



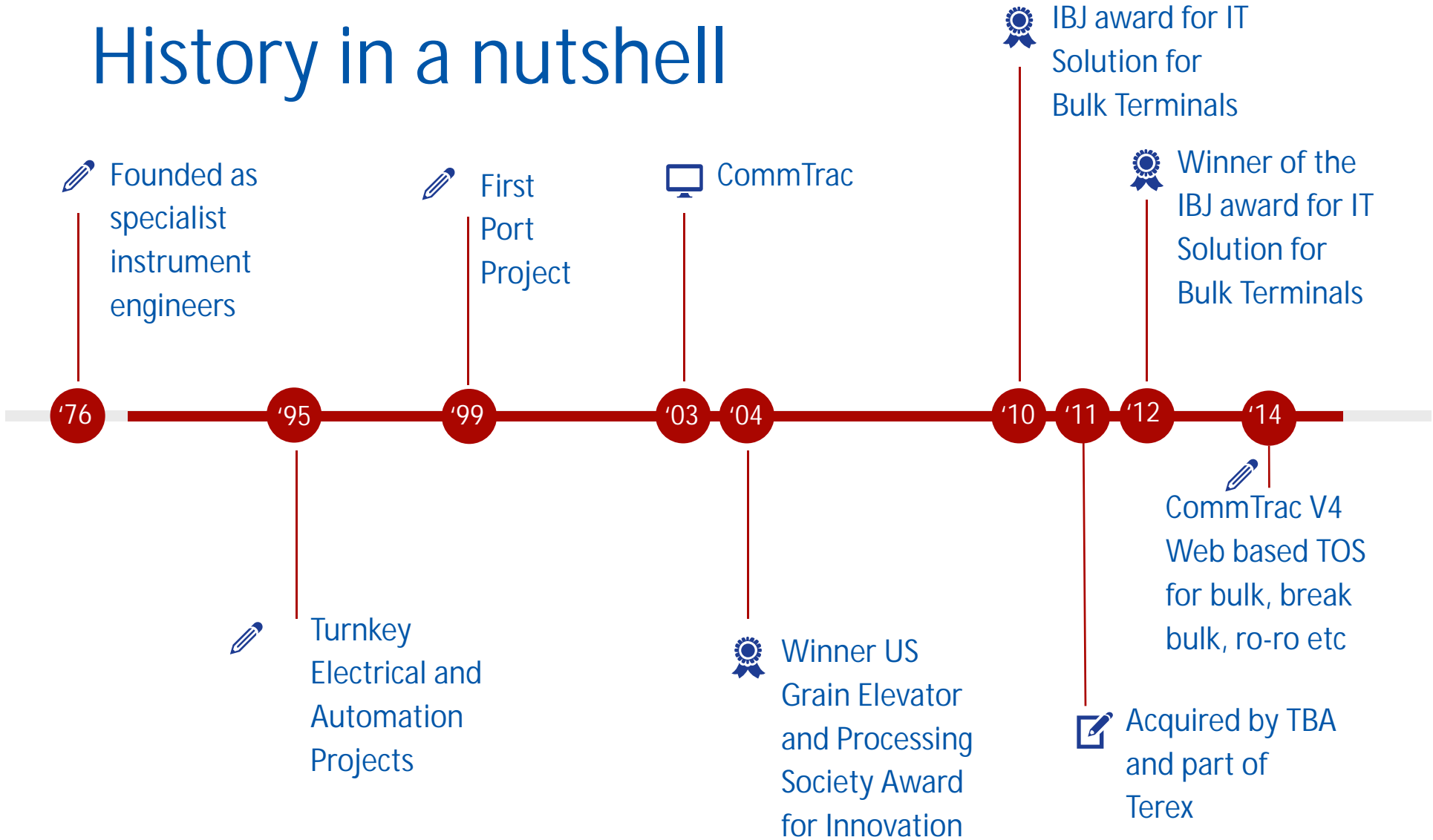
Using Real Time IT to Deliver Operational Efficiency at Bulk Terminals



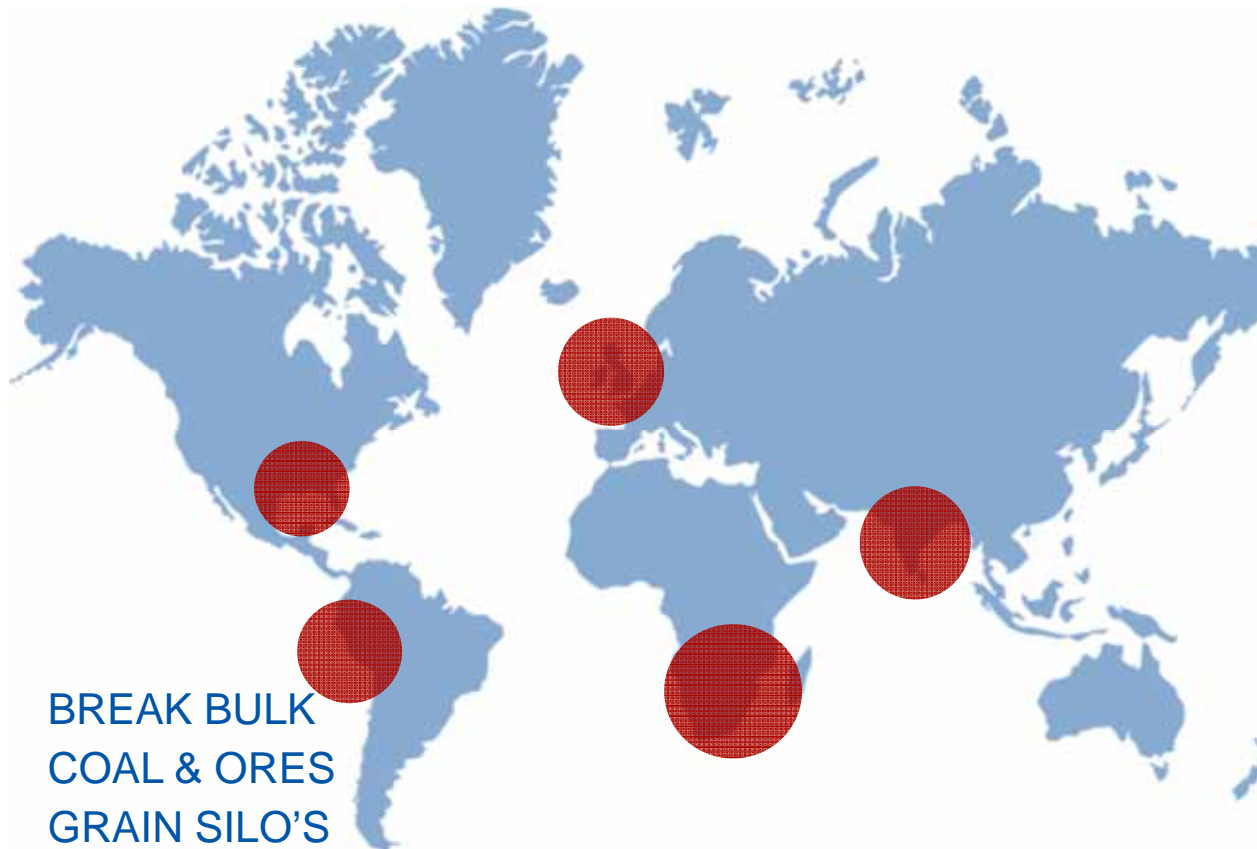
About DBIS

Delivering complete software solutions for
the bulk supply chain

History in a nutshell



23 installations in 5 continents



BREAK BULK
COAL & ORES
GRAIN SILO'S
SHEDS STORES



DBIS has extensive references in the region

- Four sites for Grindrod Terminals – Richard's Bay, Maydon Wharf plus GML and TCM in Maputo
- Transnet Port Terminals – Saldanha Bay iron ore terminal export terminal serving Kumba and Assmang and exporting 65 million tonnes per annum
- Nectar Group Coal Terminal in Biera



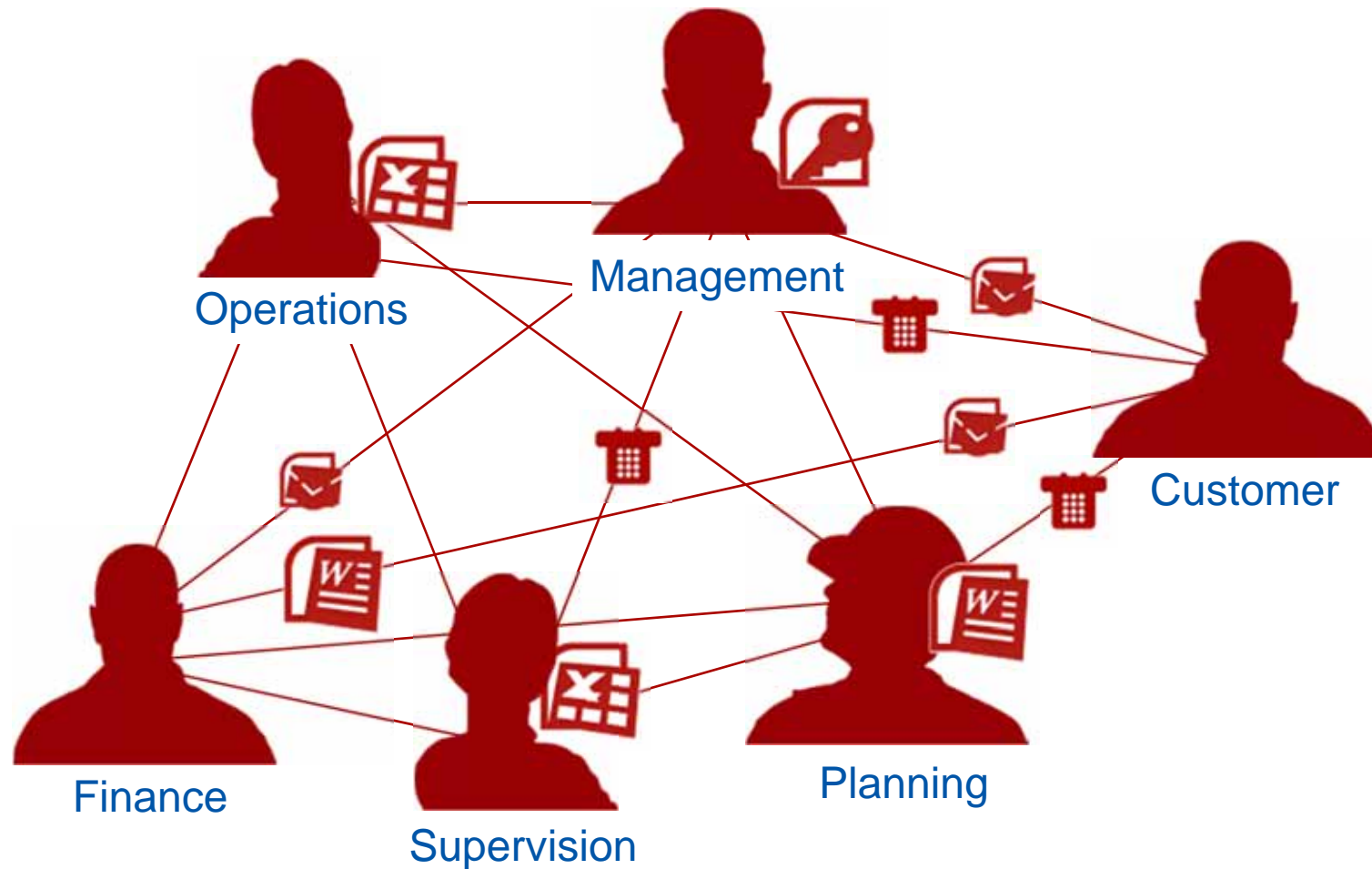
D|B|I|S

SOFTWARE
AUTOMATION
CONSULTANCY

IT in bulk terminals

What we see and what needs to change

A typical situation



This results in

- ⚠️ | 50+ different spreadsheets, mostly maintained by hand
- ⚠️ | Revenue derived from un-auditable data sources
- ⚠️ | Difficulty in tracking inventory
- ⚠️ | Hard to get real time operational information

But what is wrong with spread sheets?

