 **Viewpoint**
Jobpac Connect[™]

Schedule of Rates Projects
Module Guide
Version: 1.1

Document Control Table

Prepared by	Damien Bourke
Approved or authorised by	
Release date	31/03/2022
Version	1.1
Commercial in Confidence	

Change History

Version	Date	Author	Description of Changes
1.0	31/03/2022	DMB	Initial Release
1.1	27/04/2022	DMB	General QTY Upload added

Table of Contents

- Schedule of Rates Overview 6**
- Configuring a Schedule of Rates (SOR) Project 8**
 - Template Project 8
 - Setting up a Project 8
 - Cost Centres/Codes 10
 - Schedule Sections 11
 - Item Types 12
 - Tagging Codes 13
 - Forecasting Method 14
 - General Explanation 14
 - Business Rules 14
 - Standard Forecasting Methods 14
 - Schedule of Rates Parameter for Preliminaries Management 15
 - Description 15
 - Setup SOR Parameter 15
 - Parent Items 19
 - Entering Long Description 21
- Setting up the Schedule of Items 22**
 - Item Maintenance 22
 - Maintaining an Existing Item 23
 - Adding a New Item 25
 - Sequence No Tab. 27
- Adding Sub Items (Budget Lines/Resources) 35**
- Budget Transfer within Item Maintenance 39**
- Importing a Schedule from Expert Estimation 42**
 - Maintain Upload Parameters 42
 - Format of Upload File 42
 - Loading an Estimate 44
- Finalising the Budget 47**
- Earned Value 48**

Schedule of Rates Projects

Forecast Final Quantities	48
Enter Earned Quantities.....	50
Forecasting	55
Forecasting by Item.....	55
Forecasting Rate to Complete.....	59
Forecasting by Cost Centre	59
Combined Upload for FFQ, QTY Done, and Claimed Quantities	63
Resource Library	65
Introduction	65
Setup for Resource Library.....	65
Progress Claims	70
Creating a Progress Claim	70
Progress Claim Entry Functions.....	71
Reprinting a Progress Claim	74
Rolling Over a Progress Claim	75
Importing a Variation Schedule.....	76
Loading an Estimate.....	76
Establishing a Variation.....	79
Variation Buildup	81
Selecting Variation Section	84
Variation Price Submission	84
Reports – Schedule of Rates	86
Schedule of Rates List	86
Item Details.....	86
Cost Centre Details.....	86
F/C Worksheet by Item	86
Item Quantities	86
Reports – Earned Budget	87
Earned Budget – Item	87

Schedule of Rates Overview

In a Schedule of Rates contract the contract consists of a rate for each Schedule Item of work to be done. For each item there is an expected contract quantity. The sum of quantity by rate for all the items gives the contract sum.

An Item is defined as a portion of the work required under the contract and is referred in the Tender Schedule. It is characterised by the following data:

- Item no
- Description
- Unit of measure
- Quantity (which can alter)
- Agreed contract rate

Every item has a mandatory 6 digit sequence number, and this number is used to present items in the sequence number order in screens and reports, including the Progress Claim. Sequence numbers can be changed as required by the user. Sequence numbers from 990,000 to 999,999 are reserved for system use.

For Schedule of Rates contracts the Final Contract Sum is a function of the following:

- Forecast Final Quantity of work for each Item
- Variations

If the quantity of work finally done for an item exceeds, or is less than, the quantity specified in the schedule of quantities, then the contract quantity for that item is adjusted, along with the contract sum.

The major difference between a Schedule of Rates project and a Lump Sum project is that the Contract Sum is built up from the quantities and rates in a Schedule of Rates project, and thus there is no need to enter a Contract Sum and Margin in the Job Setup screen.

The dissection of the budget cost for each Schedule Item (Called Resources) is entered into Jobpac on individually numbered lines. This may be the estimate itself or a summary of the estimate or the Project Managers own dissection.

Each budget cost line (Resource) is associated with one Cost Centre. A Cost Centre can consist of multiple lines from different Items or from the same Item. All Committed Costs and Actual Costs are collected at the Cost Centre level not at the Item budget cost line level.

Preliminaries and overhead recovery can be managed in different ways in Schedule of Rates projects. Sometimes preliminaries costs are included within the prices of each of the Schedule Items, and sometimes preliminaries are separate items on the schedule.

If preliminaries and overheads are separate items in the schedule, then they are setup as Schedule Items, and treated like any other item. If the preliminaries budget is embedded as a % within each of the list of Schedule Items, then specific functionality exists to automatically calculate this budget.

A specific menu item can be used to establish the business rules associated with this feature.

A % of the budget for each Schedule Item is defined, and as the budget for each item is entered into the system, the percentage is used to calculate a prelims budget amount, and this budget is accumulated in a single nominated holding cost centre.

Schedule of Rates Projects

A normal set of preliminary and overhead cost centres should be setup for the project. These will initially have no budget. These preliminary cost centres will be linked by one or more item with no price. Using item maintenance and these preliminaries items, overheads can be setup for each preliminary cost centre. The budget for each of these overheads comes from the accumulated budget of the holding cost centre.

As item quantities change, this will automatically increase or reduce the overall preliminaries budget. User can then spread this additional budget across cost centres as required.

A flag is provided at the item level to exclude items from this contribution to preliminaries budget if required. A flag is also available at the sub item level to exclude that sub item from the preliminaries budget contribution.

If the preliminaries budget is embedded as a % within each of the list of Schedule Items, then parameters must be setup to define the business rules associated with the budget calculation.

The option to select a Job as a Schedule of Rates project is greyed out by default. To open up this option, the parameter SORJOB must be set to Y.

The Resources mentioned above should not be confused with the Resource/Activity code facility that can be used to cost projects. The two functions are completely different. With resources for SOR projects these are referred to a Resource Names or Resource Descriptions.

Configuring a Schedule of Rates (SOR) Project

This section covers the Project specific configuration required to be able to setup Schedule of Rates (SOR) jobs in Jobpac. SOR jobs can be entered manually into Jobpac or uploaded from the Expert Estimation system (or from any other estimating system, if it can generate the Expert upload format).

The detail of configuration for SOR project is described in this section. For experienced users the following quick checklist can be used.

- Ensure an appropriate template job is setup.
- Setup the new SOR project using Job setup.
- Setup any required cost centres for overhead budget management defaults
- Ensure Forecasting Method table is setup.
- Setup any required sections for overhead management and variations
- Setup the SOR Parameter
- Upload the project from Expert Estimation format in preview mode.
- Fix any errors in upload
- Upload the project.

Template Project

A template project is required to load an estimate from Expert Estimation template into Jobpac. The Template Job defines the cost centres that are permitted on the project.

During the upload process the Cost Centres used in the upload file are validated against the Template job and when the cost centre has not been created prior to the upload the description in the template job is used to create the cost centre.

Cost centres may be created prior to the upload from the menu option “Set up Cost Centres”. This will be necessary for some system required cost centres.

Setting up a Project

The key reference for setup and maintenance of Project is the Job Setup and Maintenance module guide. This manual will describe the standard data that can be recorded for all project types in Jobpac. This section will cover the specific steps required to setup a Schedule of Rates project.

A schedule of rates project requires parameters to be setup in Job Maintenance. This documentation will cover just those settings required for schedule of rates projects.

Select **Projects>Job Setup and Reports>Setup Jobs**.

Job Maintenance : Type
⌵ ACTIONS

Mode MODIFY

Job SORPRO Schedule Of Rates Project

TYPE
SETTINGS
VALUES
SCHEDULE
INSURANCE
CLIENT
STAFF
GUARANTEES
DEFINED FIELDS

Payroll Interface Parameters

Allowance Allocation Method Employee by Employee Job by Job No Allocation Method

Item Maintenance Parameters

This a property development job

This a schedule of rates head contract

Earned Budget Facility/Item Structure Used

Earned Budget/Item Structure Use Separate Item Structure Use Cost Code Sub Items Use Cost Centres Only

Earned Budget Forecasting Use Budget Items & Subitems Use PMW - Create PMW Entries

Use PMW - Do Not Create PMW Entries None

Other Parameters

Project Managers Worksheet Formula A B C D E G H L None

Nominate GL at CC Level OR Service Order At CC level Not at CC level Service Order

This a Small Orders Job

Is this a Cost Plus Billing Job? If Yes, Enter Markup Percentage

Use Cost Centre Security

Use Resource Code Cost Tracking? Disable Excel In Progress Claim Terms & Conditions Format

Use Resource Library Forecast Control

This is a template job Template Job Number SORTMP SOR Template

Field	Description
This a Schedule of Rates head contract	Set to Y. This must be done before ANY activity occurs on the project. It is not possible to change this from N to Y after any budgets have been setup on the project.
Earned Budget Facility Used	Set this to Y. Even if you are not using Earned budget reporting, this will give you the option to use it later in the project if required.
Earned Budget/Item Structure	Should be set to Separate item structure. Other options not applicable to SOR projects.
Earned Budget Forecasting	Recommended option is PMW- Create PMW entries. This will keep Project Managers Worksheet (Forecasting entries) synchronised with sub item details (known as resource names or descriptions)
Project Managers Worksheet Formula	This must be set to H. This means the system uses Cost of Work in Progress as the starting point to forecast cost to complete for Schedule Items, and cost centres.
Use Forecasting by Input of Forecast Rate to Complete	Optional – Set to Y to enable the input of the Forecast Rate to complete for a whole Schedule Item on the Project managers Worksheet Forecasting by Item screen. This overrides forecasting done at the Schedule Item Resource Name level. Two options exist for this function. The default is to update each resource rate proportionally with the change in FFC Rate. The other option is for the system to calculate the overall change in forecast for the Schedule Item, and to assign this change to the nominated cost centre.

Schedule of Rates Projects

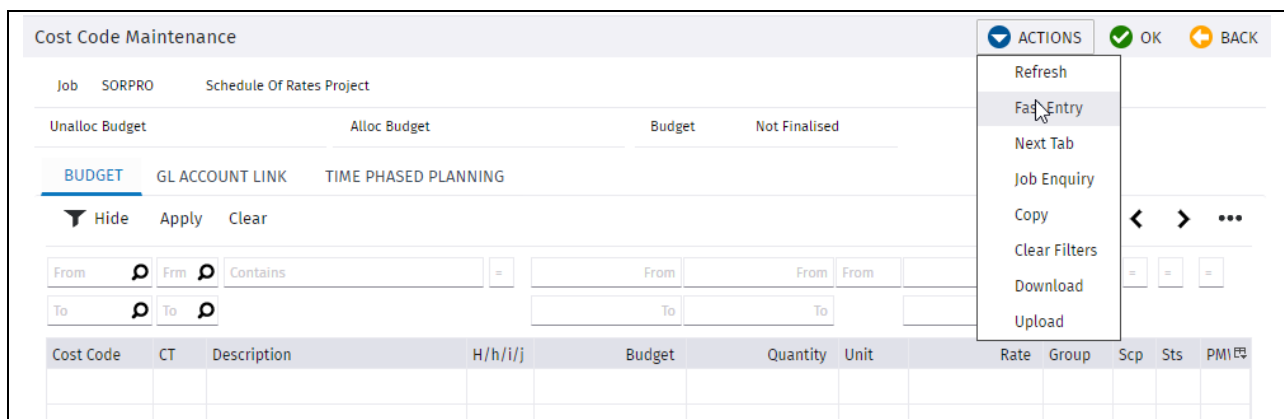
Field	Description
This is a template job	Set to Y to use the Cost Centre structure of this job as a template for other jobs. When set to Y a template job number cannot be entered for this job. This should be set to N for a schedule of Rates project.
Template Job Number	When using Expert Estimation template to create a Schedule Item structure, enter a template job number which will be used to validate cost centres during the import process. Any cost centres created later in the project must be present in this template job.
Use Resource Library Forecast Control	This is only set to Y if the resource library is to be used. If the resource library is used, resources are called Resource Names, and if it is not used resources are called Resource Descriptions

Note: In the Values Tab, no contract amounts or margins are entered as these are automatically calculated when Schedule Item prices and budgets are entered via Item Maintenance or by Upload of the Schedule.

Cost Centres/Codes

Select **Projects>Job Setup and Reports>Setup Cost Centres**.

Budgets for SOR projects are not setup using Cost Centre maintenance, these are automatically calculated when budgets for each Schedule Item are entered in Item maintenance or when the Schedule is uploaded. However, the cost centres themselves must be setup using this screen if the project is being setup manually. To setup cost centres manually for SOR projects, select the **Fast Entry** option.



Cost Centres can be added after the last entry. Use 'New Cost code' in the Actions Menu

Providing cost centres do not have budgets, they can be deleted from the screen below by replacing the X with a C and either press **ENTER** or click **OK** to update your changes. Multiple cost centres can be deleted at one time.

Cost Code Maintenance										ACTIONS		OK	
Job SORPRO Schedule Of Rates Project													
Hide Apply										KLS		<	
From													
To													
Cost Type (x To Select Or C To Cancel)													
Cost Code	Description	Heading Code (H/h)	LB	MT	SC	PL	OT	RV					
1013	Recruitment		X	X	X	X							
1020	Labour (Workcover Lost Time)		X										
1021	Labour (Workcover Restricted W		X										
1555	Disputed Payments	h											
1555	Disputed Payments		X	X	X	X							
1999	Buying Gain		X	X	X	X							
2000	EARTHWORKS & ROADWORKS	H											
2010	Clearing, Grubbing, Demoliti	h											
2010	Clearing, Grubbing, Demolition		X		X	X							
2020	Topsoil Stripping	h											
2020	Topsoil Stripping		X			X							
2030	Earthworks	h											
2030	Earthworks		X	X		X							

Note: When the Expert Estimator template upload is used and cost centres have not been defined the cost centres will be created during the upload process using descriptions from the template job nominated on the Job Maintenance "Type" TAB.

Schedule Sections

If the schedule of rates is broken into defined sections, then these sections can be setup. Once setup, every item in the schedule may be associated with a section.

There are three sections that have a specific meaning

- Section to contain all overhead items that source their budget from a component of the Schedule Item schedule.
- Section to contain all variation overhead items that source their budget from a component of the variation Schedule Item schedule
- Section to contain all variation Schedule Items

These will be explained in the setup of the SOR parameter for the project.

Select **Projects>Job Setup and Reports>Schedule of Rates>Setup Schedule Sections**.

When the Setup Schedule Sections is selected from the menu a job selection screen is displayed. Selecting the job displays the following screen.

Schedule of Rates Projects

Trades/Sections Maintenance		ACTIONS	OK
Job	SORPRO	Schedule Of Rates Project	
<input type="text" value="From"/> <input type="text" value="Contains"/>			
<input type="button" value="Hide"/> <input type="button" value="Apply"/>		<input type="button" value="+"/> <input type="button" value="←"/>	
Code	Description		
8000	Variations Section		
9000	Prelims Section		
9500	Variation Prelims Section		

The three Sections above should be set for all projects, and then others added to break up the Schedule. They are used in the Progress Claim.

Enter each section code and description directly into the table format. Use the option **Add New Code** to position cursor for the new entry of a Section. If a section needs to be deleted, select the **Delete** option from the right mouse click options.

If a longer description is required, select the **Text** option from the right mouse click options. The **Expand/Contract** option can be used to display the full description of all sections.

The fields at the top of the table are for filtering entries already in the table.

Item Types

Item Types are codes that can be setup to assign to Schedule Items to allow specific filtering. These codes are NOT project specific, and apply to all projects within a workid. There are some specific Item Types that are used by the system.

PS – Provisional Sum Schedule Item.

Automatically created by the Expert Estimation template upload if there are provisional sums within the upload.

RO – Rates only Schedule Item.

Automatically created by the Expert Estimation template upload if there are rates only Schedule Items within the upload.

RI – Rounding Item.

Parent/Child Schedule Items within the schedule may require a rounding item to ensure that the Parent Item is the sum of child items. These are automatically created by the upload process.

Other Types can be created, but must be used consistently across the workid.

Select **Project>Job Setup and Reports>Schedule of Rates>SOR Configuration>Item Type Maintenance**.

The following screen will be displayed:

Schedule of Rates Projects

Type	Description
RI	Rounding Child Pay Item
PS	Provisional Sum
RO	Rates Only

Item Type Maintenance

On this screen you can change the description of the item type by editing the field and either press **ENTER** or click **OK** to update your changes.

To add a new item type click **Add New Type** on the **Actions** menu. This will position the user to enter the code and the description.

To delete an existing item type, select **Delete** from the right mouse click menu.

Tagging Codes

Tagging Codes are user defined two character codes which are project specific and are associated with Schedule Items. These codes provide no business rule logic but provide filtering capabilities to assist in the maintenance and review of the Item / Sub Item structure. Project Managers can use them as they choose to classify Schedule Items. Up to three codes can be associated with a Schedule Item. Filtering facilities exist on many screens for the codes.

Select **Project>Job Setup and Reports>Schedule of Rates>SOR Configuration>Tagging Code Maintenance**.

Tagging Code	Description
S1	Site Engineer 1
S2	Site Engineer 2
HR	High Risk Item

Tagging codes can be associated with Schedule Items in the Item Maintenance screens.

