Agenda

• Who we are
• Our involvement with BiTAS
• Acuwize Collaborative Documentation Platform
• How you can get involved
Ben Kothari - Entrepreneur

• Proven track record in building and managing rapid-growth software companies
• Founded, Ampliflex Inc-- Strategic Consulting in Digital Transformation, Cloud enablement, Integration, Security and Analytics
• Oracle SaaS – Financials, Procurement, Order Management, Supply Chain, Logistics (OTM/GTM), HCM
• Middleware Experts – Warehouse, Analytics, Integration, API, SOA, ESB and Security
• Currently focused on building AI powered, Blockchain secured solutions in supply chain industry
• Prior jobs include Chief Technology Officer at Agile Software (sold to Oracle), Senior Architect at Healtheon
Thought Leaders

The Next Big Things: **AI, Blockchain, Chatbots, IoT**

- Artificial Intelligence/Machine Learning
- Blockchain
- Autonomus Software
- IoT
- Human Interface
Blockchain in Logistics
Our involvement with BiTAS

- Involved since inception
- Responsible for setting up standards foundation
- Workgroup Chair
  - Tracking
  - Shipment
  - Shipment Order
- Deep contributions
  - Party
  - Location
  - BoL

- 92% of the respondents either plan to use the BiTAs work products or are using them; 8% are not using the BiTAs standards, and do not plan to use them.
- 80% of the respondents are interested in seeing the blockchain projects of other members, and 10 have provided their names to work on a small group to share learnings.
Key Highlights

General
• OpenAPI
• Diagram UML
• Illustrative purpose – JSON Examples

Shipment
• Shipment model – Meta Model
• Compact start of the art model – refresh technology
• Engaged with TradeLens, GS1, MMT
• Governance workflow
Using Blockchain to Automate Financial Settlements (Order to Cash cycle Optimization)

- What
- Which Vehicle?
- Who
- Proof
- Other Factors?

**Blockchain**

- Shippers
- Carriers
- Regulatory Authority
- Customers
- Drivers
- Finance (payers, factoring companies, insurance)

**API Gateway**

**Order**

**BOL**

**Track/Custody**

**POD**

**INVOICE**

- BOL #: 1234 (Root)
- Truck: ABC
- Amount: $9999
- Detention Fee: $400
- Dock Arrival Time: 3 Hours
- POD: trimble.com/api/pod/12
Standards Development Approach

- Data collected from BoL
  - Ocean
  - Rail
  - Truckload / TLT
  - Air
A Shipment is Goods or Products that may be transported under the terms of an Agreement authorized by two or more Parties. As a grouping of Ship Units, the shipment is moved at the same time and transported by means of a transportation service offered by the Carrier or any Transportation Service Provider (Party) and requested by the Shipper (Party) who is at one Origin (Location) to one Recipient (Party) who is at one Destination (Location), and with respect to the total number of Ship Units and their respective piece counts and total weight.

ShipUnit describes how freight is packaged and measured for transportation. Origin and destination associated with Shipment remains the same for all ShipUnits; however, a route a portion of ShipUnit may take to reach final destination may be different.

Passive vehicle resources which are responsible for bearing or storing the load of ShipUnits are collectively referred to as HandlingUnit (HU). The loadable portion of a vehicle which is used to transport goods such as a container, box or a pallet are examples of HandlingUnit.
Example

ShipOrder between Ground and RailRoad

Party2: RailRoad

ShipOrder between Ground and RailRoad

Party1: Ground

Pre-exist and posted on Blockchain (genesis block for Shipment)
Lack of multi workgroup, multi role, Collaborative Platform

- Lack of standard to define information models and APIs – Business and Technical
- No Version control
- Email/slack as state of art
- No way to get community feedback
- Incentives for participation
- Governance issues
Current Tools on the Market

- Swagger
- Apicurio
- Stoplight
- Apiary
- Postman
- Readme

- Designed for technical Developers only
- Incompatible with multi-workgroup, multirole collaborative environment
- Scalability Issues
New Process

Model Editor
- Design Class
- Diagrams in StarUML
  - Export Diagrams as OpenAPI files
  - Drag and drop OpenAPI file on Acuwize Portal's Workgroup page to upload it.
  - Uploaded file is automatically checked into Acuwize Git repository

Copy Writer
- Write/Edit narrative, describe the Model in Acuwize Editor
  - Edit text, colors, enumerated list, tables, styles, and insert images in Acuwize WYSIWYG Editor.
  - Commit Changes to Acuwize Git Repository

Specification Viewer
- Read Specifications in Acuwize Viewer
  - Submit and discuss new ideas in Acuwize Portal
    - Post comments, seek clarifications on context specific forums

Technical Developer
- Download OpenAPI files to develop applications
  - Use auto code generators to create code adhering to the specification
  - In near future, instantly test specifications using Acuwize example Mock Server.
Democratic Blockchain Based Voting

- Participants get to vote on API topics, Products, Ideas
- Participants may vote on specific ideas using thumbs up/down
- Votes are captured in **tamper proof** blockchain system
  - To truly enable co-opetition decentralized, trusted voting is important
- Top Ideas are voted, approved and implemented in next version of specifications
- Participants whose idea submission are accepted are rewarded with “innovator” badge and earn extra points

Each Idea is tracked by unique Idea number
Points and Rewards

• Members earn points for their contributions
• As their points increase their membership level may be upgraded, giving them additional privileges
• Privilege rules are configurable as smart contracts
• Members may also earn badges and may be rewarded
• May get recognized at BiTAS conferences
• Reward points are also stored in blockchain
Participate in BiTAS

- Signup at bitas.acuwize.com to access BiTAS standards
- Participate in workgroup meetings, forums
- Spawn new ideas and workgroup

Thank You!