AN INTERNET OF RULES

WHY & WHAT

WITH A REQUEST FOR CONVERSATION ABOUT HOW

Joseph Potvin
Executive Director, Xalgorithms Foundation
No Common Computational Standard has Emerged for Executable Modal Verbs

"MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" rules

Money, Finance & Commerce
Tax & International Trade
Machine & IoT Control
Intent-Based Networking
PROBLEM: Wasteful Error-Prone Redundancy

SOLUTION: PUT-FIND-GET Simple Declarative Rules Online
Domain-Specific Language
Domain-Optimized Search

GIVEN x is WHEN y is THEN z ought to be

Certain Context Fact
Certain Input Fact
Hence Certain Output Fact

An “Internet of Rules”

- api data
- Xalgo-fact
- find rules
- Xalgo-rule
- deliver findings
- report findings
- publish rules

Context fact & Input fact
Output fact

LICHÉN
INTERLIBR
XALGO

XALGORITHMS Foundation
Domain Specific Language

**Xalgo**

JSON/CBOR tuples

Small number of reserved words

Existing standard schemas

Deliberately **not** Turing-Complete
Domain-Specific Search

**REQUEST**
Xalgo-fact message
key-value pair
logged

**RESPONSE**
Xalgo-rule message
data package
logged

**Interlibr**

1st FILTER: **In Effect**
GIVEN jurisdiction and date/time

2nd FILTER: **Applicable**
WHEN certain facts present

3rd FILTER: **Does it work?**
THEN test rule & table lookups

“IS” MESSAGES find “OUGHT” DOCUMENTS
Tues 8:30 am Session
Viger Room

Joseph Potvin
jpotvin@xalgorithms.org
+1-819-593-5983
@xalgorithms

Don Kelly
karfai@gmail.com

Ryan Fleck
Ryan.fleck@protonmail.com

Craig Atkinson
Craig.atkinson@lexmerca.com

Bill Olders
wolders@xalgorithms.org

Alpha Testing Now
https://github.com/Xalgorithms
Video Demo: https://tinyurl.com/yyym4pgwd