Schedule of Rates Projects

Forecasting Method

General Explanation

It is mandatory that every Schedule Item in a Schedule of Rates project is associated with a forecasting method. This code will determine the relationship between the contracted quantity and the forecast final quantity for the Schedule Item. These codes are “Hard Coded” and cannot be changed, or new forecasting methods created.

These are setup using the following menu path. Only the descriptions can be changed.

Select [Project](#)>Job Setup and Reports>Schedule of Rates>SOR Configuration >Forecasting Method.

These apply to all projects in a Workid, they are not project specific. All six must exist.

Forecasting Method	Description
CM	Comment
LS	Lump Sum
PI	Parent Items
RO	Rates Only
SC	Schedule Item coupled
SU	Scheduled Item Uncoupled

Business Rules

There are very specific business rules associated with these forecasting methods. These are described in the Item Maintenance section of this manual.

Standard Forecasting Methods

The available Forecasting Methods are outlined below. Additional methods are not supported without an enhancement to the base product.

Method	Description
SC – Schedule Item Coupled	Schedule of rates items where the Forecast Final Quantity (FFQ) is automatically kept by the system to be the same as the Current Contract Quantity, and vice versa.
SU – Schedule Item Uncoupled	Schedule of rates items where the Current Contract Quantity is managed separately from the Forecast Final Quantity (FFQ). i.e. changes to the FFQ will not change the Current Contract Quantity, and vice versa.
LS – Lump Sum Item	Schedule Items declared as a Lump Sum. The Current Contract Quantity is frozen at Budget finalisation time, and the user maintains the Forecast Final Quantity separately.

Method	Description
CM – Comment Item	These are comment lines only, and have no impact on Contract Value or budget. Quantities or rates can be maintained against this type of item, but have no impact on contract.
RO – Rates Only	These Schedule of Rates items will have a rate and may have a quantity and price, and have sub items to support the budget for the item. These items will NOT update the contract values, budgets, or margins, and are excluded from forecasting and may not appear on client schedules.

Schedule of Rates Parameter for Preliminaries Management

Description

Preliminaries recovery can be managed in different ways in Schedule of Rates projects. Sometimes preliminaries cost is included within the prices of each of the Schedule Items, and sometimes preliminaries are separate items on the schedule.

If preliminaries are separate items in the schedule, then they are setup as Schedule Items, and treated like any other item. If preliminaries budget is embedded as a % within each of the list of Schedule Items, then specific functionality exists to automatically calculate this budget.

A Schedule of Rates Parameter can be used to establish the business rules associated with this feature. This parameter is mandatory if overheads are contained within the Schedule Item rates, but does not have to be used if overheads are directly claimed from the client.

A % of the budget for each Schedule Item is defined, and as the budget for each item is entered (or loaded from Expert Estimation template) into the system, the percentage is used to calculate a prelims budget amount, and this budget is accumulated a single nominated holding cost centre.

A normal set of preliminary cost centres should be setup for the project. These will initially have no budget. These preliminary cost centres will be linked by a number of prelims items with no budget and no price. All of these items will be setup with a defined Preliminaries Section defined in the parameter. Using item maintenance and these preliminaries items, sub items (resources) can be setup and related to preliminary cost centres. The budget for each of these items comes from the accumulated budget of the holding cost centre.

As Schedule Item quantities change, this will automatically increase or reduce the overall preliminaries budget. A user can then spread this additional budget across cost centres as required.

A flag is provided at the item level to exclude items from this contribution to the preliminaries budget if required. A flag is also available at the sub item level to exclude the selected sub item from the preliminaries budget contribution.

Setup SOR Parameter

To setup the SOR parameter use the following menu option

Projects>Job Setup and Reports>Schedule of Rates>SOR Job Setup>Set SOR Parameter.

Schedule of Rates Projects

Schedule Of Rates Parameter Maintenance ACTIONS OK BACK

ITEMS VARIATIONS VARIATION SECTION

Hide Apply + < > ...

920	From	Contains	=	From	From	Frm	From	Fri	From	=	From	Fri
920	To			To	To	To	To	To	To		To	To

Wkid	Job	Description	Use 1 Item Prelim	PI Seq #	PI Sect	Preliminary Item	PI Line	PI Cost Code	PI CT	Def% Bud Calc	Fix Pre Spread Method	U/O Recovery Cost Code	U/Rt Cl
920	SOR	SOR Project	N	9999...									

To add a new parameter for a project, select **Add** option. The following screen displays

Schedule Of Rates Parameter Maintenance ACTIONS OK BACK

Work Id: 920

Job Number: SORPRO Schedule Of Rates Project

Items -

Use One Item For Preliminaries Preliminary Sequence No. 999999

Preliminary Section Code: 9000 Prelims Section

Preliminary Item Code: HOLDINGCP

Preliminary Sub-Item Line N: 9999

Preliminary Holding Cost Centre: 9996 MT

Default % for Budget Calculation: 10.00

Fixed Prelims Under/Over Recovery - Spread Method:

 Allow spread by function key and No manual spread

 Allow spread by function key and allow manual spread

 No function key available, only manual spread

Fixed Prelims Under/Over Recovery - Cost Centre: 9997 MT

Variations -

Variation Section:

Use One Item For Variation Preliminaries Variation Sequence No. 999998

Variation Preliminary Item Section Code: 9500

Variation Preliminary Item Code: HOLDINGVP

Variation Preliminary Sub-Item Line N: 99999

Variation Holding Cost Centre: 9998 MT

Default % for Variation Budget Calculation: 10

Fixed Prelims Under/Over Recovery - Spread Method:

 Allow spread by function key and No manual spread

 Allow spread by function key and allow manual spread

 No function key available, only manual spread

Fixed Prelims Under/Over Recovery - Cost Centre: 9999 MT

If the project will be claiming preliminaries and overheads as part of the Claim Schedule, then only, the Workid, Job No and Variation Section field need to be entered.

Field	Description
Use one item for Preliminaries	This is ticked if only one item is to be used for all preliminary budgets. This is a carryover feature from release 7, and should not be used in R8, i.e. remain unticked.

Field	Description
Preliminary Section code.	This defines the Section of the project that will hold all of Preliminary items, including the nominated Preliminary Item Code which is used to hold the overhead budget made available via a component of each Schedule Item. Recommend that 9000 be used.
Preliminary Item Code	This defines the Item code which is used to hold the overhead budget made available via a component of each Schedule Item. Each Item must have a sequence number, and a system defined no of 999,999 is used for the Item. Suggest HOLDINGCP (holding contract prelims)
Preliminary sub item Line No.	Within each Schedule Item in the schedule, a sub item is automatically created to hold the overhead contribution of that Schedule Item. This field defines the line number that is used. It is usually set to 99,999 (the max number).
Preliminary Holding Cost Centre	This cost centre will hold budget that relates to the difference between the overhead budget provided from contributions from the Schedule Items, and the budget used for overhead items. This cost centre should not be used elsewhere on the project. Recommend 9996/M . Make sure this is setup in the Template project.
Default % for Budget Calculation	This is the default % of the total direct cost budget for a Schedule Item that goes to the “pool” of budget for overheads. This will be defaulted each time a new Schedule Item is created, but can be changed for that Schedule Item as required.
Fixed Prelims Under/Over Recovery spread Method.	<p>When additional budget is made available via a remeasure of the schedule, the user has options as how to spread this additional budget to existing overhead budgets:</p> <ul style="list-style-type: none"> • Allow spread by function key and no manual spread. Assigning this default option means the Actions option is used to automatically spread the additional budget to existing sub items in the prelims items, in the ratio of the current budget. No manual changes can be made to these budgets. • Allow spread by function key and allow manual spread. Assigning this default option means the Actions option is used to automatically spread the additional budget to existing sub items in the prelims items, in the ratio of the current budget, or the spread can be made by manual changes to these budgets. • No function Key available, only manual spread. No automatic spread option available. The additional budget can only be spread manually.

Field	Description
Fixed Prelims Under/Over Recovery – Cost Centre	Individual overhead budget sub items can be marked to not receive any additional budget that may be made available. If the automatic spread method is used, the amount of the budget that would be allocated to those sub items marked to not receive additional budget, is placed in this nominated cost centre. This budget can be used as contingency or as a gain for the project. Recommend 9997/MT
Variation section	The section that all variation Schedule Items are allocated to. This is the way the system determines the Schedule Item is part of a variation, and to apply the associated business rules for variation Schedule Items. Recommend 8000. This must be setup for all SOR projects.
Use one item for Variation Preliminaries.	This is ticked if only one item is to be used for all preliminary variation budgets. This is a carryover feature from release 7, and should not be used in R8, i.e. remain unticked.
Variation Preliminary Item Section code.	This defines the Section of the project that will hold all of the Variation Preliminary items, including the nominated Variation Preliminary Item Code which is used to hold the overhead budget made available via a component of each Variation Schedule Item. Recommend 9500
Variation Preliminary Item Code.	This defines the Item code which is used to hold the Variation overhead budget made available via a component of each Variation Schedule Item. Each Item must have a sequence number, and a system defined no of 999,998 is used for the Item. Recommend HOLDINGVP. (holding Variation prelims)
Variation Preliminary Sub item Line No.	Within each Variation Schedule Item in the schedule, a sub item is automatically created to hold the overhead contribution of that Variation Schedule Item. This field defines the line number that is used. It is usually set to 99,999 (the max number).
Variation Holding Cost Centre	This cost centre will hold budget that relates to the difference between the Variation overhead budget provided from contributions from the Schedule Items, and the budget used for Variation overhead items. This cost centre should not be used elsewhere on the project. Recommend 9998/MT
Default % for Variation Budget Calculation	This is the default % of the total direct Variation cost budget for a Variation Schedule Item that goes to the “pool” of budget for Variation overheads. This will be defaulted each time a new Variation Schedule Item is created, but can be changed for that Schedule Item as required.

Field	Description
Fixed Prelims Under/Over Recovery spread Method.	<p>When additional budget is made available via a remeasure of the Variation Schedule Items, the user has options as how to spread this additional budget to existing Variation overhead budgets:</p> <ul style="list-style-type: none"> • Allow spread by function key and no manual spread. Assigning this default option means the Actions menu panel option is used to automatically spread the additional Variation budget to existing sub items in the Variation prelims items, in the ratio of the current budget. No manual changes can be made to these budgets. • Allow spread by function key and allow manual spread. Assigning this default option means the Actions menu panel option is used to automatically spread the additional Variation budget to existing sub items in the Variation prelims items, in the ratio of the current budget, or the spread can be made by manual changes to these budgets. • No function Key available, only manual spread. No automatic spread option available. The additional Variation budget can only be spread manually.
Fixed Prelims Under/Over Recovery – Cost Centre	<p>Individual Variation overhead budget sub items can be marked to not receive any additional Variation budget that may be made available. If the automatic spread method is used, the amount of the budget that would be allocated to those sub items marked to not receive additional budget, is placed in this nominated cost centre. This budget can be used as contingency or as a gain for the project. Recommend 9999/MT</p>

Parent Items

Description

The option exists within the SOR module to establish Parent Schedule Items, which are made up of the sum of a number of Schedule Items, called child items. Parent Schedule Items are those usually presented to the client on Progress Claims, and in the original schedule. Using Child items allows more detailed management of budgets, earned values and forecasts on a monthly basis.

Parent Items can be established either manually, or created via an upload from Expert Estimation.

Manual Creation

A Parent code is first established. This code is the link between the Parent and the Child items. This will automatically create the Parent Item in the Schedule. The Parent Item has a quantity and a unit of measure, but no rate or Pay amount. The pay amount is derived from the sum of the pay amounts from the Child items. The rate is calculated by dividing the sum of the child pay amounts by the Parent quantity.

Automatic creation from Expert Estimation Template

Parent and Child Schedule Items can exist within the estimate produced by Expert Estimation. These are loaded into Jobpac via the upload process. The value held as the Parent Pay amount

Schedule of Rates Projects

becomes the Schedule Item schedule amount, and the child items are loaded as they appear in the estimate. If any rounding difference between the sum of the children pay amounts, and the parent pay amount occurs, then a rounding item is automatically created for that difference. These rounding items have a sequence number in the protected range (>990,000), and are given an Item Type of RI. This enables filtering to see these items. In Item maintenance and Progress claim entry, these rounding items, and child pay amounts are, by default, not displayed. An option exists to display in both these functions to display the child items. More information is provided in the description of these functions.

To set-up or maintain a Parent Code and Item from the Jobpac main menu,

Projects>Job Setup and Reports>Schedule of Rates>SOR Job Setup>Parent Item Maintenance

A list of existing Parent Items is displayed. This is in expanded description mode. Each Parent item within the project is uniquely defined by the two character code in the first column.

Parent Code Maintenance									
Job		9088 SOR Demo Project							
<div style="float: right;"> ACTIONS OK BACK </div>									
<div style="display: flex; justify-content: space-between;"> Hide Apply + < > ... </div>									
AA	From	From	Contains	From	=	From	From		
AD	To	To		To		To	To		
Code	Sect	Item	Description	Quantity	UOM	Insert After Seq No.	Rate	Amount	
AA		707	(a) On leads to roads and allotments (bank volume)	3,573.0000	m		16.5000	58,954.50	
AB		755	(b) Excess cut to fill from Stage 1R1 to 1A (bank volume)	19,768.0000	m		16.3200	322,613.76	
AC		9509	(a) On leads to roads and allotments (bank volume)	28,041.0000	m		14.2800	400,425.48	
AD		9558	(d) Cut to fill sourced from other stages (1R2 and 1R3)	35,832.0000	m		16.8500	603,769.20	

On this screen you can update the details of the parent code by editing the fields and click **OK** to update your changes.

To add a new parent code click **Add New Code** on the **Actions** menu, then enter the following across the screen:

Field	Description
Code	Enter a 2 character code which is used to link the Parent Item and child items (Mandatory). This uniquely defines the parent Item.
Section	Enter section code required(optional)
Item	Enter the Parent Item No required. (Optional, may be blank). This will appear on the Progress Claim.
Description	Enter the description of the Parent Item No.
Quantity	Enter the quantity of the Parent Item
UOM	Enter the Unit of Measure for this item.

Field	Description
Inset after Seq No.	Controls the insertion point into the Item schedule for the Parent Item. Use whatever sequence number you want.
Rate	This field is a system calculated from the child items and not available for input.
Amount	This field is a system calculated from the child items and not available for input.

To delete an existing parent code, select **Delete** from the right mouse click menu. They can only be deleted if they are not linked to child items

Entering Long Description

There are many places within this software that extended text can be maintained. For example, Description of a Schedule Item, Notes associated with resources, Subcontract Item Descriptions, Variation item Descriptions.

In places where this is possible, Jobpac will automatically popup a text box in which to type additional description. These are options within this popup box to save the entered description, or clear the description in order to replace the description. User will be asked to confirm any clearing of text. If no replacement text is entered, the first line of the cleared text will be inserted. This is done to ensure blank descriptions are not left in the system.

Setting up the Schedule of Items

Item Maintenance

Schedule Items can be established either manually, or created via an upload from Expert Estimation template.

Item maintenance is used to

- Setup a new item
- Change or delete an existing Schedule Item.
- Combine items (Parent/child items) for the purposes of simplifying the progress claim. User can flag a number of items that are to be combined with a specific code.
- Group Schedule Items via a user defined tagging codes. The code can be associated with each item i.e. tag Schedule Items that relate to a particular foreman/leading hand to allow filtering during the forecasting process to allow quick review of items directly with the person.

Item maintenance has the following screen features

- Delete all items
- Delete a single item
- Microsoft type shift delete to delete a group of items
- Microsoft type control delete to delete a selection of lines
- The Text option to display the full description will be displayed as a popup window with a word wrap.
- If more description text exists in the system than is displayed on the screen, the description will appear in different colour.
- Copy, Paste and Insert Option. These will be presented via a Right Mouse click options. A range of items can be selected using Select and Shift key. When a paste or move is undertaken, system will calculate the band of sequence numbers required at the insertion point and re sequence the following sequence numbers accordingly.
- Filters exist in all screens. Any filter used in one screen also applies when other screens are viewed. Single filter fields are either "Positioners" or text string filters e.g. for sequence number it would be a positioned and for a description, it would be a text search through the descriptions.

The initial view will display the item no, description, contract quantity, sell rate and price. Items will appear in sequence no. order even though the sequence no is not displayed on some screens. Alternate views of Item maintenance screens will be provided to display section code, sequence no and other appropriate values.

To set-up or maintain an Item Code from the Jobpac main menu,

Select **Project>Job Setup and Reports>Schedule of Rates>Item Maintenance**

Item Maintenance
ACTIONS OK BACK

Job 9088 SOR Demo Project

Direct Cost Budget	9,883,100.31	Budget Finalised	Y
Overhead Budget	210,374.27	Contract Sum	12,477,299.52
Allocated	210,374.27	Budget	10,093,474.61
Available		Margin	2,383,824.91

SCHEDULE SEQUENCE NO. DESCRIPTION BUDGET QUANTITIES MARGIN OVERHEAD TAGS

Hide Apply
< > ...

