Contract, when the full allocation rules have been set up in the last one.
- Setting up rules - all work: - Use **Batch Gang Allocation** to assign work to Gangs. For Routine Work identified by the Routine Batch Allocation, work will be removed from the NGA Gang as it is assigned to its proper Gang. When all the rules are in place, the NGA Gang should have no allocation of work left.
- Use the **Default Gang Allocation screen** to fine tune the allocation rules, and change any single item of allocation.
- Use the **Un-Routed Sites report**, and **Un-Routed Beat Sites report** to check that all Sites allocated to Gangs are correctly included in their Gang Routes.
- Where SMVs are assigned to SOR Items, the Annual, and Periodic Workload graphs may be used to estimate the amount of Routine Work (in hours) that the rules assign to each Gang.

**Note:** Completing this process puts in place a set of allocation rules. No allocation of work has been carried out until Routine Work is committed, when an automatic allocation will take place based on the rules; or Non Routine Work is committed and manually allocated.

This means that rules may be set up at any time after the Inventory is complete, and Contracts are in place.

## Maintaining Rules

Rules, particularly for Routine Work, may become out-of-date as Sites are added, Features added, and new SORs and Regimes are introduced.

Where rules are required for Non Routine Work, the new Sites and SORs must be added to the Gangs allocations and Gang Routes.

For Routine Work, additions to work that do not have an allocation rule in place can be identified by running the **Batch Routine Allocation utility**.

This will identify all the Routine Works programmed in the system again, but, when the allocation is saved, only 'New' work, that is work that does not already have a Gang, will be sent to the default (NGA) gang entered in the 'Allocate New To:' field.

Routine Work without an existing allocation rule is now found in the allocation for the NGA gang and can be allocated to the correct Gang using the Batch Allocation, and Gang Allocation forms.

The Un-routed Site, and Un-routed Beat Sites reports should be used to check that all new Sites are correctly included in their Gang Routes.

**Note:** Updating the Gang Allocation rules will not change allocation of committed work that have already taken place. The rules will be used next time Routine Work is committed, or next time Non Routine Work is allocated using rules.

Therefore, if Routine Work has been committed before the update to the rules, changes to the allocation of currently committed Routine Work must be done using 'Re-Allocate Routine Maintenance' - see "" on page

## Using References

The Reference can be used to identify a set of rules. For instance:

- A Routine Batch Allocation run for Routine Maintenance due to be committed in Period 1 of 2002, could carry a reference which identifies this - 'RM-0201-GM01-WMD' for instance. This would identify a Routine Batch Allocation, in period 0201, for contract GM01, by [initials of officer carrying out the allocation].
- A Gang Allocation, to correctly assign work to Gangs, might then be referenced to identify the date and officer ('GA-0201-WMD' for instance).
- The next Routine Batch Allocation run for Routine Maintenance due to be committed in 2003, could carry a reference of - 'RM-0301-GM01-WMD' for instance, indicating a rule set up in Routine Batch Allocation for period 1 - 2003. All work identified in this Routine Batch Allocation (whether already allocated or not) will carry this new reference.
- Therefore, rules dealing with work which is no longer required (because Routine Maintenance has changed) will carry the old reference RM-0201-GM01-WMD', or GA-0201-WMD.
- The reference number therefore identifies rules that can be removed.

# Scheduling

The Scheduling functionality provides allows Non-Routine works to be allocated to Gangs using the Bookings facility within Confirm. Jobs can be interactively allocated to an available Gang's Booking slot in the Scheduling screen using a 'drag and drop' interface.

A Booking record is created for each Job when it is Scheduled. This Booking is then progressed by the Gang it is assigned to and can be Completed manually, or automatically by the Job status.

The Standard Minute Values (SMVs) entered in the Cost Details screen are used by the Scheduling module to display how long each Job will take to complete, and to work out which Gangs have capacity in their Booking slot to complete the Job.

SOR Items can also have Labour Types set against them in the Cost Details screen. In the Scheduling scenario these are treated as the skills/requirements for completing that particular SOR Item. If Labour Types have been assigned to the Items, the Booking slots will be restricted to those Gangs which have the required Labour Types (skills).

**Note:** Please note that this scheduling functionality is not related to the newer ConfirmWorkzone® functionality. It is not recommended to use the two functionalities at the same time as this can cause data anomalies. In this scenario, the allocation in ConfirmWorkzone will take precedence over any other method of allocation. If you are using ConfirmWorkzone® exclusively the Scheduling lookups below relating to Bookings (Resources, Types and System Settings) do not need to be configured, however these lookups are required for the Scheduling functionality described in these pages.

## Scheduling

The Scheduling screen is used to allocate Committed Jobs to Gang Resource Booking slots. This is done by simply dragging a Job onto a Booking slot to Schedule it. This can also be done by selecting a Job, the required slot and clicking the 'Allocate' button.

The screenshot displays the Scheduling interface with the following components:

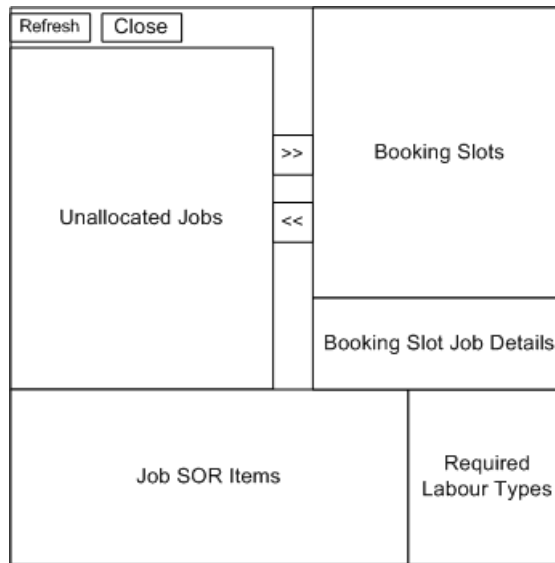
- Buttons:** Refresh, Close
- Filters:** Start Date (22/04/2015), No of Days (30), Team Like
- Job List Table:**