- ⚠️ | "Research has repeatedly shown that an alarming proportion of corporate spreadsheet models are not tested to the extent necessary to support directors' fiduciary, reporting and compliance obligations,"
- ⚠️ | A simple spreadsheet error cost a firm a whopping \$24 million. The mistake led to TransAlta, a big Canadian power generator, buying more US power transmission hedging contracts in May at higher prices than it should have.
- ⚠️ | Kodak spokesman Gerard Meuchner said the hefty \$11 million severance error was traced to a faulty spreadsheet.



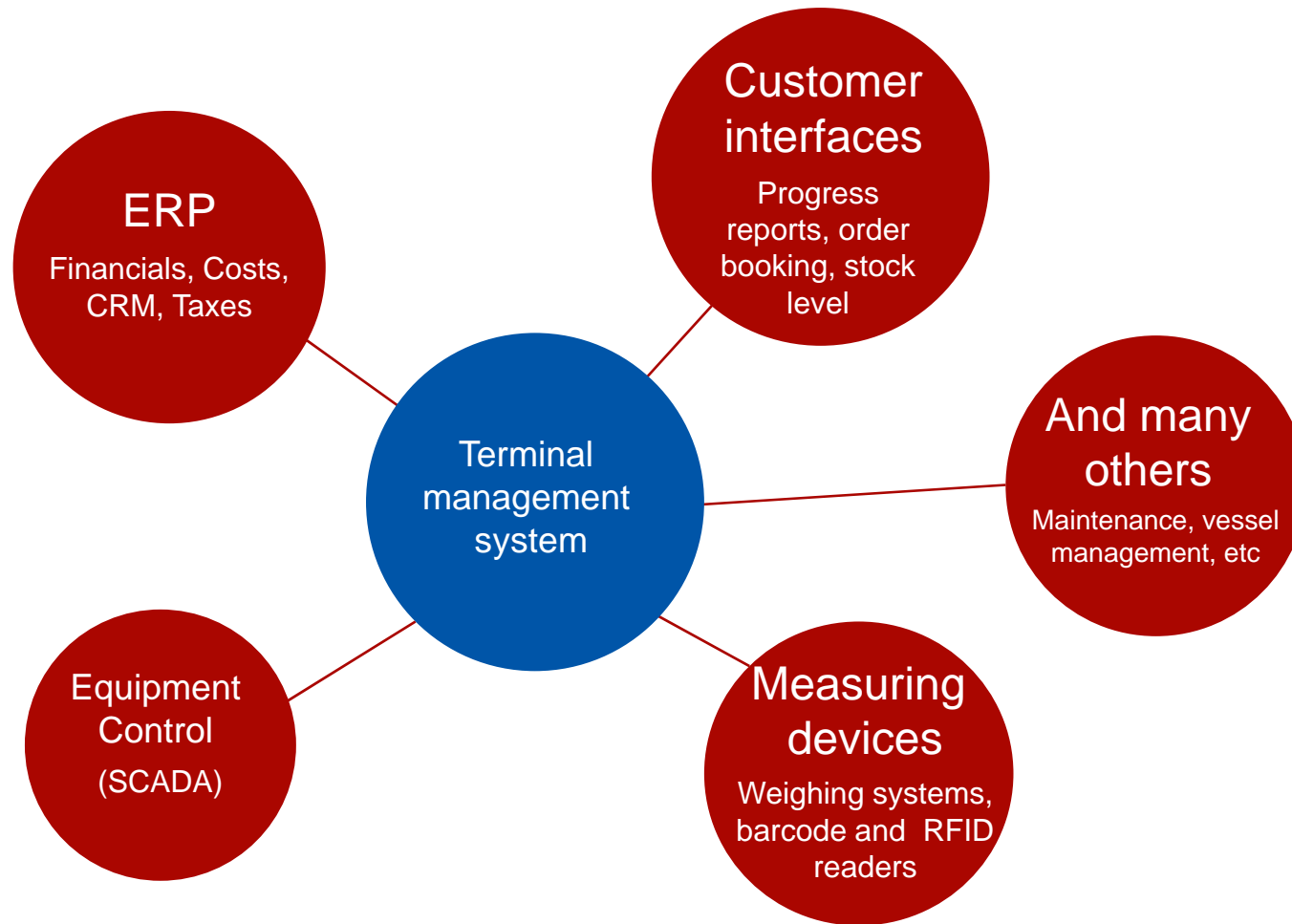
DBIS

SOFTWARE
AUTOMATION
CONSULTANCY

Integration is key

Real time, accurate and auditable data

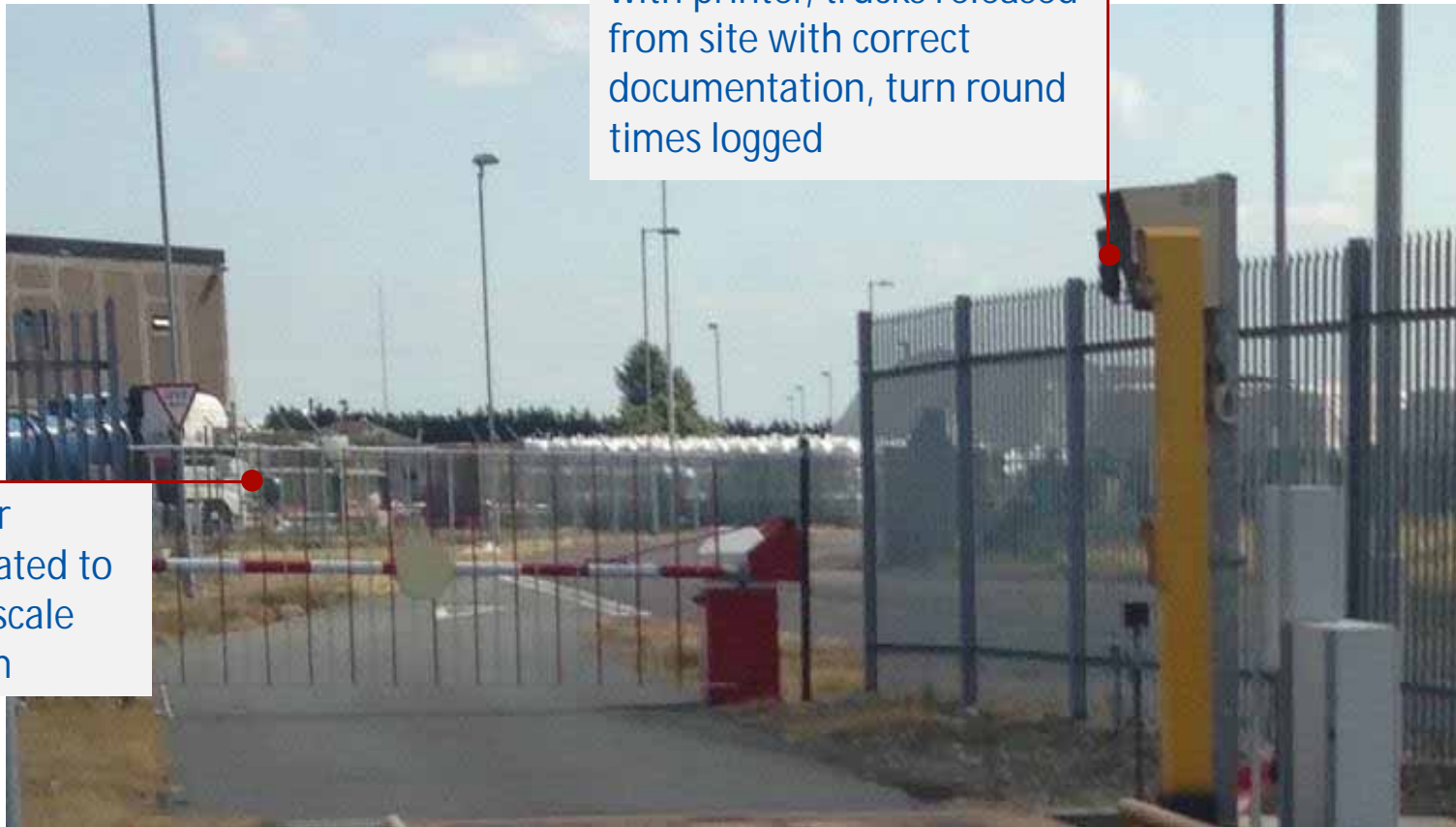
TMS in the IT landscape



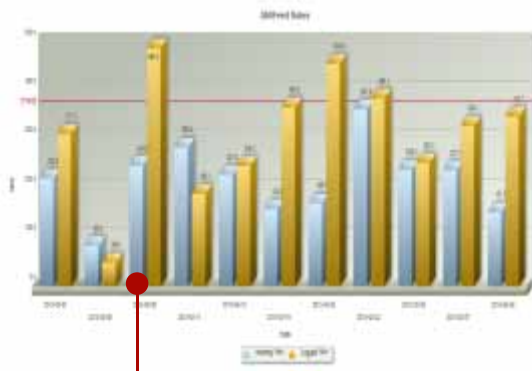
Weighing systems

Unmanned Driver Interface with printer, trucks released from site with correct documentation, turn round times logged

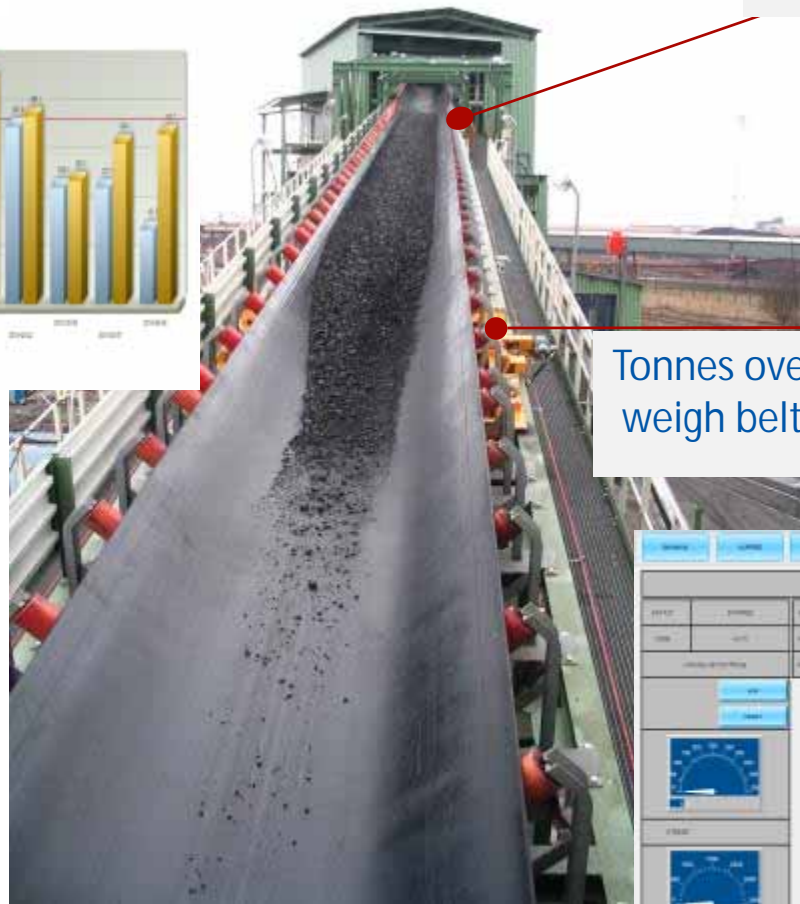
Barrier integrated to truck scale system