From Contains = = = = From = From From = = =

Period To

Item	Description	Hd	Tp	FM	Par Chd	Quantity	UOM	Budget Rate	Current Budget	Tag 1	Tag 2	Tag 3
2.09	Linemarking			CM								
	(a) General			LS		1.0000	Item	5,488.8700	5,488.87			
	(b) Median islands with			LS		1.0000	Item	992.1800	992.18			
				CM								
2.11	Concrete bin bays			CM								
				CM								
2.12	Supply and erect street name			CM								
	(a) Posts			LS		2.0000	No	259.6450	519.29			
	(b) Road name plates			LS		4.0000	No	217.1675	868.67			
				CM								
2.13	Supply and erect signs			CM								

< > ...

Maintaining an Existing Item

The fields that can be modified will be white and the fields that cannot be changed will be greyed out.

Field	Description
Item Description	Enter item code description.
Sequence No.	Can only be changed to an unused sequence no. User can only nominate numbers from 1 to 899999. Sequence numbers from 990000 to 999999 are reserved numbers. Changing the item sequence no. will change the position of item.
Heading	Heading can only be changed to a comment item and only comment item can be changed to heading. To change a heading to a comment item, clear the heading and enter "CM" on the forecasting method column.
Item Type	Enter a valid item type or use the search function to select from Item Type Scan. Item type is optional but if changed, should be to a valid code.
Forecasting Method	This field may be changeable. The following business rules control whether the field can be changed, the types of changes allowed and the impact on other item values:

Field	Description
	<p>When a LS item is changed to a SC item, then Forecast Final Quantity will be changed to equal Current Contract Quantity, and Quantity To Go will be recalculated by Qty to Go = Forecast Final Qty – Qty Done, and Forecasting Worksheet Entries will be recalculated.</p> <p>When a SC item is changed to a LS item, then no changes are made to any item quantities.</p> <p>When a LS item is changed to a SU item, then no changes are made to any item quantities.</p> <p>When a SU item is changed to a LS item, then no changes are made to any item quantities.</p> <p>When a SC item is changed to a SU item, then no changes are made to any item quantities.</p> <p>When a SU item is changed to a SC item, then Forecast Final Quantity will be changed to equal Current Contract Quantity, and Quantity To Go will be recalculated by Qty to Go = Forecast Final Qty – Qty Done, and Forecasting Worksheet Entries will be recalculated.</p> <p>When a RO item is changed to a SC, SU, or LS item, then the item is treated as if a new item was added to the project. The contract sum, margin and budgets are updated using the rates and quantities from the RO item. The PMW will be populated.</p> <p>Only a SC item can be changed back to a RO item, and only if no claims have occurred for that item. This change will reduce the contract sum, reduce the budgets, and remove entries from the PMW.</p> <p>For SU items, Forecast Final Quantity will be separately maintained from Current Contract quantity, however, if the Current Contract Quantity is changed, the Forecast Final Quantity will be changed by the same change in the Current Contract Quantity, e.g. If the Current Contract Quantity is changed from 10 to 15, then Forecast Final Quantity will be increased by 5. if Forecast Final Quantity is changed, Current Contract Quantity will not change.</p> <p>CM items can be changed to heading. They cannot be changed to SC, SU, LS, or RO. Likewise, SC, SU, RO, LS or PI cannot be changed to a CM items. To change comment line to heading, clear forecasting method and enter either “H” or “h” on the heading column.</p> <p>PI items cannot be changed to any of the above forecasting method and vice versa. Parent Item cannot be created via this program.</p> <p>Parent Code Enter the Parent Item code defined in Parent Item Maintenance to link this item to a Parent Item. When a child item is linked or unlinked to a Parent Item, the Parent Item rate and sell price will also change. Parent Item sell price is the sum of sell rate of the child items.</p>

Field	Description
Forecast Final Quantity	When Forecast final quantity of SC item is changed, the current contract quantity will also change. Changing forecast final quantity will have an impact on forecasting.
UOM	Enter Unit of Measure
Sell Rate	Changing sell rate will change sell price. If item is a child item, then Parent Item sell price will also change.
Sell Price	Changing sell price will change quantity. If item is a child item, then Parent Item sell price will also change.
Exclude from Claim	Enter "Y" to exclude the item from the Claim process.
Item Completed	Enter "Y" to lock the item and prevent updates to budget and sell rates / price.
Contribute to Prelim	If job is not managing preliminaries, then these two fields cannot be changed. If flag was changed from Y to N, then prelim overhead budget % will be set to 0.
Prelim Contribution %	If flag was changed from N to Y and % was not entered, then % will be set to the default %. Any changes on these two fields will have an impact on the overhead budget.
Tagging Codes	Tagging codes are optional and can be assigned as required by the Project Manager. They are used to enable the filtering of Schedule Items.

The **Actions** Button has the following options

The screenshot shows the 'Item Maintenance' interface for Job 9088, 'SOR Demo Project'. A table displays budget details: Direct Cost Budget (9,883,100.31), Overhead Budget (210,374.27), and Allocated (210,374.27). Below this is a table with columns: SCHEDULE, SEQUENCE NO., DESCRIPTION, BUDGET, QUANTITIES, MARGIN, OVERHEAD, and TAGS. A search filter is set to 'From' containing 'FEB22'. The main table lists items: 2.09 Linemarking (CM), (a) General (LS), and (b) Median islands with (LS). The 'Actions' menu is open, showing options like 'Add New Item', 'Next Tab', 'Expand/Contract', 'Prompt', 'Refresh', 'Toggle Price/Budget', 'Clear Filters', 'Variation Section', 'Transfer Section', 'Copy Single Item', 'Bulk Transfer Section', 'Bulk Item Copy', 'Show/Hide Child', and 'Spread OH Budget'.

Adding a New Item

From the Item Maintenance screen, to add a new Item, select **New Item** from the **Actions** Menu. The following screen will be displayed.

Item Maintenance - Add

 ACTIONS
 OK
 BACK

Job 9088 SOR Demo Project

Sequence No.

Section

Item Number

Description

Heading

Item Type

Forecasting Method LS

Parent Code

Quantity

Unit of Measure

Sell Rate

Sell Price

Tag Codes 1,2,3

Exclude from Claim
 Item Completed
 Contribute Prelim Budget

Prelim Contribution %

Field	Description
Sequence No	Used to control the presentation sequence of items. Must be an unused sequence number from 1 to 899999. Sequences from 990000 to 999999 are reserved and cannot be used. If not entered, system will generate the sequence no by adding 1 to the last sequence no. used.
Section	Entry is optional. Enter a valid section code or use the search function to select from the Section Scan.
Item Number	Entry is optional. No validation done on this field.
Description	Description of the scope of work. This is a required entry. If more than 30 characters, the text box will automatically pop up to allow entry of multiple lines of description.
Heading	Enter "H" for Major heading or "h" for minor heading or leave blank.
Item Type	Entry is optional. Enter a valid item type or use the search function to select from Item Type Scan.
Forecasting Method	The initial value shown is the nominated default value. The default value can be changed by entering a valid forecasting method or use the search function to select from the forecasting method scan.
Parent Code	If adding a child item to an existing Parent Item, then enter the Parent Item code defined in Parent Item Maintenance to link this item to a Parent Item. Leave blank if item is not a child item.
Quantity	Enter quantity of scope of work. Entry is optional.
Unit Of Measure	Enter the unit of measure e.g. each, metre. If left blank, then value will be set to "UOM".
Sell Rate	The sell rate is the unit price used for claiming. Entry is optional.

Field	Description
Sell Price	Sell Price, if entered, must equal to the product of quantity and sell price. If not entered, then will be calculated by multiplying quantity by the sell rate.
Tag Codes	Enter a valid Tag code or use the search function to select from the Item Group Scan. Optional.
Exclude from Claim	If not ticked, then the value will be set to "N".
Item Completed	If not ticked, then value will be set to "N". It is recommended not to tick this box.
Contribute Prelim Budget	The entry in the on these two fields will depend on whether job is setup to include preliminaries in the Schedule Item rates If Job rates do not manage preliminaries and they are claimed separately, then
Prelim Contribution %	<ul style="list-style-type: none"> - Contribute Prelim Budget must be un-ticked. - Prelim contribution % must be zero.

Next Tab Function

Pressing this function will toggle screen formats.

Sequence No Tab.

This tab is used to change the order of the items within the schedule. Changing the sequence number for an item will move the item to that part of the schedule.

Se

Item Maintenance

[ACTIONS](#)

Job 9088 SOR Demo Project

Direct Cost Budget	9,883,100.31	Budget Finalised	Y
Overhead Budget	210,374.27	Contract Sum	12,477,299.52
Allocated	210,374.27	Budget	10,093,474.61
Available		Margin	2,383,824.91

SCHEDULE	SEQUENCE NO.	DESCRIPTION	BUDGET	QUANTITIES	MARGIN	OVERHEAD	TAGS
----------	--------------	-------------	--------	------------	--------	----------	------

Hide Apply

← → ⋮

Period FEB22

From	From	From	Contains	From	=	From	=	=	From
To	To	To		To		To			To

Seq#	Sect	Item	Description	Quantity	UOM	Sell Rate	Sell Price	Exc Clm	I C	Prel Cont	%	
1367		2.09	Linemarking					N	N	N		
1368			(a) General	1.0000	Item	5,936.5300	5,936.53	N	N	Y	1.14	
1370			(b) Median islands with	1.0000	Item	1,073.1000	1,073.10	N	N	Y	1.14	
1372								N	N	N		
1373		2.11	Concrete bin bays					N	N	N		
1374								N	N	N		
1375		2.12	Supply and erect street name					N	N	N		
1376			(a) Posts	2.0000	No	280.8200	561.64	N	N	Y	1.14	
1391			(b) Road name plates	4.0000	No	234.8800	939.52	N	N	Y	1.14	
1401								N	N	N		
1402		2.13	Supply and erect signs									Right-click to show available options

← → ⋮

The other tabs are self explanatory.

Expand/Contract

This function will either display one line of item description (collapse function) or will display the full description (expand function).

Toggle Price/Budget

This changes the Columns Sett Rate and Sepp Price with Budget Rate and Current Budget.

Variation Section

This positions the user at the start of the Variation section items

Item Maintenance - Variations
ACTIONS OK BACK

Job	9088	SOR Demo Project	Original Cont Value	10,501,443.10	Linked (Transferred)	2,569,926.44
Section No	9500	Variations	Quantity Changes	594,070.0200-	Linked (Untransferred)	
			App Varns (Trans)	2,569,926.44	Unlinked	2,337,749.72
			Unapp Varns (Trans) (ER)			
			Current Contract Sum	12,477,299.52		

HEAD CONTRACT ITEM VARIATION DESCRIPTION SEQUENCE NO

Hide Apply Clear
< > ...

Variation Status
 Not Submitted
 Waiting Approval
 Approved
 Approved In Principle
 Rejected
 Withdrawn
 Period: FEB22

From Contains Contains =

From From From From From =

To Linked Unlinked

To To To To (Y/N/)

Seq#	Item	Description	H/h	FM	Varn#	Unit	Price	Budget	Margin	Sts	Trf	☒
15312		Stage 1C (9012)		SC	20003	\$	84,794.00	84,794.00		A	Y	
15313		Stage 1C (9013)		SC	20003	\$	172,392.00	172,391.00	1.00	A	Y	
15314		Survey (9014)		SC	20003	\$	28,656.00	28,656.00		A	Y	
15315		Shutdown Costs (9015)		SC	20003	\$	10,499.00	10,499.00		A	Y	
15316		Design Changes (9020)		SC	20003	\$	76,079.00	76,079.00		A	Y	
15317		Pump Station (9021)		SC	20003	\$	168,785.00	168,785.00		A	Y	
15318		Margin Adjustment		SC	20002	\$	1,203,693.47		1,203,693.47	A	Y	
15321		Stage 1C Works		CM		\$	584,187.43					

Transfer Section

Options exist to move items from one section to another. These will be presented via **Actions** menu Transfer Section. A single item, a selection of items or a range of items can be moved using Select and Shift key. There are rules when transferring item from one section to another.

Preliminary items cannot be moved to any section

Main Schedule Items cannot be moved to a preliminary section, variation section or preliminary variation section. It can only be moved to any section within the main schedule

Variation and variation preliminary section cannot be moved to any section

Schedule of Rates Projects

Item Maintenance ACTIONS OK BACK

Job 9088 SOR Demo Project

Direct Cost Budget 9,883,100.31 Budget Finalised Y
Overhead Budget 210,374.27 Contract Sum 12,477,299.52

Copy/Change Items To

Apply

From

Seq#	Section	Item Number	Description
534			(a) Insurance as required by
545			(b) Site establishment /
552			(c) Survey and set out
554			
555		1.02	Traffic control including TMP
602			
603			Environmental management
605			
606		1.04	Compliance with Cultural
607			
608		1.05	Clearing and grubbing
609			(a) Current stage
670			(b) Other stages - 1R2
671			(c) Other stages - 1R3

Close

SCTCPYFM02

This is the screen where you select items to be moved or copied to another section

Item Maintenance ACTIONS OK BACK

Job 9088 SOR Demo Project

Direct Cost Budget 9,883,100.31 Budget Finalised Y
Overhead Budget 210,374.27 Contract Sum 12,477,299.52

Copy/Change Items To :

Type code & description (if not existing) of section to receive copied/moved it

Section Code

Description Only if new section

Sequence No

Seq#	Section	Item Number	Description	Act
555		1.02	Traffic control including TMP	COPY
602				COPY
603		1.03	Environmental management	COPY
605				COPY
606		1.04	Compliance with Cultural	COPY
607				COPY
608		1.05	Clearing and grubbing	COPY

OK Close

SCTCPYFM01

Schedule of Rates Projects

This will display the selected items to be moved. The user will have to enter the section code to receive the items. If section does not exist, user will have to enter the section description and a warning message “A new section will be created” will be displayed. The user will then have an option to continue or nominate another section. The sequence number is not required when moving items. If copying items and the sequence number is not entered, then item sequence number will be generated by incrementing 1 to last number used. If nominated, sequence can only be from 1 to 990,000.

When items are moved, they will be moved to the nominated section and sequence no, if entered.

Copy Single Item

Option exists to copy an item or a copy a range of sub items from another item. Following rules apply when copying items

- Preliminary items cannot be copied to any section
- Main Schedule Items cannot be copied to preliminary section.
- Parent Item cannot be copied.

The screenshot shows the 'Standard Item Reproduction' dialog box. The 'Copy from' section has the following values: Job: 9088, Seq No: (blank), Section: (blank), Item: (blank), Start Line: 00001, and Finish Line: 99999. The 'Copy to' section has: Job: 9088, Seq No: (blank), Section: (blank), Item: (blank), and Start Line: 00001. Below this, there are fields for Description, Quantity, Unit, and Rate. The background shows a table of items with descriptions like 'Linemarking', 'Concrete bin bays', and 'Supply and erect street name plates'.

This is the display where you can copy an item or copy a range of sub items from another item. If copying to a new item, user can nominate a description, quantity, unit of measure and rate for the new item. If left blank, then it copies the values from the source item.

Schedule of Rates Projects

Bulk Transfer Section

Option exists to move or copy a range of items. This is presented via **Actions** menu **Bulk Transfer Section**. User can nominate a range of items to move or copy from one section to another. When moving items from one section to another, following rules apply:

- Preliminary items cannot be moved to any other section
- Variation section cannot be moved to any other section
- Main Schedule Items can only be moved to section within the main schedule
- Following are the rules when copying items to another section
- Cannot copy preliminaries to any other section.
- Cannot copy main Schedule Items to preliminary section
- Cannot copy Parent Item

The screenshot displays the 'Item Maintenance' window for Job 9088, SOR Demo Project. It features a summary table with the following data:

Direct Cost Budget	9,883,100.31	Budget Finalised	Y
Overhead Budget	210,374.27	Contract Sum	12,477,299.52
Allocated	210,374.27	Budget	10,093,474.61
Available		Margin	2,383,824.91

Below the table is a list of items with columns for SCHEDULE, SEQUENCE NO., DESCRIPTION, BUDGET, QUANTITIES, MARGIN, OVERHEAD, and TAGS. A 'Bulk Copy/Change Section' dialog box is open, allowing users to specify 'From' and 'To' items and sections, and choose between 'Change' and 'Copy' actions.

This is the display where you can enter the range of items to be copied or moved to another section

Bulk Item Copy

Options exist to copy a range of items. Rules stated above will apply when copying items from one section to another.

Schedule of Rates Projects

This will display the selected items to be copied and user will have to nominate a new section or an item or both. If sequence number is not entered, then sequence number will be generated by adding 1 to last number used. If entered, sequence number can only be from 1 to 899999.

Show/Hide Child

By default, Child Items and Parent Item are displayed. Using this option will only display the Parent items.

Spread Overhead budget

When additional budget is made available via a remeasure of the schedule, the user has options as how to spread this additional budget to existing overhead budgets. Refer to SOR parameter for the spread option. If additional budget is to be spread by the automatic option, and budget has been finalised, then an **Actions** panel option **Spread OH Budget** in Item maintenance is used to automatically spread the additional budget to existing sub items in the prelims items, in the ratio of the current budget.

