

BusinessConnect and SolutionsConnect

It's time to make bold moves.

Blue Skies Ahead!

RightShip to transform the maritime industry with Big Data, Analytics and Cloud

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RightShip



Global Maritime Sector

- Over 90% of world trade is carried by sea
 - Dry bulk (iron ore, wheat, coal etc)
 - Tankers (oil, products, chemicals)
 - Gas Tankers (LNG, LPG)
 - Container ships (consumer goods)
 - RoRo (car carriers)
 - Tugs & Barges

- Just under 10 billion tonnes of cargo shipped in 2013
 - Australia shipped 9% of total world trade



Agenda

- Who is RightShip
- What we do
- How we review it **today** and predict it **tomorrow**
- New analysis engines **IBM SPSS** and **Cognos**
- Our journey into the cloud with **SoftLayer** – lessons learned

Who is RightShip?

About RightShip

- Independent company formed in Oct 2001
 - Houston, Melbourne, & London
 - 240+ Customers globally
- Ship Vetting & Risk Management
 - Petroleum & Dry Cargo Vetting Service
 - Removed over 950 ships from customer supply chains in 2013
 - Environmental Rating & CO₂ Benchmarking
- Award winning proven system
 - ISO9001 & ISO27001 Certified
 - Prime Minister's 2013 Australian Exporter of the Year



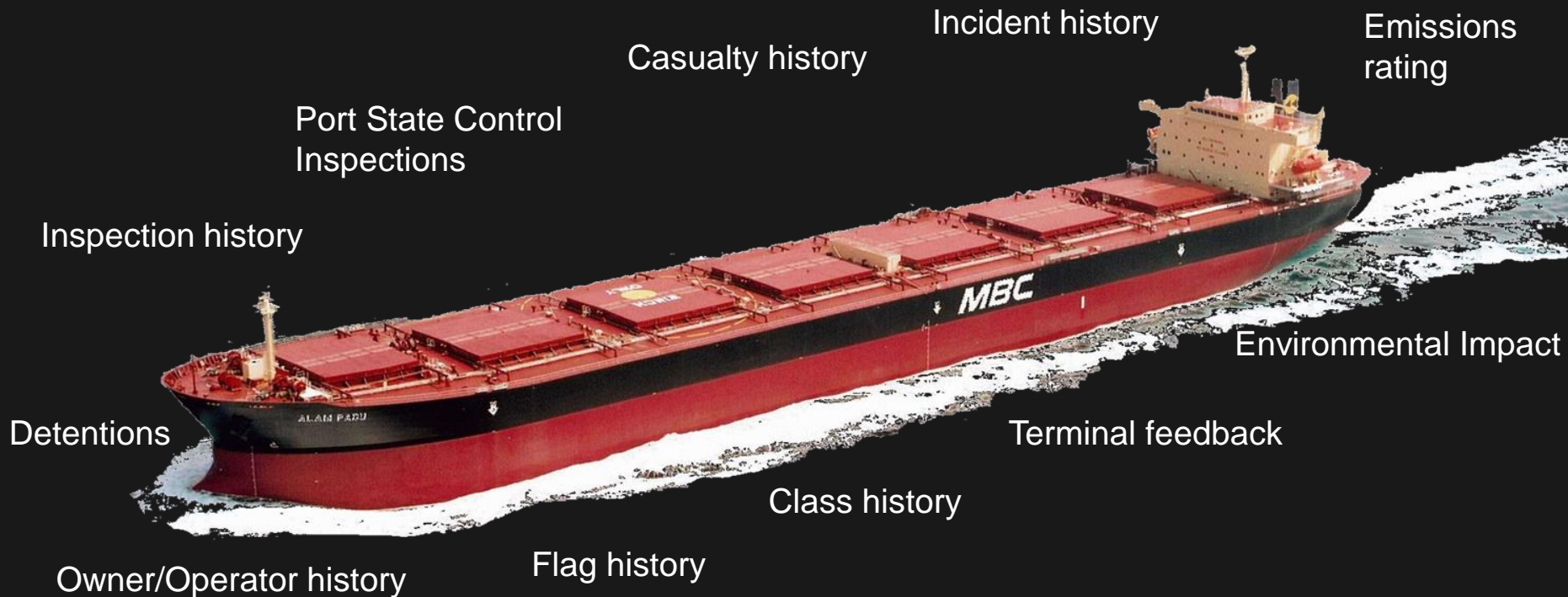
Current Maritime Risk Management

What is Vetting?

