

BarnOwl & Arbutus

**Fully integrated risk management,
compliance, audit and data analytics
software**



BarnOwl background

- [BarnOwl](#) is a fully integrated governance, risk management, compliance and audit software solution which can be implemented in a modular fashion.
- IDI Technology Solutions (Pty) Limited (IDI) is a local company founded in 2002 and based in Johannesburg with a 20 year track record.
- IDI are the sole developers, owners, distributors and implementers of the BarnOwl software.
- The BarnOwl solution is used by over 150 clients in South Africa, Africa and abroad.
- BarnOwl is the preferred Risk Management software solution for the Public Sector endorsed by the OAG (Office of the Accountant General).

Why BarnOwl GRC & Audit

<p>Fully integrated risk, compliance and audit software solution</p>	<ul style="list-style-type: none"> • State of the art (database centric) “off-the-shelf” integrated software solution • Embedded best practice (ISO31000, COSO, GACP, IPPF frameworks, King IV, National Treasury) • Functionally rich • Local compliance content available • Integrated risk & control based auditing • Online / Offline • Facilitates combined assurance
<p>Flexibility with ease of use</p>	<ul style="list-style-type: none"> • Highly configurable • Parameter-driven system • Allowing you to work the way you want to work
<p>Flexible reporting and graphical drill-down dashboards</p>	<ul style="list-style-type: none"> • All registers with drag & drop, sort, group, filter, save favourite views with export into Excel • Risk, Compliance and Audit report builder enabling you to extract data easily in ‘flat-file’ format exported to Excel • MS Word writer / integration for final audit reporting and audit committee reporting • MS Excel and MS Word integration supporting ‘prepare’, ‘review’ and ‘sign off’ • Business intelligence reporting with graphical drill-down, slice & dice dashboards: risk & control, key indicators, incidents, resource management, findings analysis, root cause analysis etc.
<p>Owned, developed, implemented and supported locally in SA</p>	<ul style="list-style-type: none"> • One team taking full accountability for successful implementation • Totally responsive to your ongoing requirements and • Unrivalled support
<p>Tried and tested</p>	<ul style="list-style-type: none"> • 20 year track-record with over 150 clients • Highly qualified and experienced team • Extensive client experience adding additional value • Guarantee success
<p>Best Value for money</p>	<ul style="list-style-type: none"> • Rand based • Bundled licensing: Risk includes Compliance, Audit includes Risk & Compliance, includes Incident Management, Workshop module, Key Indicators (KI) and Open license • Web-based portal (intranet) free to unlimited users for action plans, surveys / checklists, voting (risk & control self-assessments) and KI capture



Arbutus background



Who is Arbutus

- Arbutus was started by Grant Brodie, co-founder of ACL Services Ltd., to meet the diverse and challenging requirements of audit and other business professionals in performing enterprise-wide testing of organisational data. With a reputation for outstanding customer service, strong product support, and flexible licensing, Arbutus is not only the most technically advanced but, also the best value you will find anywhere in the industry.
- 2003 -2013 providing IT solutions: Data Migration/Data Quality/Data Access (ACL No compete)
- Lead with technology: Believe that better technology will yield better results
- Philosophy - Develop software for users - not to sell more licenses on more platforms
- Approach – Audit data analytics, this is what we do and this is all we do



[Arbutus data analytics](#) locally distributed by [Beta Software \(a proud subsidiary of RSM South Africa\)](#)

is arguably the most powerful Data Analytics software on the market.