Job Number	Priority	Start Date
2006386	Reactive 7 Working Day	
Site: HEOL Y GWRGAN		
Description: MARGAM, PORT TALBOT, NEATH PORT TA		
Description: Replace dog waste bin(s)		
Standard Hours: 0:00		
2007351	Reactive 7 Working Day	
Site: MARGAM ROAD		
Description: MARGAM, PORT TALBOT, NEATH PORT TA		
Description: Removal of fallen tree and branches		
Standard Hours: 0:00		
2007354	Reactive 7 Working Day	
Site: MORLAIS ROAD		
Description: MARGAM, PORT TALBOT, NEATH PORT TA		
Description: Cut back overhanging vegetation		
Standard Hours: 0:00		
- Booking Slot Table:**

Date	Start	End	Team	Remaining C
Wed 22/04/15	08:00	08:30	Flytip Pickup Gang	
	08:00	17:00	South General	
	08:00	17:00	West General	
	08:30	09:00	Flytip Pickup Gang	
	09:00	09:30	Flytip Pickup Gang	
	09:30	10:00	Flytip Pickup Gang	
	10:00	10:30	Flytip Pickup Gang	
	10:30	11:00	Flytip Pickup Gang	
	11:00	11:30	Flytip Pickup Gang	
- Booking Slot Job Details:** (Empty field)
- Job SOR Items Table:**

Job SOR Items	Qty	Qty/Hr	Total H	Labour Types required
<input checked="" type="checkbox"/> 10 G000001: App Moss Killer Putting Gm - Ped	85	0	0	

The screen contains a lot of information, so is split into areas, as outlined below:



**Unallocated Jobs:** All Committed Jobs which have not been fully Scheduled, and do not have an Actual End Date set, will be displayed in this area of the screen. Archived Jobs will not be displayed. The 'Refresh' button can be used at any time to restrict these Jobs.

**Note:** Jobs can also be allocated to Gangs using the 'Allocate' option on the Job's 'Other' button. When this is done, the Job cannot be selected for use with the Scheduling screen. The 'Reallocate Non-Routine Maintenance' utility can be used to remove the SOR Items from the allocation, at this point the Job will be available in the Scheduling screen.

**Booking Slots:** This area displays all available Booking slots for the time period entered at the top of the screen. The Gang slots can also be restricted by using the 'Gang Like' field. If a partial Gang code is entered, then Confirm will do an automatic 'Like' search (without the need for a wildcard character) and display the appropriate slots. A wildcard can be used if required at the beginning. If a specific Gang is selected with the pick button, then the slots will be restricted to those for that Gang only.

The 'No of Days' value and the colour of the slots are set using the Booking System Settings. The colouring/availability of the slots will alter depending on the Job currently selected.

Jobs can only be allocated to Gangs which have the required Labour Types assigned to them in the Booking Resources screen.

Hovering over a Booking slot will display further information in a tool-tip e.g. it may tell you why the slot is unavailable.

Once a Job has been Scheduled the Booking slot will be updated to reflect this. A graphical bar will display the percentage still available, and the Capacity value will be updated also.

**Booking Slot Details:** This area of the screen displays the Jobs within the currently selected Booking slot. The order that they are completed can be altered with the 'Up' and 'Down' buttons.

If changes are made to the lookups which invalidate currently Scheduled Jobs, Confirm will display a warning sign. When this is hovered over, a tool

tip will explain the reason why. The following examples are possible reasons for this:

The number of hours Booked is different to the number of hours required by the SOR Items. This can occur when the SMV for items has been changed after the Job was Scheduled.

The Gang no longer has sufficient 'skills' to complete the Booking. This may be the result of removing a Labour Type from the resource after the Job was Scheduled.

The Booking is not within the date range covered by Job Start Date and Job Estimated Completion Date (only if populated).

**Job SOR Items:** The SOR Items for the currently selected Job, or Booking Slot Job will be displayed in this area of the screen.

When Scheduling a Job, all SOR Items will be selected by default. Specific SOR Items can be Booked by unchecking the checkbox next to the items not required. If a Job has been selected in the Booking Slot Job Details area, then the Items displayed will be the ones allocated to that Slot, and the other Items will be greyed out.

**Note:** Percentage Items are not displayed in the list.

**Required Labour Types:** This area of the screen will display the Labour Types that are required to complete the SOR Items currently selected. This is an easy way to see why a Booking slot is not available.

### Available Buttons

**Refresh:** The 'Refresh' button displays the Job Filter. This can be used to limit the Jobs displayed in the 'Unallocated Jobs' area of the screen.

**Note:** Only Committed Jobs that have not been cancelled or archived will be selected, regardless of the filter criteria.

**Close:** The 'Close' button will close the Scheduling screen. All operations on the Scheduling screen are saved when they occur.

**>>** The 'Allocate' button can be used once a Job and Booking slot has been highlighted to perform the allocation.

**<<** The 'Un-Allocate' button can be used to remove a Job from a Booking slot when a Job has been selected in the 'Booking Slot Job Details' area.

**Up & Down** Jobs within Booking slots can be reordered with the 'Up' and 'Down' buttons.

**Note:** Care should be taken when reordering Jobs within Booking slots, as a Job may have been split over slots, and it would not be practical to partially complete one Job, move onto the next, before finishing the first.

### Job & Booking screen

The Job screen can be opened with the relevant records displayed from the Scheduling screen by double-clicking on a record in either the 'Unallocated Jobs' or 'Booking Slot Job Details' area.

The Booking screen can be opened by double-clicking on a Booking slot which has a Job scheduled to it.

Information on how allocation data is stored can be found here: **Storing of Job Allocation Information**. This information can be used when writing reports on current and historical Job allocations.

### Scheduling Jobs

Jobs are Scheduled by transferring it from the 'Unallocated Jobs' area to the required Booking slot. When this is done Confirm will check to see if the slot is available for the Job, and if the Booking slot is outside the range of the Job's Start and Estimated Completion dates. If the slot is suitable then the Gang will be allocated to the Job Items and the Booking for this slot will be made.

If the selected Items on a Job would require more than one Booking slot (the time is taken from the SMV and Pricing Quantity) then subsequent slots, for the same Booking Resource, will be checked to make sure there are no existing Bookings that would prevent the Job Bookings from being created concurrently. If Bookings are found that would cause the Bookings to be split, or if any part of the Booking falls outside of the Jobs Start and Estimated Completion date range, then the User will be prompted to see if the Job should be Scheduled in this way. When a Booking is spread over more than one slot a Booking will be created for each slot used. The 'Booking Slot Job Details' area will display 'Previous' and 'Next' Booking dates when the Job covers multiple slots.