Selecting this displays the following screen.

The screenshot shows the 'Item Maintenance' window for Job 9088, SOR Demo Project. A summary table is visible:

Direct Cost Budget	9,883,100.31	Budget Finalised	Y
Overhead Budget	211,489.39	Contract Sum	12,477,299.52
Allocated	210,374.27	Budget	10,094,589.73
Available	1,115.12	Margin	2,382,709.79

The 'Spread OH Budget' dialog box is open, showing the following data:

	Total OH	Allocated OH	Available OH
<input type="checkbox"/> Main Schedule OH Budget	211,489.39	210,374.27	1,115.12
<input type="checkbox"/> Variation OH Budget			

The dialog box also includes 'OK' and 'Close' buttons and the text 'ITEMSPREDOH'.

The box can be checked, and OK selected. This will spread the \$1,115.12 across the budget on all preliminary items in the ration of the current budget.

Adding Sub Items (Budget Lines/Resources)

Sub Items can be created as part of the Expert Estimator load, manually entered, as individual items, or a grouped of sub items from another item are copied to another item.

Sub items are the budget details of an item. They are lists of the measurement and costs of all resources that will make-up the item budget. These budget lines are associated to a cost centre.

Sub item lines without a cost centre will be treated like a comment line. They can be a blank line; can have a description, quantity, unit of measure and cost but the cost will not be included in the budget.

The sub item lines maintenance program will be presented via the right mouse click option **SELECT** on the Item Maintenance program. The initial screen to be displayed will depend on the default screen format nominated on the system parameter "SUB ITEM" position 1-3. The screen format codes are displayed on the top right hand corner of the program.

The following are the functions on all sub item screens

- Delete all lines
- Delete a single line
- Use MS Type shift delete to delete a group of lines
- Use MS Type Control delete to delete a selection of lines
- The text option to display full description or full notes will be displayed as a pop up window or a word wrap
- If more than one of descriptions or notes exists, then notes or description will be displayed in different colour. An **Actions** menu Expand/Contract function is available to either display the full notes/text descriptions or display first line of notes/text. The initial view is to display one line.
- Copy, paste and move option within the same item is supported with insertion point re-sequencing. When a paste or move is undertaken, system will calculate the band of lines required at the insertion point and renumber the following sub item lines.
- Copy, paste and move to another item is supported with lines copied at the end of the target item number
- Function to view or link to Cost Centre Budget makeup Enquiry Screen.
- Function to display Parent Item summary is provided
- Filters exist in all screens. Any filter used in one screen also applies when other screens are viewed. Single filter fields are either "Positioners" or text string filters e.g. for line number it would be a position and for a description, it would be a text search through the descriptions.

Adding a New Line

From the sub-item maintenance screen below, select **New Line** from the **Actions** Menu. The cursor will be positioned to the next available line number.

Adding Sub Item Comment

All fields are optional except for line no and Comment Flag. Flag must be set to Y.

Current Quantity

When current quantity is changed, then the following process occurs:

- Entered quantity will update the Current Contract Quantity
- Original Contract Qty will be updated to equal Current Contract Quantity if budget has not been finalised. If finalised, the original contract quantity will not be updated
- If item is SOR Item UnCoupled (SU), then forecast final will be updated by the same change in contract quantity
- If SOR item is Coupled (SC), then forecast final quantity will be set to current contract quantity
- If item is lump sum (LS) and budget is not finalised, then forecast final quantity will be updated by the same change in contract quantity i.e. if current contract quantity is changed from 10 to 15, then forecast final quantity will be increased by 5. If budget is final, then current contract quantity cannot be changed.
- Sell Price and Margin will be recalculated
- sub items budget quantity and amount will be recalculated
 $SI\ Budget\ Qty = Curr\ Qty * Production\ rate$
 $SI\ Budget\ Amt = SI\ Budget\ Qty * Budget\ rate$
- If item is to contribute to overhead, then item OH will be recalculated
- If item is a child item, then the Parent Item sell price, sell rate and budget will also be updated.
- Markup % will also be calculated

Item Budget

This is the total of all sub item amounts excluding notes. As lines are added, deleted or changed, the budget will be also be changed.

Budget rate

This is calculated as budget divided by current quantity.

Markup %

This is calculated as Sell Margin divided by Budget. Changing the mark-up % will change the sell margin.

Sell Price

Current Quantity x Sell rate.

Margin

Margin is calculated as Sell Price less Budget. Changing the margin will change the sell rate, sell price and the markup %.

Forecasting Entries

As lines are added or updated, forecasting worksheet entries with the associated notes and descriptions are also created or updated. Initially, scope of work quantity will equal the budget qty and earned qty is set to zero. Forecast quantity to go will be calculated as scope of quantity

Schedule of Rates Projects

less earned quantity, the forecast rate will be set to budget rate and cost to complete will be calculated as Quantity to go multiply by forecast rate.

Comment lines will also be added to the forecast worksheet entries.

Extended notes are presented via a right mouse click option Extended Notes. This pop up window will also be automatically presented when entering more than 30 characters of notes.

Preliminary Lines

If an item is to contribute to overhead, the sub item lines will automatically be flagged to contribute to overhead. An option to exclude sub item lines from contributing to overhead exist and is presented via **Actions** menu **More Data** Function.

When sub item budget lines are added, changed or deleted and sub item is flagged to contribute to overhead, prelim line is created or updated. The prelim line is the line displayed at the bottom of the screen where the line number and cost centre is nominated in the Schedule of rate parameter. The prelim line amount or the item overhead contribution is calculated as a % of the total sub item lines budgets to contribute to overhead. The prelim % is the % nominated at item level. See screen above.

The prelim holding item which is defined on the Schedule of parameter will be updated by the overhead contribution and the contribution will be shown as available overhead budget to distribute.

More Data

This display will be presented when **Actions** Menu More **Data** option is taken. This will allow user to mark which sub item lines are to contribute to preliminaries.

When subitems are added, changed or deleted on preliminary items, the available OH budget is being changed and a reversal line is being created on the prelim holding item.

As subitem lines for preliminary items are entered and budget is allocated, the budget used comes from the contribution of each Schedule Items. In the screen above, the Original Overhead is the sum of the prelim contributions for the original budget of all payitems, The generated budget is addition budget available form remeasures of original Schedule Items (this could be negative if remeasures down occur).

When additional budget is made available via a remeasure of the schedule, the user has options as how to spread this additional budget to existing overhead budgets. Refer to SOR parameter for the spread option. If additional budget is to be spread by the automatic option, and budget has been finalised, then an **Actions** panel option **Spread OH Budget** in Item maintenance is used to automatically spread the additional budget to existing sub items in the prelims items, in the ratio of the current budget.

Individual overhead budget sub items can be marked to not receive any additional budget that may be made available. If the automatic spread method is used, the amount of the budget that would be allocated to those sub items marked to not receive additional budget, is placed in this nominated cost centre. This budget can be used as contingency or as a gain for the project.

Schedule of Rates Projects

Budget Transfer within Item Maintenance

This functionality enables the resource mix for a particular Schedule Item to be changed to reflect how the work will be carried out, without losing integrity of the budget, i.e. The total budget for the Schedule Item before the change in resource mix will still be the same after the change.

If earned budget exist and has changed, program will display a warning message before continuing with update.

The screens used for this function are the same as for standard Item Maintenance, but with some restrictions.

Full Item Maintenance can be made available only to those users who have authority and knowledge to change the Schedule prices, budget and margin. This Budget Transfers version of Item Maintenance can be made available to engineers and site staff who are managing the work methods for Schedule Items.

When the resource mix for a Schedule Item is changed, the change must be completed fully, or the system will return the Schedule Item resources to their original state.

To use this function use menu options

Projects>Job setup and Reports>Schedule of Rates>Item Maint-Bud Transfer

This displays the following screen.

Changes to Forecasting Method, rates and prices, cannot be made in this screen. Also new Items cannot be added, or existing items copied.

Schedule of Rates Projects

The **Actions** options are described in the Item Maintenance section of this manual.

The main function is to select an item and change the resources for that item. To do this take the **Select** option from the right mouse click options.

Item Maintenance - Budget Transfer
ACTIONS ✔ OK ➔ BACK

Job 9088 SOR Demo Project
Budget Finalised Yes

Section		Seq#	1176	Item Type		FM LS	LUMP SUM
Item	(d) 50mm average compacted			Parent			
FFQ	953.0000	Budget Rate	216.28	Budget	206115.15	Markup %	8.16
Curr Qty	953.0000	UOM t	Sell Rate	233.9200	Sell Price	222925.76	Margin
							16810.61

Resource Budget	203791.83	Unallocated Budget		Budget Adj (BA) Factor	1.000000442	<input checked="" type="checkbox"/> Calc Subitem
Earned Value	203791.92	Revised Earned Val	203791.92	Item Level EV Factor	1.000000000	

RESOURCE NAME
NOTES/RESOURCE NAME
NOTES
EARNED VALUE
EARNED VALUE FACTOR
RESOURCE RATE/AMT
BUDGET ADJUSTME

Hide Apply
◀ ▶ ⋮

Period FEB22
 = =
 Show SI With No Current Budget

Line	Notes	Resource Name	UOM	Budget Qty	Budget Rate	Cost Code	CT	C	⌘
1	1=(7776*0.05th*2.45t) (OQ	50MM ASPHALT STAGE 1R	t	981.1368	207.7099	2110	S	N	
2	2=%(1,3)							Y	
3									
4									
5									
6									
7									
8									

99999
Prelims Component
%
203,791.9200
0.0114 9996
M
⌘

Field	Description
Resource Budget	This is the current budget for the Schedule Item. It is the sum of the resource budgets for that item. This will change as resources are changed.
Unallocated Budget	As changes are made to resource mix, this will reflect the difference between the Resource Budget and the fixed current budget for the Schedule Item.
Budget Adjustment Factor	This is the current budget for the Schedule Item/total of the budgets for the resources for the Schedule Item. It will always start at 1.000000000.
Calculate Subitem	This flag will determine if budget and earned value factor will be automatically applied for each subitem. A value of "Y" will apply the item budget adjustment factor to the subitem resource rate to get the subitem budget rate and item level earned value factor to the budget amount to get subitem earned value. A value of "N", then subitem values will be calculated from subitem quantity X budget rate. Quantity done, earned value factor and earned value are input capable only when the flag value is "N".
Earned Value	The initial pay item earned value.
Revised Earned Value	This is the current earned value. It is the total of all the subitems earned values.
Item Level EV Factor	It is expressed as the initial earned value over the current budget at item level. It represents the even spread to sub items that will result in re-allocation of the sub item earned value. Where the Calculate Subitem Flag is Y, then the earned value factor will be automatically applied to the subitem budget to get the subitem earned value.

Additional options that appear in the **Actions** menu are described as follows.

Field	Description
Accept Updates	<p>When this function is pressed and unallocated budget exist, program will prompt a message "Undistributed budget exists. Continuing will result in no update with all changes lost". If revised earned value is not equal to the initial earned value, program will display message "Undistributed earned value exists. Continuing will update budget and earned value with changes".</p> <p>This function will update sub item details with recalculated budget quantity, rate and amount, the new budget rate will be preserved in the current rate and the new resource rate will be the forecast rate. Earned value will be updated and recalculated depending on the value contained in Calculate Sub item flag. All existing PMW entries will be deleted and replaced with the new subitem break up. FFQ will be updated by the change in budget Qty and forecast qty to go will be calculated as FFQ – Qty done. If earned value is changed, then change will flow at item level.</p>
Apply Bud Ad Factor	Pressing the Apply Budget Adjustment factor will recalculate the subitem rate and amount displayed on the screen. It will not at this point update the file. Where the Calculate Sub Item is set to "Y", then the item budget adjustment factor will be applied to the resource rate to calculate the new budget rate. The item earned value factor will be automatically applied to the subitem budgets to calculate subitem earned value. Where flag value is "N", then budget rate will be calculated

Schedule of Rates Projects

Importing a Schedule from Expert Estimation

This section will cover how to upload the Item / Sub Item Structure from a csv file downloaded from Expert Estimation. An upload from any estimating system could be done via this method, providing the output from the estimating system can be in the same format. This layout is in an appendix.

The following are the steps required to upload a Pay Schedule from Expert Estimation

- Setup a template job if it does not exist. The Template Job defines the cost centres that are permitted on the project. The cost centres from this template will be used to create the project cost centres during the load process.
- Setup a SOR Job. To setup the job, refer to section, setting up a SOR Job.
- Setup required section codes. To setup section code, refer to section, Setting up Section code
- Setup SOR Parameter. To setup the parameter, refer to section to Setting up SOR parameter
- Run the upload program

Maintain Upload Parameters

To access Setup SOR Parameters from the Jobpac main menu, select Projects>Job Setup and Reports>Expert Upload / Setup>Set SOR Parameters.

Refer to Setting up SOR parameter on how to setup parameters for Schedule of rates jobs. The upload requires that preliminary section defined in the SOR parameter record will allow for multiple preliminary items.

Format of Upload File

For presentation purposes, the Template is described in three separate components.

Providing the project data can be described as per this template, it can be uploaded.

First Component.

Expert Estimation Upload Template <small>Please check which line data should begin on and delete columns headin</small>						
Sequence #	Trade/Section	Schedule Item Code	Sub Item	Description / Notes	Margin %	Resource
6.0 N	4 A	12 A	5.0 N	2000 A	5 A	10 A
1000		A.1		Build Footpath		
1001		A.1	1	100 M3 required		
1002	9000	P.1		Staff		
1003	9000	P.1	1	Part time PM required		
1004	9000	P.1	2	Part Time SE required		

Column

Description/ comments

Sequence No

This must exist for every line in the upload, and must be unique. It determines the order of presentation in screens and reports.

Trade/Section

No mandatory, except for Prelims Items, in which case it must be 9000. On upload this will be replaced by the prelims section defined in the SOR Parameter

Schedule of Rates Projects

Column	Description/ comments
Schedule Item code	This is the Schedule Item code. It can be blank. All subitems related to a SOR Item must have the same Schedule item Code.
Subitem	This must be blank for SOR Items, and must be present for Subitems
Description/Notes	For SOR Items this is the description of the SOR Item. For Subitems it is used for the Notes Field for Subitem displays.
Margin %	This is not used
Resource	This is only used for Subitems, if the Resource/Activity function is turned on for the project. This is different to Resource Names or Resource Descriptions associated with SOR Projects.

Second Component

Quantity	UOM	Rate	Value	Item Overhead	Margin Amount
15.4 N	5 A	15.4 N	15.4 N	15.4 N	15.4 N
100	M2	100	8000	1000	1000
100	M3	80	8000		
5	HRS	100	500		
5	HRS	60	300		

Column	Description/ comments
Quantity	This is Quantity for both SOR Items and Subitems
UOM	This is UOM for both SOR Items and Subitems
Rate	This is Rate for both SOR Items and Subitems
Value	This is Budget for SOR Items and Subitems. For SOR Items is it NOT QTY * Rate. This value for SOR Items should equal the sum of budgets for all subitems related to that SOR Item. For Subitems, if this has a Heading Type of TEXT, it must be zero
Item Overhead	This is only applicable to SOR Items, and is that component of the Item value assigned to Overheads. It will only have a value if the Spread Prelims function is active for the project.
Margin Amount	This is equal to QTY * RATE – Value - ITEM Overhead

Third Component

Cost Code	Cost Type	Resource Description	Forecasting Method	Parent Item Seq #	Heading Type	Item Type
8 A	2 A	30 A	2 A	6.0 N	10 A	2 A
			SC			
1002	MT	10MM Gravel				
			SC			
1001	LB	Project Manager				
1001	LB	Site Engineer				

Schedule of Rates Projects

Column	Description/ comments
Cost Code	This must be present for all Subitems, unless the Subitem line has a Heading Type of TEXT, in which case it must be blank, and blank for SOR Items.
Cost Type	This must be present for all Subitems, unless the Subitem line has a Heading Type of TEXT, in which case it must be blank, and blank for SOR Items.
Resource Description	This is the Resource Description or Resource Name for Subitems. It is blank for SOR Items.
Forecasting Method	This must be present for all SOT Items, and one of SC, SU, LS, CM, RO
Parent Item Sequence No	This is only applicable to SOR Items, and only if the load is actually from Expert Estimation
Heading Type	The options here are HEAD1, and HEAD2, and TEXT. HEAD1 and HEAD2 will provide subheadings and Subtotals within the SOR Schedule. TEXT is used for Subitem lines that are just description only and do not contribute to the Budget.

Loading an Estimate

Once the parameters have been setup for the job relating to the estimate you are loading and the Expert Estimator file has been uploaded to the Holding file on the server you are ready to load the estimate. This upload to a Holding file will be setup by your Jobpac consultant.

To access the Expert Upload from the Jobpac main menu, select Projects>Job Setup and Reports>Estimating Interfaces>Expert Estimation>SOR Upload

When the Expert Upload to Jobpac is selected from the menu the following screen is displayed.