“to subject somebody or something to a careful examination or scrutiny, especially when this involves determining suitability for something”



Ship Vetting Information



Calculated Risk Profile – Expert Opinion

Section 1: Calculated Risk Profile						
Code: LR = Low Risk; LMR = Low Medium Risk; MR = Medium Risk; MHR = Medium High Risk; HR = High Risk						
Parameter	HR	MHR	MR	LMR	LR	ACTUAL
Yard Risk				■		0.43
Flag Risk			■			0.40
Flags Registered			■			3.00
Class Changes					■	1.00
Class Risk				■		0.50
Owner Risk	■					4.00
Manager Risk	■					4.00
Parent Risk	■					5.00
Owner Fleet Risk				■		0.71
Ownership Risk					■	0.00 / 13
Casualties Risk					■	0.00
Casualties by Age Risk					■	0.00 / 24
Casualty Timing Risk					■	0.00
Column Counts	3	0	2	3	5	
Multiplier	2	4	6	8	10	
Points Scored	6	0	12	24	50	92
Total Calculated Score						92

For each risk parameter a vessel is assigned (independently) into one of the following risk categories:

- Low Risk (LR – 10 points)
- Low Medium Risk (LMR - 8 points)
- Medium Risk (MR – 6 points)
- Medium High Risk (MHR – 4 points)
- High Risk (HR – 2 points).

Once matrixes (instantaneous) the columns are totalled and a base score is generated.

Note:

- RightShip Inspection – up to **+15 points**
- Green Award – bonus **+15 points**
- Intercargo Vessel – bonus **+5 points**