The order that the Jobs in a Booking slot appear in the Job details area is indicative of the order the Gang would be expected to complete them. The order can be changed with the 'Up' and 'Down' buttons provided. If a Job is a continuation from a previous Booking Slot then it will default to the first position in the list otherwise it is added to the end of the list.

When Items are Scheduled an entry in the Job Status Log will be created with Notes to indicate the change, detailing the Items that were Scheduled and for when. The actual Job Status code will not be changed.

### To Un-allocate Jobs

A Job can be 'Unallocated' by moving the Job back from the 'Booking Slot Job Details' area back to the 'Unallocated Jobs' area. If the Job spanned more than one Booking Slot then the Job will be removed from them all.

If Job Items are 'Unallocated' an entry in the Job Status Log will be created with Notes to indicate the change. The Job Status Code will not be changed.

### To Re-allocate Jobs

Scheduled Jobs can be 'Re-scheduled' to different Booking slots by selecting the Job in the 'Booking Slot Job Details' area, and dragging it to a different available slot. As above, the Job Status Notes will be updated to detail the Gang that the Items were re-allocated from and to.

### To Update Bookings

A 'Confirmed' Booking is created for each Job that is Scheduled. The Booking will at some point in its life need to have its status updated to 'Completed', 'Cancelled' or 'Failed'. When the Booking status is changed to one of these values, the Booking slot in the Scheduling screen is restored by the amount the Booking was for, making it available again to take other Jobs if the slot is for a future date.

The Booking can be updated by:

- Manually changing the status to 'Completed', 'Cancelled' or 'Failed'.
- The Booking Job's Status being changed to a Status which has the 'Complete' flag set e.g. a Batch utility or import.

- If a 'Cancelling' Payment is Committed for a Job which is Scheduled, the Booking will be set to a 'Cancelled' status when a cancellation payment for the Job is committed.

When a Booking's status is changed automatically by a Job Status change, the actual Start and End dates for all of the Bookings related to that Job will be set using the Job actual Start and End dates. If the Start and End dates are already set on a Booking, Confirm will not update these values.

## Scheduling Lookups

The Scheduling Lookups folder contain the Booking Resources, Type and System Settings that are used by the Scheduling module.

These are the same lookups as found in the Customer Services Bookings module.

## Booking Resources

Booking Resources define a Resource, and Booking templates for its availability. A template specifies the availability of the resource at an interval of a specified number of days (one day for daily, seven days for weekly, etc.). A Resource may have several Templates specified to cover the full availability.

1 of 1
⏪ ⏩ 🗑️ 📄 🗑️ 🗑️ 🗑️ 🗑️ 🗑️

Code  Notes

Name

Type

Resource Templates
Resource Activity

Show

Booking Type	Eff From	Eff To	Interval	Slots	Max Capacity
WM - Bulky Uplift Eastern Area	28/04/2015	01/01/3000	1	32	1.00

Booking Type  BUEA ...

Effective From  To  Interval  Working Days

Start Time From  To  Slots

Optimum Capacity  Maximum Capacity

Notes

Code: Up to 10 characters

Name: Up to 50 characters

Notes: A free text field to supply further information on the Booking Resource.

Type: Select the physical or logical resource(s) that will fulfil Bookings. Select from:  
 'Action Officer' - To display the Action officer field for selection of an Action officer.

'Feature' - To display the Site / Feature fields for selection of a Feature.

'Gang' - To display the Gang field for selection of a Gang.

**Note:** Confirm will prevent a Gang being allocated to more than one Booking Resource.

'Not Linked' - To indicate that the Booking Template is not linked to a physical or logical resource.

## Booking Types

Booking Types relate to the type of service that a customer requests for a Booking. Possible Booking Types could include 'Bulky Uplift', 'Gardening Service', 'Tennis Court' etc.

Code: FTAA

Name: Flytip Pickup All Areas

Unit of Measure: Cubic Metres

Notes: Flytip Pickup All Areas

Order: 0

Advance Day Limit: 120

Unavailable:  Warn when booking:

Subtype Name	Code	Default
Flytip Pickup All Areas	FTAA	✓

Code: FTAA

Name: Flytip Pickup All Areas

Notes:

Display Order: 0 Default:

**Code:** An unique code up to 6 characters

**Name:** Up to 50 characters

**Unit of Measure:** Booking Type has a Unit of Measure specified against it, defining the meaning of the quantity that needs to be entered against a Booking (e.g. cubic metres for a Bulky Collection).

Select from the drop down list. The drop down list references the Unit of Measure lookup.

**Notes:** Optional free text field

**Order:** You may define a display order for this Booking Type

**Advance Day Limit:** Specify the maximum number of days in advance appointments of this Booking Type can be entered.

**Unavailable:** Check this box to indicate that no appointments can be created for these Booking Types. The unavailable Booking Types will only be used to configure templates for periods when the Resource will be unavailable (e.g. a Tennis Court closed for repair).

**Note:** A Warning will be given if the value of this flag is changed for an existing Booking Type

**Warn When Booking:** Check this to give the User a warning message if another Booking has been created in the same slot during the time between the User picking the slot and saving the Booking. When the Booking becomes 'Confirmed' the check, and hence potentially the warning, is repeated. This will allow the User making the Booking to make an informed decision whether to reschedule.

**Bookings Data Key:** This will be used to define which Bookings a User can view, create and update. It will not restrict access to Booking Types themselves, or to the Booking Types to which a User has access when Booking Templates and Enquiry Subject Sites are being configured.

Select from the drop down list. The drop down list references the Data Security Keys Lookup.

**System Administration\Security**

**Bookings System Settings**

The Bookings System Settings define the defaults for Bookings.

Protected lifetime for Provisional Bookings: 10 Minutes

Default preview range for Booking Resources: 30 Days

Default preview range for Bookings: 30 Days

Display Colours

- Odd numbered weeks: [Light Green Swatch]
- Even numbered weeks: [Light Green Swatch]
- Weekends: [Dark Green Swatch]
- Bookings: [Yellow Swatch]
- Bookings with Optimum Capacity exceeded: [Orange Swatch]
- Bookings on an inactive Template: [Red Swatch]
- Unavailable Booking Slot: [Grey Swatch]

Scheduling

- Show filter on Window open:
- Show Completed Jobs:
- Show Outstanding Jobs only:

**Protected Lifetime for Provisional Bookings:** Enter here the time interval during which a Booking slot will be protected after selection but before 'Confirming' the Booking. Once this time has elapsed then the Booking will not be taken into consideration in availability checks and hence the slot may be taken by a different booking.