Expert Estimation Upload

Complete the fields as follows:

Field	Description
Job No	The Job must be schedule of rates job and a template job has been associated to the job.
Create claim structure and cost budget	Set this to N if doing an initial load and want to check if all lines are valid. Set to Y when there are no invalid lines. By setting this field Y, the load process will update Jobpac. The update will only occur if there are no validation errors.
Evenly Spread Total OH Budget across all Schedule Items	Set this to Y if total Over Head budget is to be evenly spread across all items. Total Over Head budget is the total of the overhead amounts for all Schedule Items. The prelim contribution % will be calculated as total Over Head budget divided by total direct costs. The calculated % will then be used to calculate each Item Prelim Overhead by multiplying the % by each item total direct cost. Set this to N if overhead is not to be evenly spread across all items, i.e. the amounts nominated for each item will be used for that item. (This option not generally used.) Or if overhead spreading function is not used.
Cost Centre	The sub item lines shown on the screen are provisional Item from the schedule. Upload will identify all provisional items and sub items with a "PS" in item type. Expert Estimation has no facility to record a cost centre for provisional budgets. User must input the cost centre to be used for the budget for provisional sub item. Cost centre, if entered, must be a valid cost centre from the template job or user can use the search function to select from the cost centre scan window. This feature is only used if the upload is from Expert Estimation
Report Option	Select Spool file, PDF or Excel.
View Report	If you select this box, the report will be displayed on screen prior to printing.

When project is uploaded, it will automatically be copied to an "Original State" files, for audit purposes.

File can be re-uploaded if the following criteria have been met

- Budget has not been finalized
- No claims made against any of the item
- No quantity done
- Variation Schedule Items are not linked to variations

When re-uploading, upload will delete existing Schedule Items, sub items, worksheet entries, notes and descriptions including the "Original State" files. Cost Centres will be deleted if there is no cost committed against the cost centre. If there is, then budget and Forecast cost to complete will be set to zero, Forecast Final cost will be set to committed cost and Gain/loss will be recalculated.

Expert Upload Validation Report

A sample of the validation report produced by the upload program is embedded in this sheet.

Use the Excel option, so you can filter on the Error column.



Adobe Acrobat
Document

The validation report will list all lines regardless if the line is valid or not. Erroneous lines are flagged with starting error description of #ERR. If the uploaded item contract value is not the same as the calculated value and the difference is within the allowable variance defined in the system parameter EXTVAR, then a warning message will be printed. If not within the allowable variance, then an error message will be displayed. Uploaded item value is the sum of the direct cost, overhead cost and margin. Calculated item value is quantity (EIQTY) * rate (EIRATE).

When there is rounding difference between the parent and sum of the child items, the upload will create a rounding item where rounding item value will be set to the difference. The rounding items will be printed at the end of the report.

Totals are printed at the last page of the report.

Total Overhead Budget (Schedule Item Level) is the total of the uploaded overhead.

Nominated OH (Allocated OH) is the sum of the prelim section sub item lines. Prelim section will be have section code as defined in the SOR parameter.

Unallocated OH will be equal to the difference between Total Overhead Budget (Schedule Item Level) and Nominated OH.

Contract Sum is total of the calculated item value (Qty * rate)

Direct Cost Budget is the total of the sub item lines budget

Overhead budget is equal to the overhead budget at Schedule Item level

Total budget is the sum of direct cost budget & overhead budget

Margin is calculated as the difference between contract sum and total budget

Total number of records will be printed.

Total invalid records will also be printed.

When the file is uploaded,

The "9000" trade section will be replaced by the Preliminary section defined on the Schedule of rate parameter.

Forecasting method of provisional items will be set to "RO" and will not update the contract sum, budget and margin.

Parent code of parent item will be generated starting from AA, AB, AC, AD etc. The upload will add the code to the parent code table.

Project contract sum, budget and margin will be updated.

Finalising the Budget

Finalising the budget on a project in Jobpac locks in the Original numeric data, i.e. contract value, budget, margin on Schedule Items and Sub Items (Resources).

Changes can be made after budget finalisation, but these are tracked. The budget changes made can be viewed via the Budget Adjustment Report.

At time of budget finalisation, ALL details of Schedule Items, and Resources, including descriptions are written to “Original” files. This data is used if “Build from Sub items” option is used in PMW by item.

Un-finalising a budget may be possible, and your Jobpac consultant should be contacted if you believe this is necessary.

Earned Value

In Jobpac, Earned Value is the term used to describe the function of comparing the budget value of work done on a project and comparing it with the cost value of the same component of work. Budget value of work done is calculated by measuring the quantities achieved. The cost value of work done is the actual cost to date (i.e. authorised and posted costs) plus the value of goods delivered and services completed but not yet authorised for payment.

With SOR projects, the measurement is done by measuring the actual quantities achieved for each Schedule Item, forecasting the final quantity for that Schedule Item, calculating the % of work completed, and multiplying by the budget for that component of work.

Earned budget is calculated for each cost centre on the project, and then this is compared with the cost of work in progress for that cost centre. When this is completed, the Financial Status Report will show the comparison for each cost centre and the project.

Steps to establish Earned Budget for the project are:

- Establish Forecast final Quantities for each Schedule Item and enter into system.
- Measure quantities done for each Schedule Item and enter into the system. An option exists to copy claimed quantities into the Earned quantities screen.
- For Schedule Items where the resources are not deployed evenly throughout the project, then a more detailed measure can be done at the resource level within each Schedule Item.

Forecast Final Quantities

The screen to enter Forecast final Quantities for the Schedule Items can be configured to allow entry only of Forecast Final Quantity. Other configurations are available via parameter FFQDEF.

To update Forecast by Item from the Jobpac main menu, select **Project>Job Setup and Reports>Schedule of Rates>SOR Job Forecasting>Forecast Final Quantities**.

When the Forecast Final Quantity is selected from the menu a job selection screen is displayed. Enter the Job number or use the Job search function to search for the required job.

The following screen is displayed:

Forecast Final Quantity Entry
ACTIONS OK BACK

Job 9088 SOR Demo Project

Contract Sum	12,477,299.52
Current Claim Amount	8,052,843.81
Current Earned Budget	9,697,606.93

SHOW CLAIMED FORECAST FULL DESCRIPTION SEQUENCE NO TAGS VARIATIONS

Hide Apply ↑ XLS < > ...

Period: FEB22

Contains Contains = = LS = From From From From

To To To To

Item Code	Description	Cmp	Unit	FM	Par Chd	Claimed Qty	F'cast Final Qty	Qty Done	F'cast Qty To (€)
11	Fees and Insurances	N	Item	LS			1.0000	1.0000	
5	Insurance Excess	N	Item	LS	AE		1.0000	1.0000	
6	Rework	N	Item	LS	AE		1.0000	1.0000	
	Stage 1C	N	Item	LS			1.0000		1.0000
	(a) Insurance as required by	N	IT	LS			1.0000		1.0000
	(b) Site establishment/	N	IT	LS			1.0000		1.0000
	(c) Survey and set out	N	IT	LS			1.0000		1.0000
1.02	Traffic control including TMP	N	IT	LS			1.0000		1.0000
	(a) Cut existing working	N	CM	LS			158.0000		158.0000
	(a) Rip, mix and trim	N	SM	LS			1,575.0000		1,575.0000
	(a) To footpaths, allotments	N	HA	LS			0.9800		0.9800
2.01	Saw cut existing pavement	N	LM	LS			9.0000		9.0000
	(a) Base course - Type 2.1	N	CM	LS			151.0000		151.0000

Forecast Final Quantity Entry

Only the Forecast Final Quantity (FFQ) for each Schedule Item is entered. Entering these quantities will cause the associated quantities related to the sub-items within each item to be changed by the same % value. It will also calculate the earned budget for each of these cost centres related to the individual sub items. For example, if the FFQ is 1 and this is changed to 2. Then the FFQ of all sub items (resources) will also be doubled.

The relationship between FFQ, Qty Done, and Qty to go, must be maintained. When a FFQ is changed, the Qty Done will always remain unchanged, and the Qty to go will change to maintain the relationship. This means the quantities to go in the forecasting worksheets will change. This will immediately affect the forecast final cost for cost centres.

If the Forecasting Method is SC, then the Current Contract Quantity will also change to the same value as the FFQ, with a corresponding change in budget for that item.

The Forecasting Method can be changed in this screen. The business rules associated with this change are described in the Forecasting Method section and Item Maintenance section of this manual.

Additional tabs are available displaying Sell Price, Long Description, Section, Sequence number, Tag Codes, and Variation links.

Forecast final Quantities are not entered for Parent Items, but are entered for all child items. The system automatically calculates the FFQ for a Parent Item based on the children.

The **Tags** Tab can be used to filter the Schedule Items, by all available codes.

Schedule of Rates Projects

The **Variation** Tab shows only those Schedule Items that are in the defined variation section of the schedule. It shows if the Schedule Items are linked to a variation or not.

The other options which may be available, depending parameter CPYCDQ, are:

Copy Qty Done to Claim Qty Selecting this option will copy all of the Done quantities to the Claimed to date quantity in the Progress Claim screen.

Copy Claim Qty to Qty Done Selecting this option will copy all current claimed to date quantities to quantities done. The Forecast Quantity to go will also be changed and Forecast Final Quantity will remain fixed.

Enter Earned Quantities

Once Final quantities have been established, then quantities achieved to date can be entered for each Schedule Item, this will enable the Earned budget to be calculated for each Schedule Item, and for each cost centre on the project.

The percentage Qty Done/FFQ (i.e. percentage complete) calculated for the Schedule Item is used to adjust the Quantity done for each sub item related to the Schedule Item, i.e. if percentage complete is 60%, then the quantity done for each sub item is changed to 60% of the FFQ for that sub item.

$$\text{Earned Budget} = \text{Quantity Done/Forecast final Quantity} * \text{Current budget.}$$

An earned budget is calculated for each sub item for the Schedule Item. Each sub item has a cost centre, so the earned budget for each cost centre is generated. This is compared with the CWIP for that cost centre to establish a productivity to date for each cost centre and the project. The Financial Status Report best shows this information.

To update Entering Earned Quantities from the Jobpac main menu, select **Project>Job Setup and Reports>Schedule of Rates>SOR Job Forecasting>Enter Quantities Done**.

Enter the Job number or use the Job search function to search for the required job, click OK and the following screen is displayed.

Schedule of Rates Projects

Calculate Earned Budget for Items						ACTIONS	OK	BACK				
Job	9088	SOR Demo Project	(Budget Finalised)									
	Current Budget	EB This Period	EB To Date	CWIP To Date	Variance To Date							
Project Totals	10,094,589.70	2,437,497.67	9,699,189.42	10,611,042.51	911,853.09-							
Filtered Totals	7,827,701.93	22,740.05-	7,238,951.50									
QUANTITY DONE	DESCRIPTION	SEQUENCE NO	AUDIT	VARIATIONS								
Hide	Apply											
Equals	Contains	From	From	=	LS	=						
For Period	FEB22	To	To									
Item	Description	Contract Quantity	B/ F	Unit	Tp	FM	Pc	Forecast Final Quantity	Quantity Done	% Comp	Upd SIs	EQ
5	Insurance Excess	1.0000	B	Item		LS	AE	1.0000	1.0000	100.00	N	
6	Rework	1.0000	B	Item		LS	AE	1.0000	1.0000	100.00	N	
	(a) Insurance as required by	1.0000	B	IT		LS		1.0000			Y	
	(b) Site establishment/	1.0000	B	IT		LS		1.0000			Y	
	(c) Survey and set out	1.0000	B	IT		LS		1.0000			Y	
1.02	Traffic control including TMP	1.0000	B	IT		LS		1.0000			Y	
	(a) Cut existing working	158.0000	B	CM		LS		158.0000			Y	
	(a) Rip, mix and trim	1,575.0000	B	SM		LS		1,575.0000	575.0000	36.50	Y	
	(a) To footpaths, allotments	0.9800	B	HA		LS		0.9800			Y	
2.01	Saw cut existing pavement	9.0000	B	LM		LS		9.0000			Y	
	(a) Base course - Type 2.1	151.0000	B	CM		LS		151.0000			Y	
	(b) Sub-base course - Type	197.0000	B	CM		LS		197.0000			Y	

Field	Description
Contract Quantity	Current contract quantity for the Schedule Item
B/F	B : Contract Quantity EQ Forecast Final Quantity F : Contract Quantity NE Forecast Final Quantity
Forecast Final Quantity	Quantity established in the FFQ entry screen.
Qty done to date	Quantity Done. Cannot be greater than FFQ.
% Complete	Quantity done/FFQ
Calc SIs	If this is Y, then the % complete is transferred to each sub item related to this Schedule Item. Quantities done for each sub item are adjusted using the same %. If this is N, then the system prevents the calculation transferring to the sub items. This is automatically set to N if changes are made directly to the sub item quantities. See next screen.

There are four other tabs.

The **Audit tab** will show who last updated the Schedule Item Quantity, and the date and time.

Schedule of Rates Projects

The **Variations tab** will show only those Schedule Items within the Variation Section of the schedule.

The **Actions** menu option **Detail/Summary**, provides detail about each Schedule Item on screen one at a time. Selecting this displays the following screen.

Note: When selected the first line on the screen is displayed, and user should use the page up/down marks to display the required Schedule Item.

Calculate Earned Budget for Items
ACTIONS OK BACK

Job 9088 SOR Demo Project (Budget Finalised)

	Current Budget	EB This Period	EB To Date	CWIP To Date	Variance To Date
Project Totals	10,094,589.70	2,437,497.87	9,699,189.42	10,611,042.51	911,853.09-
Filtered Totals	7,827,701.93	22,740.05-	7,238,951.50		

QUANTITY DONE	DESCRIPTION	SEQUENCE NO	AUDIT	VARIATIONS
<div style="display: flex; justify-content: space-between; align-items: center;"> Hide Apply ↑ XLS < > ... </div>				
Equals	Contains	From	From	From
	For Period FEB22	To	To	To

Item	Description	Contract Quantity	B/F	Unit	Tp	FM	Par	Forecast Final Quantity	Quantity Done	% Comp	Upd Sis
	(a) Rip, mix and trim	1,575.0000	B	SM		LS		1,575.0000	575.0000	36.50	Y

Budget Quantity	Budget UOM	Budget Rate	Budget Amount	FF Qty	UOM	Qty Done	% Compl	Earned Budget
Orig	SM							
Prev								
Curr	1575.0000 SM	2.7521	4334.61	1575.0000		575.0000	36.5	1582.49

If Schedule Item is 100% earned, the Earned budget may be less than the current budget. This is because the overhead contribution amount for Schedule Items is not included in the earned budget calculation.

If the % complete for sub items is not the same as for the Schedule Item, then sub items can be directly remeasured. To do this select the Schedule Item, and all the sub items for the Schedule Item are displayed.

The option **Claimed to Qty done** in the **Actions** menu, will copy the claimed quantities for every Schedule Item that is currently filtered on this screen. A message is displayed before this happens.

Confirm
✕

?

Only filtered items will be copied.

Quantity Done will be updated with Claim Quantity.

*** Copy will not be done for Pay Items marked 'N' (Don't Recalculate Subitems) ***

*** If copied quantity is greater than the FFQ, then the Quantity Done will be set to FFQ ***

✓ Yes

✕ No

CONFIRMUPD01

Schedule of Rates Projects

Copies quantities will change colour to indicate a copy has been done.

If the % complete for sub items is not the same as for the Schedule Item, then sub items can be directly remeasured. To do this select the Schedule Item, and all the sub items for the Schedule Item are displayed.

Calculate Earned Budget for Qty Done
ACTIONS OK BACK

Job	9088	SOR Demo Project	(Budget Finalised)
Seq#	15419		
Section	9500	Variations	
Item		(a) Rip, mix and trim	
Variation No	20004	Stage 1C	Status A *Approved Transferred Y
Current Earned Budget	1,582.49	Current Budget	4,334.61
Previous Earned Budget		Direct Cost Budget	4,334.61
		Overhead Budget	

COST CENTRE NOTES/RESOURCE NAME

Hide Apply < > ...

Show SI With No Current Budget

For Period

Line	Notes	Resource Name	Unit	B F	Forecast Final Qty	Qty Done	% Comp	C	☒
1	1			B				Y	
2	2 =(1575[#QTY]) in m2			B	1,575.0000			Y	
7	7 =(5.25[#lq6])	GRADER12G	hr	B	5.2500	1.9167	36.5	N	
8	8 =(5.25[#lq6])	ROLLER	hr	B	5.2500	1.9167	36.5	N	
9	9 =(5.25[#lq6])	V-MOXI WTRUCK DRY	hr	B	5.2500	1.9167	36.5	N	
10	10 =(5.25[#lq6]*load per	V-WATER CHARGES MRC	kL	B	147.0000	53.6667	36.5	N	
11	11 =(5.25[#lq6]*1)	14T EXC	hr	B	5.2500	1.9167	36.5	N	
12	12 =(5.25[#lq6]*1)	V-CW4	hr	B	5.2500	1.9167	36.5	N	

Changing the Quantity done for a Schedule Item or for a sub item will change the quantity to go in the forecasting worksheets, and change the forecast final cost for each cost centre associated with the change.

