# InterAcct for Trailer Manufacturing

Why *InterAcct?*

☑ **Bill of Materials**   Multi-Level - Sub Assemblies

☑ **Production Processes**   Labour and Machine Capacity Planning

☑ **OH&S & QC**   Safety and Quality Control considerations

☑ **Document Register**   Link to drawings, specifications, and Photos

☑ **Production Jobs**   Automatic job accounting processes

☑ **Vin, Hin, Serial Numbers**   This modified version of the Manufacturing system allows for VIN number creation.

☑ **Custom BOM**   Bills of materials can have items swapped out, like Tyres, this will affect the end sell price to the customer.

InterAcct

Your Company

Manufacturing

The Perfect Fit
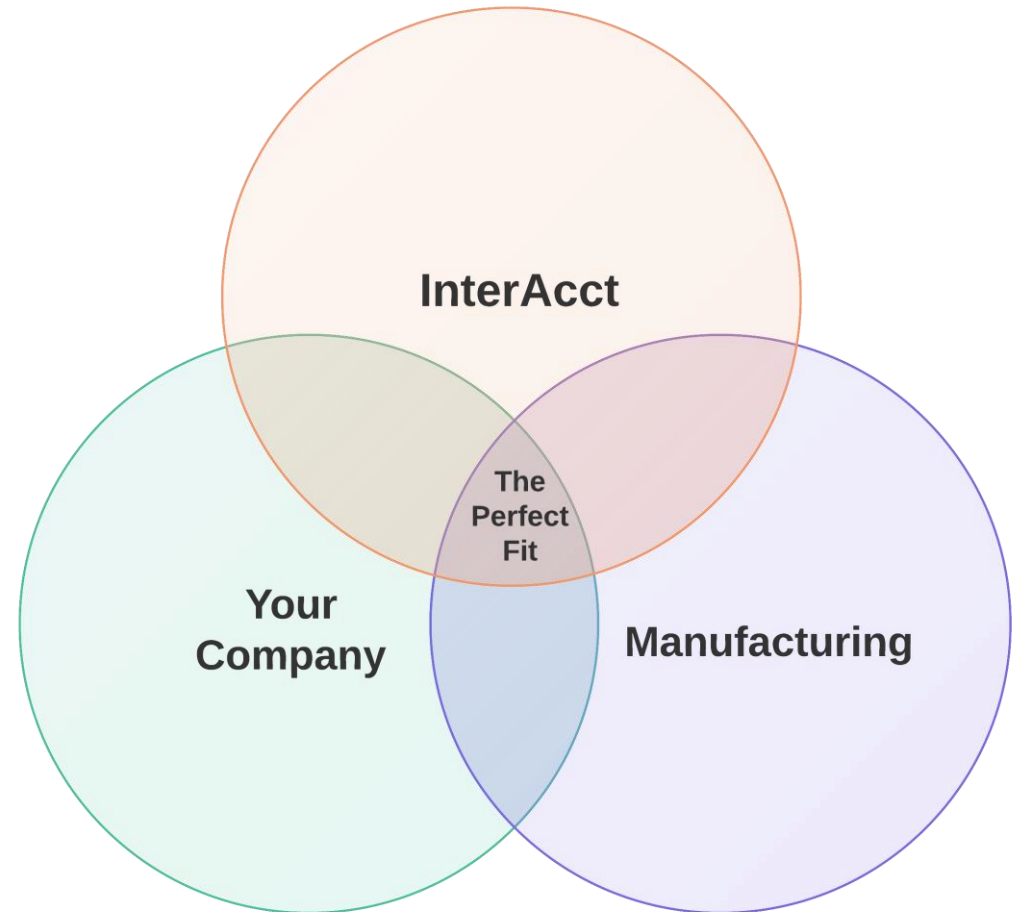
Manufacturing- Bill of Materials