Improving Maritime Risk Management

New sources

Risk Modeling

Predictive Analytics

LinkedIn

Twitter

Casualty history

Incident history

Emissions rating

Port State Control Inspections

Inspection history

Environmental Impact

Detentions

Terminal feedback

Mobile

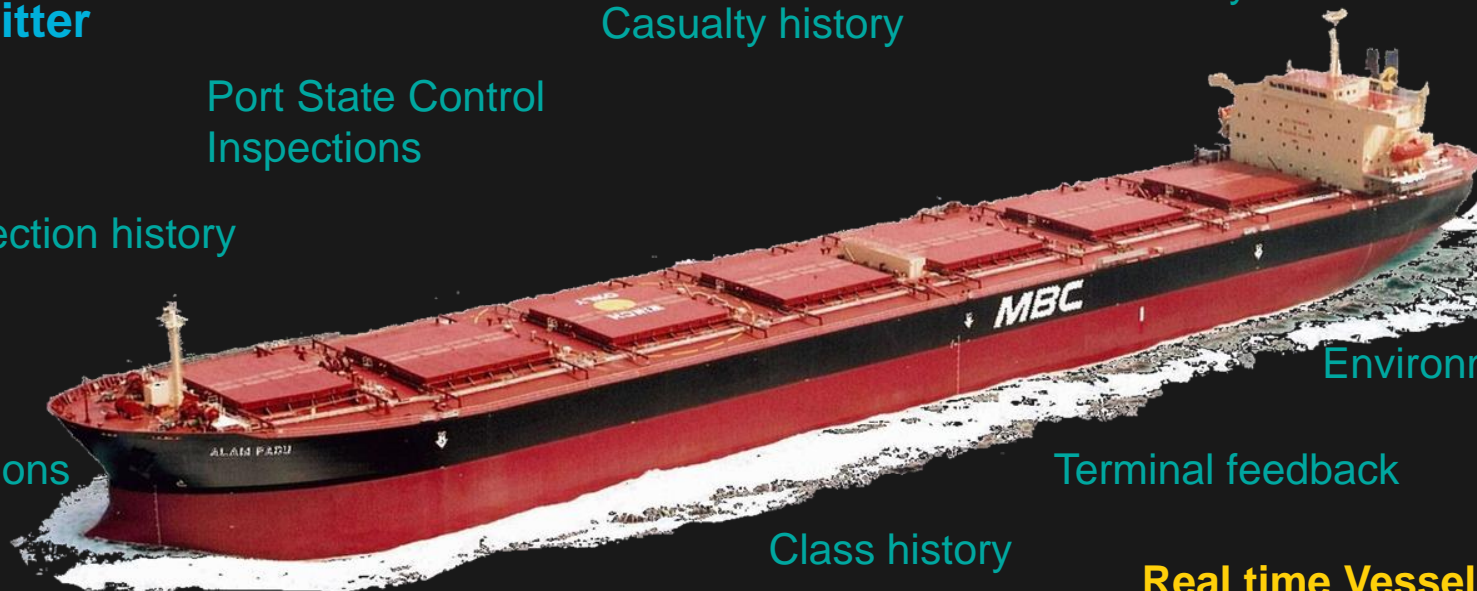
Class history

Real time Vessel Position

Owner/Operator history

Flag history

Email



Transforming silos of raw data into useful information



New tools - Enablers

- SPSS
 - **Modeler**: Enhanced Risk Modelling
 - **Decision Management**: Rules Management
 - **Data Collections**: Forms to gather data
- Cognos
 - Enhanced Business Intelligence
 - Dashboards
 - Event driven reports