**Default Preview Range for Booking Resources:** Enter here the default number of days in advance to be displayed in the Resource Activity tab of the Booking Resource screen.

**Default Preview Range for Bookings:** Enter here the default number of days in advance to be displayed in the Resource Availability tab of the Booking screen.  
(0850 - Gang Allocation & Scheduling)

This setting will also be used to display the number of days in advance for the Booking Slots on the Scheduling screen.

**Display Colours:** You may change the colours assigned to Booking slots in the Resource Activity tab of the Booking Resource screen and the Resource Availability tab of the Booking screen. To change a colour click on the colour box and choose a new colour from the palette.

# Works Costing

Works Costing is carried out for each SOR Item contained in the Bills of Quantity (BoQ) for a Contract. This may be done at any time, but if it is done before the Contract is awarded in the system, then the costings can be applied as Contractor's bids in the Contract, and will become the Contract Rates if the Contract is awarded to that bidding contractor.

Costings are based on a calculation of the labour, plant, and materials used to carry out the work, calculated with the pricing quantity and the Standard Minute Value (SMV). Overheads may be applied, as fixed amounts, as a percentage, and proportionally over all the SORs involved.

SORs may be priced directly, where they directly reflect the work, or they may need to be priced from a breakdown of operational SORs, where the Client SOR is a Performance item that does not describe the tasks involved.

## Pre-requisites for Works Costing

Operations are priced directly from the SOR Item library. The required SOR Items must therefore be present in the SOR Items library.

### Asset Maintenance\SOR Item.

Client SORs are priced from the client BoQ. A contract must therefore be prepared, with Contract Areas and Price Factors. The BoQ must be calculated and contain all the necessary SOR Items.

### Contact Preparation\Contract

## Cost Details

The Cost Detail form is used to price SOR items. Only SOR Items that have been saved from the 'Prepare Cost Details' utility, or have been previously priced as 'Operations', can be recalled into the Cost Details form using the 'Find' (binoculars) button.

Contract	<input type="text"/>	<input type="text"/>	...
Price Factor	<input type="text" value="1.00"/>		
SOR Item	<input type="text"/>	<input type="text"/>	...
Cost Type	<input type="text"/>	Priced per <input type="text"/>	Type <input type="text"/>
Feature Qu.	<input type="text" value="1.00"/>	Ave. Freq. <input type="text"/>	Contract Quantity <input type="text" value=".00"/>
SMV	<input type="text" value=".00"/>	Direct Cost <input type="text" value=".0000"/>	Contract: <input type="text" value=".00"/>
		Overhead Cost <input type="text" value=".0000"/>	<input type="text" value=".00"/>
Pay Rate	<input type="text" value=".0000"/>	Unit Rate <input type="text" value=".0000"/>	<input type="text" value=".00"/>

Labour	Plant	Material	Overhead	Breakdown								
<table border="1"> <thead> <tr> <th>Name</th> <th>SMV Used</th> <th>Rate</th> <th>Cost</th> </tr> </thead> <tbody> <tr> <td></td> <td>.00</td> <td>.00</td> <td>.0000</td> </tr> </tbody> </table>					Name	SMV Used	Rate	Cost		.00	.00	.0000
Name	SMV Used	Rate	Cost									
	.00	.00	.0000									
Labour	<input type="text"/>	<input type="text"/>	...									
Usage	<input type="text" value="0"/>	Minutes at <input type="text" value="0"/>	per Hour									

Contract:	Where a client's SOR has been recalled for pricing, the Contract will be entered and cannot be amended.  Where an Operation is being created, enter the appropriate Contract.
Price Factor:	Where client's SOR has been recalled for pricing, the Price Factor will be entered and cannot be amended.  Where an Operation is being created, enter the appropriate Price Factor.
SOR Item	Where client's SOR has been recalled for pricing, the SOR Item will be entered and cannot be amended.  Where an Operation is being created, select an SOR to price from the pick list. The pick list references the SOR Item library.  <b>Asset Maintenance\SOR Item</b>
Priced per:	Entered from the SOR Item library - cannot be edited.
Type:	Entered from the SOR Item library:  SOR Items which have 'Annual Performance' checked, will be described in this field as 'Annual'.  SOR Items which do not have 'Annual Performance' checked, will be described in this field as 'Frequency'.
Feature Qu:	Where client's SOR has been recalled for pricing, the Feature Quantity will be copied from the BoQ. The Feature Quantity may be amended.  Where an Operation is being created, the Feature Quantity will default to 1 and may be amended.
Ave Freq:	Where client's SOR has been recalled for pricing, the Average Frequency will be copied from the BoQ and will represent the total number of occasions programmed in Maintenance Regimes. The Average Frequency may be amended.  Where an Operation is being created, the Feature Quantity, and Average Frequency will be blank.
Contract Quantity:	The Contract quantity is automatically calculated from the Feature quantity and Average Frequency. Contract Quantity will be amended, but if it is, the Feature Quantity figure will change to reflect the amended Contract quantity.
SMV:	Standard Minute Value. Enter the number of minutes (as a decimal) that the work described above, in the quantity given in the 'Priced per' field, would take to perform.
Direct Cost:	The Cost of the work before Overheads are added. This will be automatically calculated from information entered on the Labour, Plant and Material tabs, and the SMV.  A Direct Cost may be entered directly into the field, without using the Labour Plant and material tabs.
Overhead Cost:	The cost of the Overheads. This is derived from the Overheads tab, and may not be amended.
Contract:	These three fields display the show the Contract Direct Cost, Contract Overheads, and Unit Rate based on the Contract quantities shown in the Contract Quantity field.

- Pay Rate:** A Pay Rate may be entered, which may be shown on tickets and used in reports. The Pay Rate has not function in the calculation of Unit Rates.
- Unit Rate:** The unit rate is calculated by adding the Direct Cost and the overhead. The entry may not be amended.
- The Unit Rate is the figure that will be returned as the 'Contractor Bid' for this Item in this Contract.
- Where an Operation is being calculated, the Unit rate is the figure that will be added with the unit rates from other operations to give the Unit rate of the Composite SOR.