A Three simple steps to get started to create your Bill of Materials

B Production jobs can be to satisfy Sales Backorders or for Stock

C Gross and Net Material requirements are shown

Manufacturing Flow Chart

'InterAcct offers two options of a full Manufacturing system, and/or a simple production system'
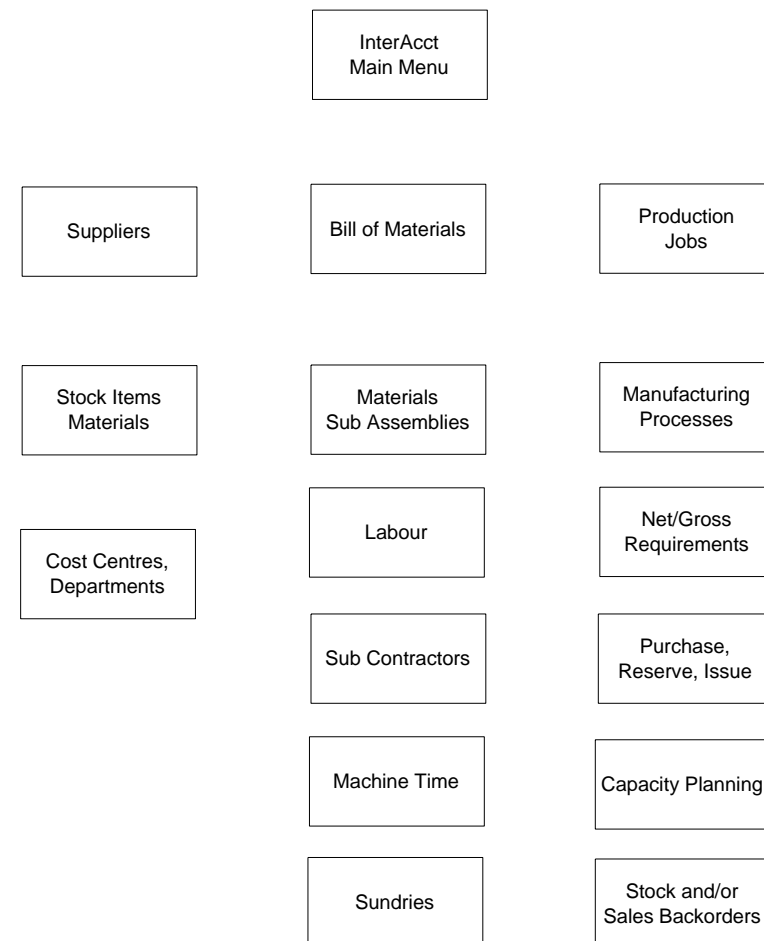
Bill of Materials:
Material requirements, labour, machines, sub-contractors, and sundries

Production:
Net and Gross Material Requirements, purchasing, reserve stock, auto issue

Fully Automatic Option:
Based on the actual finished product produced - post all related cost factor accounting transactions

	InterAcct Main Menu	
Suppliers	Bill of Materials	Production Jobs
Stock Items Materials	Materials Sub Assemblies	Manufacturing Processes
Cost Centres, Departments	Labour	Net/Gross Requirements
	Sub Contractors	Purchase, Reserve, Issue
	Machine Time	Capacity Planning
	Sundries	Stock and/or Sales Backorders

Key Features & Advantages

	Feature :	Advantage :	Base?
Same model, different options	One manufactured product might have a number of optional products that can be swapped in or out, either affecting the price or not.	You don't need to setup a different bill of material item for just changing the plug types or even tyres, or even colour preferences.	Option
Vin/Hin/Serial Number Allocations	If you want the system to automatically allocate VIN numbers or serial numbers when orders are created it can.	Removes errors and need to log or allocate the numbers outside of the system.	Option
Make Instructions	Free format notes area	Prints on reports	Option
Quality Control	Tests and results required	Maintain tight quality control factors	Option
Drawings, Photos	Link to various related documents	View drawings, specification documents, etc.	Option
Sales or Stock	Production jobs can be linked to sales backorders, and/or for stock replenishment	Update sales order of when production expected to be complete	Option
Net Requirements	The system calculates the gross and net material requirements	Also shows a cutting list (from sheets)	Option
Purchase	Can create auto purchase orders for Materials	Reduce admin time	Option
Reserve Stock	Can reserve stock for future production jobs	Make sure materials are available when required	Option
Multi-Level	A Bill of Materials can be created with product material items and sub-assemblies	Sub-Assemblies may also be multi-level and have their own Bill of Materials	Option
Check Available	Can check when all materials are now available to be issued - so that production can start	What remains to be received?	Option
Auto Issue	Can process stock issues of materials to the production job automatically	Reduce admin time	Option

Screen 1: Setup Supplier Database

Supplier Database:

Before you can add details on your Materials (Products) and create your Bill of Materials, you must first set up the database of your Suppliers.

