THE CLOUD AND WHAT IT MEANS TO YOU

Jonathan Victor

Chief Operating Officer

Oceanwide

AGENDA

- Understanding the Cloud

- Security in the Cloud

- Selecting a Cloud Service Provider

- Migration to the Cloud

- SaaS Benefits

- Cloud Usage Scenarios

Oceanwide
An Insurity Company

DIFFERENT TYPES OF "CLOUDS"

Cloud Types	Description
Public	Large scale infrastructure available to any organization to host applications
Private	Purpose built cloud infrastructure designed to host a specific application, platform or client
Hybrid	A combination of Public, Private and On Premise infrastructure designed to work together to enable users to benefit from select aspects of each type

Oceanwide
An Insurity Company

"AS A SERVICE"

Offerings	Description
SaaS: "Software"	An application offered over the internet, accessed via the browser and consumed on a subscription basis. Ie: Oceanwide, Salesforce
PaaS: "Platform"	A cloud based development platform to build, test, deploy applications offered on a subscription basis Ie: Force.com, Azure, AWS
IaaS: "Infrastructure"	Compute, Storage and Networking offered on a subscription basis. Ie: AWS, IBM Softlayer, Azure

Saas

Paas

Iaas

Oceanwide
An Insurity Company

"THE NINES"

SLA	Downtime per Month	Downtime per Year
Two 9s	7.2 hours	3.6 days
Three 9s	43 minutes	8.7 hours
Four 9s	4.3 minutes	52 minutes
Five 9s	25.9 seconds	5.26 minutes

Oceanwide
An Insurity Company

"SHARING"

Types of Segregation	Description
Single Tenant	An environment where a single client instance runs on dedicated server infrastructure
Multi Tenant	An environment where a multiple client instances run on share server infrastructure
Physically Segregated	When data from each client is stored in a physically separate database
Comingled / Logically Segregated	When data from multiple clients is stored in common tables within a single database and segregated logically via security rights & roles

Infrastructure

Data

Oceanwide
An Insurity Company

SECURITY IN THE CLOUD, WHAT TO LOOK FOR

- Chief Security Officer
- Certifications: SSAE16 or ISO2700x, PCI
- Mature Cloud Operations & Development organizations and processes
- Regular network scans & applications penetration tests
- Specialized Web Application Security Tier including:
  - Multi vendor, multi tier firewall layers
  - Web application firewall
  - Three tiered application architecture
  - Encryption at rest and in transit
  - Distributed denial of service protection
- 'Tier 1' service delivery partners

Oceanwide
An Insurity Company

SERVICE PROVIDER EVALUATION
SLA CHECKLIST

The following Service Level Agreement (SLA) checklist can be used to evaluate a Cloud Service Provider's maturity, experience and ability to effectively provide cloud services.

✓ Audit & Compliance

The cloud service provider should clearly state how and when its controls are audited and make the audit results available to clients. A standard such as SSAE16 should be used for the basis of the audit and a reputable, objective third party should conduct the audit on an annual basis.

✓ Availability

The cloud service provider should provide a system availability commitment which outlines the amount of monthly / quarterly system uptime. This measurement of availability should also incorporate access to third party services made available from the cloud provider's platform. The percentage of system uptime and number of scheduled maintenance windows should be outlined.

✓ Business Continuity

The cloud service provider must outline their disaster recovery plans, explicitly stating their primary site redundancy positioning and RTO / RPO commitments to ensure adequate protection in case of a disaster.

✓ Customer Support

The cloud service provider should explain how their customer support staff will provide the skills, knowledge and expertise required to support a client's specific business and technical needs.

✓ Geographic Presence

The cloud service provider must ensure that its systems and associated Cloud Operations and Support teams are available to service the client's global business.

✓ Location of Data

The cloud service provider must be able to clearly identify where a client's data is stored and that the applicable data residency requirements are being enforced.

✓ Maintenance

The cloud service provider should clearly outline the types of maintenance tasks it performs and the associated maintenance window schedule.

✓ Performance

The cloud service provider must clearly state their response time objective and should have a monitoring solution that can objectively and transparently measure performance commitments outlined in their Availability SLA.

✓ Privacy

The cloud service provider should clearly state how client data is secured (including encryption algorithms) and kept private from other clients and third parties.

✓ Security

The cloud service provider must be able to provide their documented security policies and be able to evidence that these policies are being followed.