Refine prediction

Predict the likelihood
of a vessel having a
Casualty



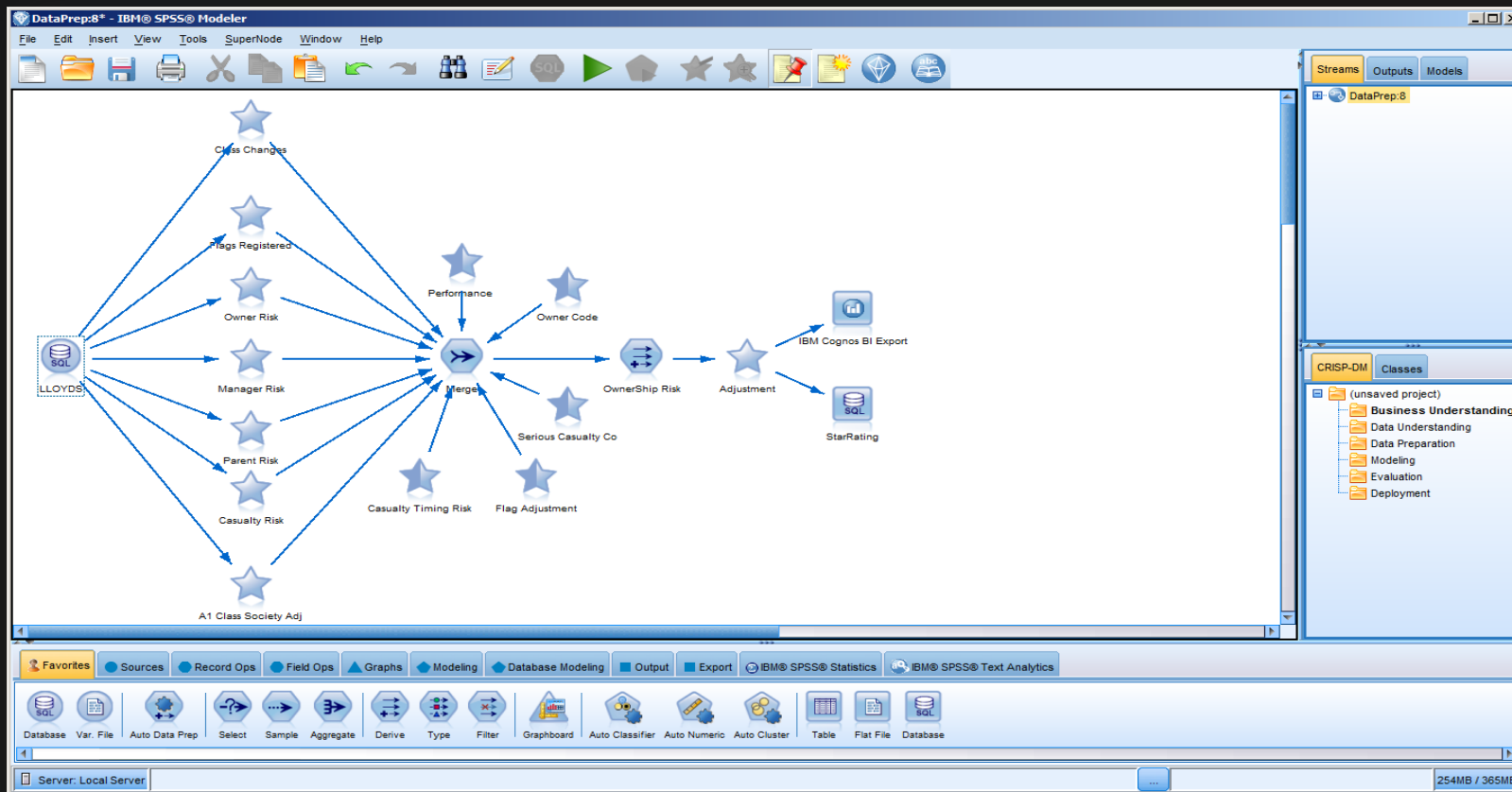
Data to analyse

Risk Modeling