Why Arbutus

Most advanced data analytical software	<ul style="list-style-type: none">• Developed by auditors for auditors• Solely focused on data analytics• Advanced & unique functionality
Solid and stable technology	<ul style="list-style-type: none">• Desktop & server on same platform• In use for over 25 years• User orientated, driven by deep technical requirements• Used by more departments
Designed to support continuous audit	<ul style="list-style-type: none">• Unique & advanced sharing• Real time comms with SQL based databases• Windows, mainframe, AS400, Linux servers• Advanced SAP connector
Best licencing options in market	<ul style="list-style-type: none">• Perpetual• Subscription• Network
Most economical in market	RSA discount for switching – 50% on perpetual Both software and support in perpetuity

Arbutus Analytics

Arbutus Analytics | Platform

The Engine That Powers Change



Why BarnOwl with Arbutus

- BarnOwl together with Arbutus offers a fully integrated risk management, compliance, audit management, issues management and data analytics software solution.
- BarnOwl integrated with Arbutus provides a real-time, strategic early warning system informed by continuously updated key indicators in support of continuous risk monitoring.
- The ability to integrate strategy with risk management with top-down strategic objective linking supported by key performance indicators (KPIs). A top-down approach determines the analytic.
- The ability to set and monitor risk appetite at every level of the organisation.
- Embed risk management with action plans and risk & control self-assessments (RCSAs) enabling combined assurance reporting across the multiple lines of defence.
- Real-time dashboards driving preventative and predictive capability.

Why BarnOwl with Arbutus

- Arbutus Audit Analytics provides auditors, business analysts, and fraud investigators with the very best in data analysis technology.
- Arbutus is not only the most technically advanced data analytics tool, but also the best value you will find anywhere in the industry.
- BarnOwl is a locally (South Africa) owned, developed, implemented and supported software solution guaranteeing superior and cost effective ongoing support.
- Arbutus data analytics is locally distributed and supported by Beta Software (a proud subsidiary of RSM South Africa).

- [Arbutus / BarnOwl integration part #1](#)
- [Arbutus / BarnOwl integration part #2](#)

Continuous risk measurement through Data Analytics

- Risk indicators resides within data records.
- Each record carries a wealth of information that can on its own, or compared to appropriate benchmarks, distinguish the record from its peers
- The process of measuring risks through data analytics must cater for the fact that data records can change over time. Eg, a Journal can change from parked to posted to placed on-hold to marked for cancellation and back to posted. This can happen over a relatively long period of time. Obviously, a journal placed on-hold carries a higher risk rating than a Journal parked and awaiting approval
- Similarly can a vendor invoice be unique in the system today but tomorrow the invoice can be duplicated and immediately the risk associated with that invoice increases
- Risk measurement of data must be dynamic. It must be attached to a data record. The concept of Robotics is perfectly suited for Continuous Risk Measurement
- Methodology – Attach robots as fields (computed columns) instead of independent programs. Robot lives with data record; continuously

Top down approach - Risk determines continuous Analytic

Increased inventory holding costs audit						
Control Title			Control Adequacy		Control Effectiveness	
Just in Time (JIT) ordering			Adequate		Ineffective	
Stock on hand management			Adequate		Partially Effective	
Key Performance Indicator Title			Measure Type		Measure Name	
Appropriate levels of stock on hand			%		% value of Stock on Hand vs T	
Target Date Title	Target End Date	Target Value	Actual Value			
January	01 January	0.00	1.00			
February	01 February	0.00	2.00			
March	01 March	0.00	4.00			
April	01 April	0.00	5.00			
May	01 May	0.00	2.00			
June	01 June	0.00	9.00			
July	01 July	0.00	15.00			



Arbutus Analytic

- Import MSEG & MBEW
- Get average sales quantity over 6 months from MSEG
- Get current stock holding from MBEW
- Identify value of stock in excess of 6 months sales (QTY)
- Automate and schedule continuous analysis



Arbutus SAP continuous monitoring

Arbutus Smart Link technology provides independent, continuous access to SAP and other data.

The screenshot displays the Arbutus Analyzer interface. On the left, a 'Select Tables' dialog box is open, showing a list of available SAP tables and a 'Selected Tables' area containing the SAP logo. The main window shows a 'Project Overview' tree with 'Arbutus_SAP' selected. Below this, a 'Command Log' window displays a table of data. A blue arrow points from the 'Select Tables' dialog to the main data table. In the top right corner, a 'Server Activity (Not Responding)' window shows a log of events, including connection and data reading activities.