Automation



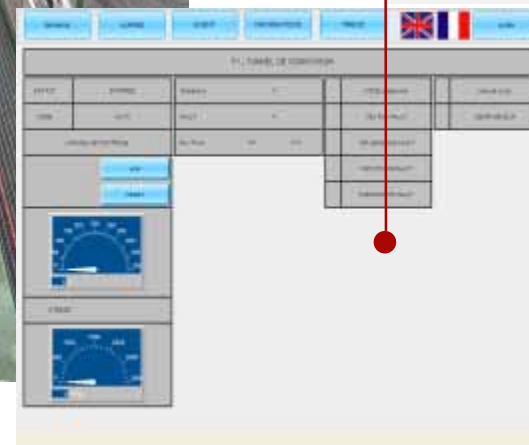
Root cause of faults



Sending the cargo to the correct store

Tonnes over weigh belts

Run time hours

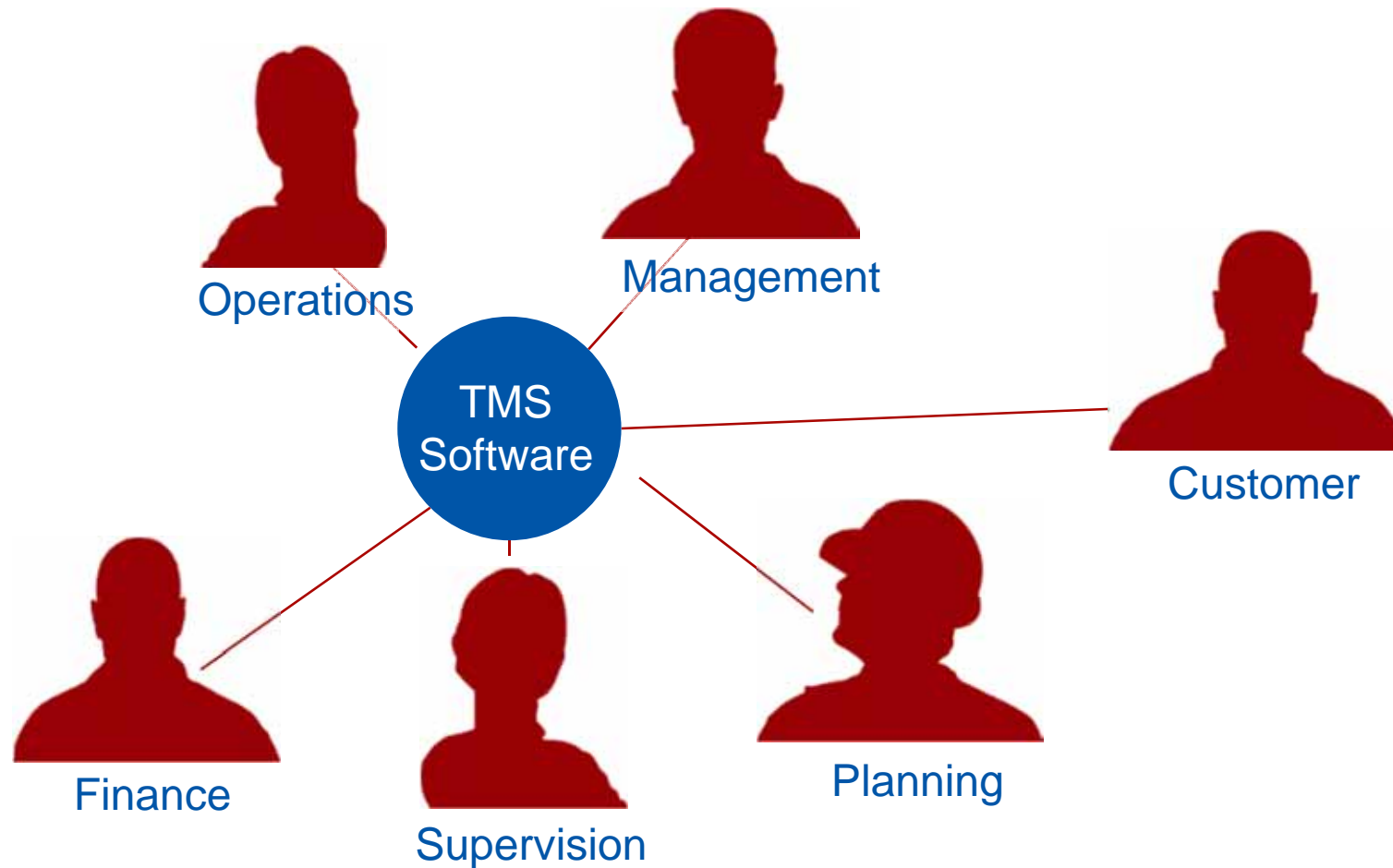


Hard to get data

Mobile/Bar Codes/RFID

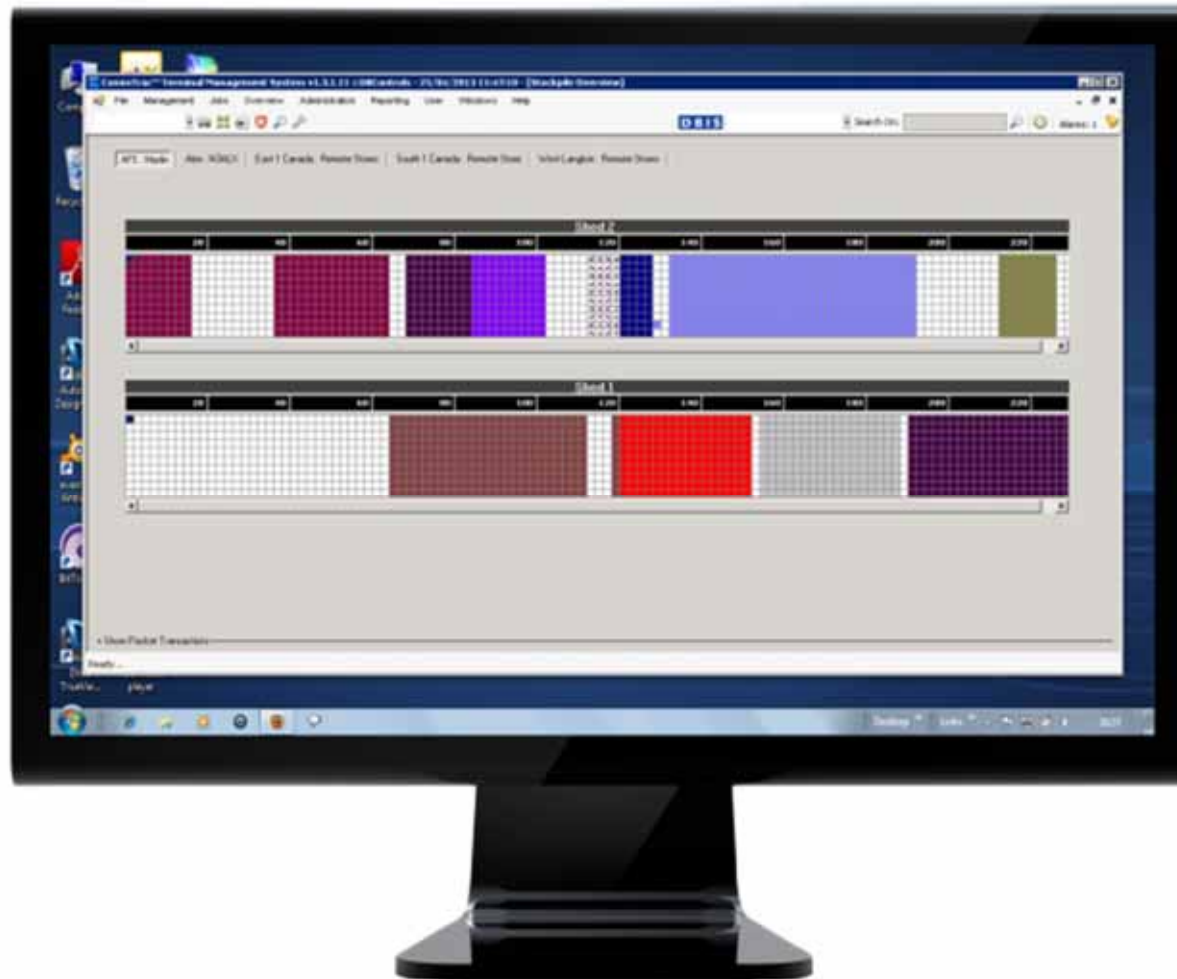


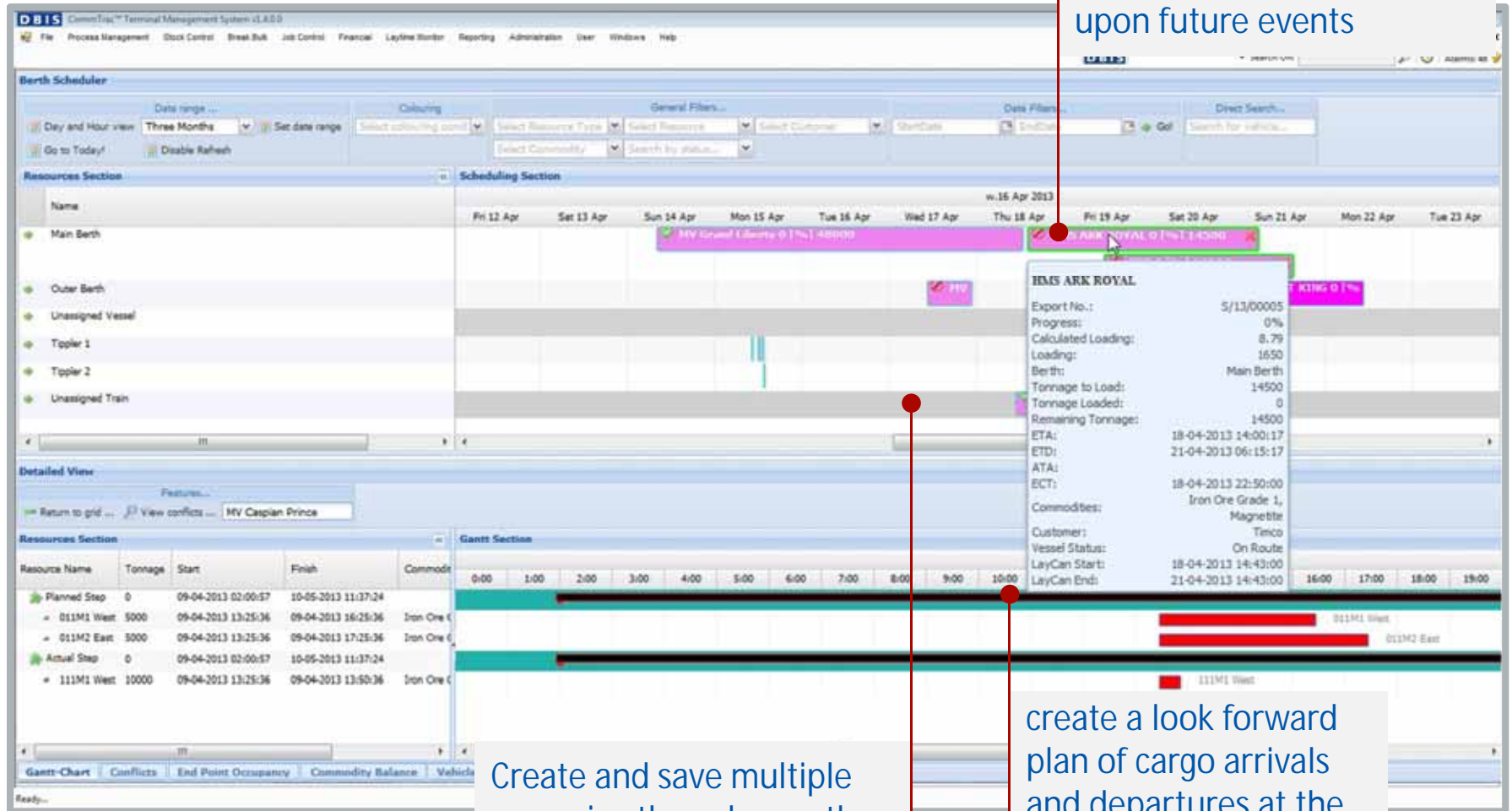
All users sharing and benefitting



TMS Functionality

- ❖ | Manage reception, storage and delivery
- ❖ | Interface to weighing and automation equipment
- ❖ | Provide real time overview of inventory tonnage and position
- ❖ | Provide real time overview of discharge and loading progress
- ❖ | Provide real time overview of delays and variances
- ❖ | Provide accurate, error free information with provable compliance to QA
- ❖ | Configurable to meet the requirements of all bulk and break bulk commodities





Real-time view of current activities and their impact upon future events

Create and save multiple scenarios then choose the most effective

create a look forward plan of cargo arrivals and departures at the terminal allow stock forecasting

CommTrac™ Terminal Management System v1.4.0.0 :: Admin - 25/11/2013 10:13:33 - [Export Vessels]

File Process Management Stock Control Break Bulk Job Control Financial Laytime Monitor Reporting Administration User Windows Help