- ✓ You can view a list of product/materials by Supplier
- ✓ Suggested re-order reporting is also by Supplier and product

Screen 2: Setup Materials, Sub Assemblies, Products

Products/Materials Database:
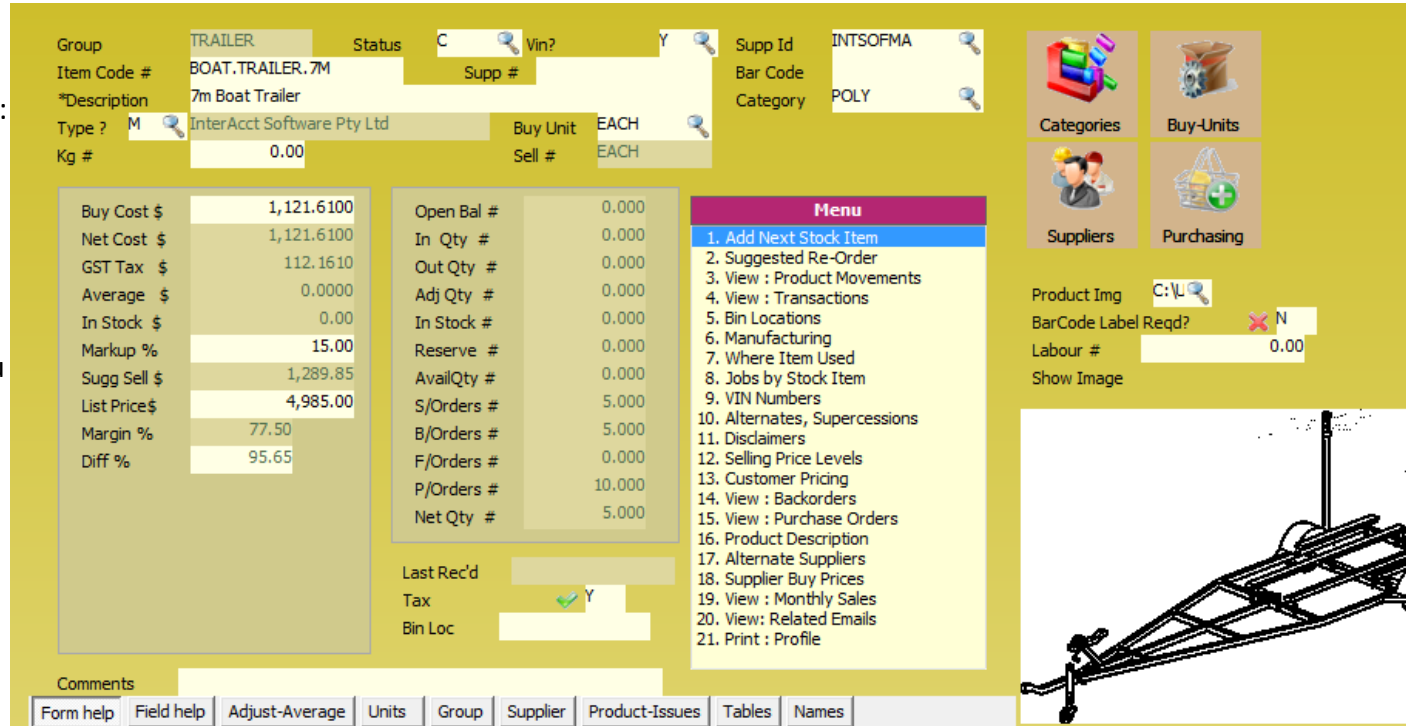
The second step is to create your database of:

- ✓ Materials
- ✓ Sub-Assemblies
- ✓ Finished Products

For those products that are made by you (you are the default Supplier), you can view:

- ✓ Bill of Materials (Manufacturing)

For material component products you can view where that material is used in a Bill of Materials

Screen 3: Bill of Materials

A Items can be marked as being Optional, allowing them to be added or removed when ordered

B Spoilage and Quantities can be entered into the materials

C When calculating costs for production, you are able to enter in how many items this is based on producing. Useful for small sub assemblies that might have small production times and costs.

D Instructions, drawings and notes can be stored under the BOM, as well as reports printed.

