



JobCost9

Cost Control

Procedure & Database

OBJECTIVE

The purpose of this document is to describe how to use JobCost9 Cost Control Database as a tool for Project Cost Control.

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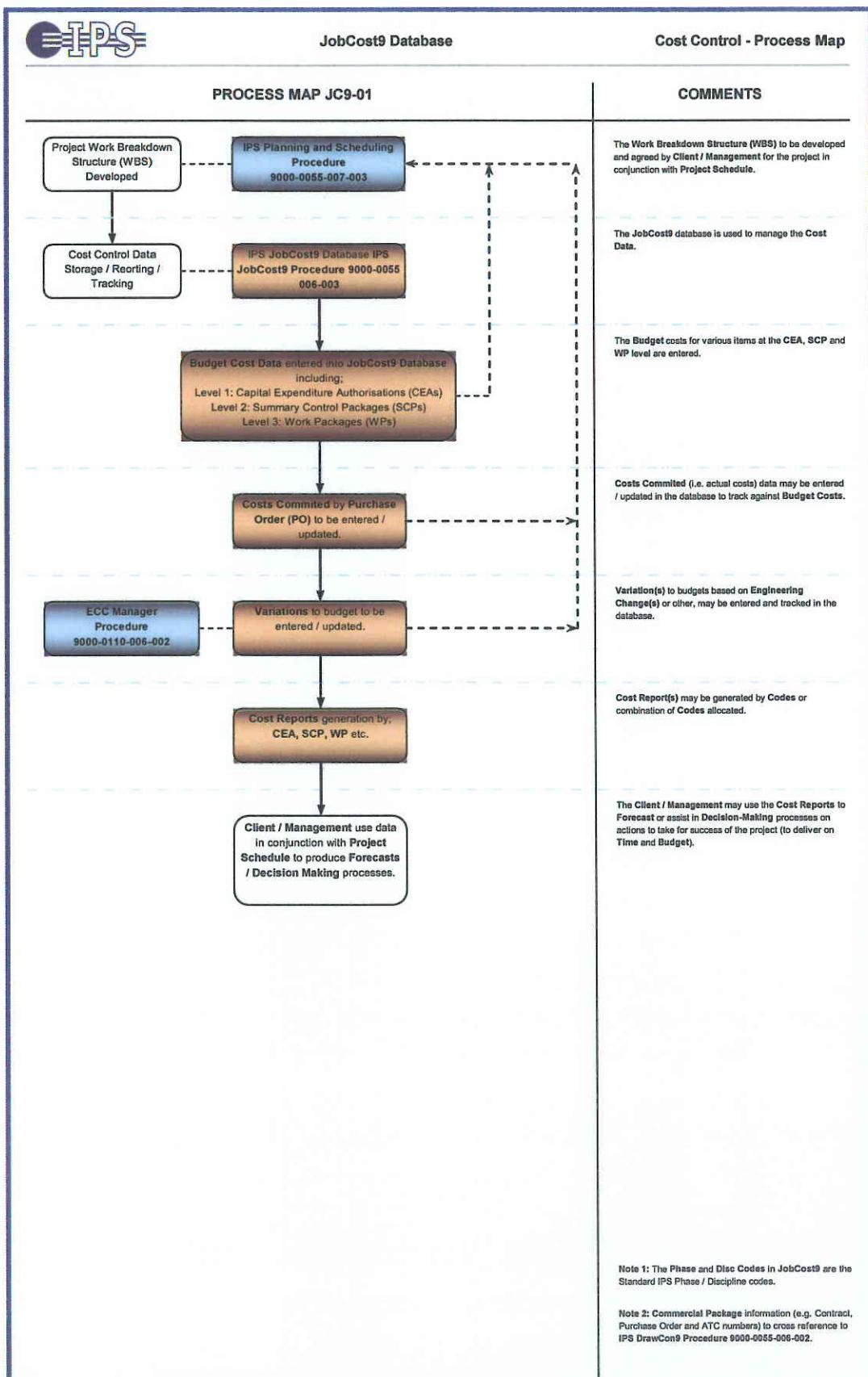
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1.0 PROCESS MAP



2.0 MAIN MENU

The Main Menu page in JobCost9 (see Figure 1) is the main User interface page for using the JobCost9 database system.