Field	Description
B/F	B : Contract quantity EQ Forecast Final Quantity F : Contract Quantity NE Forecast final quantity
Forecast Final Quantity	Initially; the budget quantity for the sub item.
Qty done to date	Quantity Done. Cannot be greater than FFQ.
% Complete	Quantity done/FFQ
C	If this is Y, then the line is a comment line If this is N, then it is a line that can contribute to earned budget.

Actions Options	Description
Detail/Summary	As for the Schedule Item, this can be used to see the detail of each line item, one at a time.
Next Item/Previous Item	Allows user to move to next or previous item without having to go back to the Schedule Item itself.
Expand/Contract	Expands and contracts to show the full description of the sub items

Initially the sub items have the same % complete as the Schedule Item. The FFQ and Quantity Done for each sub item can be adjusted to reflect the correct measurement for that sub item, and a more accurate earned budget. On returning to the Schedule Item screen the % complete will have been recalculated to reflect the changes at the subitem level.

Schedule of Rates Projects

Forecasting

Forecasting costs to complete for item based projects, allows both forecasting by individual item, and forecasting by Cost Centres.

As a project budget is loaded into Jobpac, either from an upload from Expert Estimation, or manually, the detail of the budget of resources that are entered is transferred automatically to both the forecasting worksheet by Item and the forecasting worksheet by cost centre. The entered budgets and rates become the starting point for preparing a forecast. Each month a forecast is prepared for each Schedule Item and cost centre, and is locked in. This forecast becomes the starting point for next month's forecast.

Generally the forecast final quantities, and the quantities done for Schedule Items and sub items have been done prior to the detailed forecasting. The focus on forecasting is on the rates.

Any quantities to go that are changed in the worksheets will also change the forecast final quantities for associated sub items. This will change the earned budget for that cost centre and Schedule Item.

Forecasting by Item

Each Schedule Item in the schedule should be reviewed each month to establish if rates need to be changed, or new forecasting items are required to accurately forecast the cost to complete.

To update Forecast by Item from the Jobpac main menu, **select Project>Job Setup and Reports>Schedule of Rates>SOR Job Forecasting>Forecasting By Item**

Enter the Job number or use the Job search function to search for the required job then click **OK**. The following screen is displayed.

Project Manager Worksheet Forecasting by Item

Job: SORPR2 SORPR2 Test
Section:

ACTIONS OK BACK

QUANTITIES FCC RATE BUDGET RATE AUDIT TAGS VARIATIONS

Hide Apply

Position - Section: [] FCC Rate Override Used: [] (Y/N /) Period: MAR22

Contains: [] = [] From: [] To: [] From: [] To: [] From: [] To: [] From: [] To: []

Item	Description	Unit	Current Quantity	Forecast Final Qty	Done Quantity	Quantity To Go	Claimed Quantity
1	Preliminary & General						
	Test A						
1.1	Safety, Environmental and	LS	1.0000	1.0000		1.0000	
3.2	Public Pipe Supply and						
	TEST B						
3.2B	Catchment B						
B3.2.8a	300mm dia. pipe	m	50.0000	50.0000		50.0000	
C3.2.2a	375mm dia. pipe	m	70.0000	70.0000		70.0000	

Project Managers Worksheet Forecasting by Item

Schedule of Rates Projects

All of the fields on this screen are changed from other places. This represents a summary after all the previous quantity changes that have been done. The Section filter allows the user to just display a particular section.

A rate override facility is available at the Schedule Item level. This is described in the next section. The filter at the bottom of the screen enables the user to just display those Schedule Items where this feature has been used.

A number of tabs are available to display other data associated with the Schedule Items.

The tab **Budget Rate** shows the Original and current budget rates for each item, and also the Forecast Cost to Complete Rate (FCC Rate).

The FCC Rate for a Schedule Item is calculated by subtracting the Budget Earned to Date from the Forecast Final Cost for the Item divided by the quantity to go for the item.

The **Audit** tab shows the last person and date who changed the forecast by using PMW by item or PMW by cost centre, and also the last person to change the forecast via changing quantities in the Earned Budget or Forecast Final Quantity functions.

The Variations Tab shown only those items that are linked to variations.

When a Schedule Item is selected, all of the sub items (resources) required to complete that component of work are displayed.

Project Manager Worksheet Forecasting by Item ACTIONS OK BACK

Job	SORPR2	SORPR2 Test	Original Qty	50.0000	Sell Rate	400.0000		
Seq#	12		Contract Qty	50.0000	Claimed		To Claim	50.0000
Section	20		FFQ	50.0000	Orig Rate	278.0000		
Item	B3.2.8a	300mm dia. pipe	Qty Done		Curr Rate	278.0000	Budg to Comp	13,900.00
FM	SC	Schedule Item c	FQC	50.0000	FCC Rate	278.0000	m FCC	13,900.00

Rate Override Used

FORECAST NOTES AUDIT

Hide Apply Clear XLS + < > ...

Period: Notes Worksheet Lines

=	Contains	=	From	From	From	From	From	From	From	=
			To	To	To	To	To	To	To	

Line	Resource Description	Unit	Production Rate	Qty To Go	Rate	Amount	Cost Code	CT	P C	€
1	300 PVC	m	1.0000	50.0000	50.0000	2,500.00	5040	MT	P	
2	GAP 20 (PER T)	ton	1.2000	60.0000	30.0000	1,800.00	5040	MT	P	
3	GAP 20 (PER T)	ton	1.2000	60.0000	30.0000	1,800.00			N	
4	TRANSPORT - GAP 20 (PER T)	ton	1.2000	60.0000	10.0000	600.00	5040	PL	P	
5	DRAINLAYER	HOURL	2.0000	100.0000	50.0000	5,000.00	5040	LB	P	
6	OPERATOR	HOURL	2.0000	100.0000	40.0000	4,000.00	5040	LB	P	
7									P	
8									P	

The top section of the screen displays the current status of this Schedule Item

The **Original Qty** is that at the time of budget finalisation

The **Current Qty** is the current contract quantity.

The **FFQ** is that entered in the Forecast Final Quantity screen.

FQC is the Forecast Quantity to complete (FFQ – Quantity Done)

Schedule of Rates Projects

FCC Rate is the overall Rate to complete for the whole Schedule Item. This can be used in conjunction with the **Rate Override Used** indicator. This is described in the next section.

FCC is the Forecast Cost to Complete

Field	Description
Line	Line number. This is the link back to the originating sub item in the budget for the Schedule Item
Notes	Notes that describe how the estimate or forecast was generated. These are copied from the budget when the budget was created. New forecast lines can be created in the Forecasting worksheet. This will automatically create an equivalent budget line for the Schedule Item, with a budget quantity of zero.
Resource Description	Name of the resource required for this element of work.
Unit	Unit of Measure
Qty to Go	If Earned Budget has been done for the project, this quantity should reflect the quantity required to complete this element of work. If it is change here, it will result in the FFQ for the element of work to be adjusted (FFQ = Qty Done + Qty to Complete)
Rate	Rate to complete. (next version of this document will include Resource Library facility)
Cost Code	Cost Code for this element of work.
CT	Cost Type. e.g. L, M, P, S
P/C	Pending or Contingency. Pending is the default. Lines can be marked a contingency components of the forecast. Jobpac will sum those lines marked C, and will present the total value of contingency in the Project Summary Report. These can be changed at any time. This field can also be 'R'. This is used to indicate the line item is related to Rates Only Schedule Items, or Schedule Items linked to Quote Variations. No forecast can be done for these lines, and they do not contribute to the FCC for the cost centres associated with them.
C	Comment indicator. 'Y' – Comment line; 'N' – Forecast line.

Each line has a number of options associated with it. These are displayed using the Right Mouse Button.

- Extended Notes
- Extended Resource Description
- Delete
- Cut
- Copy
- Cut to Another Item

Schedule of Rates Projects

- Copy to Another Item
- Paste before
- Paste after
- Prompt

These allow the changing of the detailed descriptions of the line item, deleting of the line, and a range of Cut and Copy options for sub items. To Paste a line, select where you want to insert the line, and use **Paste Before**(the line) or **Paste After**(the line). **Prompt** is cursor sensitive.

Actions Options	Description
Expand/Contract	Expands the description to show all lines of the description, and contracts back to one line.
Prompt	Cursor sensitive. System will display a popup list related to the data where the cursor is positioned.
Add	Positions the cursor at the next available position to enter a new line.
Next Tab	Each click of this will take user to next tab.
Budget Makeup	This displays the makeup of the cost centre budget associated with the Schedule Item. The current budget is displayed, and the option to show the original budget is available in that display.
Build From Sub items	This will replace the current forecast with the current budget or original budget (user selects) for that Schedule Item. A preview is provided. To actually make the replacement, select Build From Sub items from the preview screen.
Build From History	This will replace the current forecast with that of a nominated previous month. A preview is provided. To actually make the replacement, select Build From Sub items from the preview screen.
Delete All	This will completely delete all lines in the worksheet for the Schedule Item.
FFQ entry	Displays the FFQ screen and allows the FFQ for the Schedule Item to be changed.
Cost Centre Enquiry	This is cursor sensitive. The full budget of the cost centre is displayed. All Schedule Items that makeup the cost centre budget are displayed.
Next Item	Allows user to move forward to next Schedule Item without returning to Schedule Item screen.
Previous Item	Allows user to move backward to previous Schedule Item without returning to Schedule Item screen.

Schedule of Rates Projects

Forecasting Rate to Complete

Forecasting every resource within every Schedule Item may not be appropriate or time effective. There is a facility to nominate a rate to complete for the Schedule Item, and have this rate used to change each resource rate proportionally. For example,

If current Rate to complete for the Schedule Item is \$278 per unit. (QTC/FFC for item)
And Proposed Rate to complete is \$250 per unit, then the rates for each resource within the Schedule Item are reduced by 250/278, with corresponding changes to the FCC.

To use this facility, tick the box “Rate Override Used” Parameter PMWIRO can turn this on.

Selecting OK will change the rates as shown in the screen below.

Project Manager Worksheet Forecasting by Item ACTIONS OK BACK

Job	SORPR2	SORPR2 Test	Original Qty	50.0000	Sell Rate	400.0000		
Seq#	12		Contract Qty	50.0000	Claimed		To Claim	50.0000
Section	20		FFQ	50.0000	Orig Rate	278.0000		
Item	B3.2.8a	300mm dia. pipe	Qty Done		Curr Rate	278.0000	Budg to Comp	13,900.00
FM	SC	Schedule Item c	FQC	50.0000	FCC Rate	250.0000	m FCC	12,500.00

Rate Override Used

FORECAST NOTES AUDIT

Hide Apply Clear XLS + < > ...

Period Notes Worksheet Lines

= Contains = From From From From From From From =

Line	Resource Description	Unit	Production Rate	Qty To Go	Rate	Amount	Cost Code	CT	P C	EQ
1	300 PVC	m	1.0000	50.0000	44.9640	2,248.20	5040	MT	P	
2	GAP 20 (PER T)	ton	1.2000	60.0000	26.9785	1,618.71	5040	MT	P	
3	GAP 20 (PER T)	ton	1.2000	60.0000	30.0000	1,800.00			N	
4	TRANSPORT - GAP 20 (PER T)	ton	1.2000	60.0000	8.9928	539.57	5040	PL	P	
5	DRAINLAYER	HOURLY	2.0000	100.0000	44.9640	4,496.40	5040	LB	P	
6	OPERATOR	HOURLY	2.0000	100.0000	35.9712	3,597.12	5040	LB	P	

The rates have been changed, and this is indicated by the colour of the rate. This colour will also display in the forecasting Worksheet by Cost Centre for these resources.

The Forecasting by Item summary screen has a filter at the bottom of the screen that enables the user to just display those Schedule Items where this feature has been used.

This indicator also appears on the Forecasting worksheet by Item report and the Cost Comparison and Forecast Report.

Forecasting by Cost Centre

Once forecasting of quantities has been done, and Forecasting by Item has been used to assess and change rates to complete, the forecasting status of each cost centre can be used to refine the forecast. This is done via the BFM Contract Valuation Maintenance screen. The function may be available via a separate menu function while not in a review period. Once in a BFM review period, it is only available via the BFM Contract Valuation Maintenance screen.

Either options take the user to the same initial forecasting screen shown below.

Schedule of Rates Projects

The standard PMW Forecasting manual describes the many features in the forecasting worksheet. This manual will focus on the functions that have been added through the Schedule of Rates features.

Cost Centre Cost Reconciliation ACTIONS OK BACK

As at

Job Lock Job

GAIN/LOSS W/S ENTRY BY C/C COMMITTED EARNED VALUES MOVEMENT GAIN/LOSS MOVEMENT AUDIT ACCRUALS FORECAST

Hide Apply XLS < > ...

Cost Code	CT	Description	PMW Entries	FCC	Difference	Gain/Loss	Last Update	Sts	
2050		Underground Services						A	
2050	LB	Underground Services	4,900.00	4,900.00				A	
2050	MT	Underground Services	4,800.00	4,800.00				A	
5040		Testing of Pipework					25/04/2022	A	
5040	LB	Testing of Pipework	8,093.52	8,093.52		906.48	25/04/2022	A	
5040	MT	Testing of Pipework	3,866.91	3,866.91		433.09	25/04/2022	A	
5040	PL	Testing of Pipework	539.57	539.57		60.43	25/04/2022	A	
6020		Traffic Management						A	
6020	LB	Traffic Management	12,740.00	12,740.00				A	
6020	MT	Traffic Management	8,600.00	8,600.00				A	
6020	PL	Traffic Management	1,000.00	1,000.00				A	
9996		Preliminary Parameters						A	

The **Last Update** column is the date the last user updated the forecast for that cost centre.

The Forecasting worksheets are displayed for the selected cost centre by choosing either the **PMW by Cost Centre** or the **PMW By Cost Code**. The PMW By Cost code displays all worksheet entries for all cost types for the cost code.

Schedule of Rates Projects

PMW Forecasting by Cost Code ACTIONS OK BACK

Job: SORPR2 SORPR2 Test NEW FCC = Sum of Worksheet Entries Formula: H
 Cost Code: 6020 Traffic Management NEW FCC = Cost of WIP + FCC Last Upd Date: Last Upd User:

Current Budget	22,340.00	JAN22	PF	FEB22	PF	MAR22	PF	Worksheet
Cost Of WIP		0.00		0.00		0.00		
F.C.C.		0.00		0.00		22,340.00	1.00	22,340.00
F.F.C.		0.00		0.00		22,340.00	1.00	22,340.00
Gain/Loss		0.00		0.00		0.00		0.00
Movement		0.00		0.00		0.00		0.00

WORKSHEET HEAD CONTRACT ITEM SEQUENCE NUMBER AUDIT ITEM DESCRIPTION NOTES

Hide Apply XLS < > ...

Show as at: MAR22 ▶▶

From: Equals

CT	Line	Resource Description	Quantity	Units	Rate	Value	C/P	A	R	Tx	Eq
LB	4	DRAINLAYER	140.0000	HOUR	51.0000	7,140.00	P	N	Y		
LB	5	OPERATOR	140.0000	HOUR	40.0000	5,600.00	P	N	Y		
MT	1	375 PVC	70.0000	m	80.0000	5,600.00	P	N	Y		
MT	2	GAP 20 (PER T)	100.0000	ton	30.0000	3,000.00	P	N	Y		
PL	3	TRANSPORT - GAP 20 (PER T)	100.0000	ton	10.0000	1,000.00	P	N	Y		

Key elements on this screen are:

Last Upd Date Last time any of the FCC for the cost centres for this cost code were changed.

Head Contract Item Tab This displays the Schedule Items to which each resource line is attached.

Audit tab Selecting this tab displays the following screen.

PMW Forecasting by Cost Code ACTIONS OK BACK

Job: SORPR2 SORPR2 Test NEW FCC = Sum of Worksheet Entries Formula: H
 Cost Code: 6020 Traffic Management NEW FCC = Cost of WIP + FCC Last Upd Date: Last Upd User:

Current Budget	22,340.00	JAN22	PF	FEB22	PF	MAR22	PF	Worksheet
Cost Of WIP		0.00		0.00		0.00		
F.C.C.		0.00		0.00		22,340.00	1.00	22,340.00
F.F.C.		0.00		0.00		22,340.00	1.00	22,340.00
Gain/Loss		0.00		0.00		0.00		0.00
Movement		0.00		0.00		0.00		0.00

WORKSHEET HEAD CONTRACT ITEM SEQUENCE NUMBER **AUDIT** ITEM DESCRIPTION NOTES

Hide Apply XLS < > ...

Show as at: MAR22 ▶▶

From: Equals

CT	Line	Resource Description	Unit	C/P	A	R	Lst PMW Upd Date	Lst PMW Upd Time	Lst PMW Upd User	Lst EVB Upd Date	Lst EVB Upd Time	Lst EVB Upd User	T	Eq
LB	4	DRAINLAYER	HOUR	P	N	Y								
LB	5	OPERATOR	HOUR	P	N	Y								
MT	1	375 PVC	m	P	N	Y								
MT	2	GAP 20 (PER T)	ton	P	N	Y								
PL	3	TRANSPORT - GAP 20 (...)	ton	P	N	Y								

Schedule of Rates Projects

The FCC for the cost centre will change during the month due to commitments being actioned, e.g. purchase orders, invoices, payroll, etc. When any changes are made to the pending lines, either by earned value quantities being entered, or a remeasure of the Schedule Items, the FCC for the cost centre is automatically updated by the sum of the worksheet entries.