### Labour tab

- To add Labour, select the Labour type from the pick list in the Labour field. The pick list references the **Labour lookup**.
- The Usage field will copy the SMV from the SMV field and cannot be amended.
- The At x per Hour field will copy the Cost per Hour from the Labour Lookup, when a Labour type is selected.
- Click on the 'Add' button to add another Labour type.

### Plant tab

- To add Plant, select the Plant type from the pick list in the Plant field. The pick list references the **Plant lookup**.
- The Usage field will copy the SMV from the SMV field and cannot be amended.
- The At per Hour field will copy the Cost per Hour from the Plant Lookup, when a Plant type is selected.
- Click on the 'Add' button to add another Plant type.

### Material tab

- To add Material, select the Material type from the pick list in the Material field. The pick list references the **Material lookup**.
- Enter in the Usage field, the quantity of material that will be used to carry out the task to the pricing quantity.
- The At x per x [Unit of Measure] will copy pricing details from the Material Lookup, when a Material type is selected.
- Click on the 'Add' button to add another Material type.

### Overhead tab

Select the Overhead tab and click on the 'Detail' button to display the Cost Details Overhead form:

Contract	<input type="text" value="GROUCO"/>	<input type="text" value="Grounds Maintenance 06 - 08"/>
Price Factor	<input type="text" value="Reactive Works"/>	
SOR Item	<input type="text" value="G0000060"/>	<input type="text" value="Cut Grass to 20mm - Football/Grids"/>
Overhead Type	<input type="text"/>	<input type="text"/> ...
Percentage	<input type="text" value=".00"/>	
Cost	<input type="text" value="0.0000"/>	
Amount	<input type="text" value="0.0000"/>	

The details above the grey line will be entered from the Cost Detail form and cannot be amended.

**Overhead Type:** Select an Overhead Type from the pick list. The pick list references the **Overhead Type lookup**.

**Percentage:** The percentage associated with this Overhead Type in the Overhead type Lookup will be automatically entered. This may be amended.

**Cost:** The cost associated with this Overhead Type in the Overhead type Lookup will be automatically entered.

Or, if the Allocate Money to Overheads utility has been run, the figure derived will be entered here.

The entry may be amended.

**Amount:** The amount that will be added to this SOR as an overhead.

### Breakdown tab

Where an SOR is an 'Annual' item, or does not reflect the variety of tasks which are carried out, the cost cannot be directly applied.

In this case, operational SOR Items are priced in the Cost Details form, and these Operational SORs are added to the original SOR on the Breakdown tab.

The Original SOR then becomes a 'Composite' SOR type. The Direct Cost, Overheads cost, and unit rate are then derived from the Operational SORs.

To add Operational SORs to the original SOR, select the Breakdown tab and click on the 'Detail' button. The Cost Detail Breakdown form is displayed:

Contract	GROUCO	Grounds Maintenance 06 - 08
Price Factor	Reactive Works	
SOR Item	G0000060	Cut Grass to 20mm - Football/Grds
	Priced Per	1 Hectares
Feature Quantity	1.00	
Average Frequency		
Contract Quantity	.00	
<hr/>		
Operation		...
	Priced Per	
Feature Quantity	1.00	
Average Frequency		
Contract Quantity	.00	

The fields above the grey line carry information copied from the Cost Detail form and cannot be edited.

- Operation: Select an operational SOR from the pick list. The pick list will display only SOR Items that have been costed as 'Operational' Items.
- Price Per: Copied from the costing details for the selected Operational Item. This field cannot be edited.
- Feature Quantity: Copied from the costing details for the selected Operational Item. This field may be edited.
- Average Frequency: Enter the frequency for the Operation within the SOR.  
Where a frequency SOR is being broken down - the Average Frequency will remain at the default of 1.  
Where an Annual Performance SOR is being priced, this will be the number of occasions per year on which the operation is performed.
- Contract Quantity: This will be calculated by the system from the Feature Quantity and the Average Frequency.

### Prepare Cost Details

The Prepare Cost Details utility will copy the BoQ details and make them available for costing.

Contract	GROUCO	Grounds Maintenance 06 - 08	...
Price Factor	Routine Maintenance		
Copy Cost Detail Build-up From	OTHER	Other Contract	...
Delete SORs not in BOQ	<input checked="" type="checkbox"/>	Delete Operations not in SOR breakdown	<input type="checkbox"/>

- Contract: Select the appropriate Contract. The pick list references the Contract library.  
**Contract Preparation\Contract**

**Price Factor:** Select the appropriate Price Factor. The drop down list displays all the Price Factors assigned to the selected Contract.

Fields under the grey line need not be completed unless you wish to use the Costings already prepared in another Contract as the basis for the Costings in this Contract.

**Copy Cost Detail ...:** Select the Contract from which you want to copy Costings.  
...

**Delete SORs ...:** Check this to delete from the copied costings any SORs that are not present in the BoQ for the Contract selected in the Contract field above.

**Delete Operations...:** Check this to delete from the copied costings, any Operations that are not part of an SOR breakdown.

Click on Ok to display a preview list of the BoQ Items that will be available for costing. Click on 'Save' in the preview to copy the SORs. Once the preview is saved, these items will be available to be recalled into the Cost Detail form using the 'Find' (binocular) button. Where costings have been copied from another Contract, those costing will already be entered for the SORs concerned, but may be amended in this (new) Contract.

### Allocate Overhead Types

The Allocate Overhead Types utility will place the selected Overhead Type on each SOR costing for the selected SORs. Where the Overhead Type has a fixed value, or a percentage entered, this will be entered on the costing. Where no value has been assigned in the Overheads Lookup, the type will be added to the SOR, but the value will be zero.

Contract	GR01	Grounds Maintenance 06 - 08	...
Price Factor	Routine Maintenance		
Schedule	Grass And Herbage		
SOR Item From			...
To			...
Name Contains			
Short Description	<input type="checkbox"/>		
Overhead Type			...

The fields above the grey line define the Costing SOR to which the Overhead is to be added. Only 'Contract' must be completed.

Under the grey line, select the Overhead Type to be added. The pick list references the Overhead Types lookup.

When an Overhead has been selected, the associated percentage, or Cost will be entered in the field below. The description of the field will change depending on whether it is a percentage, or a cost that has been associated with this Overhead Type in the Overhead Type library.

Click on Ok to view the preview. Save the preview to carry out the allocation.