Oceanwide
An Insurity Company

CLOUD MIGRATION BEST PRACTICES

- Clearly defined business & technology needs
- IT & business alignment
- Data residency requirements definition
- Data migration strategy
- Thorough cloud service provider selection
- Conservative migration approach

Oceanwide
An Insurity Company
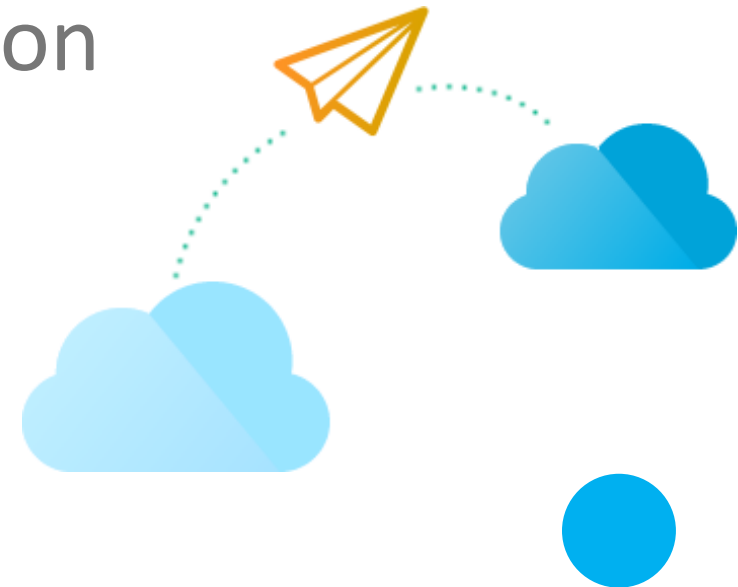
REAL WORLD BENEFITS

- Focus on core business not IT

- Speed to market and product agility

- Limit upfront investment, zero IT footprint

- One stop shop: hardware, software, services, DR, help desk from one vendor, under one contract

- Configuration rather than Customization

- "Try Before You Buy"

Even when not a factor in vendor selection, SaaS has offered value to insurers by lowering upfront capital costs and, after project completion, formalizing an upgrade path.
*2015 Novarica Study

Oceanwide
An Insurity Company

CLOUD USAGE SCENARIOS

From Complete System Replacement to Filling Gaps in Legacy Systems:

- Complete End to End Policy Administration System
- Front End Agent/Customer Portal
- MGA Management System
- Producer Management System
- Underwriter Workstation
- Policy Document Generation
- Standalone Quote-Bind-Issue Solution
- Rating Engine / Quoting Tool
- Reporting and Analytics Engine

Oceanwide
An Insurity Company

INTERNATIONAL MARINE STARTUP

Objectives

- A startup marine MGA was looking for an end-to-end system to manage its multi-line, multi-national marine insurance offerings

Challenges

- Needed to support immediate startup
- Manage the various tax and regulatory regimes in North America, Latin America, Asia and Europe
- Integration to the global accounting system
- Writing for multiple insurers both within and outside of the Lloyds market
- Wide range of premium booking and billing scenarios

Solution

- Genoa platform implemented for all marine lines in North America, Asia and Europe
- Automated invoicing to brokers
- Client / Agent portal implemented for cargo certificates
- Integration to accounting and data warehouse

Results

- System implemented to production within 6 weeks
- Supported growth to over $200M in premium within 5 years
- Wide variety of marine products supported

ENABLING SPEED TO MARKET

Objectives

- A lean startup MGA with limited resources needed an automated process that offered indicative quotes and also automated communication and policy processing for the new agency's sales force.

Challenges

- The business could not afford the expense of traditional PAS development or the ongoing expense of vendor updates to meet regulatory changes.
- Crop insurance seasonality creates a very limited sales cycle. Missing deadlines for launch would have been catastrophic to the business.

Solution

- Bridge delivered the low cost, flexible solution needed for rapid deployment.
- Faced with constant regulatory and market changes, the MGA was able to use Bridge's self-service configuration tools to input changes quickly, with their own resources and keep their professional service fees low.

Results

- The MGA launched its crop-yield products and agent portal within 62 days of the project start date.
- The new system was able to provide indicative quotes for multiple scenarios before selection of the final quote and reduced response time from 24 hours to 15 minutes.
- MGA estimated that it was also able to reduce costs by more than $1 million with the adoption of Bridge.

Oceanwide
An Insurity Company

BROKER MANAGEMENT SYSTEM

Company/Objectives

- A global insurance broker with operations in 50+ countries was looking for an end-to-end system to manage the placement, issuance, billing and accounting on all commercial insurance products
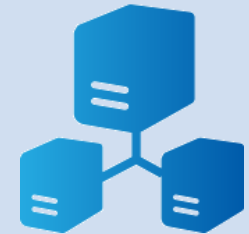
Challenges

- Broker was looking to grow its international commercial lines
- Needed to accommodate writing business with over 2000 insurers including Lloyds market business and local insurers in 50+ countries across all commercial lines insurance products
- Manage the various tax and regulatory regimes in North America, Latin America, Asia and Europe
- Provide integration to the global accounting system

Solution

- Bridge selected to handle CRM/submission process, Policy Issuance in multiple languages, Invoicing and receivables management

Results

- Implementation of Broker Management System in progress

Oceanwide
An Insurity Company

Q&A

Wayne Umland & Jonathan Victor