Delivering DAML Smart Contracts for Hyperledger Sawtooth

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The Challenge

- Blockchain technology is complex
- Blockchain technology must be open
- Blockchain networks are long-lived
- Blockchain networks need to be maintained
The Solution

Use our expertise to simplify enterprise adoption of blockchain by providing a platform that lets enterprises focus on developing applications that are then deployed & managed by our platform.

Bringing the benefits of blockchain to Business
Sextant

- Hyperledger Sawtooth Distribution
  - Open source framework contributed by Intel to Hyperledger project
  - Distribution built, tested, hosted and maintained by BTP

- Blockchain Management Platform
  - Automated deployment & management of Sawtooth networks
  - On Kubernetes open source platform contributed by Google to CNCF

Commercial Open Source Software Model
Sawtooth Management

Custom Transaction Processors

- Hyperledger Sawtooth
- Kubernetes

Cloud / On Premises

Sawtooth Distribution
Developing Applications with DAML

The productive, concise, and safe smart contract language that enables seamless application portability and interoperability

The Smart Contract Language

Productive – abstraction lets developers focus on business logic

Reliable – deterministic execution delivers predictable behavior

Composable – encourages reuse within and across organizations

The Ledger and Integration Kit

Ubiquitous – available on wide range of platforms

Interoperable – write once, run where appropriate for the business case
Using Classic Programming Languages

Writing complex workflows is complicated

It takes over 800 lines of Kotlin to describe an Interest Rate Swap

The code mixes system level concerns with business logic

A developer must understand and correctly define the applied domain AND define behavior of the underlying system
Using DAML

DAML allows the focus to remain only on the business logic

102 lines of DAML defines the same Interest Rate Swap

There is no systems code here only business logic

Due to DAML built-in rights and obligations guarantees, this code is also safer and easier to extend
DAML on Hyperledger Sawtooth

Accelerate productivity and simplify deployment by combining best in class open source technologies with a comprehensive management platform

- DAML: The concise, safe programming language for modeling processes and workflows in business
- Hyperledger Sawtooth: A modular blockchain framework for building distributed ledger applications and networks
- Sextant: A management platform that delivers one-click deployment of enterprise grade ledgers

Simplifying enterprise adoption of blockchain
Digital Asset and Blockchain Technology Partners to deliver DAML Smart Contracts for Hyperledger Sawtooth

Synchronize New York
Sextant for DAML

- Hyperledger Sawtooth Distribution
  - Open source framework contributed by Intel to Hyperledger project
  - Distribution built, tested, hosted and maintained by BTP
  - Extended to include DAML runtime components

- Blockchain Management Platform
  - Automated deployment & management of Sawtooth networks
  - On Kubernetes open source platform contributed by Google to CNCF
  - Extended to include configuration of DAML participants/parties
  - Extended to include upload of DAML archives
DAML on Sawtooth Management

DAML Apps/Libs
DAML Selection
DAML Runtime
DAML on Sawtooth Management
DAML on Sawtooth Contribution

Sextant
Enterprise Edition
Hyperledger Sawtooth
Kubernetes
Cloud / On Premises
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DAML on Sawtooth
Digital Asset announces DAML Partner Integrations with Hyperledger Fabric, R3’s Corda and Amazon Aurora

Synchronize Europe
# DAML on X Management

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## DAML Apps/Libs

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DAML on Aurora
The definition of insanity is doing the same thing over and over again, but expecting different results

Albert Einstein
The definition of sanity is doing the same thing on different platforms and getting the same result
Find out more

- daml.com
- digitalasset.com
- blockchaintp.com/sextant

- When Hyperledger Sawtooth met Kubernetes
- DAML Smart Contracts are coming to Hyperledger Sawtooth