The Last PMW Update code via	Displays the last date/time a user updated the forecast for the cost either of the forecasting worksheets.
The Last EVB Update code via	Displays the last date/time a user updated the forecast for the cost either the Forecast Final Quantity or the Earned Value options.

Schedule of Rates Projects

Combined Upload for FFQ, QTY Done, and Claimed Quantities

There is a single upload available for:

- Forecast Final Quantity
- Quantity done
- Quantity claimed.

This is available in multiple places throughout the SOR Options

Forecast Final Quantity Entry

Forecast Final Quantity Entry

Job: SORRSL - SOR Resource Library Project

Contract Sum
Current Claim Amount
Current Earned Budget

SHOW CLAIMED FORECAST FULL DESCRIPTION SEQUENCE NO TAGS VARIATIONS

Hide Apply

Period: MAR22

Item Code	Description	Cmp	Unit	FM	Par Chd	Claimed Qty	F'cast Final Qty	Qty Done	F'cast Qty To G
1	Preliminary & General								
	Test A								
1.1	Safety, Environmental and	N	LS	LS			1.0000		1.0000

Enter Quantities Done

Calculate Earned Budget for Items

Job: SORRSL - SOR Resource Library Project

	Current Budget	EB This Period	EB To Date	CWIP To Date	Variance To Date
Project Totals	45,940.00				
Filtered Totals	45,940.00				

QUANTITY DONE DESCRIPTION SEQUENCE NO AUDIT VARIATIONS

Hide Apply

For Period: MAR22

Item	Description	Contract Quantity	B/F	Unit	Tp	FM	Pc	Forecast Final Quantity	Quantity Done	% Comp	Upd Sis
1	Preliminary & General		B			CM					Y
	Test A		B			CM					Y
1.1	Safety, Environmental and	1.0000	B	LS		LS		1.0000			Y

Progress Claim Entry

Progress Claim Entry

 ACTIONS

 OK

 BACK

Job SORRSL SOR Resource Library Project Claim Number 1 Date

QUANTITY ENTRY	DESCRIPTION	CLAIM VALUES	UNDER/OVER CLAIM	AUDIT	VARIATIONS	TAGS
Current Contract Amount	60,000.00	This Claim Amount	Claim to Date Amount			

Hide
Apply
Clear

= = =

Include Previously Claimed at 100%

Item	Description	Head	FM	Par	Unit	Curr Contract Qty	Qty Done
1	Preliminary & General	H	CM				
	Test A	h	CM				
1.1	Safety, Environmental and		LS		LS	1.0000	
3.2	Public Pipe Supply and	H	CM				

The same template is used for all three uploads. It can be used to upload all three Quantities, or just one or two.

It is always preceded by a download. The Columns marked in Green are the ones that can be uploaded.

Resource Library

Introduction

A centralised resource library option is available for SOR Projects. The library can either be generated from Expert Estimate upload, manually created or 'built' for existing live projects. The review and bulk application of new forecast cost rates across a project is also supported with audit trails.

This library is based on standard Description or Resource names used for each Subitem line in the Schedule of Rates.

For Example

SOR Item

R1.2	Construction of Footpath	400 M2 at \$100/M2	= \$40,000
Resources	1. Standard Labourer	200 HRS @ \$50	= \$10,000
	2. Standard Supervision	50 HRS @ \$70	= \$ 3,500
	3. 1.2 M Grader	50 HRS @ \$100	= \$ 5,000
	4. 10mm Gravel	400 M2 @ \$10	= \$ 4,000
	5. Thumper	100 HRS @ \$100	= \$10,000

Each of the descriptions of the resources are in effect 'a Code'. They will appear many times in other SOR Items. They must be consistently named.

A library of Rates is built up based on these names.

This library can then be used to update forecast rates for these Resources across the whole project. E.g. If the rate for a 1.2M Grader moves to \$120 per hour, then this new rate can be pushed out to all the occurrences of 1.2M Grader throughout the project.

It is important to note these are forecast rates only, and the budget rates are not changed.

Setup for Resource Library

If a SOR Project is to use a Resource Library then the box must be ticked in Job Maintenance

<input type="checkbox"/> Use Resource Code Cost Tracking?	<input type="checkbox"/> Disable Excel In Progress Claim	Terms & Conditions Format <input type="checkbox"/>
<input checked="" type="checkbox"/> Use Resource Library Forecast Control		
<input type="checkbox"/> This is a template job	Template Job Number	<input type="text" value="SORTMP"/> <input type="button" value="SOR Template"/>

Schedule of Rates Projects

This will cause the column description on Sub Items to change from Resource Description to Resource Name.

When the SOR Project is loaded, and the Use Resource Library Forecast Control' is ticked, a Resource library is automatically created.

Resource Library Maintenance ACTIONS OK BACK

Job Number SORRSL SOR Resource Library Project
Budget Finalised N

PROJECT QTY MOVEMENT RESOURCE DESCRIPTION Upload

Current RL Control DJC 45940.00 Proposed RL Control DJC 45940.00

Hide Apply Clear XLS + < > ...

Resource Name	CT	Project Qty	Unit	Current FCC Rate	Current Resource FCC	Proposed FCC Rate	Proposed Resource FCC
DRAINLAYER	LB	242.8000	HOUR	50.0000	12,140.00	50.0000	12,140.00
GAP 20 (PER T)	MT	160.0000	TON	30.0000	4,800.00	30.0000	4,800.00
OPERATOR	LB	240.0000	HOUR	40.0000	9,600.00	40.0000	9,600.00
PL INSURANCE	MT	1.0000	ITEM	2,000.0000	2,000.00	2,000.0000	2,000.00
SAFETY REPORT	MT	4.0000	NO	700.0000	2,800.00	700.0000	2,800.00
STANDARD FOREMAN	LB	3.0000	DAY	600.0000	1,800.00	600.0000	1,800.00
STANDARD PM	LB	3.0000	DAY	600.0000	1,800.00	600.0000	1,800.00
STANDARD QS	LB	2.0000	DAY	650.0000	1,300.00	650.0000	1,300.00
TRANSPORT - GAP 20 (PER T)	PL	160.0000	TON	10.0000	1,600.00	10.0000	1,600.00
300 PVC	MT	50.0000	M	50.0000	2,500.00	50.0000	2,500.00
375 PVC	MT	70.0000	M	80.0000	5,600.00	80.0000	5,600.00

Column Name	Description
Resource Name	There is one entry here for every resource that has appeared across the project.
Cost Type	This is the cost type of the Resource. This must be consistent throughout the project.
Project Qty	This is the total Qty of that resource across the whole project
Current FCC Rate	This forecast rate is current used through the whole project for this resource
Current Resource FCC	Project Qty * Current FCC Rate
Proposed FCC Rate	This field is Changeable. The FCC rate can be change here.
Proposed Resource FCC	Project Qty * Proposed FCC Rate

Right Mouse Click options

Option	Description
Audit History	This show an audit of changes done to that Resource Name
UOM Change	The UOM for the Resource Name can be changed throughout the project. This option presents a screen to nominate the new UOM, and to change it.
Rate Change	This actually applies the Change that was made for this Resource Name.
Name Change	This can be used to change the name of the Resource throughout the project
Delete	This can only be used if the Resource Name no longer is used in any PMW entry.

Action Menu options

Option	Description
Add	New resource Names can be added here, and then used in new subitems in Forecasting by Item.
Copy	Resource Names can be copied from one project to another
Merge	Two or more Resource Name can be merged together, providing they have the same Cost type, UOM, and FCC Rate
Apply Rates All	This will apply any outstanding Rate changes for all Resource Name
Rebuild	This can be used to Rebuild the whole Resource library
Resource listing	This prints out a list of Resource Names.

Adding a Resource Name from Forecasting By Item

If a new Subitem is added in Forecasting by Item, and the Resource Name does not exist, it can be added to the Resource Library

In screen below, the line called Contingency was added.

Schedule of Rates Projects

Add New Resource ✕

Job Number SORRSL SOR Resource Library Project

Resource Name

Resource Description

Cost Type

UOM

Current FCC Rate

RESRCMN201

This now appears in the Resource library, and can be used elsewhere

Resource Library Maintenance

Job Number SORRSL SOR Resource Library Project

Budget Finalised N

PROJECT QTY
MOVEMENT
RESOURCE DESCRIPTION

⬆ Upload

Current RL Control DJC 53200.00 Proposed RL Control DJC 53200.00

⌵ Hide Apply Clear

Resource Name	CT	Project Qty	Unit	Current FCC Rate	Current Resource FCC	Proposed FCC Rate	Proposed Resource FCC
CONTINGENCY	MT	5,000.0000	Item	1.0000	5,000.00	1.0000	5,000.00
DRAINLAYER	LB	240.0000	HOUR	60.0000	14,400.00	60.0000	14,400.00
GAP 20 (PER T)	MT	160.0000	TON	30.0000	4,800.00	30.0000	4,800.00
OPERATOR	LB	240.0000	HOUR	40.0000	9,600.00	40.0000	9,600.00
INSURANCE	MT	1.0000	ITEM	3,000.0000	3,000.00	3,000.0000	3,000.00

Schedule of Rates Projects

Progress Claims

Head contract Progress claims are prepared by entering quantities claimed against each Schedule Item where work has been undertaken. When the Claim is prepared, it is transferred to the Accounts Receivable function, where it can be accrued, and then marked as certified. Variations are claimed by establishing quantities claimed for each Schedule Item linked to a variation.

To update the Progress Claim from the Jobpac main menu, select

Projects>Job Setup and Reports>Schedule of Rates>SOR Progress Claim>SOR Progress Claim Entry.

Creating a Progress Claim

Select a Job number, and the following screen is displayed.

Progress Claim Entry

Job SORPR2 SORPR2 Test Claim Number 1 Date 26/04/2022

QUANTITY ENTRY	DESCRIPTION	CLAIM VALUES	UNDER/OVER CLAIM	AUDIT	VARIATIONS	TAGS	AMOUNT ENTRY	% ENTRY
Current Contract Amount	60,000.00	This Claim Amount		Claim to Date Amount				

Hide Apply Clear

Include Previously Claimed at 100%

Item	Description	Head	FM	Par	Unit	Curr Contract Qty	Qty Done	Prev Claim Qty	Claim To Date Qty
1	Preliminary & General	H	CM						
	Test A	h	CM						
1.1	Safety, Environmental and		LS		LS	1.0000			
3.2	Public Pipe Supply and	H	CM						
	TEST B	h	CM						
3.2B	Catchment B		CM						
B3.2.8a	300mm dia. pipe		SC		m	50.0000			
C3.2.2a	375mm dia. pipe		SC		m	70.0000			

Claimed to Date quantities are entered in the last column. If quantities done have been entered in the Earned Value function, then these can be copied to the claimed quantities. This can be done individually or all quantities done can be copied over, or the Schedule Items can be filtered on the screen and only the filtered Schedule Items copied over.

Quantities cannot be entered for Parent items, as these are calculated as quantities are entered for the child items. There is a hidden rounding item for each parent to ensure that quantity done * rate at the parent level exactly equals the amount claimed for the parent.

Example: If the sum of the amounts claimed for the children = \$1,235,784.79, and the rate for the parent was \$176.89, then the system would calculate the

Quantity done to be $\$1,235,784.79 / \$176.89 = 6986.1766635$
 Multiplying this back, with 4 decimal places $6,987.1767 * \$176.89 = \$1,235,784.80$
 The difference of 0.01 is held in the rounding item.

Schedule of Rates Projects

Options for Right Mouse Click are:

Sub Items

To edit/view the item's resource names, select the required row, right-click and choose **Sub Items**.

Copy Qty Done

To update the item's Claim to Date Quantity with the item's Quantity Done just for that SOR Item, select the required row, right-click and choose **Copy Qty Done**.

Text

This show the Full Description of the SOR Item

Comments

Comments can be added to display under each SOR Item in the Progress Claim Report

Progress Claim Entry Functions

Progress Claim Entry functions may be accessed using the **Actions** menu options.

- Next Tab
- Expand/Contract
- Prompt
- Refresh
- Clear Filters
- Report Print
- Variation Section
- Copy Qty Done
- Show/Hide Child
- Download
- Upload

Report Print

Use this option to print the SOR Progress Claim report. A Selection Screen is displayed.

SOR Progress Claim Report
ACTIONS OK BACK

Job: SORPR2 Test

Claim:

Claim Date:

Period Work Done:

GST Code: GST Taxable Supply

Report Level: Section level Major Heading (H) Level Minor Heading (h) level Item Detail level

Include Heading/Subtotal: Section level

Include subtotal: Major Heading (H) level Minor Heading (h) level

Report Type: Header page Include footer
 Summary page Include footer
 Detail Include footer

Print Child Items
 Print Claimed Items Only
 Print All Approved & Claimed Unapproved Variations
 Print Variation Summary Only
 Ready for Posting
 Print Client Name on Progress Claim

Report Option: PDF Excel

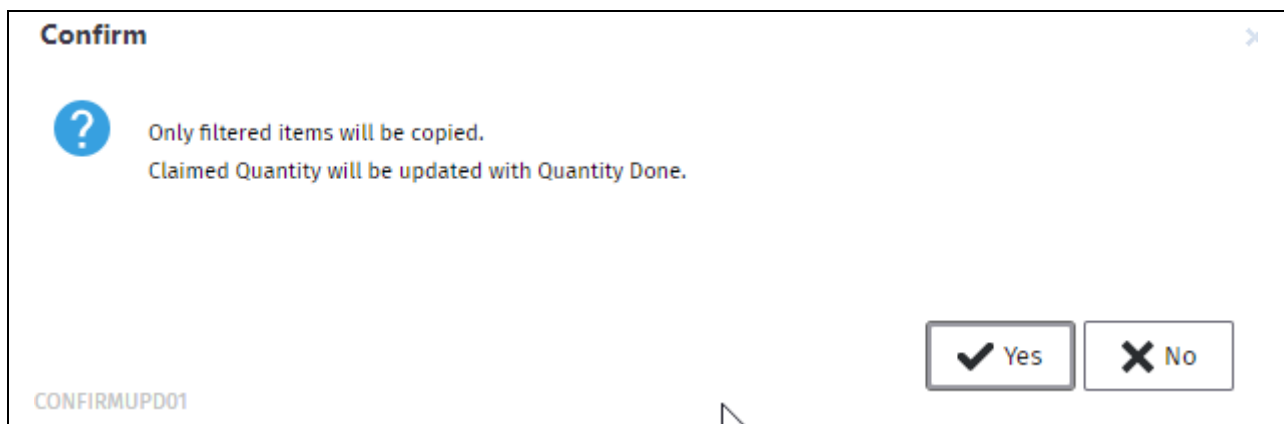
View the report

Field Name	Description
Job Number	Defaults to current job.
Claim Number	Defaults to current claim number. To print a previous Progress Claim, use the menu option
Claim Date	Defaults to today's date, and can be overridden.
Period Work Done	This is the period in which the work was done. It is not the accounting period of the actual claim. It is used as the key selection in the Claim Certification Report.
GST Code	Defaults to workid default output GST code
Report Level – Section, Major Heading (H), Minor Heading (h), Item Detail	Defaults to Item Detail. This will show each Schedule Item on the report. Three other summary options are available. These options show one summary line for the Level option chosen.
Include Heading/Subtotal	If detail report level is selected, this determines if the Section heading and subtotals appear on the report.
Include Subtotal	This determines if subtotals for major and minor heading appear on the report. Defaults – Major Heading (H) level, Minor Heading (h) level
Report Type	Three reports types are available, Header page, Summary Page, and the Details report. All can be produced as required. The additional

Field Name	Description
	option ' Include Footer ' should be selected if a summary is to be produced at the bottom of the report. This summary includes GST and Retention.
Print Child items	Default is to not print child items. If they are printed only the quantities claimed are displayed.
Print Claimed items only	Default is to print all items.
Print Claimed varns only	Default is to print claimed variations only
Print Variation Summary Only	This will print one line per variation on report.
Ready for posting	If ticked this will establish an entry in accounts receivable. This entry is not posted, or accrued. It also causes the report to be written to a claim history table with the date created. Further running of the report for the same claim number, with this option ticked will create additional versions in the history table. Providing the AR entry has not been accrued, then this entry will also be updated.

Copy Quantity Done

To copy the quantity done for all items into the Claim to Date Quantity, select **Copy Qty Done** from the options on the **Actions** menu. A new window will be opened for you to confirm the function to be done. Click **Yes** to proceed or **No** to cancel the copy function.



Show/Hide Child

To view/hide child values for the items, select **Show/Hide Child** from the options on the **Actions** menu.

Downloading the Progress Claim

To download the progress claim into a spreadsheet, click on the **Download** button above the table.