Screen 4: Materials Required

Materials Required:

Materials can include both purchased and made (sub-assemblies).

Units of measure might include :

- ✓ Each
- ✓ Square (M2)
- ✓ Cubic (M3)
- ✓ Linear (eg 3/1.2, 4/6.5,)

It shows the current stock on hand position, and what might be required to purchase to make the production quantity

Screen 5: Materials Required- Sheets Cut- Spoilage

Cut Sheets:

InterAcct provides for cutting from a length or sheet.

To aid in optimizing the lowest spoilage %, it calculates how many of a certain size sheet will be required for a cut out size and the maximum that can be cut from a single sheet.

Screen 6: Sundry Costs

Sundry Costs:

There is the option to calculate overheads based on your direct labour, or across all cost items.

In addition, you can add sundry costs (such as packaging) on either a fixed or variable cost basis.

Screen 7: Production Job- Stock/Sales Orders

Production Jobs:

A job is created when you wish to schedule production, or indeed plan on what materials may need to be purchased for a future job.

A production job may be required to:

- ✓ Satisfy one or more customer sales backorders, and/or
- ✓ For stock replenishment

Screen 8: Manufacturing Processes

Manufacturing Processes:
Under the production job, this is the central menu that controls all the processes:

- ✓ Create the job estimate. Copies the Bill of Materials over and multiplies the job production quantity to calculate gross and net material requirements
- ✓ Auto raise purchase orders for materials
- ✓ Auto raise Works Orders for Sub Contractors
- ✓ Check when all materials are in stock
- ✓ Auto Issue materials from stock

You can also view the Operations Summary to see :

- ✓ Labour requirements - resource planning
- ✓ Machine requirements - capacity planning

Screen 9: Sales Order Entry

Sales Order Entry with VIN Allocation

When sales are made, the system can automatically allocate VIN numbers to the trailers based on your annual allocation :

- ✓ Possible to have different VIN number ranges for different products or groups of products.
- ✓ Details for VIN plates can be stored in the system and brought through to each VIN number. These can be modified if needed where the trailer has changes made to it. These details might include Tare Weight, Aggregate Trailer Mass and cold tyre pressure.

You can have multiple deliveries, discounts, price levels and buy breaks setup on product items.

Screen 10: Modified Sales Order

Sales Order Entry Modified BOM

When made items are ordered you can:

- ✓ Add any items to the BOM, adding to the sell price of the finished product.
- ✓ Remove any items marked as optional, reducing the sell price of the finished product
- ✓ Apply discounts to the items
- ✓ Create a bill of materials job automatically
- ✓ Print job work tickets
- ✓ Cancel order lines, if needed
- ✓ Enter in Order notes on delivery details or customer requests.

Report: Multi Level by Operation

Reports can be personalised to suit a customer's requirements

This is an example of the BOM report in the standard system, that displays multiple levels (Sub-Assemblies) and the items required for these. So the line starting with 3 has 4 lines under it 3.1-3.4 that show the costs for the Axel.

Selected Printer : HP Universal Printing PCL 6   **Selected Tray :** Automatically Select

BILL OF MATERIALS : 7m Boat Trailer

| Stock Code: | BOAT.TRAILER.7M | Total Cost : | $ 1121.61 | Date Printed : | 28/08/2015 | Page : 1 |
| Stock Group : | TRAILER | Total Sell : | $ 3163.14 | Time : | 3:54:13 PM | Based on Qty : 1 |