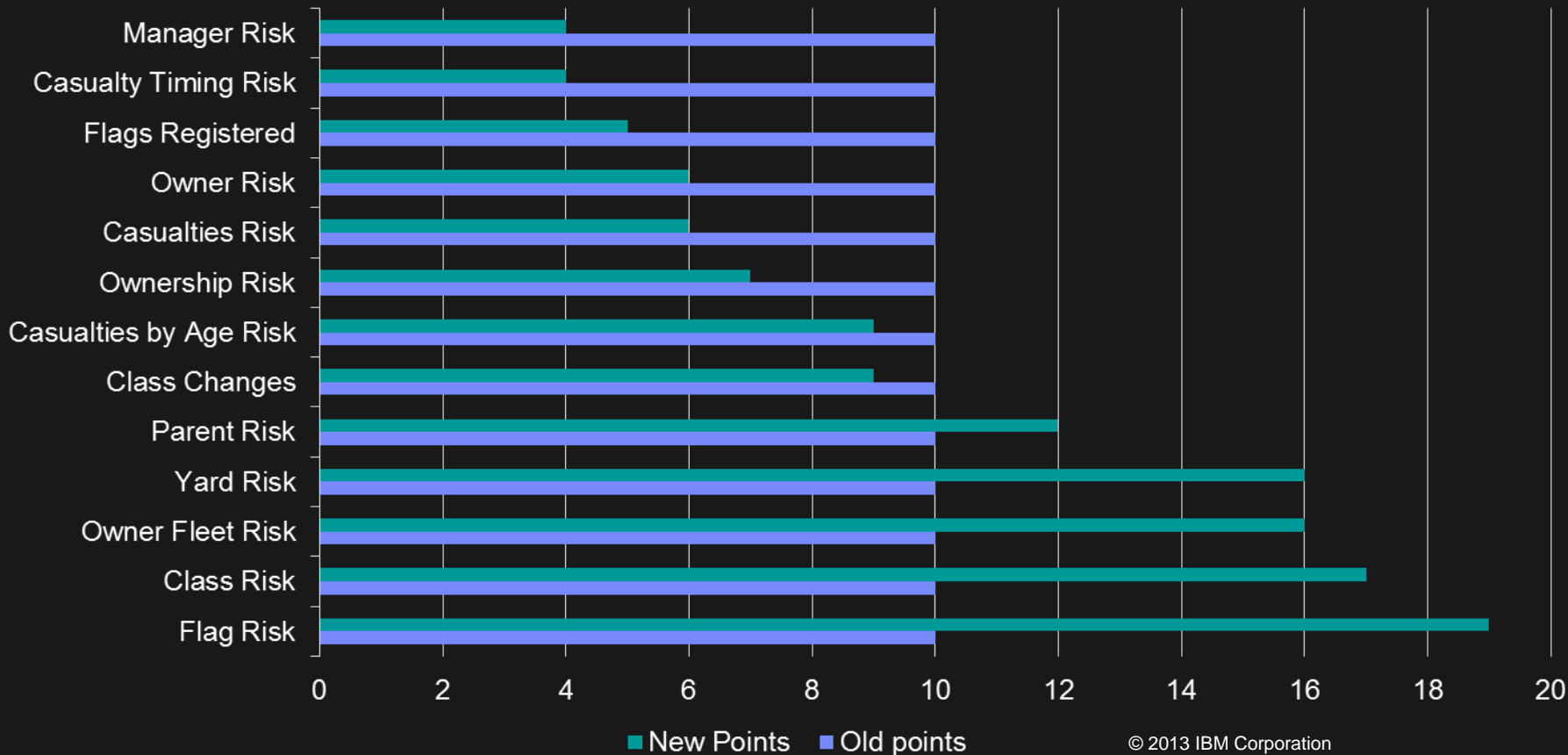
Predictive Analytics



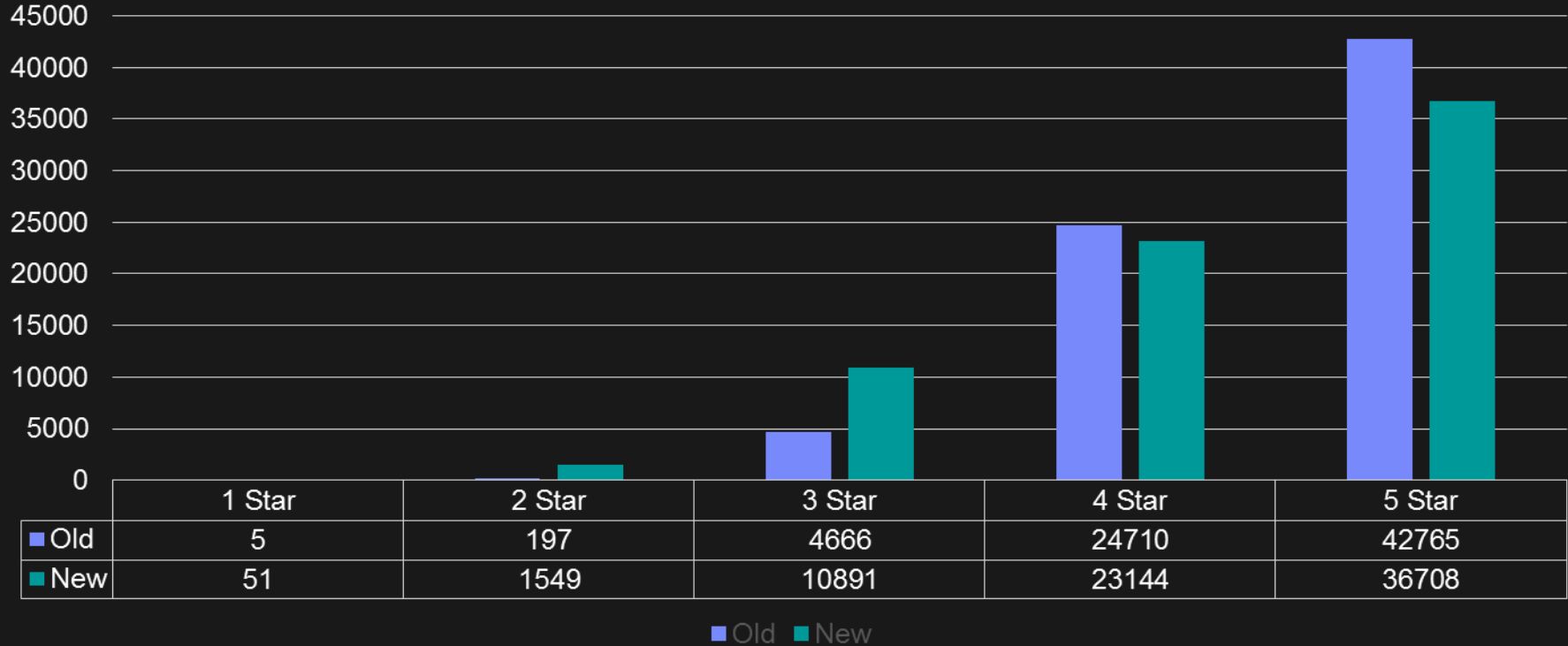
SPSS - Predictive Modeling Application