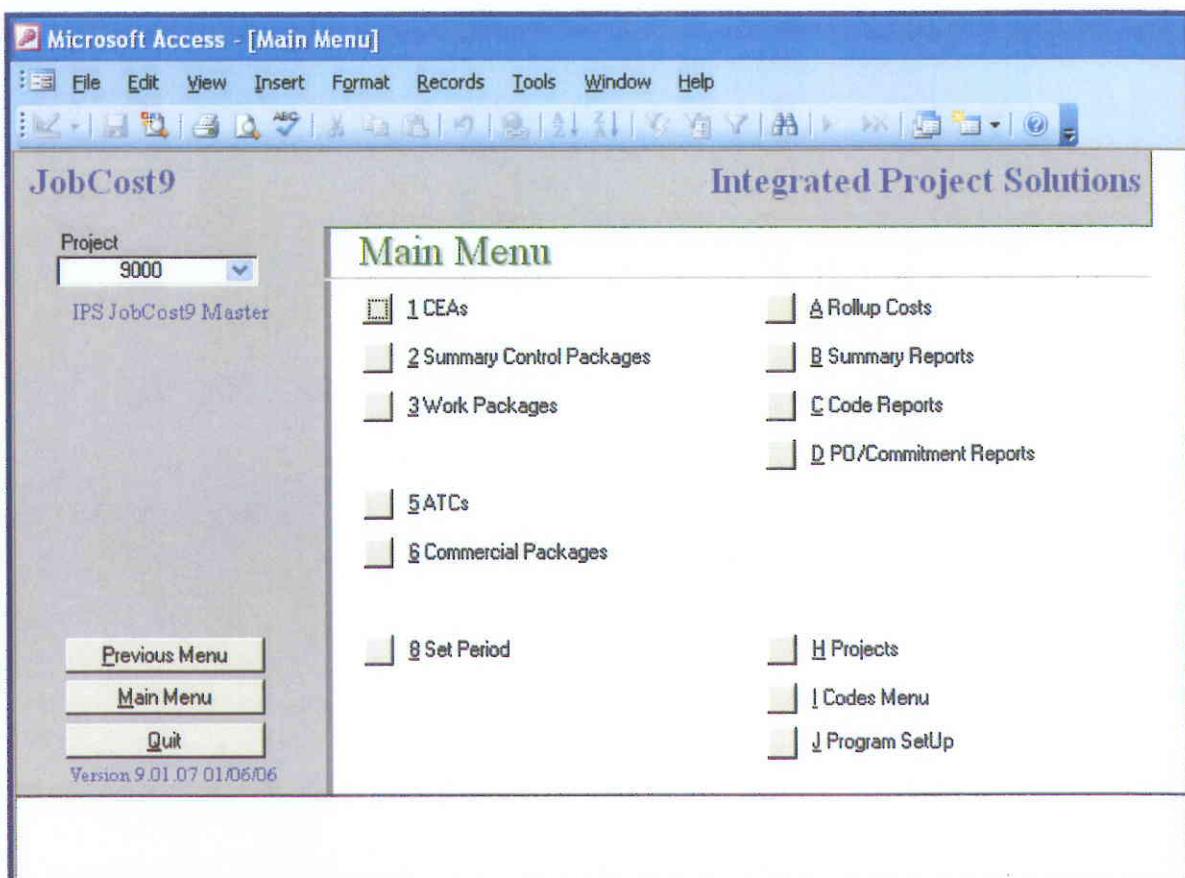


Figure 1: Main Menu Screen Dump

The user will need to establish and agree a **Project Work Breakdown Structure (WBS)** with the Client / Project Manager prior to using the JobCost9 database (see Section 2.1). The WBS must be consistent with the Project Schedule and Progress Reporting Structure. See also IPS Standard 9000-0055-007-003 Project Planning and Scheduling.

2.1 Work Breakdown Structure (WBS)

The **Work Breakdown Structure (WBS)** divides the project scope into hierarchical, manageable, definable packages of work that balance the control needs with an appropriate and effective level of project data. The **WBS** is the central instrument of order and communication in the project. It shall depict the deliverables and work content in a manner in which technical accomplishments can be incrementally verified and measured and provide the conceptual framework for all integrated planning and control of the work.

