

The background features a dark blue field with glowing orange and blue light trails. Binary code (0s and 1s) is scattered throughout. Several nodes and blocks are depicted as 3D rectangular prisms with labels: 'NODE 01', 'NODE 02', 'NODE 03', 'NODE 04', 'NODE 05', 'BLOCK 01', and 'BLOCK 02'. These elements are interconnected by thin white lines, suggesting a network or blockchain structure.

# Reinsurance Accounting Blockchain – RITA<sup>®</sup>

## German Run Off Forum 29.03.2019 Cologne

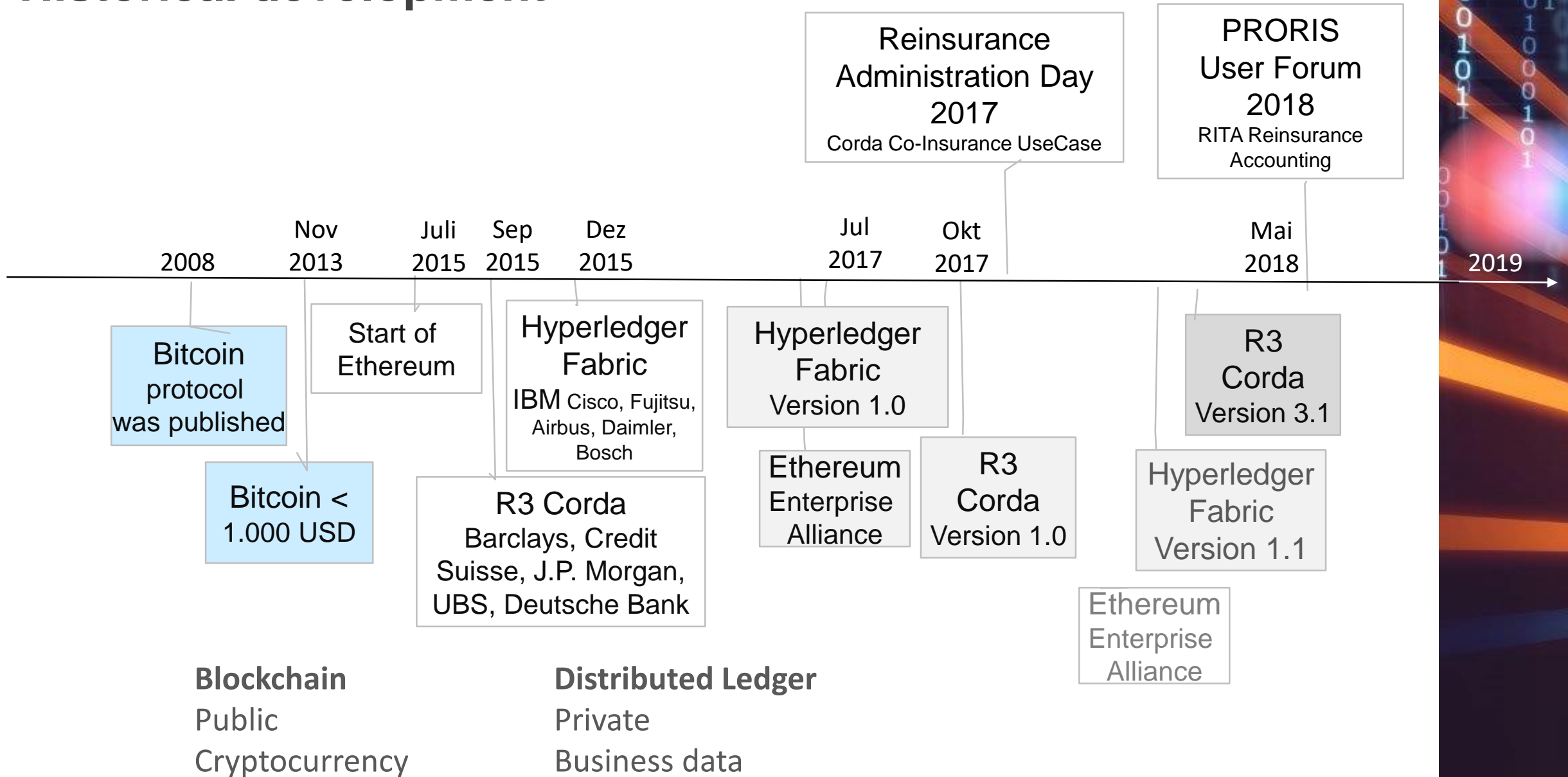
- Blockchain @ Consurance – Development prototype
- Reinsurance Technical Accounting Blockchain – RITA
  - Target
  - Architecture / Technology
- Integration of RITA in ProRis*blue*
- Partner Consurance / Inveos
- Next steps