DBIS Search On: Alarms: 0

Summary **Attributes**

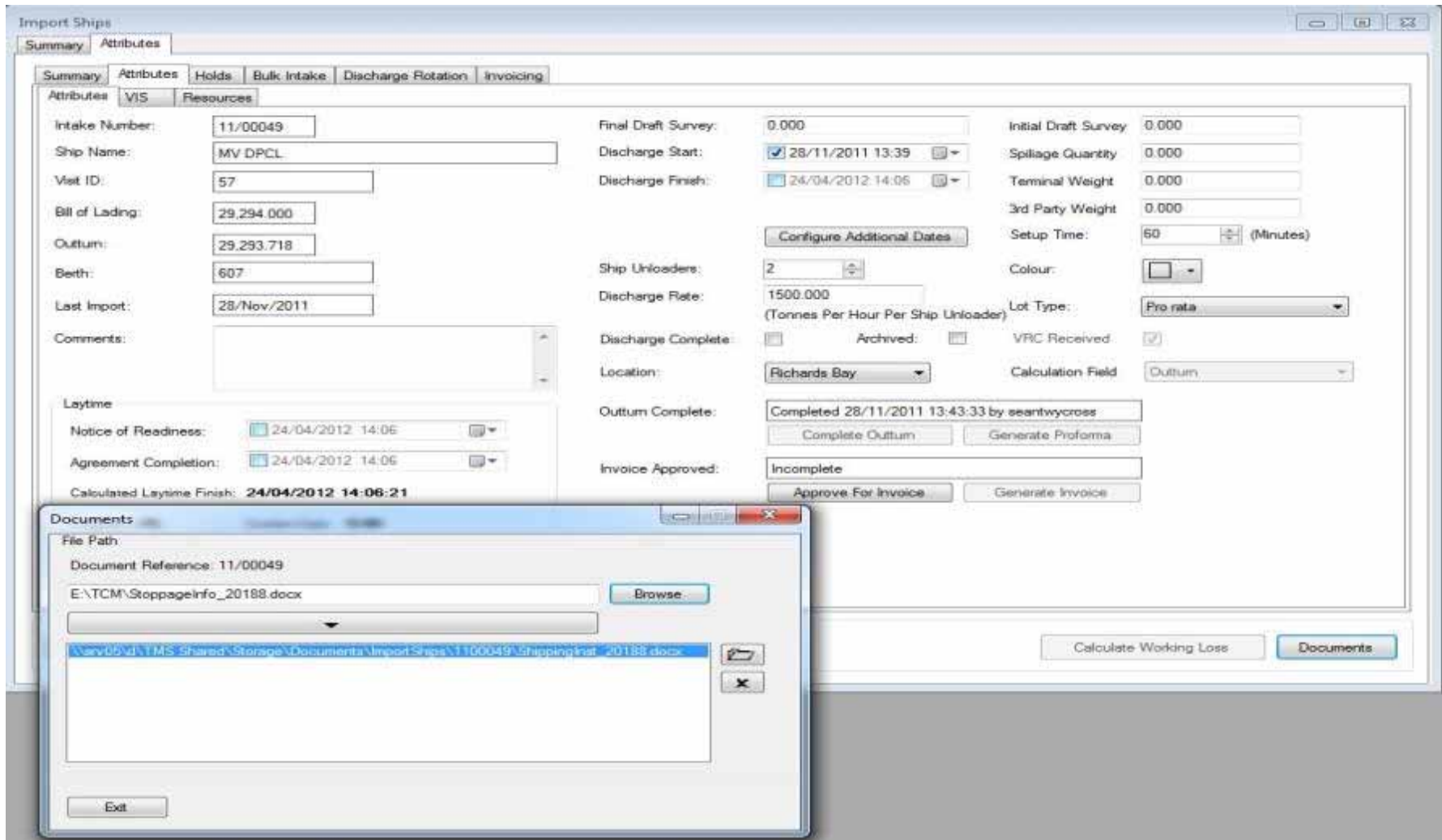
Column Criteria Archive No Show Unallocated Yes

Export Number	Ship Name	Cargo Type	Arrival Date	To Load	Loaded	Draft Survey	Archive	Berth	Commenced Loading	Finished Loading:	Customer	Loading Complete	VIS Inactive	Loading Confirmed
S/13/00016	China &Obama co	Bulk	20/11/2013 10:56	400.000	500.000	0.000	N	Outer Berth			Umesh and warren Buffett Associates	N	N	N
S/13/00012	coop	Bulk	10/11/2013 08:35	500.000	330.000	0.000	N	Main Berth	18/11/2013 08:36		Mango Software	N	N	N
S/13/00010	Gold international	Bulk	06/11/2013 14:52	100.000	0.000	0.000	N	Outer Berth			Umesh and warren Buffett Associates 1	N	N	N
S/13/00013	hms phil	Bulk	05/11/2013 16:13	100000.000	0.000	0.000	N	Main Berth			Umesh and warren Buffett Associates 1	N	N	N
S/13/00015	Mother Teresa charity	Break Bulk	14/11/2013 15:46	0.000	0.000	0.000	N	Main Berth	15/11/2013 15:47		Mango Software	N	N	N
S/13/00014	Mother Teresa charity	Bulk	14/11/2013 13:11	100.000	100.000	0.000	N	Main Berth	15/11/2013 13:12		Mango Software	N	N	N
S/13/00007	MV First	Bulk	05/11/2013 12:00	330.000	0.000	0.000	N	Main Berth			Umesh and warren Buffett Associates	N	N	N
S/13/00002	Warren buffett & co	Bulk	30/10/2013 09:56	600.000	600.000	0.000	N	Outer Berth	30/10/2013 10:02		Umesh and warren Buffett Associates	N	N	Y

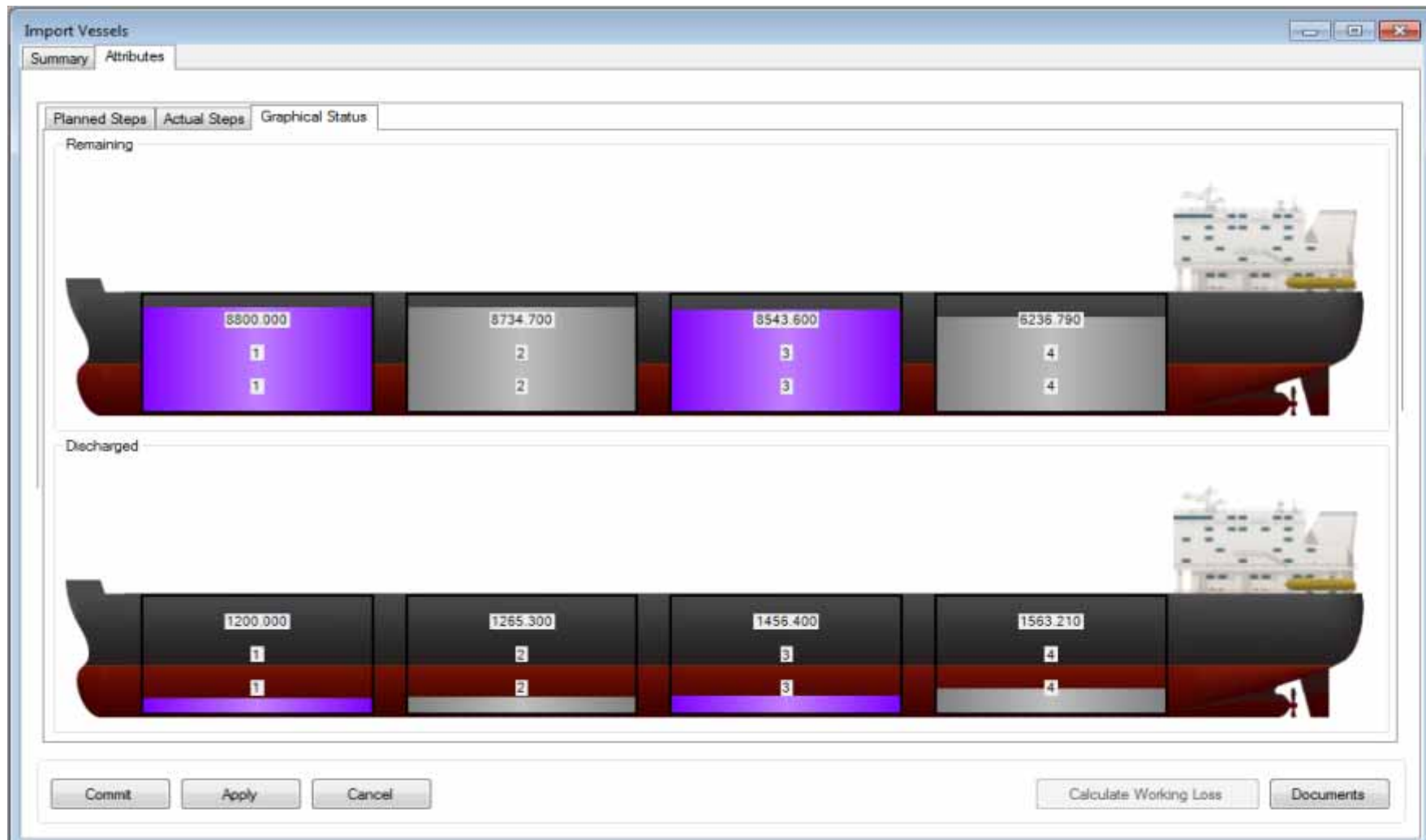
Edit Delete Exit Add Ship Print Shipping Report

Ready...

All the vessel data and documentation is stored in the system



As the vessel is unloaded the system updates in real time using data gathered from the automation layer



CommTrac™ Terminal Management System v1.4.0.0 :: Admin - 25/11/2013 08:58:51 - [Stoppages]

File Process Management Stock Control Break Bulk Job Control Financial Laytime Monitor Reporting Administration User Windows Help

DBIS Search On: [] Alarms: 0

Time Line Summary

Time Scale Previous Next Go to Date

November 2013

25 November 2013

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
---	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Stoppage

Attributes

Source Type: Ship Vessel: []

Subject: []

Entry Type: [] Manage Entry

Sub Type: [] Manage Sub

Plant: []

Resource: []

Code: [] Manage Codes...

Primary Delay: []

Secondary Delay: [] Department: []

Terminal Agreed

Start Date: 25/11/2013 [] 25/11/2013 [] End Date: []

Start Time: 09:17:00 [] 09:17:00 [] End Time: []

Comments: []