## Allocate Money to Overhead

The Allocate Money to Overhead utility will proportion the given amount over the SORs that carry the Overhead, based on the Contract Quantities.

Contract	GR01	Grounds Maintenance 06 - 08	...
Price Factor	Routine Maintenance		
Schedule	Grass And Herbage		
SOR Item From			...
To			...
Name Contains			
Short Description	<input checked="" type="checkbox"/>		
Overhead Type			...
Amount of Money		.00	Proportion by
			Direct Cost

The fields above the grey line define the Costing SOR to which the Overhead is to be added and the money proportioned. Only 'Contract' must be completed.

**Overhead Type:** Select the Overhead type that is to be added to the selected costing SOR Items, and have the money allocated.

**Amount of money:** Enter the amount of money to be proportioned. This will usually represent a yearly amount for the specified Overhead.

**Proportion by:** Select from:

'Direct Cost' - To proportion the money, (within the parameters set in the filter) to all SORs that have a direct Cost entered.

'Labour' - To proportion the money, (within the parameters set in the filter) to all SORs that have Labour entered on the Labour tab.

'Plant' - To proportion the money, (within the parameters set in the filter) to all SORs that have Plant entered on the Plant tab.

'Material' - To proportion the money, (within the parameters set in the filter) to all SORs that have Material entered on the Material tab.

'Pay rate' - To proportion the money, (within the parameters set in the filter) to all SORs that have a Pay Rate entered.

Click on Ok to view the preview. Save the preview to carry out the allocation.

**Note:** This utility should be run when all costings are complete, since it will proportion the money based on the costings present in the system at the time the utility is run. To change the allocation to take account of new costings, the Allocate Money to Overheads utility must be run again and saved again.

## Refresh Direct Cost Build Up

The Refresh Direct Cost Build-up utility will update Costings to take account of changes subsequently made in the Costs associated with Labour, Plant or Material in the Lookups.

Contract	GR01	Grounds Maintenance 06 - 08	...
Price Factor	Routine Maintenance		
Schedule	Grass And Herbage		
SOR Item From			...
To			...
Name Contains			
Update Labour	<input type="checkbox"/>	Like	
Update Plant	<input type="checkbox"/>	Like	
Update Material	<input type="checkbox"/>	Like	
Show Unchanged	<input type="checkbox"/>		
Manually entered Direct Costs	Update Rates and Direct Cost		

The fields above the grey line define the costing SORs that should be updated, and what should be updated. Fields include:

**Update Labour \ Like:** Check the box to update SORs, which have Labour, entered on the Labour tab. The 'Like' field will restrict the update to the Labour Type(s) specified.

**Update Plant \ Like:** Check the box to update SORs, which have Plant, entered on the Plant tab. The 'Like' field will restrict the update to the Plant Type(s) specified.

**Update Material \ Like:** Check the box to update SORs, which have Material, entered on the Material tab. The 'Like' field will restrict the update to the Material Type(s) specified.

**Show Unchanged:** Check this to display the unchanged costing with the changed ones in the Preview report.

**Manually entered...:** This field instructs the utility on how to deal with Costings where, although there are entries on one or more of the tabs, the Direct Cost has not been derived from these, but has been manually entered.

Select from:

'Ignore' - select this to ignore SOR costings with manually entered Direct Costs when carrying out the update.

'Update Rates Alone' - select this to update the rates displayed on the Cost Detail form tabs, but to leave the Direct Cost figure unchanged.

'Update Rates and Direct Costs' - select this to update the Cost Detail form tabs, and amend the Direct Cost entry to reflect the tab entries.

Click on OK to display the Preview. Save the preview to carry out the update.

### Prepare Rates from Cost Details

Prepare Rates from Cost Details will create a completed BoQ - that is the original BoQ, with the rates derived from the costings added. These rates are returned into the Contract Letting folder by this utility - entering them as Contractor Item Costs.

### Contract Preparation\Contract Letting\Contractor Item Costs

Contract	GR01	Grounds Maintenance 06 - 08	...
Price Factor	Routine Maintenance		
Site	BERTHA PLACE	47700133	...
Schedule	Grass And Herbage		
SOR Item From			...
To			...
Name Contains			
Short Description	<input checked="" type="checkbox"/>		
Contractor	Grounds Maintenance & Co.	GROUCO	...

The fields above the grey line define the costing SORs that should be included in the priced BoQ.

Enter the name of the Contractor against whom these bids should be entered. The pick list references bidding Contractor for the Contract

### Contract Preparation\Contract - Bidding Contractors tab

Click on Ok to display the preview. Save the preview to enter these rates as the Contractors Item Costs, for the selected Contractor in the Contract.

### Contract Preparation\Contract Letting\Contractor Item Costs

## Print Completed Bill of Quantities

To Print Completed Bill of Quantities:

Contract	GR01	Grounds Maintenance 06 - 08	...
Price Factor	Routine Maintenance		
Schedule	Grass And Herbage		
SOR Item From			
To			
Name Contains			
Short Description	<input checked="" type="checkbox"/>		
Report Level	Standard		

Contract: Enter, or select from the pick list. The pick list references all live Contracts.

The field under the grey line may be used to restrict the BoQ print within the parameters shown.

The BoQ appearance can be altered by selecting:

Short Description: checked by default. Uncheck to substitute the full SOR description in the printout.

Report Level: select from 'Standard' which will give Annual Quantity and Unit Quantity, and 'Frequency' which will also show the Average Frequency for each SOR.

## Works Costing Lookups

The Works Costing Lookups provide costing details for Labour, Plant, Material and Overhead Type.

### Labour

The Labour Lookup provides a list of all the possible types of Labour used to carry out the tasks for SORs or Operations. A Cost per hour is given to each library entry that is used, combined with the SMV in the Cost Detail form, to calculate the cost of Labour. Costs entered in the Lookup provide a default, and may be altered on the Cost Detail form.

- Labour Code: Up to four alphanumeric characters
- Name: Up to thirty characters
- Cost per hour: Up to four numerical characters, and four decimal places.
- Cost per hour multiplier: Multiplier for the Action Officer's Cost per hour to determine the Action Officer's labour rate. Defaults to 1.

### Plant

The Plant Lookup provides a list of all the possible types of Plant used to carry out the tasks for SORs or Operations. A Cost per hour is given to each library entry. This is used, combined with the SMV in the Cost Detail form, to calculate the cost of Plant. Costs entered in the Lookup provide a default, and may be altered on the Cost Detail form.