Weighting of Old vs New model



Impact of new risk model

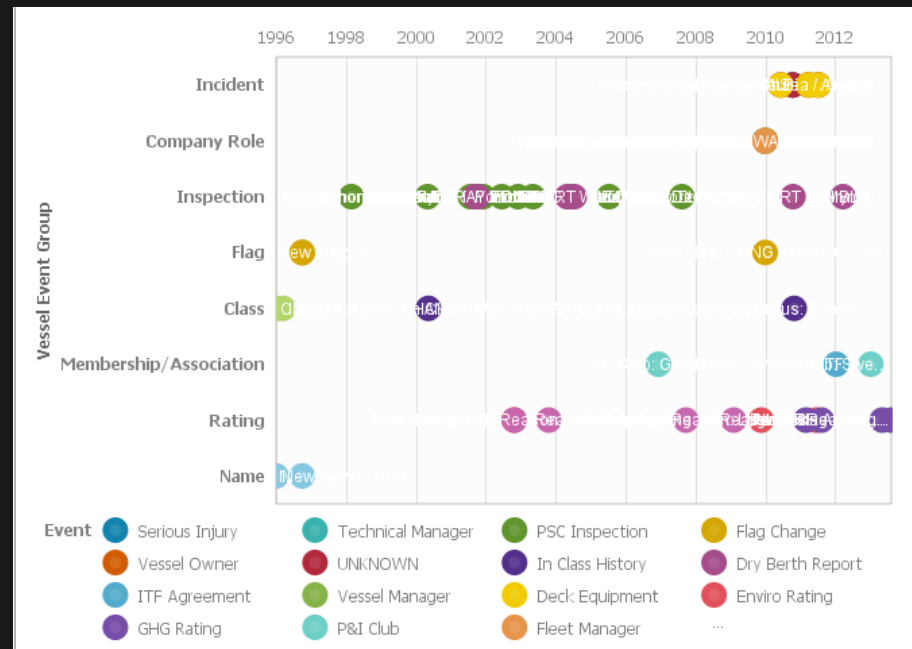
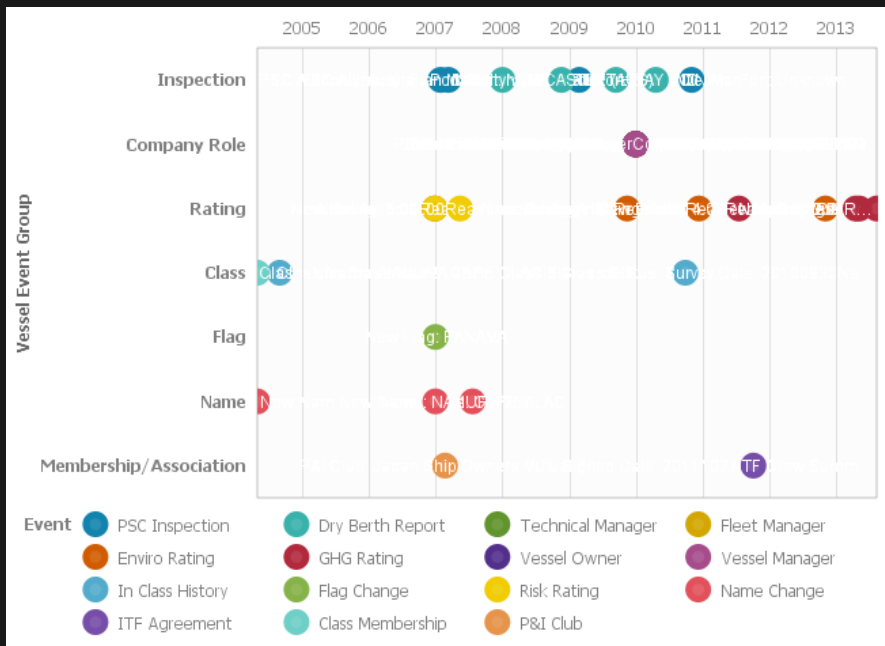