Commit and Close Commit Delete Exit Override

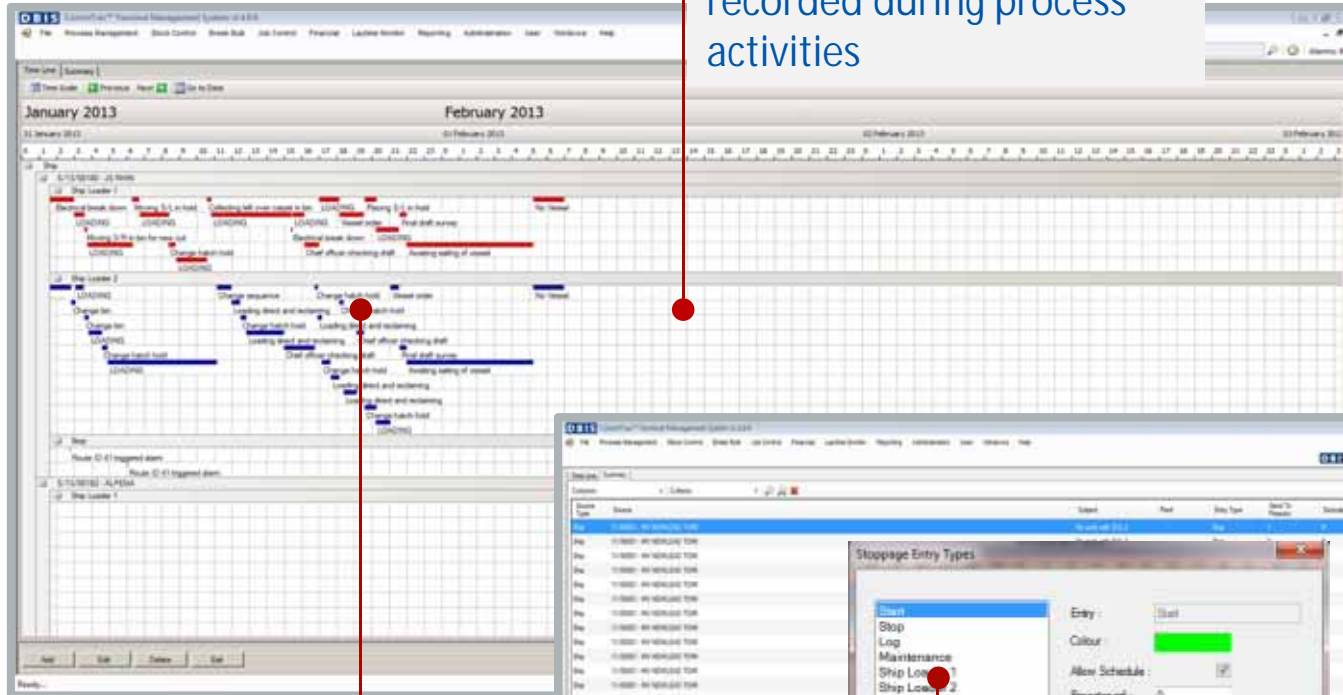
- S/13/00014 - WINDY BLUES
- S/13/00017 - DCR3 EXP
- S/13/00018 - MV TIM
- S/13/00019 - MV SHOW IN TEST
- S/13/00021 - UMESH'S CRUISE
- S/13/00022 - MV OLD TIM SHIP
- S/13/00027 - UMESH'S SHIPPING CORPORATION LTD
- S/13/00030 - DCR 5
- S/13/00032 - UMESH'S SHIPPING CORPORATION LTD
- S/13/00034 - DCR1
- S/13/00037 - DCR 16 TESTING
- S/13/00038 - DCR 6
- S/13/00044 - UMESH DCR 39
- S/13/00046 - MV TEST THE LOADING DATA
- S/13/00048 - KATES DCR3
- S/13/00050 - DCR4200613
- S/13/00053 - Y
- S/13/00054 - RETESTING DCR 5
- S/13/00055 - KATE RE-TEST DCR3
- S/13/00056 - DCR3 VESSEL
- S/13/00057 - DCR 3080713
- S/13/00058 - DCR 39.1
- S/13/00059 - DCR 22
- S/13/00061 - DCR 15 17/06/13
- S/13/00063 - MV BART
- S/13/20003 - MVO TROUBLET
- S/13/20005 - MV NORTON
- S/13/20007 - CAR VESSEL 2
- S/13/20008 - LAYTIME TEST
- S/13/20012 - PIRATE SHIP

Add Edit Delete Exit Collapse All Manage Entry Types... Archive

Ready...

09:17 25/11/2013

Time line of events recorded during process activities



View events in either graphical or list form

Event Type	Entry	Colour	Allow Schedule	Factor ref	Is Down Time	Use as Statement of Facts	Extends Layline
Down	Start	Green	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Stop							
Log							
Maintenance							
Ship Load 1							
Ship Load 2							
Tippler 1							
Tippler 2							

Configurable event types to allow root cause analysis

Here the data is collated with the contractual terms to provide a real time view of performance:

Laytime _ □ ×

Type: Import Ships ▾

IntakeNumber	Ship	Vessel Tonnage	To Discharge	Progress
11/00007	MV ARKLOW CAPE	0.000	0.000	0.00
09/00002	MV KYKLADES	21304.000	10682.300	49.86
10/00001	MV WON TON	3500.000	-300.000	108.57
10/00019	MV YANG TANG	45000.000	45000.000	0.00
11/00001	MV Jag Rahul	50000.000	-300.000	100.60
11/00002	MV ARKLOW RIVER	88008.020	83008.020	5.68
11/00003	MV TING TONG	20000.000	20000.000	0.00

Notice of Readiness: 15/01/2011 09:30:00	Time To Now: 465.04:15:00	Stoppage Time: 00:00:00
Agreed Comp. Time: 17/01/2011 12:38:00	Time +/- Estimate: 930.20:07:12	Laytime Extension: 00:00:00
Extended Comp. Time: 17/01/2011 12:38:00	Current Daily Rate: 22.834	Expected Completion: 05/08/2013 08:45:00
Daily Rate: 10000.000	Current Cost: 4654190.960	Required Daily Rate: Overdue
Dispatch Cost: 2500.000	Tonnage: (Total / Comp. / Remaining) 21304.000 / 10621.700 / 10682.300	Progress: (49.86%) <div style="width: 100px; height: 10px; background: linear-gradient(to right, green 49.86%, gray 49.86%);"></div>
Demurrage Cost: 5000.000		

RECALCULATE

Est. Daily Rate: 22.834	Est. Completion: 05/08/2013 08:45	Est. Cost: 1000000.00
--	--	--

Close
Update

CommTrac™ Terminal Management System v1.4.0.0 - Admin - 25/11/2013 11:06:55 - [Export Vessels]

File Process Management Stock Control Break Bulk Job Control Financial Laytime Monitor Reporting Administration User Windows Help

DBIS Search On: [] Alarms: 0

Summary Attributes

Summary Attributes Holds Bulk Export Loading Rotation

Attributes VIS Resources

Export Number: S/13/00002 Planned First Ore: 30/10/2013 10:03

Ship Name: Warren buffett co Commenced Loading: 30/10/2013 10:02

Vist ID: 3

To Load: 600.000

Loaded: 600.000

Berth: Outer Berth

Last Export: 30/Oct/2013

Comments:

Status:

Location:

Colour:

Shipping Bill:

Bill of Lading:

Ship Loaders: 10

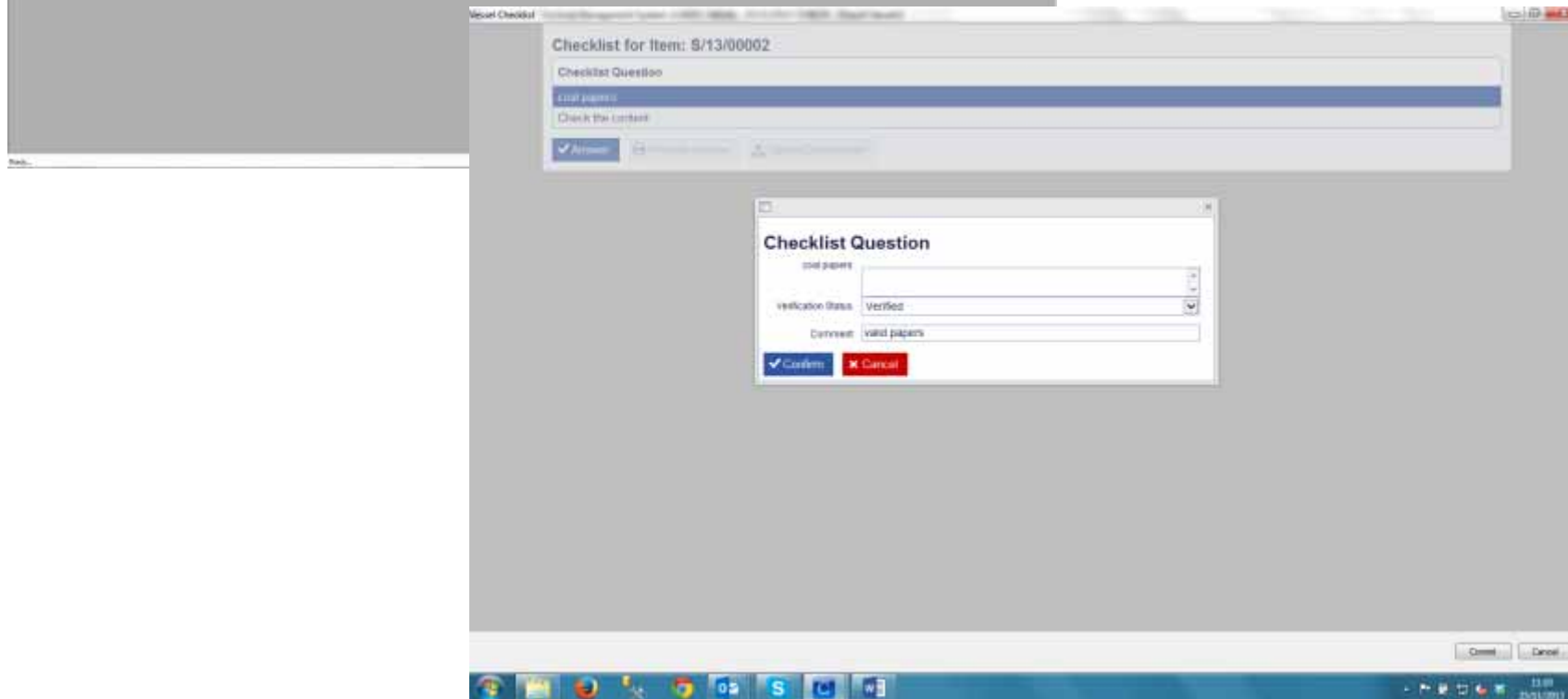
Draft Surveys for S/13/00002 - Warren buffett & co

Summary Attributes

Summary

Column Criteria Archive No

Description	Customer	Commodity	Weight	Scale Weight	Started	Completed	Su
Draft Check	Unesh and warren Buffett Associates	Iron Ore	100.000		14/11/2013 11:59	14/11/2013 11:59	
Final Draft Survey	Unesh and warren Buffett Associates	Iron Ore	200.000	0.000	14/11/2013 11:59	14/11/2013 11:59	



Pre defined process rules ensure that stock cannot be placed in or removed from the wrong storage areas

The screenshot displays the DBIS Task Planning software interface. At the top, there are tabs for 'Status', 'Setup', 'Control', and 'Alarms'. Below these, the 'Job Selection' section includes a dropdown menu and two fields: 'Source' (set to 'Tippler 1') and 'Destination' (set to 'Stacker 2').

The 'Route Filters' section contains two small diagrams labeled 'R005' and 'R006', each showing a red grid with green arrows indicating a path.

The 'Source Details' section is divided into three parts: 'Train Consignment' with a dropdown set to 'Consignment: consignment number 2008'; 'Section' with a dropdown set to 'section number'; and 'Lot' with a dropdown set to '13/30003/007/008 - Mango Softwa'.

The 'Destination Details' section includes 'Destination Stockpile' (dropdown set to 'Main') and 'Destination Packet' (dropdown set to '13/30003/007-01 - MV Portland - Brown sugar').

The 'Setup Details' section is a scrollable area containing the following text: 'Source: Train', 'Destination: IP Number: 13/30003/007', 'Destination: MV Portland', and 'Commodity: Brown sugar'.

The 'Job Details' section contains three fields: 'Estimated Job Weight' (text input with '5000.000'), 'Earliest Start Time' (calendar icon and dropdown set to '16 Nov 2013 10:00'), and 'Proposed Run Time' (calendar icon and dropdown set to '16 Nov 2013 10:00').

At the bottom of the window, there are three buttons: 'Commit' (highlighted in yellow), 'Cancel', and 'Exit'. The status bar at the very bottom reads 'Ready...'.

The screenshot displays the DBIS (Data Base Information System) interface for permit management. The top window shows a list of permits with columns for Permit Number, Permit Reason, Permit Status, Estimated Usage, Estimated Date On, Area, Plant Equipment, and Department. A context menu is open over the 'Plant Equipment' column, showing options for sorting and columns. The bottom window shows the detailed view for permit 'hh-1' at 'Active' for 'Client1, Acme'.