- Plant Code: Up to four alphanumeric characters
- Name: Up to thirty characters
- Cost per hour: Up to four numerical characters, and four decimal places.
- External ref: Up to 20 alphanumeric characters. A reference used by external systems to identify this Plant type
- Device Data Key: Optionally specify a Data Key to restrict which Users will have this lookup available on the device.

### Material

The Material Lookup provides a list of all the possible types of Material used to carry out the tasks for SORs or Operations. A Unit of Measure and pricing quantity, together with an associated price is given to each library entry. This is used, combined with the usage entered on the Material tab of the Cost Detail form, to calculate the cost of Materials. Costs entered in the Lookup provide a default, and may be altered on the Cost Detail form.

- Material Code: Up to four alphanumeric characters
- Name: Up to thirty characters
- Unit of Measure: Enter the Unit of Measure that is used to price the material. The drop down list references the Unit of Measure Lookup.

### Asset Register\Feature Lookups.

- Pricing Quantity: Enter the quantity (associated with the Unit of Measure) used to price the Material.

- Unit Cost: Enter the Cost of the Quantity of Units of Measure (per 10 litres for instance).  
Up to four numerical characters, and four decimal places.
- External ref: Up to 20 alphanumeric characters. A reference used by external systems to identify this Material type
- Device Data Key: Optionally specify a Data Key to restrict which Users will have this lookup available on the device.

### Overhead Type

The Overhead Type Lookup provides a list of all the possible Overheads that might be applied to Costings.

- Overhead Type Code: Up to four alphanumeric characters
- Name: Up to thirty characters
- Percentage: Where a percentage (of the Direct Cost) should be applied to an SOR carrying this Overhead Type, enter the percentage.  
  
A percentage entered here provides a default entry for costings, which may be amended in the Cost Details form for an individual SOR item.
- Cost: Where a fixed cost should be applied to an SOR carrying this Overhead Type, enter the cost.  
  
A cost entered here provides a default entry for costings, which may be amended in the Cost Details form for an individual SOR item.

**Note:** Where money will be allocated to an overhead type, or individual entries will be made for SORs, both Percentage and Cost should be left blank.

### Costing a BoQ - step-by-step

Costing a BoQ may be done for awarded Contracts as well as Contracts still at the bidding stage. Where the Contract is awarded, Cost detail calculation will not affect the current BoQ prices for that Contract. It is only where the Contract is at the bidding stage, that costing returned as Contractor Unit Rates, will subsequently become the Contract BoQ when the Contract is awarded to the relevant Contractor. See **Contract Preparation\Contract Letting** for more information on setting up, pricing and awarding a Contract.

- Obtain the BoQ by running the **Prepare Cost Details utility**.
- Obtain and cost any Operations that will be required to provide a breakdown for BoQ SORs:
- Open the **Cost Details form**. Enter the appropriate Contract and Price Factor. Use the SOR Item field pick button to select a SOR Item from the SOR Item library.
- Cost the operation using the Labour, Plant, Material and Overhead tabs, or enter a direct cost. Enter an SMV, and a pay rate if required.
- Run **Allocate Overhead Types** on page 42, if necessary, to batch assign Overhead types to the appropriate SORs.
- Use the Cost Details form to recall the BoQ SORs, and price them.
- SORs requiring a breakdown of Operations need only have the Operation added to the Breakdown tab. The SOR Type field of the Costing Form will now display 'Composite' to indicate that this SOR has been costed from the combined unit rates of the Operational SOR Items.

- SORs being directly costed may have Labour, Plant, Material and/or Overheads added. Where Overheads have been added by the Allocate Overhead Types utility they will carry the cost or percentage assigned to them in the Overhead Type Lookup.

**Note:** SORs or Operations, which will have Money Allocated to Overheads, need not have these Overheads added at this stage.

- When all SORs are priced, or have priced Operations added, you may run **Allocate Money to Overhead** on page 43 to proportion yearly costs of Overheads over all the SORs requiring that Overhead Type.
- To complete the process and return the rates as Contractor Unit Rates, run **Prepare Rates from Cost Details** on page 44.

# Works Management Forecasting

Works Management Forecasting reports will call on data held in the Works Costing folder, and, for Workload Forecasting, on the information held in the Gang Lookups for Gang Allocation Rules.

The reports make no reference to actual allocations of committed work within Confirm - Workload Profiling reports should be used to report on this.

## Cost Details Report

The Cost Details report calls on the costing for SORs and Operations to provide a breakdown on total Labour, Plant, and Material costs for each Item, together with the Direct Cost, Overhead Cost and Unit rate for each Item.

## Labour Requirements

This report lists Labour Types and details the SORs that use each Labour Type. Details of Hours (based on SMVs, and Contract Quantities, that is Feature Quantities times occasions for a Year), Unit Cost and Contract Cost are given. Totals are given for each Price Factor, for each Labour Type and, at the end of the report - for all Labour Types included on the report.

## Plant Requirements

This report lists Plant Types and details the SORs that use each Plant Type. Details of Hours (based on SMVs, and Contract Quantities, that is Feature Quantities times occasions for a Year), Unit Cost and Contract Cost are given. Totals are given for each Price Factor, for each Plant Type and, at the end of the report - for all Plant Types included on the report.

## Material Requirements

This report lists Material Types and details the SORs that use each Material Type. Details of Usage (based on usage entered for each SOR, and Contract Quantities, that is Feature Quantities times occasions for a Year), Unit Cost and Contract Cost are given. Totals are given for each Price Factor, for each Material Type and, at the end of the report - for all Materials included on the report.

## Overhead Recovery

This report lists Overhead Types and details the SORs that use each Overhead Type. It shows details of Unit Recovery (Cost recovered per unit of Measure that the SOR uses) and Contract Recovery (Cost recovered over the Contract when Unit Recovery is multiplied by Contract Quantities). Totals are given for each Price Factor, for each Overhead Type and, at the end of the report - for all Overheads included on the report.

## Annual Routine Workload Graph

This will display a bar chart, showing each Gang against a grid of hours required to carry out the year's work allocated to them.

This is based on the SMV given for the SORs and Operations in the Cost Details from, the Contract Quantities, and the Sites and SORs assigned to them in the Gang Allocation rules.