		Code	Unit #	Qty:	Unit Cost $	Cost $	Sell $	Available #
	Cutting Materials to Size	BOAT.TRAILER.7M						
1	Standard Labour	STANDARD	Hours	0.4667	47.50	22.17	32.67	
2	.....Frame 7.0M	BOAT-70WB-1900-O2T	EACH	1.0000	543.3900	543.39	1725.00	0
	.... Set Up for Jobs for BOAT-70WB-1900-O2T							
2.1	...........Leading Hand	L/HAND	Hours	2.0000	40.00	80.00	130.00	
2.2	...........Chain AS 4177 13mm Galv	CH4177-13-G	METRE	2.7940	13.0000	41.91	63.06	-1.210
2.3	...........Light Bracket Large Left Hand Side MS-250-04.0mm	FP-LLB-LHS	EACH	2.0000	13.3506	7.00	0.00	-7.000
2.4	...........Light Bracket Large Right Hand Side MS-250-04.0mm	FP-LLB-RHS	EACH	2.0000	18.4950	7.00	0.00	-7.000
	.... Welding for BOAT-70WB-1900-O2T							
2.5	...........Tradesperson	TRADES	Hours	1.1333	30.00	34.00	62.33	
3	.....1265 mm axel	AXEL-1265M	EACH	1.0000	373.0000	373.00	945.00	0
	.... Assembly for AXEL-1265M							
3.1	...........Leading Hand	L/HAND	Hours	8.0000	40.00	320.00	520.00	
3.2	...........Hub Lazy FORD Galv Kit SL Bearing Marine Seal	HL-FDGK-SL	EACH	1.0000	14.5000	18.72	25.95	830.000
3.3	...........HubPro Bearing Viewer/Grease Inspection Window Cap	HUBPRO	EACH	1.0000	58.0820	10.00	13.64	-82.000
3.4	...........Axle EasyLube 39mm Rnd x 1250mm LM Galv	AXEL-39R-1250	EACH	1.0000	33.0000	37.27	81.67	20.000
	Operation Assembly Total					**578.07**	**929.32**	
	Bending Small Tube Bender Ercolina	BOAT.TRAILER.7M						
4	Standard Labour	STANDARD	Hours	0.4167	47.50	19.79	29.17	
5	.....Wheel 14in Galvanisd	W14G-185LT-FD	EACH	1.0000	73.8913	65.03	175.00	4.000
	.... Assembly for W14G-185LT-FD							
5.1	...........Standard Labour	STANDARD	Hours	0.0167	47.50	0.79	1.17	
5.2	...........Rim Galvanized 14in	RG-14SP-FD	EACH	1.0000	21.6306	27.85	48.52	192.000
5.3	...........Wheel Valve Stem	WVSTEM	EACH	1.0000	0.3263	0.50	1.54	1,956.000
5.4	...........Tyre 14in 185	TY14-185LT-8	EACH	1.0000	41.7259	45.00	95.91	40.000
6	.....Winch Post 100x50x750mm	FWPOST-10050-20-75	EACH	1.0000	18.0295	18.38	65.00	20.000
	.... Welding for FWPOST-10050-20-75							
6.1	...........Standard Labour	STANDARD	Hours	1.6667	47.50	79.17	116.67	
6.2	...........Winch Post Leg 100x50x750 20deg	WPL-50100-750	EACH	1.0000	6.9300	6.93	0.00	12.000
	.... Cutting Small Saw for WPL-50100-750							
6.2.1	...............Standard Labour	STANDARD	Hours	0.0100	47.50	0.48	0.70	
6.2.2	...............RHS 100mm X 50mm X 3mm 8M Length	STRHS10053.08	METRE	0.7500	79.2351	7.03	168.75	6,949.248
	.... Vent Holes Rotary Notcher for WPL-50100-750							
6.2.3	...............Standard Labour	STANDARD	Hours	0.0020	47.50	0.10	0.14	

Report: Bill of Materials

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ABN : 47 003 411 658

BILL OF MATERIALS : Sample Finished Good Item (Manufactured)

	Based on Qty 1		Page : 1
Stock Code : FG-ITEM	Total Cost $ 2375.58		Printed : 07/04/2015
Stock Group : MAKE.FG	Total Sell $ 3704.16		: 1:02:35 PM

Stock Required

Product Description	Units	Net Qty	Waste %	Req Qty	Unit Cost$	Cost $
25MM 2x INSULATED LOW SMOKE 100M Roll	LM	6.6000	5.00	6.6000	6.8939	45.50
Pull Handle for Drawer	LM	14.6000	0	14.6000	9.9000	144.54
Gravity Roller Conveyor, 464mm	EACH	3.0000	0	3.0000	182.6088	547.83
HardieFlex Sheet 4.5MM – 2400 X 900	M2	4.3200	0	4.3200	18.5400	80.09
BAC Trolley, 1025 X 1010 X 755 (600 Usable)	EACH	2.0000	0	2.0000	435.1000	870.20
Total for Stock Required						$ 1,688.16