Permit Number	Permit Reason	Permit Status	Estimated Usage	Estimated Date On	Area	Plant Equipment	Department
h-1	Eng	Active	15	25 Nov 2013 09:15:00	cv1	Tippler 2	Eng
h-2	Permit	Waiting Engineer	30	25 Nov 2013 11:00:00	cv1		Eng
hh-1	Eng	Active	10	25 Nov 2013 11:00:00	cv1		
hh-2	Eng	Waiting Engineer	30	27 Nov 2013 10:00:00	cv1		

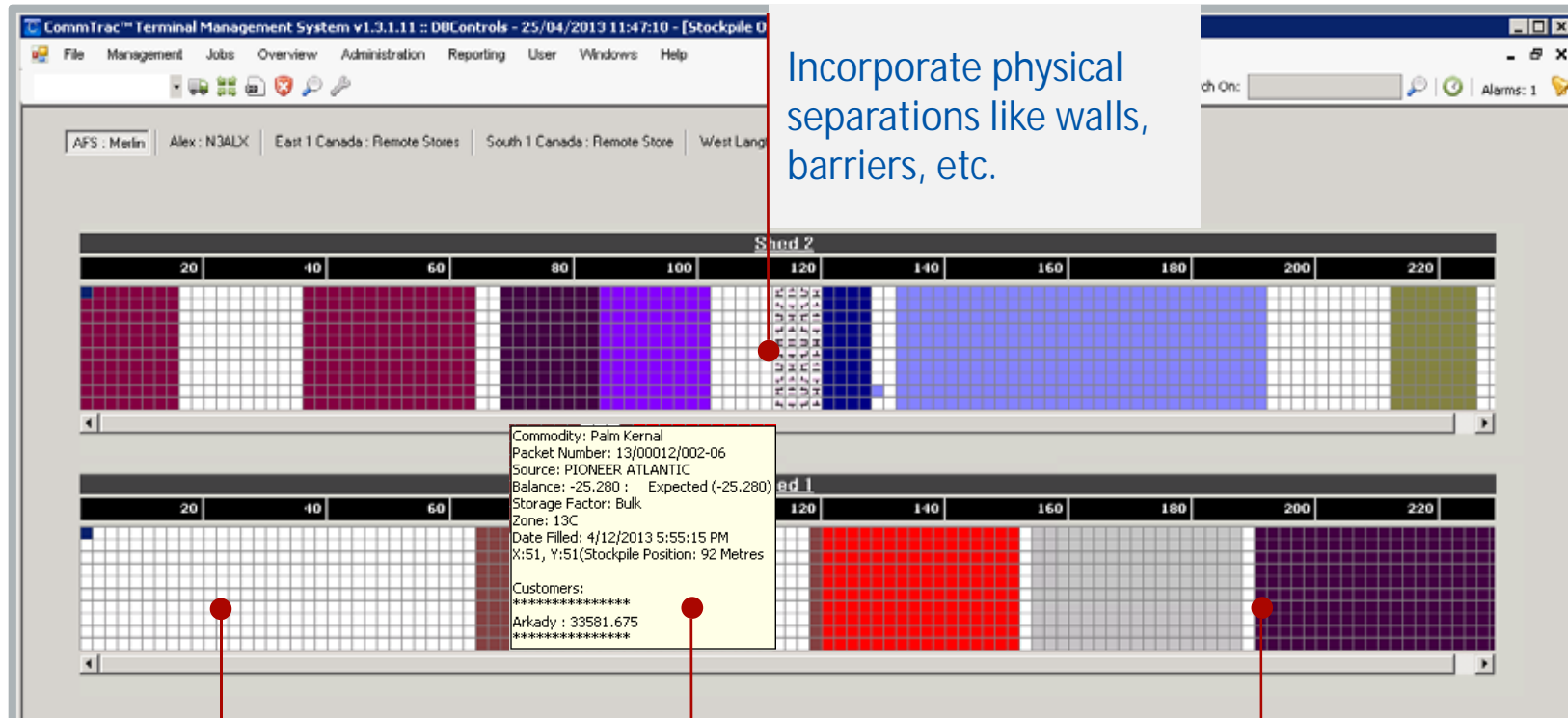
Permit hh-1 at Active for Client1, Acme.

Details

Client	Client1	Site	Acme	Permit Reason	Eng
Department	Eng	Area	cv1	Plant Equipment	Tippler 2
Estimated Date On	26/11/2013	Time	11:00:00	Estimated Usage	15 min
Contract		Engineer	Umesh	Engineer Contact Details	01146624521
Actual Date On	25 Nov 2013 09:10:39	Actual Date Off		Alarm Raised	
Created By	Comitrac User	Created When	20 Nov 2013 10:06:01	Archived	No
Updated By	Comitrac User	Updated When	25 Nov 2013 00:10:39	Deleted	No
Deleted By		Deleted When			

Buttons: Update Permit, Close Permit, Show Affected Routes, Add Comment

Stock Overviews



Incorporate physical separations like walls, barriers, etc.

User definable storage Area layouts

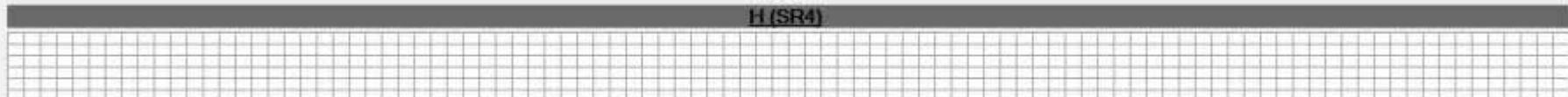
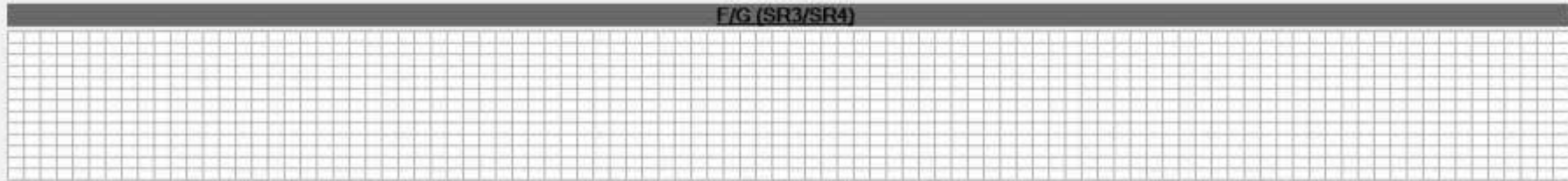
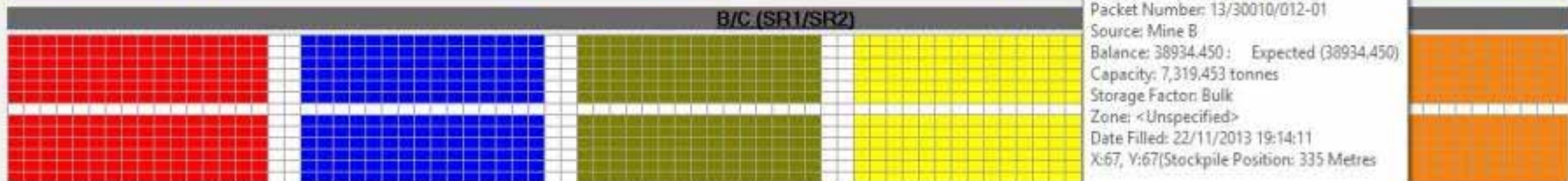
Real time information, giving users up-to-date and accurate stock levels

Easily identify different commodities through user defined colour Schemes

Saldanha Bay : BB | Saldanha Bay : Main | Saldanha Bay : Port Of Saldanha

A (SR1)

15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285	300	315	330	345	360	375	390	405	420	435	450	465	480
----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----



Commodity: Assmang Lumpy
 Packet Number: 13/30010/012-01
 Source: Mine B
 Balance: 38934.450: Expected (38934.450)
 Capacity: 7,319,453 tonnes
 Storage Factor: Bulk
 Zone: <Unspecified>
 Date Filled: 22/11/2013 19:14:11
 X:67, Y:67(Stockpile Position: 335 Metres)

Customers:

 Customer A : 100000.000

CommTrac controls weighing functions and automatically acquires the data ensuring stable weighing and removing human error

Terminal Management System v1.1.0.8 :: admin - 13/04/2007 11:00:49 ::

File Management Jobs Planning Overview Administration Reports Archive User Windows Help

Booking In

Vehicles On Site | **Booking In Details** | Collected Tickets

Booking In Type
 List Fixings Due Today:
 D.O. Fixing Contracts Ref Number
 2 Check Digit:
 Direct Ex Ship: Contract:

Delivery Order Attributes

Customer	Commodity	Required	No. Bags	Delivered	Fixed	Balance	Bags Delivered
Customer 1	Gold Gluten	0.500	0	0.000	5.000	10.000	0

Vehicle Details
 Vehicle Reg: DB07 AAA Trailer: N/A Arrival Date: 13 April 2007
 Type: <Unspecified> Haulier: Mr Haulier Arrival Time: 11:00:57
 Plated Weight: 50 Driver: Mr Driver Capped Load: Partial Load:

Unit Details
 Sheet Intact: Sheet On: Last Washed Out: 13 April 2007
 Unit Clean: Vehicle Condition:
 Ref Number:
 Pin Number: 5324
 Comments:

Last Three Loads
 Last Load 1:
 Last Load 2:
 Last Load 3:

Packet Details
 Store: Stockpile A
 Packet: 07/00010/001-01
 Location: Location 1
 Zone: <Unspecified>
 Pseudonym: Unspecified

Weight Details (tonnes)
 Tare Weight: 0 Gross Weight: 0 Net Weight: 0.000 Expected Weight: 0.500

Commit Cancel Force Re-Tare Manual Weigh

CommTrac™ Terminal Management System v3.400 - Admin - 25/11/2012 10:03:33 - [Königsheim]

File Process Management Stock Control Break Bulk Job Control Financial Layline Monitor Reporting Administration User Windows Help

DBIS Search On

Summary Attributes

Carriages

Columns: - Criteria: - Archive To:

Carriage	Ref Receipt	Customer	Date	ETA	Commodity	Source	Destination	Weight	Units	Process	Weighted	Stages	Actual	Planned	Comments
1010	1010	1010	10/11	10/11	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010
1010	1010	1010	10/11	10/11	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010
1010	1010	1010	10/11	10/11	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010	1010

Add Edit Delete Exit

CommTrac™ Terminal Management System v3.400 - Admin - 25/11/2012 10:03:33 - [Königsheim]

File Process Management Stock Control Break Bulk Job Control Financial Layline Monitor Reporting Administration User Windows Help

DBIS Search On

Summary Attributes

Carriage: 1010

Attributes Product

Summary Details

Section Details

Section Number: Planned Receipt:

Ref Truck: Planned To:

Last Truck: Planned Completion:

Total Trucks: Actual To:

Direct Loading: Actual Completion:

Dispatch Weight: Actual Weight:

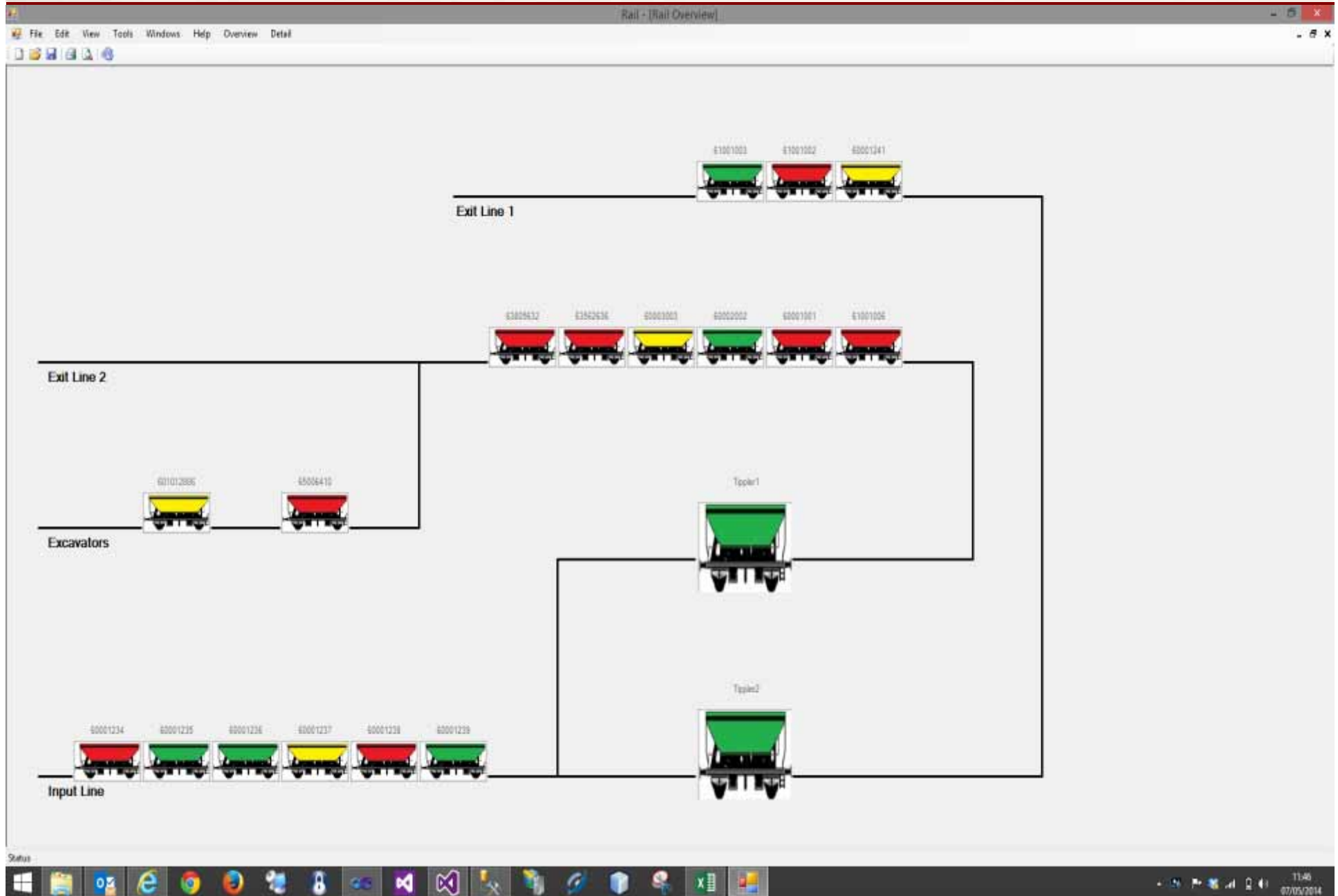
Status: Diverts Actual Weight

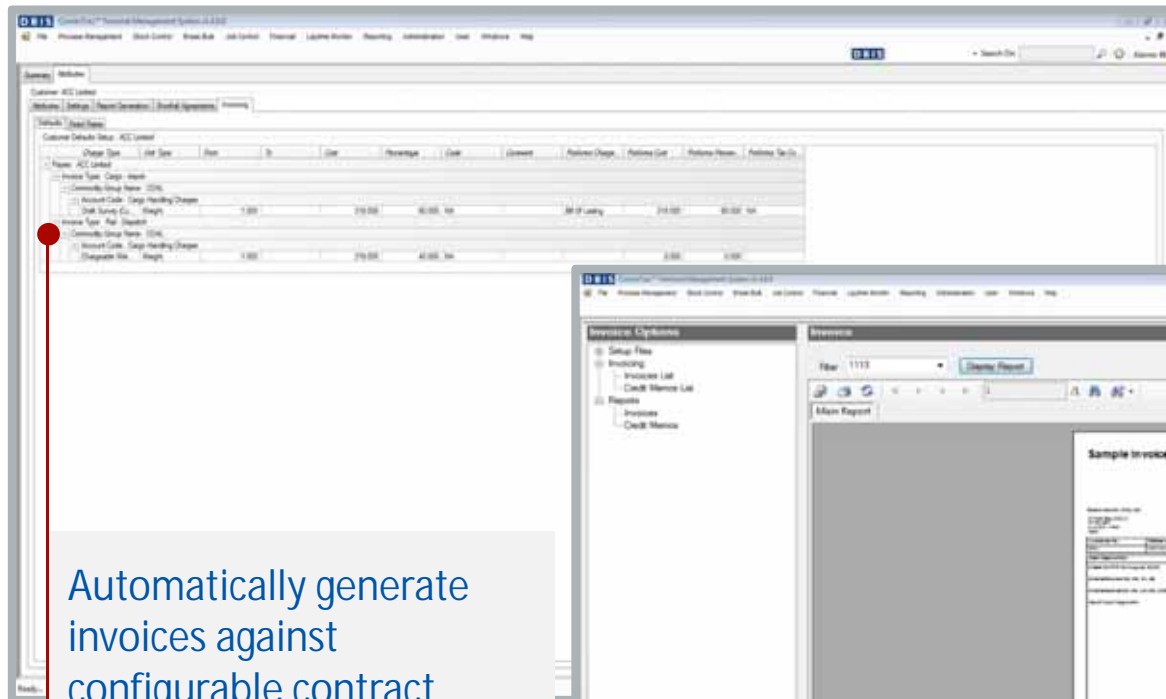
Other:

Planned Resource:

Comments:

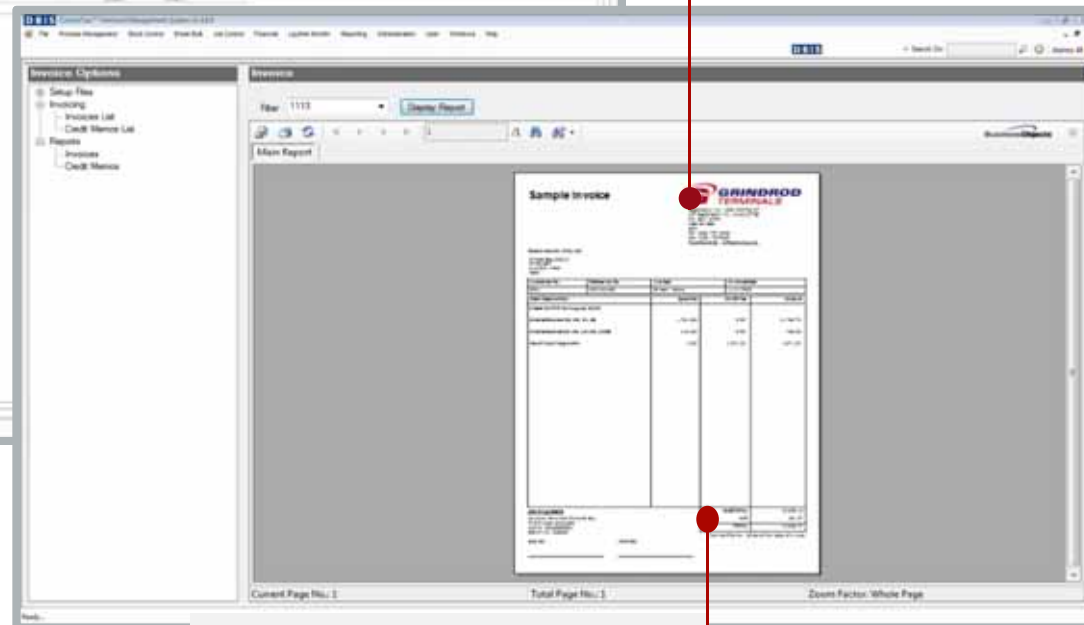
Save Cancel Assign Location





Automatically generate invoices against configurable contract terms, drastically reducing administration

Review and approve invoices before sending to customers



CommTrac Handles various tax types

Planning Grid Vessels

Vst ID	Vessel	Berth	Status	ETA	ATA	Required Quantity	Loaded Quantity	Remaining Q
1	MV Caspian Prince	Main Berth	On Route	09/04/2013 02:00:57	24/04/2013 14:00:35	19500.000	42857.143	-23
2	MV Ocean Princess	Outer Berth	On Route	17/04/2013 10:16:29	09/04/2013 13:18:40	59000.000	0.000	
3	MV Grand Liberty	Main Berth	Loading	14/04/2013 08:00:01	17/04/2013 15:10:21	48000.000	78.825	47
5	HMS ARK ROYAL	Main Berth	On Route	18/04/2013 14:00:17		14500.000	0.000	
6	BUCAREST KING	Outer Berth	Alongside	20/04/2013 14:45:19		33000.000	0.000	
7	COO	Main Berth	On Route	19/04/2013 11:00:24		26000.000	0.000	

Planning Grid Trains

Vst ID	Consignment	Section	Resource	Status	ETA	ATA	Number Of Trucks	Tippled Trucks	Res
1	123400001	1	Tippler 1	Completed	15/04/2013 10:00:00	15/04/2013 10:25:00	113	0	11
2	123400001	2	Tippler 1	Completed	11/04/2013 10:30:00		114	0	11
3	123400001	3	Tippler 2	Completed	15/04/2013 11:00:00		115	0	11
3	41250010			On Route	18/04/2013 10:30:53		0	0	0
4	123400002	Sectio...	Tippler 1	On Route	15/04/2013 12:00:00	15/04/2013 11:10:00	112	0	11
5	123400002	Sectio...	Tippler 1	On Route	15/04/2013 13:00:00		112	0	11
6	123400002	Sectio...	Tippler 2	On Route	15/04/2013 13:30:00		109	0	10

Gantt Scheduler

Allow customers to access key data via secure web portal

Real-time and historical reports

BULK TERMINAL - SALDANHA DUAL SHIPLOADING DAILY REPORT

BTS - Printed at - 23-Nov-2013 21.05

VESSEL NO	VESSEL NAME	READY FOR LOADING		FIRST ORE	DRAFT COMPLETE	DRAFT CHECK	DRAFT SURVEY
		CUSTOMER READY	BULK TERMINAL				
16	MV Rhubarb	19-Nov-2013 09:00	19-Nov-2013 09:16	19-Nov-2013 09:30	19-Nov-2013 15:46	14	

Ship Loader 1

Department	Time Start	Time End	Duration	System	Events	Remarks
SHIP	18-Nov-2013 09:15	18-Nov-2013 09:15	0	Ship Loader 1	Start	
PLANNED STOPPAGE	18-Nov-2013 11:10	18-Nov-2013 12:30	80	Stacker_Reclaimer_SR1	Maintenance	
MECHANICAL	18-Nov-2013 14:30	18-Nov-2013 15:45	75	Stacker_Reclaimer_SR3	Breakdown	
KUMBA PENALTY	19-Nov-2013 01:30	19-Nov-2013 01:42	12	Stacker_Reclaimer_SR2	POSITIONING	Positioning H4 to B4

VESSEL INFORMATION		
TOTAL LOADING TIME	6.770	Hrs
TONNAGE LOADED	2500.000	Tons
SHORESCALE	2635.000	Tons

LOADING RATES		
GROSS RATE		Tph
BT RATE	23.173	Tph
NET LOADING RATE		Tph

BULK TERMINAL	
Department Name	Duration
MECHANICAL	75.000
PLANNED	80.000
Total Delays	155.000

EXTERNAL	
Department	Duration
KUMBA PENALTY	12.000
TOTAL DELAYS	12.000

BT LOAD TIME		DEVIATION:
PLAN	0.000	100.00 %
ACTUAL	6.770	
Production	6.770	

LOADING OTHER VESSEL	0
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LOADING RATES Ship Loader 1		
GROSS RATE	369.280	TPH
BT RATE	0.000	TPH
NET LOADING RATE	202.280	TPH
TONNAGE LOADED	2500.000	Tons
TOTAL LOADING TIME	50.000	Hrs

CUSTOMER LOADING TIMES	
Kumba HRS	50.000

CUSTOMER TONNAGES	
Kumba TONS	0.000

BTS Performance Figures (Corridor Dashboard)

For the period from 24-Jun-2014 00:00 to 14-Jul-2014 23:59



Trains		
Total No. Sections	269	Count
Off Loading Time	29727	Minutes
SR Positioning Time	2117	Minutes
Off Loading Time - SR Positioning Time	27610	Minutes
Average Section Time	110	Minutes
Demand Availability	87.51	%
Total Tonnes Unloaded	3055953	Tonnes

Vessels		
Total No. Vessels	20	Count
Dual Loaded (Dual vs Single)	18	90.00 %
Direct Loading	12	Count
Direct Loading Tonnes	222504	7.32 %
Single Loading Hours	36.72	Hours
Single Loading BT Rate	5719	TPH
Single Loading Volume	174882	Tonnes
Dual Loading Hours	381.45	Hours
Dual Loading BT Rate	8624	TPH
Dual Loading Volume	2865623	Tonnes
Total Tonnes Loaded	3040505	Tonnes
Avg. Time between Customer Ready and BTS	0.78	Hours
BT Rate	8334	TPH
Total Maintenance Delays	35.07	Hours
Demand Availability	91.61	%
Berth Utilisation	40.80	%