# Blockchain @ Consurance - Development prototype

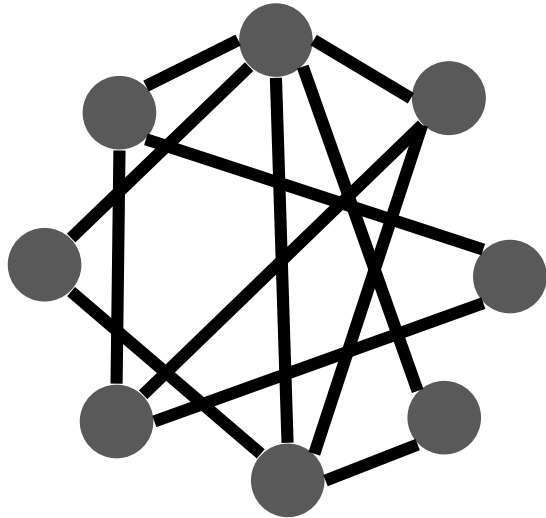




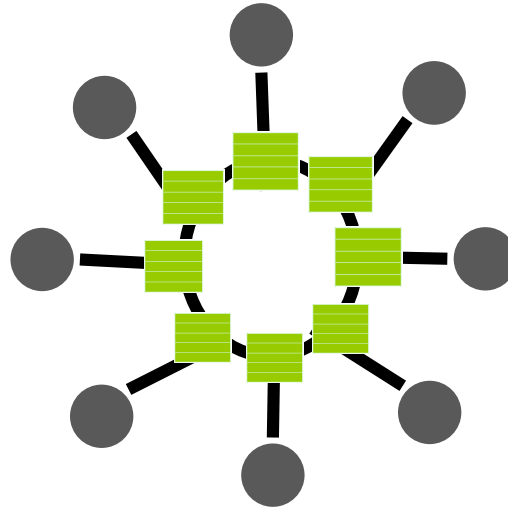
# Historical development



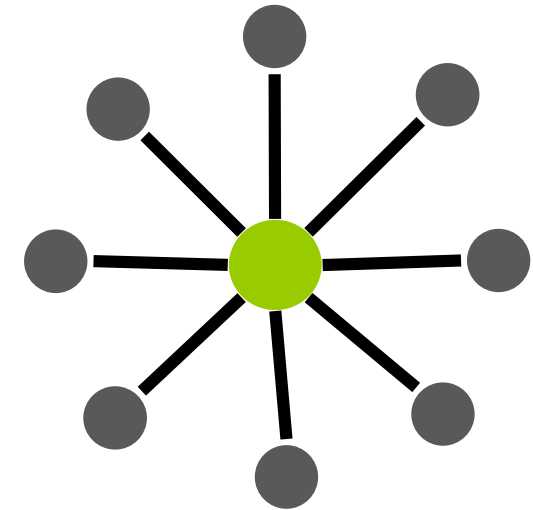
Reinsurance is a cross-company business without a cross-company (IT) system