Schedule of Rates Projects

Reprinting a Progress Claim

To reprint a Progress Claim, use option **Reprint SOR Progress Claim**

The standard Progress Claim Report selection options are presented, however there is an additional option to select a prior Progress Claim. See screen below.

SOR Progress Claim Report

Job	SORPR2 SORPR2 Test
Claim	1
Claim Version	
Claim Version Sequence	
Claim Date	26/04/2022

If a scan is done on the claim no, a list of the previous claims is presented. You select from this list.

Progress Claim Number Selection ✕

Job SORPR2 SORPR2 Test

Apply < > ...

From	Fr	From	From	From	=	From	From	From	From
To		To	To	To		To	To	To	To

Claim	Version	Version Seq#	Period Clm For	Claim Date	Claimed Rolled Over	Created Date	Created Time	User Id	
								No Version	

Actions Options	Description
Claim No	Claim No as entered when claim raised
Version	Automatically set to C
Version Sequ No	This starts at 1 for each claim, and is incremented each time the “Ready for Posting” is ticked. Normally only one, but could be repeated.
Period Claimed For	From the Progress Claim entry screen. Represents the month the claim represents. This may be different to the accounting period of the claim.
Claim Date	Date as entered when claim raised.
Claim rolled Over	This is set by rolling the claim over. This should represent the certified values.
Created	Date and time claim created.

Actions Options	Description
Userid	Person who created the claim

Rolling Over a Progress Claim

Once certification has been received, the progress claim needs to be updated to reflect the certified quantities, and variations. This should be done in Progress Claim entry. The claim can then be rolled over. This simply has the effect of moving the current claimed quantities and amounts to the previous fields. This is done by using the following menu option.

Schedule of Rates Projects

Importing a Variation Schedule.

This section will cover how to upload the Variation Schedule Item / Sub Item Structure from Expert Estimation.

This upload uses the same Excel template as for the Contract Upload. However a different menu option is used.

- Setup a variation section code and a variation preliminary section code. The variation preliminary section is not required if variation preliminaries are not used. To setup section code, refer to section, Setting up Section Codes.
- The variation section code and variation preliminary section code must be defined in the Schedule of rates parameter. To setup the parameter, refer to section to Setting up SOR parameter.

Loading an Estimate

To access Setup SOR Parameters from the Jobpac main menu, select

Projects>Job Setup and Reports>Schedule of Rates> / SOR Job Setup>SOR Variation Upload

If the Variation Preliminaries Spread option is being used, then these items must have a section of 9000 in the upload spreadsheet. This section will be replaced by the one nominated in the SOR parameter

Variation Expert Estimation Upload

Complete the parameters as follows:

Field	Description
Job No	The Job must be schedule of rates job and a template job has been associated to the job.

Field	Description
Upload Variation Item to Project	<p>Set this to N if doing an initial load and want to check if all lines are valid.</p> <p>Set to Y when there are no invalid lines. By setting this field Y, the load process will update Jobpac.</p>
This is a Re-Upload	<p>The process will allow multiple uploads of variation Schedule Items. If a batch of variation Schedule Items that have already been uploaded is to be replaced with a new batch, then this option must be set to Y. Otherwise, it should be set to N.</p>
Start Sequence Number	<p>Nominate the start sequence number to insert the Schedule Items to be uploaded. If a number is nominated, system will check if total available numbers between the nominated start number and next used sequence number is more or equal to the total number of Schedule Items to be uploaded. If there is not enough available numbers, system will display an error message. If not nominated, then start sequence number will be the last number used plus 1.</p>
Evenly Spread Total OH Budget across all Schedule Items	<p>Set this to Y if total OH budget is to be evenly spread across all items. Total OH budget is the total Schedule Items overhead defined in the csv file. The variation prelim contribution % will be calculated as total OH budget divided by total direct costs. The calculated % will then be used to calculate Item Prelim OH by multiplying the % by the item total direct cost.</p> <p>Set this to N if overhead is not be evenly spread across all items. The item overhead is the value defined in the csv field and variation prelim contribution % will be calculated as item overhead divided by total item direct cost.</p> <p>If the Overhead spread function is not used, this should by N</p>
Cost Centre	<p>The sub item lines shown on the screen are provisional lines. Upload will identify all provisional items and sub items with a "PS" in item type. User is allowed to input the cost centre per provisional sub item. Cost centre, if entered, must be a valid cost centre from the template job or user can use the search function to select from the cost centre scan window. Only used if Upload is direct from Expert Estimation.</p>
Report Option	<p>Select Spool file, PDF or Excel.</p>
View Report	<p>If you select this box, the report will be displayed on screen prior to printing.</p>

File can be re-uploaded if the following criteria have been met;

- Variation Schedule Items are not linked to variations
- No claims made against any of the item
- No quantity done

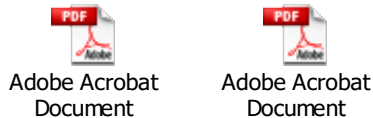
Schedule of Rates Projects

When re-uploading, it will display a screen of all variation Schedule Items.

The user must select all variation Schedule Items that will be replaced by the upload. The upload will delete the selected variation Schedule Items, sub items, worksheet entries, notes and descriptions including the “Original State” files prior to adding the new batch. If Schedule Item to be replaced is a variation prelim item, then upload will write a reversal line of the prelim overhead budget on the variation holding preliminary item.

Expert Upload Validation Report

A sample of the validation report produced by the upload program is embedded in this sheet.



The validation report will list all lines regardless line is valid or not.

Erroneous lines are flagged with starting error description of #ERR. If the uploaded item contract value is not the same as the calculated value and the difference is within the allowable variance defined in the system parameter EXTVAR, then a warning message will be printed. If not within the allowable variance, then an error message will be displayed. Uploaded item value is the sum of the direct cost, overhead cost and margin. Calculated item value is quantity * rate.

When there is rounding difference between the parent and sum of the child items, upload will create a rounding item where rounding item value will be set to the difference. The rounding items will be printed at the end of the report.

A Bulk Resource List will also be printed if the project is using Resource names. The report will list the following details

- Resource Description
- Notes
- Resource Names
- Unit of Measure
- Quantity
- Rate
- Total Amount

Totals are printed at the last page of the report.

Total Overhead Budget (Schedule Item Level) is the total of the uploaded overhead

Nominated OH (Allocated OH) is the sum of the prelim section sub item lines. Prelim section will be have section code = 9000.

Unallocated OH will be equal to the difference between Total Overhead Budget (Schedule Item Level) and Nominated OH.

Contract Sum is total of the calculated item value (Qty * rate)

Direct Cost Budget is the total of the sub item lines budget

Overhead budget is equal to the overhead budget at Schedule Item level

Schedule of Rates Projects

Total budget is the sum of direct cost budget & overhead budget

Margin is calculated as the difference between contract sum and total budget

Total number of records will be printed.

Total invalid records will also be printed.

When the file is uploaded Files will be automatically be copied to the “Original State” Files.

The Schedule Item sequence number will be generated by the system. The start sequence number will be the number nominated on the upload screen. If not nominated, then the start sequence number will be the last used sequence number plus. 1. The number will be incremented by 1 for each of the succeeding Schedule Item.

The 9000 Trade/section code will be replaced by the variation preliminary section defined in the SOR parameter

Trade/section code Schedule Items where trade/section code is not 9000, will be set to the variation section defined on the SOR parameter.

Forecasting method of provisional items will be set to “RO”.

Parent code of parent item will be generated starting from AA, AB, AC, AD etc. The upload will add the code to the parent code table.

Project contract sum, and margin will be not be updated. The overhead budget will be updated but the impact on the total budget will be nil.

Establishing a Variation

If variations are to be used on a SOR project, then the Variation section MUST be setup in the SOR Parameter, and the project budget must be finalised...

The starting point for establishing a head contract variation is the Variation register. A variation is created in the register. It is given a number, a description, a date, and a status. Then the option **Variation Buildup** is used to link variation Schedule Items to the variation. The contract value of the Schedule Items is added to provide the Price for the variation. The Expected revenue field in the variation register will be defaulted to the Price. The resources for these Schedule Items combine to become the budget for the variation. Variation Schedule Items do not contribute to the contract value or budget until the variation is transferred.

To create a variation, use Variation Register. Enter the job number, and enter a variation no, or allow system to allocate the next number.

Variation Register

Job: SORPRO | Schedule Of Rates Project

Variation Number: 02 0001 | Not Transferred To Jobcost

Description: SOR Variation Description

Variation Status: N W A P R D Not Submit

Client Reference:

Site Reference:

Proceed/Quote: Proceed Quote

Client VO Number:

Edit Client Notification Text:

Last Variation

Allocated: 0.00

Unallocated: 0.00

Date: 26/04/2022

Price:

Expected Revenue:

Budget:

Margin: 0.00

Ext. of Time: Days

Hide Apply Clear
< > ...

From	=	Contains	From
<input type="text"/>			<input type="text"/>
<input type="text"/>			<input type="text"/>

Cost Code	CT	Cost Centre Description	Budget

Field	Description
Description (mandatory)	Full description of the variation. The triangle can be selected to display a drop down text box where a full description can be entered.
Status (mandatory)	Defaults to N Notified. Can be changed to required status.
Date (mandatory)	Date associated with the status. If the status is changed, then the date can be changed to match the status.
Client Reference	Document reference from the client (not mandatory)
Date	Date of client reference
Site Reference	Document reference from project
Date	Date of site reference.
Proceed/Quote	Must be marked Proceed before a variation can be transferred, or any forecasting can be done. If marked Quote, then variation cannot be transferred, and cannot be forecast. The details of resources can be viewed in the PMW by Item, but cannot be changed.
Client VO Number	The number the client has assigned to the variation. Optional
Edit Client Price Submission Detail	If status is W, Selecting the icon displays a screen where the price submission can be prepared. See Price submission below. If status is N, then this displays as Edit Client Notification Text.
Price	Sum of the contract values of the linked Schedule Items. Cannot be overridden.
Expected Revenue	Defaults to the Price, and can be overridden. It Is the value the project contract is updated by if the variation is transferred before it is approved.
Budget	Sum of the budgets of all resources of linked Schedule Items.

Field	Description
Margin	Difference between Price and Budget if variation is approved, and difference between Expected Revenue and Budget if variation is unapproved.
Allocated	Represents the sum of the budgets of all resources of linked Schedule Items.
Unallocated	Represents the difference between the total variation budget, and the sum of budget for all resources.

Actions options are

Option	Description
Delete	Whole variation can be deleted if not linked to any Schedule Items.
Transfer	Used to update the contract value and budget of the project. Changes to untransfer, after variation is transferred. No changes can be made to the variation while in transferred status.
Prior status	If data exists, e.g. values, dates for prior statuses, then these will be displayed in a popup window.
Variation Buildup	This option displays all variation Schedule Items that are linked to the variation, or if no Schedule Items are linked, displays all unlinked variations. It is within this area that new variation Schedule Items can be added and linked to the variation. See Below
Display Budget detail	When Schedule Items are linked to a variation, the budget for the variation is the sum of the budget for all the linked variation Schedule Items summarised at cost centre level. This option will display the details that makes up the budget for the variation.

Variation Buildup

Selecting **Variation Buildup** displays the following screen.

Schedule of Rates Projects

Variation Item Maintenance
ACTIONS OK BACK

Job SORPRO Schedule Of Rates Project

Variation 20001	SOR Variation Description	Direct Cost Budget	8,000.00	Budget Finalised	Y
Section 8000	Variations Section	Overhead Budget	2,000.00	Contract Sum	10,000.00
*Unlinked		Allocated	1,600.00	Budget	10,000.00
		Available	400.00	Margin	

SCHEDULE SEQUENCE NO. DESCRIPTION BUDGET QUANTITIES **MARGIN** OVERHEAD TAGS

Hide Apply < > ...

Variation Status Not Subm Waiting App Approved Partially App Rejected Withdrawn

Contains [] = [] From [] From [] From [] From [] From [] = []

Period MAR22 To [] To [] To [] To [] To []

Item	Description	Hd	Sell Price	Current Budget	Margin	Varn Number	Varn Sts	Varn Date	Varn Trf
B.1	SOR Item		10,000.00	10,000.00					

If no Variation Schedule Items are linked to the variation, then all unlinked Variation Schedule Items are displayed. This is all unlinked Schedule Items in the variation section, nominated in the SOR Parameter.

From this screen, Schedule Items can be linked to the variation, and new Schedule Items can be created in the variation section and linked to the variation.

Variation Item Maintenance
ACTIONS OK BACK

Job SORPRO Schedule Of Rates Project

Variation 20001	SOR Variation Description	Direct Cost Budget	8,000.00	Budget Finalised	Y
Section 8000	Variations Section	Overhead Budget	2,000.00	Contract Sum	10,000.00
*Unlinked		Allocated	1,600.00	Budget	10,000.00
		Available	400.00	Margin	

SCHEDULE SEQUENCE NO. DESCRIPTION BUDGET QUANTITIES **MARGIN** OVERHEAD TAGS

Hide Apply < > ...

Variation Status Not Subm Waiting App Approved Partially App Rejected Withdrawn

Contains [] = [] From [] From [] From [] From [] From [] = []

Period MAR22 To [] To [] To [] To [] To []

Item	Description	Hd	Sell Price	Current Budget	Margin	Varn Number	Varn Sts	Varn Date	Varn Trf
B.1	SOR Item		10,000.00	10,000.00					

- Select
- Extended Description
- Change Section/Item
- Cut
- Copy
- Paste Before
- Paste After
- Delete
- Variation
- Link**
- Unlink

Applicable **Actions** options are

Option	Description
Add New Item	New Schedule Items can be added only to the variation section
Variation Section	Displays a screen that summarises all values associated with the Schedule Items in the Variation section (see below)
Copy Single Item	Allows copy of Schedule Item from the main schedule into the variation section
Bulk Item Copy	Allows copy of a range of Schedule Items from the main schedule to the variation section. NB. If a Parent item and all children are to be copied from the main schedule, then the new Parent item must be setup first in the Variation section. The children are copied from the main section and then linked to the parent.
Show/Hide Child	This can be used to display or hide child items
Spread O/H Budget	If additional (or reduced overhead budget) has been produced by remeasures of Schedule Items that contribute to overhead budget, this option can be used to spread this budget to existing overheads. Selecting this option display the value of main item schedule overheads available for spreading, and the value of variation overhead budget available for overhead. Either of both can be selected for spreading.

The right mouse options are the same as for Item Maintenance, but additional options are displayed to Link or Unlink variation Schedule Items to the variation. The sum of the price of the payitems, and the sum of the budgets for the variation Schedule Items that are linked to a variation are used as the variation price, and the variation budget.

After the appropriate Variation Items are linked to the variation, the option BACK takes you back to the Variation.

Selecting Variation Section

If this is selected, the following screen is displayed.

Similar functions are available in this screen, i.e. add new items or copy items from main schedule.

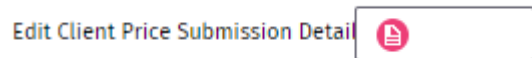
The table at the top of the screen summarises the Contract submission.

Option	Description
Original Cont Value	Sum of Contract Values of all Schedule Items in Main schedule
Quantity Changes	Contract value of re-measures since budget finalization
App Varns (Trans)	Total contract value of approved transferred variations
Unapp Varns (Trans) ER	Total Expected Revenue of un-approved transferred variations
Current Contract Sum	Total of above four items
Linked (Transferred)	Total contract Value of all Schedule Items linked to transferred variations
Linked (Untransferred)	Total contract value of all Schedule Items linked to un-transferred variations
Unlinked	Total value of all unlinked variation Schedule Items.

Variation Price Submission

The system provides the ability to prepare a price submission to the client. The template used to

prepare this is displayed by selecting the icon



on the variation screen.

Options on this screen are

Option	Description
Publish Schedule Item Details	This option will import all the Schedule Items linked to the variation into the screen
Clear All Details	This will clear all details from the screen.
Use Item Totals	This will set the Submitted Price on the Variation screen to the Total price in the worksheet.

Publish Schedule Item Details

If this option is selected all the Schedule Items linked to the variation will be imported into the screen.

There are options within this screen to add heading lines, or insert or copy lines. This information is reproduced on the Price submission form available in Variation documents.

Reports – Schedule of Rates

There are various reports available to assist in the management of Schedule of Rates jobs. They are accessed using the following menu path:

Access Path – Schedule of Rates Reports Menu

Schedule of Rates List

This report prints the item rates for the selected job(s) by item. Report totals are printed for the selected job and section.

Item Details

This report prints the item details for the selected job(s) by item. The Resources (Subitems) for each SOR Item are printed.

Cost Centre Details

This report prints by cost centre, each item and subitem linked to that cost Centre.

F/C Worksheet by Item

This report prints the subitem forecasting information for the selected job(s) by item.

Item Quantities

This report prints the contract, forecast and claimed quantities for the job and item number.

Reports – Earned Budget

There are various reports available to assist in the management of Earned Budget within Schedule of Rates jobs. They are accessed using the following menu path:

Earned Budget – Item

This report prints the budget, forecast final and earned quantities and rates for the job and section. Budget and earned budget totals for the job and section are printed at the end of the report.