In the case of **Cost Control**, the **WBS**, similarly to the project schedule, will generally be developed in multilevel layers. Typically, the project will be planned from **Level 1** through to **Level 5** with degree of detail increasing with each progressive level. **Cost Reports** shall be generated at different summary levels based on the **WBS** for reporting to various levels of Management and the Client.



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An Example of a WBS used on a previous project is shown below;

WBS Code	Description	JobCost9 Level	Project Schedule Level
P100	Feasibility	[CEA Group]	Level 1
P100-01	Feasibility Study	[CEA Budget]	Level 2
P100-01-01	Feasibility - Project Management	[Summary Control]	Level 3
P100-01-01-01	Feasibility - Project Management	[Work Package]	Level 4
P100-01-02	Feasibility - Environmental	[Summary Control]	Level 3
P100-01-02-01	Feasibility - Environmental	[Work Package]	Level 4
P100-01-03	Feasibility - Design and Cost Estimates	[Summary Control]	Level 3
P100-01-03-01	Feasibility - Design and Cost Estimates	[Work Package]	Level 4
P100-01-04	Feasibility - Marketing	[Summary Control]	Level 3
P100-01-04-01	Feasibility - Marketing	[Work Package]	Level 4
P200	Preliminaries	[CEA Group]	Level 1
P200-01A	Project Management - Other	[CEA Budget]	Level 2
P200-01-02	PM - Travel	[Summary Control]	Level 3
P200-01-02-01	PM - Travel Overseas	[Work Package]	Level 4
P200-01-02-02	PM - Travel Expenses Overseas	[Work Package]	Level 4
P200-01-02-03	PM - Travel Australia	[Work Package]	Level 4
P200-01-02-04	PM - Travel Expenses Australia	[Work Package]	Level 4
P200-01-02C	PM - Travel - Contingency	[Summary Control]	Level 3
P200-01-02C-01C	PM - Travel - Contingency	[Work Package]	Level 4
P200-01-03	PM - Third Party Inspections	[Summary Control]	Level 3
P200-01-03-01	PM - Third Party Inspections - Non Local	[Work Package]	Level 4
P200-01-03-02	PM - Third Party Inspections - Local	[Work Package]	Level 4
P200-01-03C	PM - Third Party Inspections -	[Summary Control]	Level 3
P200-01-03C-01C	PM - Third Party Inspections - Contingency	[Work Package]	Level 4
P200-01-04	PM - Legal & Statutory Fees	[Summary Control]	Level 3
P200-01-04-01	PM - Consultants	[Work Package]	Level 4
P200-01-04-02	PM - Legal Fees	[Work Package]	Level 4
P200-01-04-03	PM - Statutory Fees	[Work Package]	Level 4
P200-01-04C	PM - Legal & Statutory Fees -	[Summary Control]	Level 3
P200-01-04C-01C	PM - Legal & Statutory Fees - Contingency	[Work Package]	Level 4
P200-01-05	PM - Insurance	[Summary Control]	Level 3
P200-01-05-01	PM - Insurance	[Work Package]	Level 4
P200-01-05C	PM - Insurance - Contingency	[Summary Control]	Level 3
P200-01-05C-01C	PM - Insurance - Contingency	[Work Package]	Level 4
P200-01-06	PM - CSBP Internal Costs (Salaries &	[Summary Control]	Level 3
P200-01-06-01	PM - CSBP Internal Costs - Salaries	[Work Package]	Level 4
P200-01B	Project Management - IPS	[CEA Budget]	Level 2
P200-01-01	PM - Management	[Summary Control]	Level 3
P200-01-01-01	PM - IPS Project Management	[Work Package]	Level 4
P200-01-01C	PM - Management - Contingency	[Summary Control]	Level 3
P200-01-01C-01C	PM - Management - Contingency	[Work Package]	Level 4
P200-02	Site Establishment	[CEA Budget]	Level 2
P200-02-01	Site Establishment	[Summary Control]	Level 3
P200-02-01-01	Construction Offices	[Work Package]	Level 4
P200-02-01-02	Construction Offices Fitout	[Work Package]	Level 4
P200-02-01-03	Security Infrastructure	[Work Package]	Level 4
P200-02-01-04	Offices Cleaning / Utilities during	[Work Package]	Level 4
P200-02-01-05	Access Roads, Carparks, Fencing	[Work Package]	Level 4
P200-02-01-06	Site Establishment - Miscellaneous	[Work Package]	Level 4
P200-02-01-07	Computers - IT	[Work Package]	Level 4
P200-02-01-08	Construction Offices Consumables	[Work Package]	Level 4
P200-02-01-09	Security - Hire of Personnel	[Work Package]	Level 4
P200-02-01C	Site Establishment - Contingency	[Summary Control]	Level 3
P200-02-01C-01C	Site Establishment - Contingency	[Work Package]	Level 4