Event	Time
Connecting to server: Windows Local	12:08:03
Starting session for username: abouwer@bdo.co.za	12:08:15
Session Initialized 5.70.534	12:08:15
Connected to server: Windows Local	12:08:15
Processing SAP query: LFA1_ZNA1	12:21:48
Creating data file KNA1	12:21:48
Read 100000 records	12:23:45
Read 200000 records	12:25:34
Read 300000 records	12:27:22
Read 400000 records	12:29:12
Read 500000 records	12:31:27
Read 600000 records	12:33:33
Read 700000 records	12:35:40

	MATNR	BWKEY	LBKUM	SALK3	VPSV	VERPR
1	000000103537010000	D570	0,000	0,00	S	0,00
2	000000103537010000	D570	0,000	0,00	S	0,00
3	000000103537010000	D570	0,000	0,00	S	0,00
4	000000103537010000	D570	0,000	0,00		0,00
5	A01003A3765	D570	0,000	0,00	V	1 746,30
6	A01003A3765	D570	0,000	0,00	V	1 746,30
7	A01003A3765	D570	0,000	0,00	V	1 746,30
8	A01003A3765	D570	0,000	0,00	V	1 746,30
9	A01003A3765	D570	0,000	0,00	V	1 746,30
10	A01003A3765	D570	0,000	0,00	V	1 746,30
11	A01003A3765	D570	0,000	0,00	V	1 746,30
12	A01003A3765	D570	0,000	0,00	V	1 746,30
13	A01003A3765	D570	100 000	174 63	V	1 746 30

Seamless BarnOwl to Arbutus integration

BarnOwl ERM

BarnOwl Dashboard - Inventory Risk Register [Current] - Inventory

Lock Register Refresh Expand Register Wrap Text Print Export Reg

Drag a column header here to group by that column.

Risk Title	II	IL	IR
Increased inventory holding costs audit	5.00	4.00	20.00

Control Title Control Adequacy

Just in Time (JIT) ordering Adequate

Stock on hand management Adequate

Key Performance Indicator Title	Measure Type	Mi
Appropriate levels of stock on hand	%	%

Target Date	Title	Target End Date	Target Value	Actual Value
January	01 January	0.00	1.00	
February	01 February	0.00	2.00	
March	01 March	0.00	4.00	
April	01 April	0.00	5.00	
May	01 May	0.00	5.00	
June	01 June	0.00	9.00	
July	01 July	0.00	15.00	
August	01 August	0.00		
September	01 September	0.00		
October	01 October	0.00		
November	01 November	0.00		
December	01 December	0.00		

Organisational Structure

- Root
 - ABC Corporation
 - Cape Town
 - Durban
 - East London
 - Johannesburg
 - Assets
 - Finance
 - Inventory
 - IT
 - JHB Compliance
 - Jhb HR
 - Materials Management
 - Procurement
 - Projects



```

1 comm
2 Stock value recalculation
3 RSM 2020
4 Version: 18over 23 Jul 2020
5
6
7 do .var
8 do .prep
9 do .recon
10 do .cks_stage
11
12
13 proc var
14 comm SET ECHO NONE
15 set safety off
16 close pri all
17 set system 275 100
18 set date "yyyyymmdd"
19 del all ok
20 v_year = "2020"
21 v_prior = "2019"
22 v_table = "JDT1_all_inc_LF3"
23 v_acc = "101101"
24 set folder keep /SALES_RECON
25 v_start = "20190301"
26 v_end = "20200229"
27
28
29 proc prep
30 Open Sales
31 del field Branch ok
32 def field Branch computed str(IF#BranchesID,4)
33 del field Date ok
34 def field Date computed str(intDate,4)
35 SET FILTER BETWEEN (intDate,lv_start,lv_end)
    
```