DIBIS

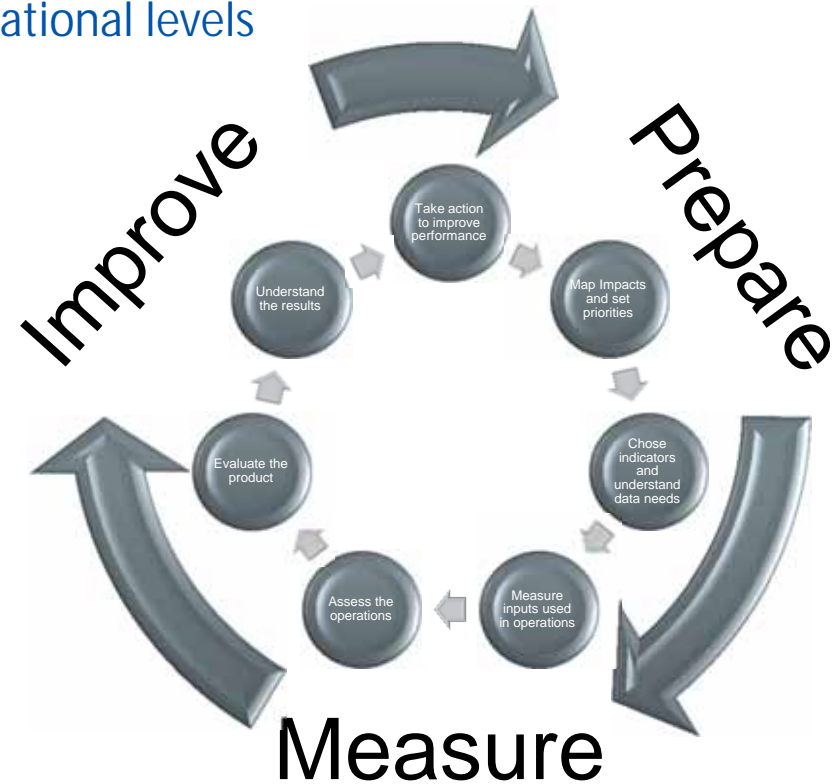
SOFTWARE
AUTOMATION
CONSULTANCY

KPIs

Business improvement

For KPIs to be effective they need to reflect the goals of the business

- ✓ | A KPI should echo an organisational goal
- ✓ | It should be decided by management
- ✓ | It creates understanding on all organisational levels
- ✓ | It is based on *real* data
- ✓ | It should be easy to understand
- ✓ | It should lead to action
- ✓ | It should improve performance



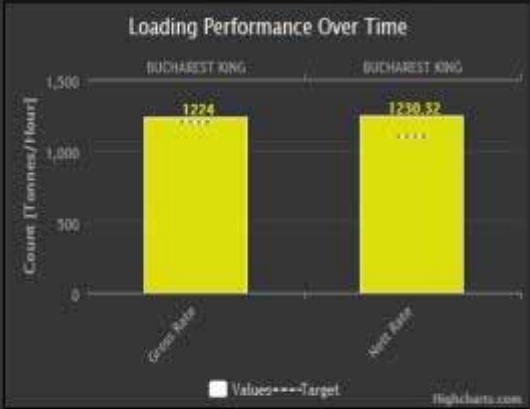
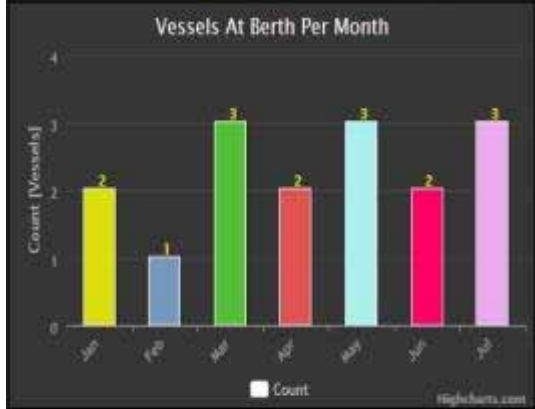
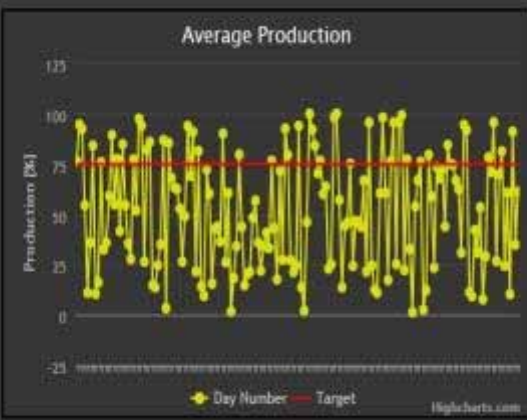
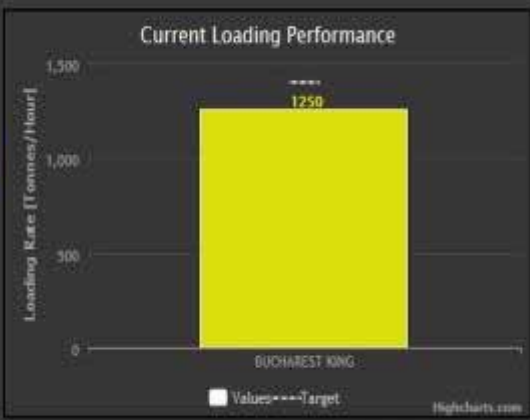
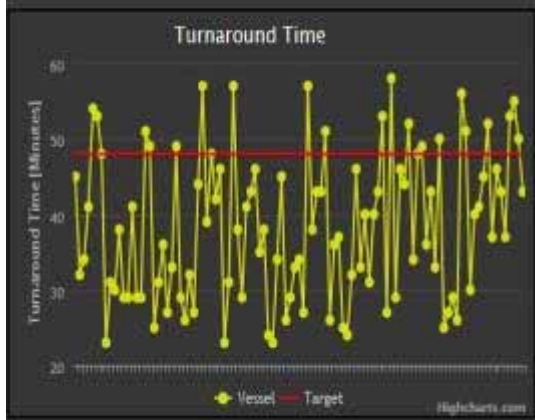
Grindrod Terminals – Dashboard
Powered by CommTrac

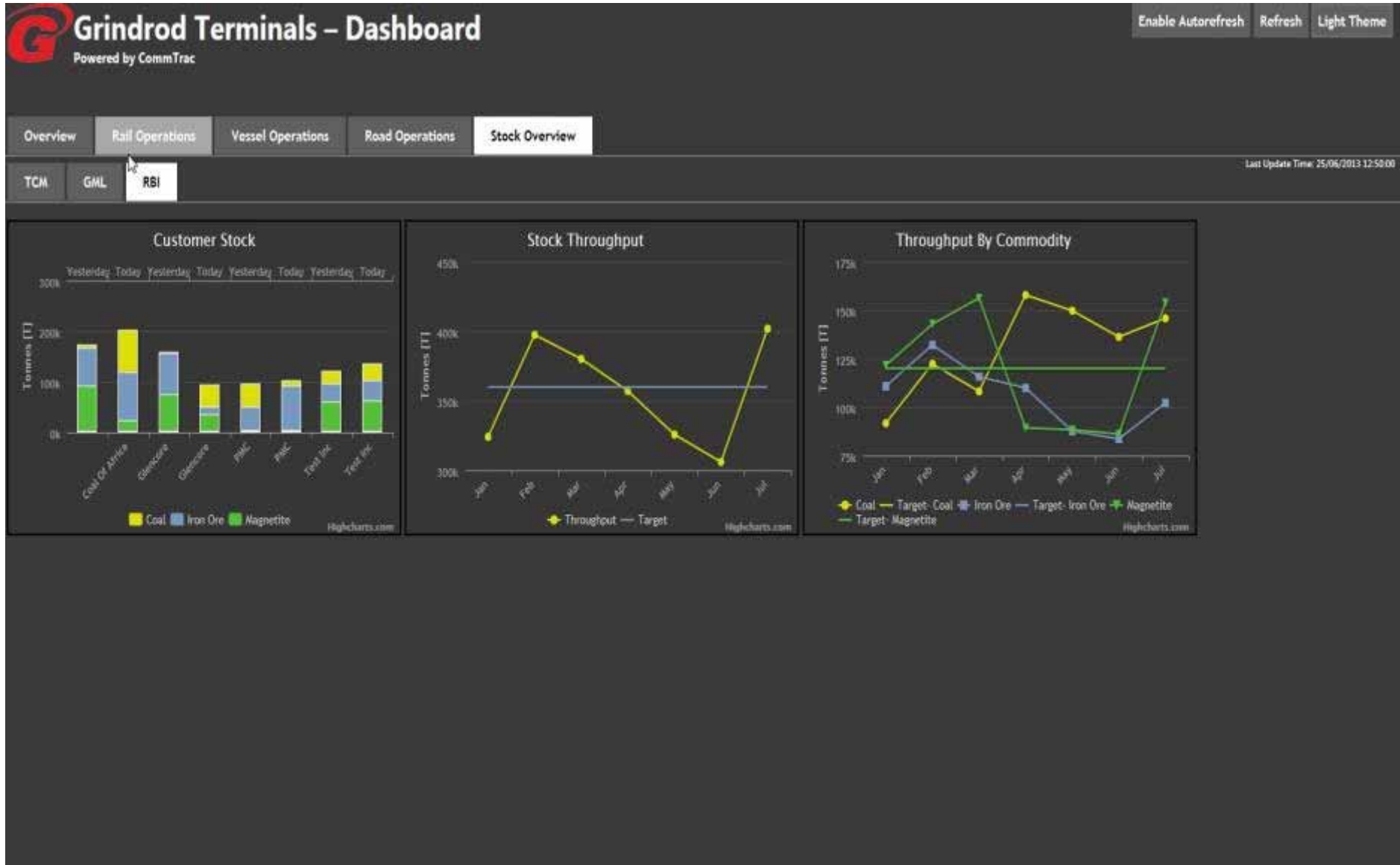
Enable Autorefresh Refresh Light Theme

Overview Rail Operations **Vessel Operations** Road Operations Stock Overview

TCM GML **RBI**

Last Update Time: 25/06/2013 12:50:00







Dashboard - Windows Internet Explorer LIV1CT02

http://localhost:8099/DashBoard/Space?siteGuid=... Dashboard

Peel Ports Liverpool - Bulk Dashboard

Powered by CommTrac


Enable Autorefresh Refresh Cycle Off Light Theme Log out Admin

Current Vessel Vessel Operations Road Operations Millfeed Overview **Space** Stock Overview

Last Update Time: 6/25/2013 12:30:00 PM Connected user: ADMIN ADMIN

RSGT AFS


Maize Space Available



19250

Highcharts.com


Oats Space Available



0

Highcharts.com


Soya Space Available



3510

Highcharts.com

Wheat Space Available



6050

Highcharts.com

Start [Taskbar icons] EN 11:58 AM 11/26/2013



Conclusions

Business improvement

Key benefits

Saving costs

- ✓ | Reduced demurrage costs
- ✓ | Reduced admin costs
- ✓ | Prevention of cross contamination
- ✓ | Prevention of paper and real stock losses
- ✓ | Timely decision making based on valid information

New business opportunities

- ✓ | Better customer service and information
- ✓ | Increased capacity through stockyard optimisation and higher efficiency
- ✓ | Outperforming competitors
- ✓ | Optimised decision making processes

Business Function	Minimum	Best Case
Reduce Demurrage Costs	\$50,000	\$100,000
Reduce Pilferage and Wastage	\$0	\$0
Reduce Administrative Costs	\$81,250	\$162,500
Improving Operational Performance	\$0	\$50,000
Reduce claims by reducing Human Error	\$20,000	\$20,000
Increase revenue by providing correct and transparent basis for invoicing loaded tonnage, rent etc.	\$0	\$0
Total	\$151,250	\$332,500

Example 1									
Working Time 24-7									
Actual Working Time 19.2 Hours								Stoppages	
@800TPH AVE Total Discharged 15,360 Tonnes									
Example 2	5% Improvement								
Working Time 24-7									
Actual Working Time 21.16 Hours								Stoppages	
@840TPH AVE Total Discharged 17,774 Tonnes									

In theory, at 60% occupancy, this would create the capacity to discharge an additional 528,666 tonnes per year. If the profit on discharging vessels was 50 cents per tonne this would generate \$264,333.00 in additional profit

This is theoretical but the principle is clear; small incremental performance improvements can radically improve the bottom line of the business

Using Integrated Systems allows operators reduce costs and improve operational effectiveness

Systems are only truly effective if an integrated approach is used to create an optimal architecture and a user friendly environment

Small gains in productivity or space utilisation can create large improvements to the financial bottom line

Thank you