### **Periodic Routine Workload Graph**

This will display a bar chart, showing each Gang against a grid of hours required to carry out the work allocated to them for the selected Period.

This is based on the SMV given for the SORs and Operations in the Cost Details from, the Contract Quantities, and the Sites and SORs assigned to them in the Gang Allocation rules.

# Workload Profiling

Workload Profiling reports draw on information about actual allocation of committed work that has taken place in the system. They all rely on an SMV having been entered in the Cost Details form, against each of the SORs used, to generate information about hours required to carry out work.

## Gang Allocation Graph

Will display the allocation of work to Gangs as both committed Routine Work and committed Non Routine works will be included.

## Gang Allocation By Priority Graph

Will display the allocation of committed Non Routine Works as a bar chart against a grid of hours. Routine Works are not included.

## Gang Allocation by Priority

Will display the committed, allocated, Jobs, giving the hours required for each. The Jobs are displayed in Priority Order, the Priority with the shortest Follow up time appearing at the top of the list. The final column gives a cumulative total of hours required for the jobs up to that point in the list, allowing you to select Jobs with the highest priority, down to the number of hours available.

## Profile Gang Requirements

Provides information about the hours required by each Gang to carry out the Routine and Non Routine Works allocated to them.

# Job Costing

## Create Payment Requests From Job Costs

This screen can be used to generate Payment Requests directly from the Job Cost details. The Value of the Payment Request will be derived from the Total Costs value for a particular Job together with the total uplift value of all the costs.

One Payment Request will be created for each Job.

The Payment Request Reference will consist of the Job Number, the Date Created (in yyyyymmdd format) and a sequential number to ensure uniqueness.

**Filter**

Contract   ... Uplift  %

Effective To

---

**Results**

1 of 5 |

Job Number	Job Status	Costs	Request Value
10000078	Works Order Committed	4.40	4.40
10000077	Works Order Committed	4.40	4.40
10000078	Works Order Committed	4.40	4.40
10000077	Works Order Committed	4.40	4.40
100134	Works Order Committed	4.40	4.40

Total Cost Values

Total Request Values

### Filter

**Contract Code:** Enter, or select from pick list, the Contract that you wish to filter on when selecting Job Costs to view or process. The Pick list references the Contract Library and displays awarded Contracts. This field is mandatory.

- Uplift:** Displays the current Uplift Percentage stored against the selected Contract in the filter. The value is taken from the Contract Lookup for that Contract.
- Effective To:** The Effective To date can be edited by clicking on the date picker icon and selecting a date or by manually entering a date into the field. Editing of the field is optional.
- The date selected will be used to filter the Job Cost details returned. Only Job Costs with an import date prior to the selected date will be returned by the filter.

The Clear button will blank the contents of the Contract Code, Uplift, and Effective To fields.

When the Search Button is clicked, the Job Cost values that match the filter criteria will be displayed in the Job Cost Results panel. All Job Costs will be grouped against the Job that they apply to. Each Job will have a row displaying the Job Number, Job Status, Request Value (costs + uplift) and Costs (costs value only).

After a search has been performed, the fields in the Filter group box are greyed out. Another search can be performed by clicking the Refilter button on the Results navigator toolbar.

## Results

### Navigator Toolbar

The Navigation Toolbar at the top of the results list shows how many results were returned.

- Export:** This field will export the filtered Job Cost information to the specified location as a CSV file.
- Refilter:** This button will re-enable the fields in the Filter group box allowed the user to perform another search.

### Summary Values

- Total Cost Values:** This field will show the total value of all Job Costs returned by the filter criteria
- Total Request Values:** This field will show the total value of all Job Costs plus the total Uplifted values for all Job Costs returned by the filter.

### Buttons

- Ok:** This button will create Payment Requests in Confirm for every Job Cost retrieved by the search and then the screen will close.
- Cancel:** This button will close the window. If there are unsaved changes on the form, then the user will be asked if they wish to save those changes before proceeding.
- Save:** This button will create Payment Requests in Confirm for every Job Cost retrieved by the search.

## Import Job Costs

The Import Job Costs screen is used to manually import files which contain Job Costing information, and allows the user to:

- Specify the location of a file to be imported.

- Specify a stylesheet that will be used to transform the import file into a form acceptable by Confirm.
- The stylesheet transformation process must pass a minimum set of data fields to Confirm to be accepted. For more information on configuring the stylesheet and import process please contact Confirm, requesting document CHA18367; "Job Costing Import API Specification".
- Check the number of Job Costs that were processed and imported.
- Check for import errors and warnings.
- Export the Job Costing Log Details to a text file.

### Import Files

Import file path:	The path and file name of the import file to be processed.
Stylesheet file path:	The path and file name of the stylesheet to be used to transform the import file.
Clear button:	The Clear button will blank the contents of the Import file path and Stylesheet file path fields.
Read and Validate button:	Clicking on this button will import the Job Costs in the file supplied in the Import file path field. Log Details of the imported Job Costs will be displayed in the list box on the screen.  After a read has been performed, the fields in the Import Files group box are greyed out. Another read can be performed by clicking the Re-Import button on the Results navigator toolbar.

### Results

The Toolbar at the top of the results provides two options:

Export:	Clicking this button will export the Job Cost Log Details displayed in the list to a user defined text file
Re-Import:	This button will re-enable the fields in the Import Files group box allowed the user to perform another read operation.

### Buttons

Ok:	Any imported Job Costs will be permanently written to the database and then the screen will close.
Cancel:	This button will close the window. If there are unsaved changes on the screen then the user will be asked if they wish to save those changes before proceeding.
Save:	This button will permanently save the Job Costs to the database.

### Refresh Job Cost Rates

The Refresh Job Cost Rates utility will update historic Job Costs to reflect changes subsequently made in the unit costs associated with Labour, Plant and Material in the Lookups.

Update Labour \ Like:	Check the box to update Costs that relate to Labour. The 'Like' field will restrict the update to the Labour Type(s) specified.
-----------------------	---

- Update Plant \  
Like: Check the box to update Costs that relate to Plant. The 'Like' field will restrict the update to the Plant Type(s) specified.
- Update Material \  
Like: Check the box to update Costs that relate to Materials. The 'Like' field will restrict the update to the Material Type(s) specified.
- Update Costs  
Logged since: Only Costs logged on or after this date will be updated to the current unit cost.

Click on OK to display the Preview. Save the preview to carry out the update.