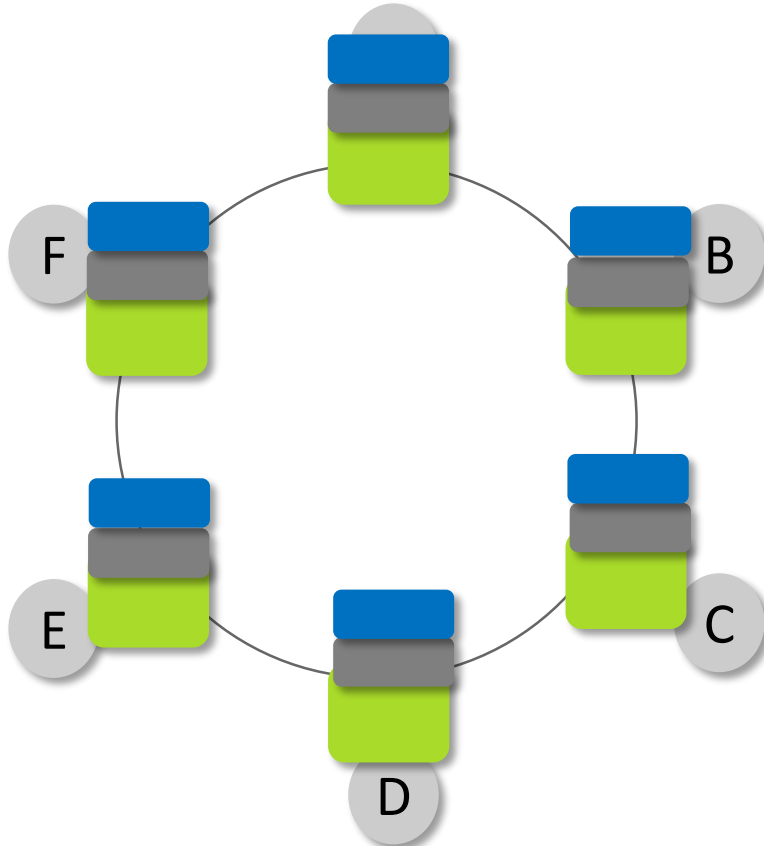
Interfaces



Common business logic  
Separate data storage  
Without central administration  
**"Distributed Ledger"**



Portal- / Platform solution

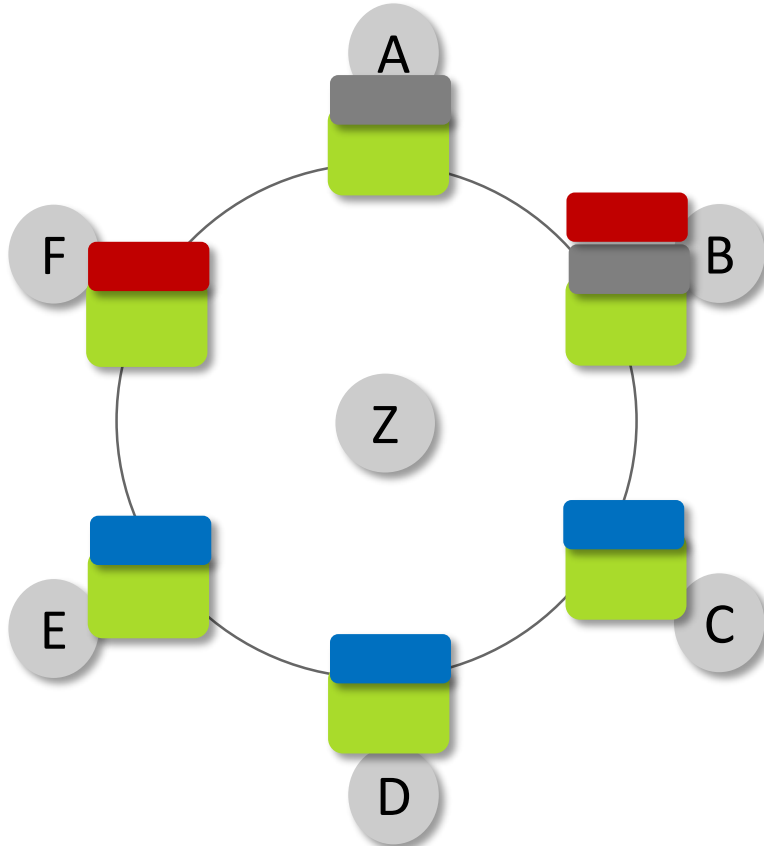


## Advantage

- ▶ Common Business Logic
- ▶ Common Data Base
- ▶ Decentralized Data Storage

## Disadvantage (for business processes, OK for Bitcoin)

- ▶ All Participants have access to all data
  - ▶ Expensive Update Process
  - ▶ Slow, high energy consumption
- ▶ Anonymous