Pure_CKS - Arbutus Analyzer

File Edit Import Data Analyze Share Tools Apps Server Window Admin Help

Project Overview

- Pure_CKS [D:\RSM\Pure P
 - POSITEL
 - Procs
 - CKS_import
 - combine_tables
 - connect_cks
 - Contra_analysis
 - Sales_med_samp1
 - Sales_recon
 - Raw
 - Branch_numbers
 - connect
 - Staging
 - BK_SSR1_fin
 - BK_SSR2
 - CKS_Stage_Sal
 - Creditors
 - Creditors1
 - Debtors
 - Debtors1
 - JDT1_261001_1
 - JDT1_261001_1
 - JDT1_261001_1
 - JDT1_all
 - JDT1_all_inc_LU
 - JDT1_Branches
 - JDT1_CoS
 - JDT1_CoS_com
 - JDT1_CoS_cros
 - JDT1_Sales_pe
 - JDT1_Sales_pe
 - OACT
 - JDT1_all
 - PayOuts

1 comm
2 Stock value recalculation
3 RSM 2020
4 Version: 18over 23 Jul 2020
5
6
7 do .var
8 do .prep
9 do .recon
10 do .cks_stage
11
12
13 proc var
14 comm SET ECHO NONE
15 set safety off
16 close pri all
17 set system 275 100
18 set date "yyyyymmdd"
19 del all ok
20 v_year = "2020"
21 v_prior = "2019"
22 v_table = "JDT1_all_inc_LF3"
23 v_acc = "101101"
24 set folder keep /SALES_RECON
25 v_start = "20190301"
26 v_end = "20200229"
27
28
29 proc prep
30 Open Sales
31 del field Branch ok
32 def field Branch computed str(IF#BranchesID,4)
33 del field Date ok
34 def field Date computed str(intDate,4)
35 SET FILTER BETWEEN (intDate,lv_start,lv_end)
36 CROSSTAB ON Branch Date COLUMNS #Type ACCUMULATE curValue AS 'SUM_curValue' curValueVAT AS 'SUM_curValueVAT' curDiscon AS 'SUM_curDiscon' OPEN

Relations

Sales1_inv_head_join_...

CKS_Branch (N)
Company (10)
COUNT (N)
IF#BranchID (2)
LegalEntity (10)
PharmacoName (50)
sName (19)

CKS_Branch (N)
Company (10)
COUNT (N)
IF#BranchID (2)
LegalEntity (10)
PharmacoName (50)
sName (19)

Buttons: Add Table, Finish, Help

Link to Arbutus detailed exceptions

BarnOwl ERM

File Edit Create/Link View Reports My Favourite Reports Window Help

BarnOwl Dashboard - Inventory Risk Register [Current] - Inventory

Lock Register Refresh Expand Register Wrap Text Print Export Reg

Drag a column header here to group by that column.

Risk Title	II	IL
Increased inventory holding costs audit	5.00	4.00

Control Title Control Adequacy

Just in Time (JIT) ordering Adequate

Stock on hand management Adequate

Key Performance Indicator Title Measure Type M

Appropriate levels of stock on hand % %

Target Date Title	Target End Date	Target Value	Actual Value
January	01 January	0.00	3.00
February	01 February	0.00	2.00
March	01 March	0.00	4.00
April	01 April	0.00	5.00
May	01 May	0.00	2.00
June	01 June	0.00	3.00
July	01 July	0.00	15.00
August	01 August	0.00	
September	01 September	0.00	
October	01 October	0.00	
November	01 November	0.00	