Risk Profile

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Cognos – vessel timeline



New User Interface – vessel data snapshot

BOW AMERICAS 9304306 Chemical/Products Tanker/Tanker 26 Aug 2004 (9.8 years) Vet

Actions ▾



Vetting

21

Approved: 19
Denied: 2

Port State Control

1

Defns/Ins: 3.4
Detentions: 2

Inspections

2

Acceptable: 1
Unacceptable: 1

Incidents

3

Serious: 1
Non-serious: 2

High risk vessel

High risk company
Moderate risk

Environmental

Conditions

13

Open: 1
Closed: 2

Restrictions

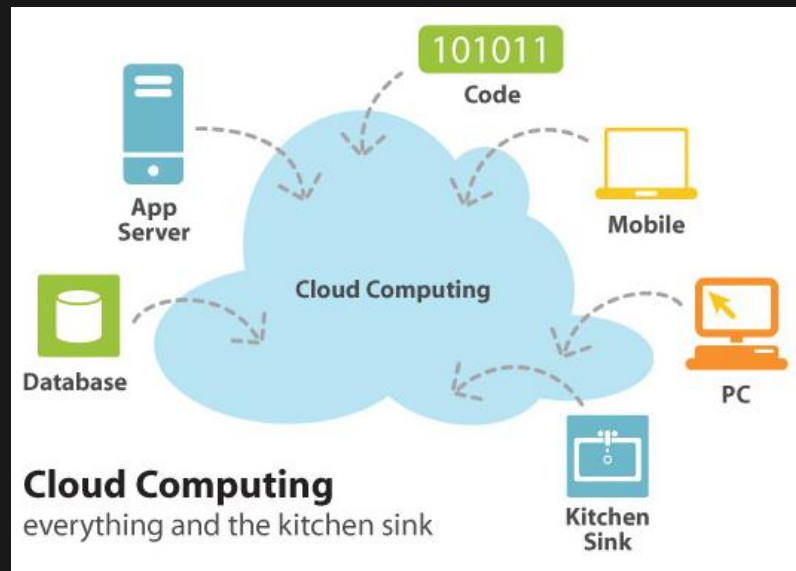
Vessel: 0
Company: 0

Our journey into the cloud with SoftLayer – lessons learned

Transition into the Cloud

*RightShip manages marine risk, **NOT** IT hardware*

- Embrace new cloud technologies
 - IaaS / Cloud
 - Scale hardware as required
 - Easy to manage
 - Fast time to market
 - Place application with customer
- Remain a nimble company
 - New business opportunities
 - Flexibility & Scalability
- Control cost
- Others...



Cloud challenges and solutions

- PVU Licensing
 - Very restrictive
 - Known hardware
- Concerns over 'Sharing' resources
- Loss of dedicated resources in a cloud environment
- Public / Private cloud options
- Security - Firewall
- Management of environment
- Data domicile
- IBM Company

Thank you – Questions?