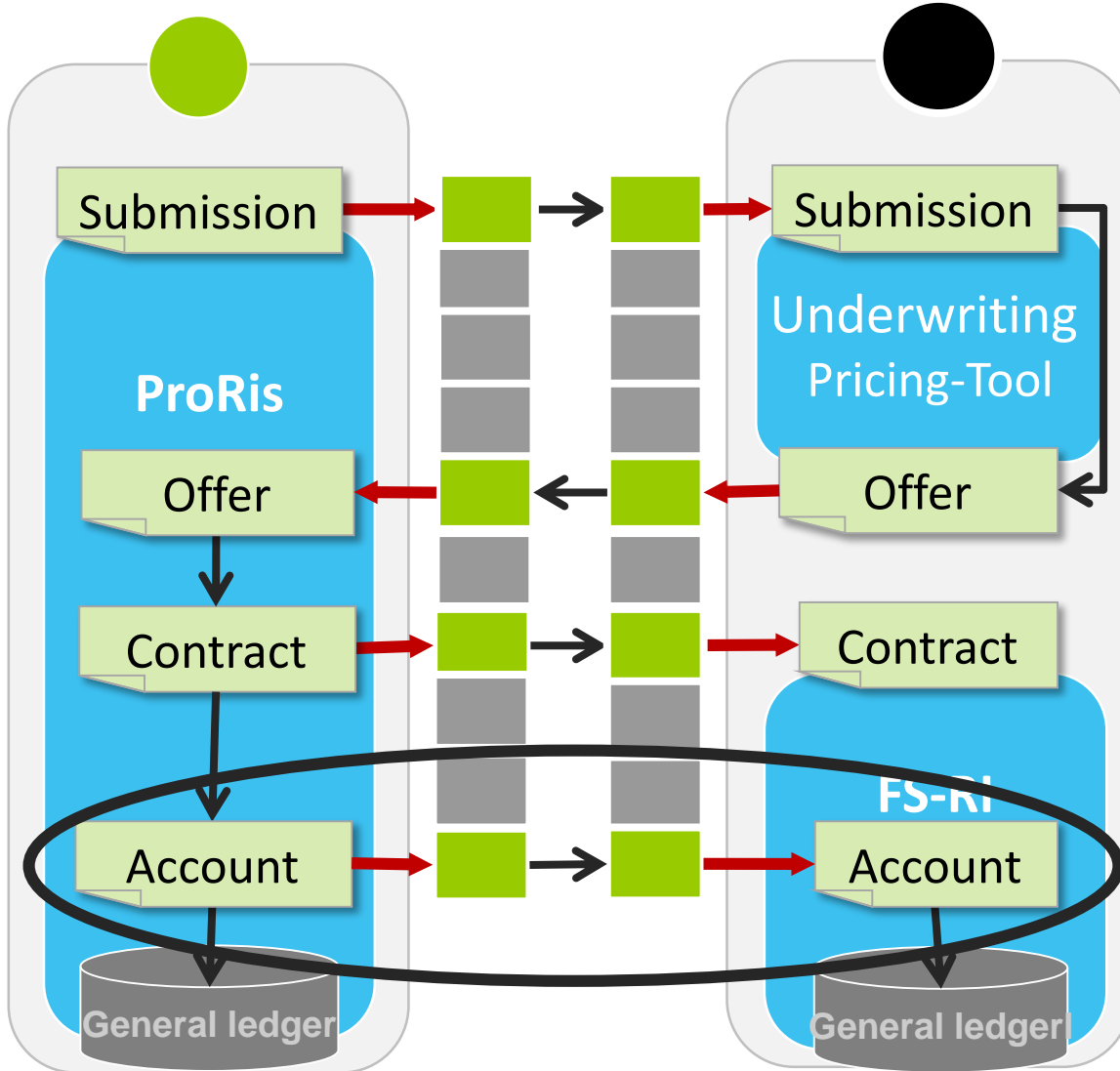
## Advantage

- ▶ Common Business Logic
- ▶ Common Data Base
- ▶ Decentralized Data Storage
- ▶ Participants are authenticated (Z=Doorman)
- ▶ Transaction based
  - ▶ Only the involved parties can see the relevant data
  - ▶ Faster, scalable