Formulas Developer Add-ins Help Fuzzy Lookup Data Streamer Acroba

Unique	EmployeeName	sPay1	IntDate	sType	sDept	sGSTType	Stage_Discounts	CK
4.40	10_Kriel	1	20200102_C	008202	1		9.21	
3.96	10_Kriel	1	20200102_D	000101	1		0.04	
3.83	10_Kriel	1	20200103_C	008202	1		20.2	
3.13	10_Kriel	1	20200104_C	008202	1		21.63	
5.17	10_Kriel	1	20200105_C	008202	1		7.11	
4.26	10_Kriel	1	20200106_C	008202	1		22.91	
2.48	10_Kriel	1	20200106_D	000101	1		0.12	
3.06	10_Kriel	1	20200107_C	008202	1		6.61	
5.26	10_Kriel	1	20200108_C	008202	1		7.48	
3.16	10_Kriel	1	20200109_C	008202	1		5.68	
5.17	10_Kriel	1	20200110_C	008202	1		6.44	
5.65	10_Kriel	1	20200110_D	000101	1		0	
1.08	10_Kriel	1	20200111_C	008202	1		4.18	
3.72	10_Kriel	1	20200112_C	008202	1		2.29	
3.13	10_Kriel	1	20200113_C	008202	1		7.32	
7.75	10_Kriel	1	20200114_C	008202	1		6.19	
5.63	10_Kriel	1	20200114_D	000101	1		0.02	
7.45	10_Kriel	1	20200115_C	008202	1		19.68	
3.26	10_Kriel	1	20200115_D	000101	1		0.04	
1.37	10_Kriel	1	20200116_C	008202	1		10.72	
5.65	10_Kriel	1	20200116_D	000101	1		0	
2.51	10_Kriel	1	20200117_C	008202	1		7.13	
4.89	10_Kriel	1	20200118_C	008202	1		4.4	
1.87	10_Kriel	1	20200119_C	008202	1		1.99	
5.16	10_Kriel	1	20200120_C	008202	1		6.91	
3.51	10_Kriel	1	20200121_C	008202	1		6.65	
2.54	10_Kriel	1	20200121_D	000101	1		0.28	

Apps Server Window Admin Help

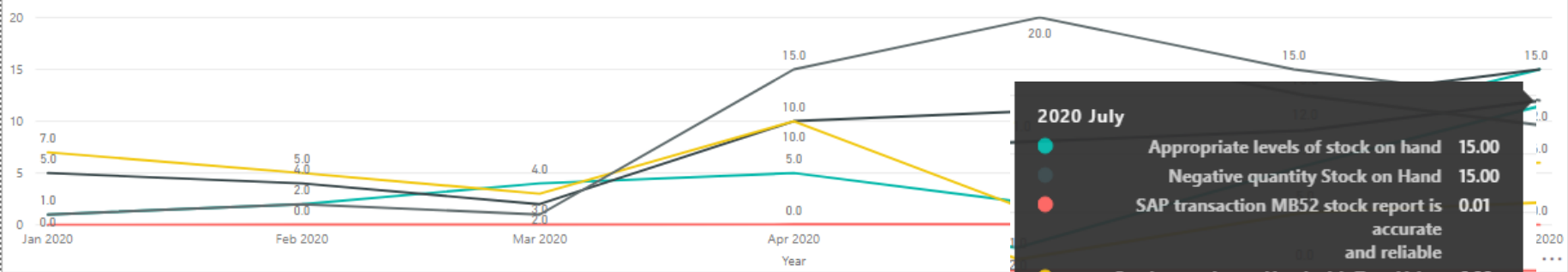
Sales1_inv_head inv_head_sales_2021 Sales_rec Stk_Movements stk_tran_al JDT1_Sales_pl JDT