3.0 CEAs

The 1 CEAs (Capital Expenditure Authorisations) function can be selected from the Main Menu page in JobCost9 (see Figure 2), and is a High Level Budget cost control interface. The CEA High Level Budget is made up of a number of Summary Control Packages (see Section 4.0) which in turn can be made up of a number Work Packages (See Section 5.0) in which Purchase Orders (POs) may be raised for committing funds.

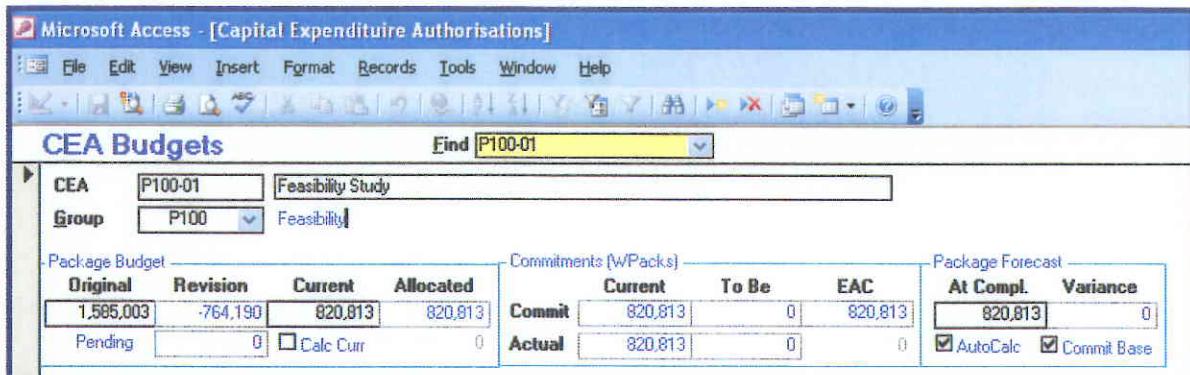


Figure 2: CEA Budgets Screen Dump

CEA's are created by typing in a CEA Code and a Description, then allocating to a CEA Group from the drop-down list. The CEA Group may be considered Level 1 of the WBS and the CEA Level 2.

NOTE: The CEA Group coding is accessed through;

Main Menu→ | Codes Menu→ 1 CEA Groups (See Section 14.1)

The Package Budget for the CEA is entered on this page in the Original cell. The Budget may be a known value or estimated value. This is the high level Baseline Budget for the project. The JobCost9 database automatically re-calculates the Revised cell based on Engineering Change Controls / Variations that may be encountered during the project. These are discussed in other sections of this procedure. The Current cell is the calculated, Current Budget and the Allocated cell is the calculated costs summing up the Summary Packages and Work Packages sitting at the levels below.

The Commitments (WPacks) cells for the CEA are calculated based on committed costs data entry at the Work Package level.

The Package Forecast cells calculates a Forecast At Completion cost and Variance to Original Budget.

In the bottom half of the page, there are three (3) tabs the user may choose to access / amend cost data, these are;

- i) **Packages:** This lists the Summary Control Packages (or next level down of cost data for a CEA Budget). The Summary Control Package Code, Description, Current Budget, Committed funds, Actual funds, Forecast funds etc. are listed here.