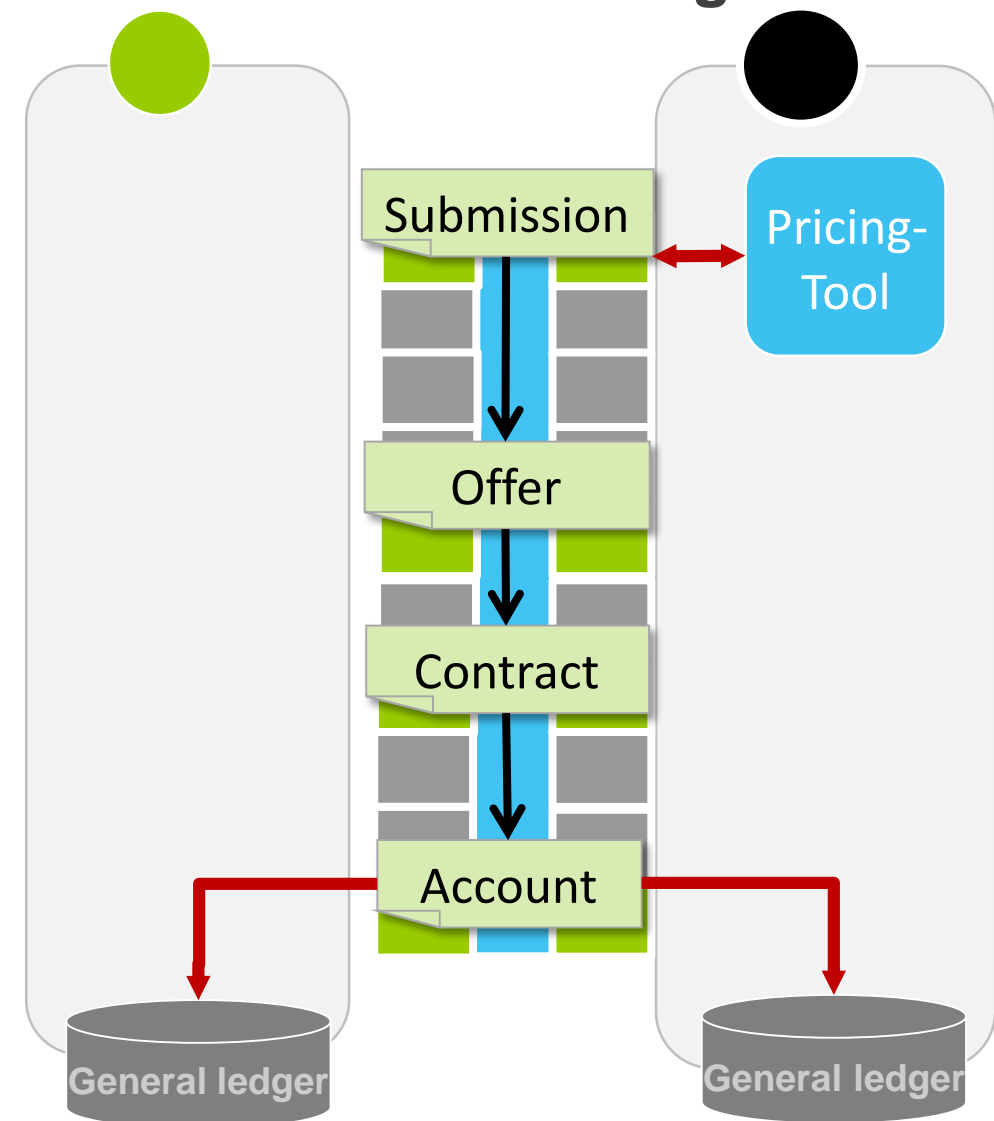
## Disadvantage

- ▶ A certain standard has to be established/accepted (as usual)