Instance	Branch	U_Branch	TransId	Line_ID	FinncPrion	Account	AcctName	ContraAct	Contra	Trans
283178	LJF	68	WYNBRG	146,156	1	24	101101	Sales	261001	Debtors Control Accou 30
283179	LJF	68	WYNBRG	146,157	1	24	101101	Sales	261001	Debtors Control Accou 30
283180	LJF	68	WYNBRG	146,158	1	24	101101	Sales	261001	Debtors Control Accou 30
283181	LJF	68	WYNBRG	146,159	1	24	101101	Sales	261001	Debtors Control Accou 30
283182	LJF	68	WYNBRG	146,161	1	24	101101	Sales	261001	Debtors Control Accou 30
283183	LJF	68	WYNBRG	146,162	1	24	101101	Sales	261001	Debtors Control Accou 30
283184	LJF	68	WYNBRG	146,163	1	24	101101	Sales	261001	Debtors Control Accou 30
283185	LJF	68	WYNBRG	146,164	1	24	101101	Sales	261001	Debtors Control Accou 30
283186	LJF	68	WYNBRG	146,165	1	24	101101	Sales	261001	Debtors Control Accou 30
283187	LJF	68	WYNBRG	146,166	1	24	101101	Sales	261001	Debtors Control Accou 30
283188	LJF	68	WYNBRG	146,167	1	24	101101	Sales	261001	Debtors Control Accou 30
283189	LJF	68	WYNBRG	146,168	1	24	101101	Sales	261001	Debtors Control Accou 30
283190	LJF	68	WYNBRG	146,169	1	24	101101	Sales	261001	Debtors Control Accou 30
283191	LJF	68	WYNBRG	146,170	1	24	101101	Sales	261001	Debtors Control Accou 30
283192	LJF	68	WYNBRG	146,171	1	24	101101	Sales	261001	Debtors Control Accou 30
283193	LJF	68	WYNBRG	146,172	1	24	101101	Sales	261001	Debtors Control Accou 30
283194	LJF	68	WYNBRG	146,173	1	24	101101	Sales	261001	Debtors Control Accou 30
283195	LJF	68	WYNBRG	146,174	1	24	101101	Sales	261001	Debtors Control Accou 30
283196	LJF	68	WYNBRG	146,175	1	24	101101	Sales	261001	Debtors Control Accou 30
283197	LJF	68	WYNBRG	146,176	1	24	101101	Sales	261001	Debtors Control Accou 30

Key Control Indicator dashboard

KI Dashboard

Average of InputValue by Year, Month and Key Riskindicator Title



2020 July

- Appropriate levels of stock on hand **15.00**
- Negative quantity Stock on Hand **15.00**
- SAP transaction MB52 stock report is accurate and reliable **0.01**
- Stock quantity on Hand with Zero Value **6.00**
- Stock unit cost prices are accurate **12.00**

Year	2020						
	January	February	March	April	May	June	July
ABC Corporation							
Johannesburg							
Inventory							
Stock unit cost prices are accurate	1.00	2.00	1.00	15.00	20.00	15.00	12.00
Stock quantity on Hand with Zero Value	7.00	5.00	3.00	10.00	1.00	5.00	6.00
SAP transaction MB52 stock report is accurate and reliable	0.03	0.03	0.03	0.05	0.06	0.05	0.01
Negative quantity Stock on Hand	5.00	4.00	2.00	10.00	11.00	12.00	15.00
Appropriate levels of stock on hand	1.00	2.00	4.00	5.00	2.00	9.00	15.00

In summary...

- [BarnOwl GRC](#) is fully integrated with [Arbutus data analytics](#) giving you the ultimate in real-time risk management and continuous monitoring
- Arbutus is arguably the most powerful Data Analytics software on the market, empowering an organisation to transform its data into valuable business insights
- BarnOwl's integrated, top down approach, enables an organisation to focus its efforts in the right areas when designing and implementing key data analytic/s
- BarnOwl GRC, underpinned by real-time metrics from Arbutus provides a strategic early warning system driving preventative and predictive capability facilitating effective business decision making and business improvement
- <https://www.barnowl.co.za/wp-content/uploads/2022/02/Arbutus-integration-Data-Sheetv2-min.pdf>
- <https://www.barnowl.co.za/tip-of-the-month/tip-of-the-month-april-2022-integrated-assurance/>
- <https://www.barnowl.co.za/tip-of-the-month/barnowl-arbutus-bringing-grc-to-life-with-integrated-data-analytics-and-continuous-monitoring/>
- [Arbutus data analytics integrated with BarnOwl GRC giving you the complete continuous monitoring solution](#)
- https://barnowl.co.za/wp-content/uploads/2023/01/RSM_BarnOwl_Elevating_audit_presentation.pdf
- <http://www.barnowl.co.za/insights/6-ways-risk-based-auditing-adds-value-to-your-organisation/>

Thank You

+27 11 540 9100 (office)

support@barnowl.co.za

+27 11 540 9112 (help desk)

<http://www.barnowl.co.za/knowledge-centre/>



BARNOWL