Modeling Carne PRI supply chain with the *-Chain Platform
Modeling Carne PRI supply chain with the *-Chain Platform

Contents

1. The *-Chain Framework (now with update too!)
2. CarnePRI – Nomenclature (use case)
3. Representing the CarnePRI Supply Chain
4. Generated Solidity Code
5. Conclusion and Future Works
The *-Chain Framework

Main Goal

• Representing the Supply chain management system use case of CarnePRI nomenclature (European definition)

Components

• Domain-Specific Graphical Language
• Graphic design interface
• Interfaces builder (new layout)
The *-Chain Framework

Domain-Specific Graphical Language

**Asset**: any "item" or object that could be subject of the analysis

**Container**: an object that somehow contains the asset under exam.

**Operations**: each relationship that binds two objects under exam.

**Properties**: defining traits of the asset

**Roles**: defining subjects who can perform a specific action.
CarnePRI supply chain

- ID Assignment
  - Animal Introduction
  - Animal Purchasing

- Antibiotics
  - Breeding

- ANAPRI Certification
  - Cow Evaluation
  - Animal Transport
  - Ante Mortem Inspection

- Slaughter
- Post Mortem Inspection
- Carcass Evaluation

- Selling
  - Packaging
  - Grinding
  - Portioning

- Meat Transport
  - Meat Maturation
  - Sectioning
  - Carcass Transport
  - Carcass Maturation

Colors:
- Technician
- Farmer
- Veterinary
- ANAPRI
- Deliver
- Butcher
- Seller

Optional
CarnePRI supply chain: schema
CarnePRI supply chain

**Update** operation renews the content of properties of an asset
CarnePRI supply chain

**Monitor** operation check and store specific or all the properties of an asset
CarnePRI supply chain

The total cost for a single product is maximum **749100** (gas)
CarnePRI supply chain
CarnePRI supply chain

- Analyze and translate other real case supply chains
- Implement Macros of operations
- Extend framework tools to other smart contract languages
- Compare our framework to other competitors
THANKS FOR THE ATTENTION