## Distributed Ledger as interface



## Application within Distributed Ledger





**RITA**

# **Reinsurance Technical Accounting via Blockchain**



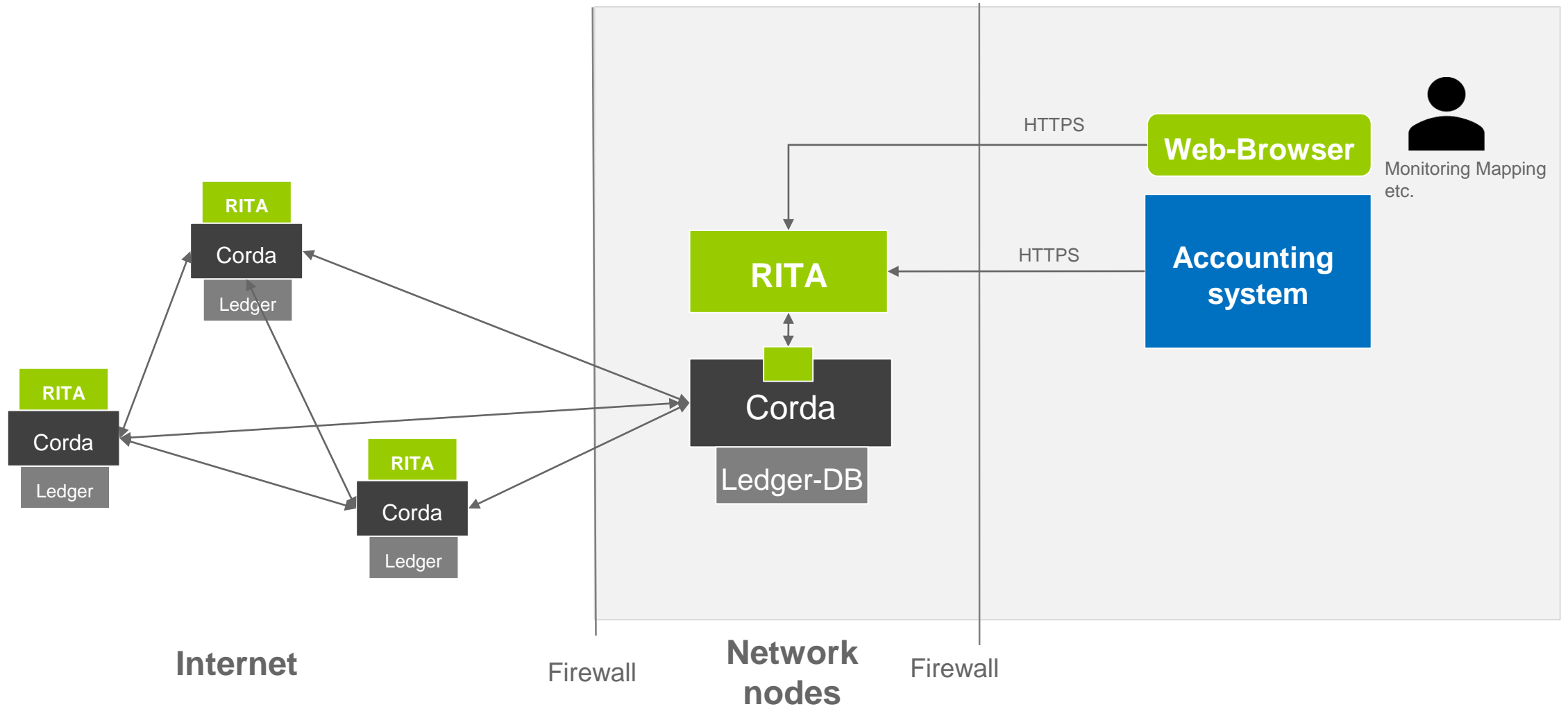
**RITA's goal is to easily integrate each participant's RI accounting system for easy delivery and receipt of accounting data.**

- Direct bilateral exchange of accounting data with all involved partners via "Blockchain"
- Avoidance of media discontinuities and manual data entry at the recipient's side
- Exchange of structured data between sender and recipient
- Direct integration with own RI system or an individual database
- Monitoring of operational processes in RITA
- Automatic booking in the own RI System
- Development of „self-learning“ standards

- **Architecture / Technology**



# Architecture





- **Network nodes**
  - Each participant operates his own network node
  - The sum of all nodes forms the RITA – Network
  - A network node consists of a Corda and a RITA layer
  - Corda handles communication and data management
  - RITA contains the business logic and the interface to the accounting system



- **RITA – Layer (Reinsurance Technical Accounting via Blockchain)**
  - Goal: Integration of the own (RI) accounting system for sending and receiving accounting data
  - Implementation of a large part of the necessary functionalities in RITA
    - Transformation of data structures („Structure mappings“)
    - Structure mapping via a graphic user interface
    - Pre-defined structure mappings for PRORIS, SAP FS-RI, SICS, ACORD (enhancement for individual systems possible)
    - Data import and export to ACORD (ebot)

- **RITA – Layer (Reinsurance Technical Accounting via Blockchain)**
  - Transformation of values ("value mappings"), e.g. entry codes / accounts, lines of business, perils etc.
  - Structure and value mappings are shared with all participants (unlike the accounting data).
  - **Development of a common, structured and therefore reusable database** of these mappings
  - Development of a "**self-learning**" logic, in which mappings between individual partners can (from a technical viewpoint) be deduced from the mappings of other sender / recipient.