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Microsoft Access - [Capital Expenditure Authorisations]

CEA Budgets Find P100-01

CEA P100-01 Feasibility Study
Group P100 Feasibility

Package Budget Commitments (wPacks) Package Forecast

Original	Revision	Current	Allocated	Commit	To Be	EAC	At Compl.	Variance
1,585,003	-764,190	820,813	820,813	820,813	0	820,813	820,813	0
Pending		0	<input type="checkbox"/> Calc Curr	0		0		
				Actual	820,813	0		

Packages ATCs Budget Changes

Package	Descript	Budget	Commits	Actual	Forecast	BC
P100-01-01	Feasibility - Project Management	412,546	412,547	412,547	412,546	
P100-01-02	Feasibility - Environmental	163,404	163,404	163,404	163,404	
P100-01-03	Feasibility - Design and Cost Estimates	99,472	99,472	99,472	99,472	
P100-01-04	Feasibility - Marketing	145,391	145,391	145,391	145,391	
*						

Record: 1 of 4

Figure 3: CEA Budgets - Packages Screen Dump

- ii) ATC's: This function will not be used.

Microsoft Access - [Capital Expenditure Authorisations]

CEA Budgets Find P100-01

CEA P100-01 Feasibility Study
Group P100 Feasibility

Package Budget Commitments (wPacks) Package Forecast

Original	Revision	Current	Allocated	Commit	To Be	EAC	At Compl.	Variance
1,585,003	-764,190	820,813	820,813	820,813	0	820,813	820,813	0
Pending		0	<input type="checkbox"/> Calc Curr	0		0		
				Actual	820,813	0		

ATCs Budget Changes

ATC	Descript	Current	Actl TD	Comm TD	At Compl.	CEA
						P100-01

Record: 1 of 1

Figure 4: CEA Budgets - ATCs Screen Dump



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- iii) **Budget Changes:** This lists the Budget Changes at the CEA Budget level (see Figure 5). The Contract Variation Number (CVNo.), Date, Value, Type, Description and Reference Number (i.e. ECC Number) are listed here. The variation cost is re-calculated in the Revision cell under the Package Budget section.

The RefNo cell will be used to enter the Engineering Change Control (ECC) number, (e.g. EC-001) attained from ECC Manager (see IPS Procedure 9000-0110-006-002).

The screenshot shows a Microsoft Access database window titled "Microsoft Access - [Capital Expenditure Authorisations]". The main title bar has "File Edit View Insert Format Records Tools Window Help". Below the title bar is a toolbar with various icons. The main area is titled "CEA Budgets" with a search bar "Find P100-01". There are two dropdown menus: "CEA" set to "P100-01" and "Group" set to "P100 Feasibility".

The interface is divided into several sections:

- Package Budget:** A table with columns "Original", "Revision", "Current", and "Allocated". It shows values: Original 1,585,003, Revision -764,190, Current 820,813, Allocated 820,813. Below this is a "Pending" row with value 0.
- Commitments (wPacks):** A table with columns "Commit", "Current", "To Be", and "EAC". It shows Commit 820,813, Current 820,813, To Be 0, EAC 820,813. Below this is an "Actual" row with value 820,813.
- Package Forecast:** A table with columns "At Compl." and "Variance". It shows At Compl. 820,813 and Variance 0.
- Buttons:** "AutoCalc" and "Commit Base" with checked checkboxes.

Packages ATCs Budget Changes: A table with columns CVNo, Date, Value, Pending, Draft, Type, Description, and RefNo. It contains two rows:

- Row 1: CVNo P100-01, Date 18/04/2006, Value -764,190, Pending 0, Draft 0, Type T, Description Transfer to CSBP Internal Costs, RefNo blank.
- Row 2: CVNo P100-02, Date 10/06/2009, Value 0, Pending 0, Draft 0, Type T, Description blank, RefNo blank.

Navigation: Record navigation buttons at the bottom left.

Figure 5: CEA Budgets – Budget Changes Screen Dump

At the bottom of the CEA Budgets page, the User has the ability to scroll to next or previous CE Budget pages by pressing the left and right arrow buttons (see Figure 6).



Figure 6: CEA Budgets – Bottom Screen Dump

The CEA Budget page may be automatically printed by selecting the Printer Caption button.

The Exit button may be selected to return to Main Menu page.

The ReCalc button may be selected following new data entry to ensure the database updates automatic calculation cells (i.e. typically those figures in blue text).

The CEA Form button may be selected to view the data in a Form format for printing and sign-off (see Figure 7).