Operation Costs - Labour/Machines/Subbies

Order	Operation Cost Description	Labour				Subbies		Machines				
		People	Mins	Hours	Cost $	Supplier	Cost $	Run	Setup	SetDown	Hours	Cost$
005	CAD Design Phase											
	CAD	1	90.00	1.5000	52.50							
010	Prepare for Production											
	L/HAND	1	15.00	0.2500	10.00							
020	Cut Materials to Length											
	F/HAND	2	180.00	6.0000	180.00							
	TEST-MAC							180.00	15.00	15.00	3.50	70.00
040	Finish Material Items											
	FABRICATE using ADETURAR					FABRICATE	150.00					
050	Assemble Item											
	APPRENT	2	60.00	2.0000	56.00							
	TEST-MAC							60.00	10.00	10.00	1.33	26.67

Report: Production Job- Cutting List

100452 : 7m Boat Trailer

Production Job No : **100452**
Stock Code : BOAT.TRAILER.7M
Stock Group : TRAILER

Based on Qty 10

Page : 1
Printed 31/08/2015
: 3:01:30 PM

Stock Required for

Product Description	BOM Qty	Available	Order Qty	Make Qty
1265 Mm Axel	30.000*	0.0000		30.0000
Frame 7.0M	30.000*	0.0000		30.0000
Winch Post 100x50x750mm	30.000*	20.0000		10.0000
Wheel 14in Galvanisd	60.000*	4.0000		56.0000
Chain AS 4177 13mm Galv	55.880	-1.2100	57.0900	
Light Bracket Large Left Hand Side MS-250-04.0MM	40.000	-7.0000	47.0000	
Light Bracket Large Right Hand Side MS-250-04.0MM	40.000	-7.0000	47.0000	
ANGLE 75mm X 50mm X 5mm 9M Length	144.000	40.3930	103.6070	
RHS 50mm X 25mm X 2.5MM 8M Length	290.400	270.2350	20.1650	
RHS 75mm X 50mm X 2.5MM 8M Length	259.200	-308.2050	567.4050	
RHS 100mm X 50mm X 3mm 8M Length	355.000	6949.2480	0.0000	
SHS 50mm X 50mm X 2.5MM 8M Length	40.000	-288.1120	328.1120	
SHS 100mm X 100mm X 4mm 8M Length	62.640	7.7120	54.9280	
Rim Galvanized 14in Spoked Ford	40.000	192.0000	0.0000	
Tyre 14in 185 R14 LT 8ply 840kg Load Rating	40.000	40.0000	0.0000	

InterAcct Pricing (Per User)

Users	Base InterAcct	Manufacturing Bill of Materials (A)	Prodn Scheduling (B)	Sales Order Entry (B)
1	$1,500 (15-25)	+ $500 (10)	+ $350 (5)	+ $350 (5)
2-3	$1,000 (20-30)	+ $500 (10)	+ $350 (5)	+ $350 (5)
4	$750 (20-30)	+ $375 (10)	+ $250 (5-8)	+ $250 (5 - 8)
5-9	$600 (25-35)	+ $300 (10-15)	+ $200 (5-8)	+ $200 (5 - 8)
10-19	$500 (30-40)	+ $275 (10-15)	+ $175 (5-8)	+ $175 (5 - 8)
20-49	$400 (40-60)	+ $250 (10-15)	+ $150 (10-15)	+ $150 (10 - 15)
50+	$350 (50-75)	+ $230 (15-25)	+ $130 (10-20)	+ $130 (10 - 20)

Software Pricing

Software Pricing is per Computer Network "User" as defined in the above table. The optional software modules (eg, Job Cost Estimating) require the Base InterAcct as well, and are purchased based on the number of base Network Users. Prices are all ex GST.

+ Annual Support Pricing

Yearly support is calculated at 20% of purchase price, with no CPI annual increases. Support is reduced by 30% after 3 years. For example a single User (with just the base InterAcct) would be ($1,500 x 20%) = $300

+ Implementation & Training Budget

The (Number) denotes the estimated min/max hours of Implementation & Training required in the budget per installation / module (not per User). Implementation / training "Advanced" is currently charged at the average rate of $160 per hour.

Modules

There is a wide variety of software modules available for purchase, talk to InterAcct staff about your specific software needs.

Request a Cost Estimate:

InterAcct Software Pty Ltd

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Email:	sales@interacct.com.au	**Web:**	http://www.interacct.com.au