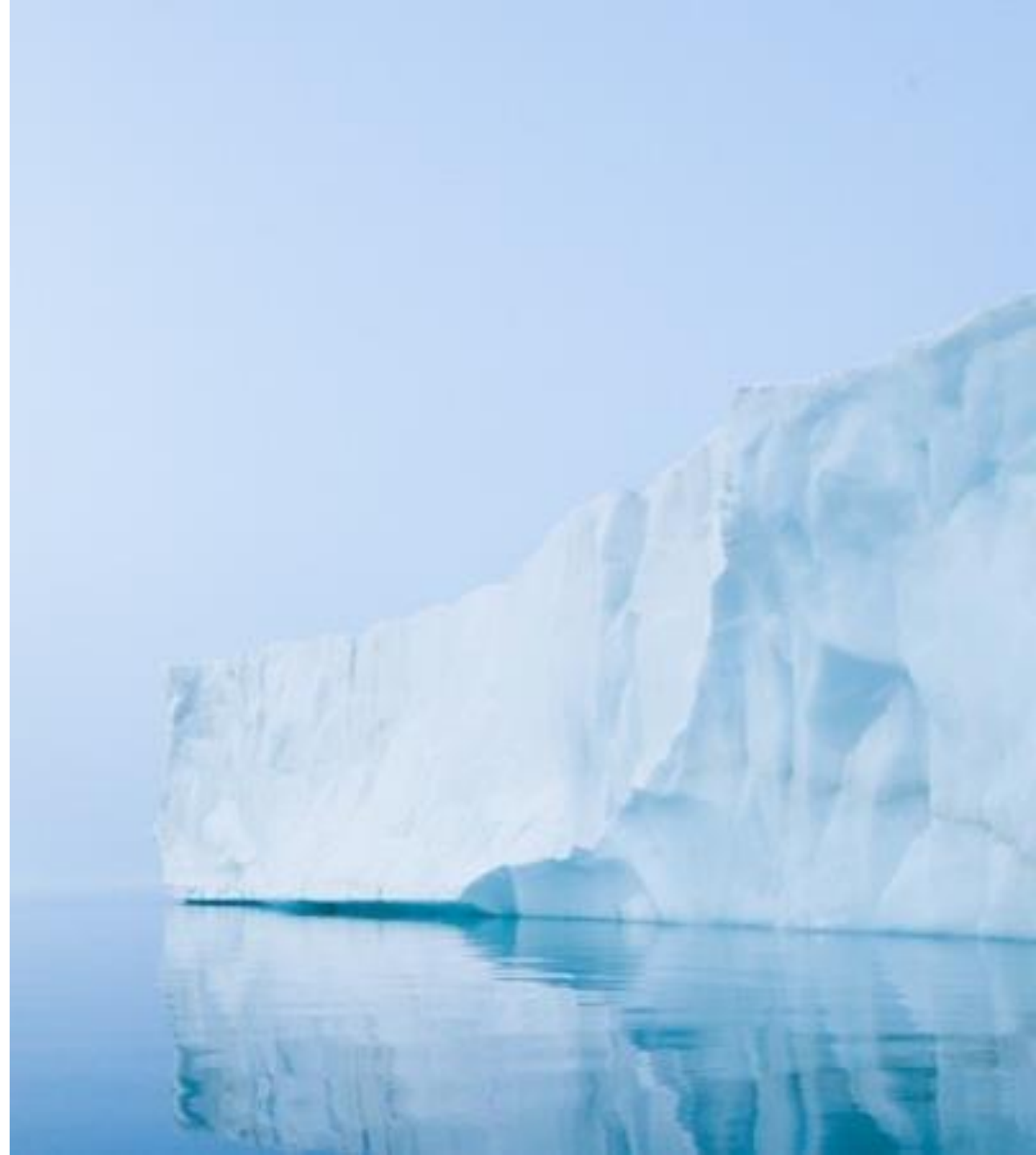
- Status management and monitoring of the entire business workflow of accounting processing by both the sender and the recipient
  - Processing of error messages from the accounting system
- Securing data consistency
- Web Client as a user interface
- Integration of accounting system (ProRis, SAP FS-RI, SICS) on the basis of the RITA web services and the technical integration of a SOAP web service is possible in Java, C# oder ABAP environments (depending on the RI system).

## Example

### Integration of RITA into ProRis*blue*



ProRis*blue*



# Integration RITA in ProRis*blue*

**The Reinsurance Technical Accounting Blockchain RITA** can be supplied with accounting data directly from and to ProRis *blue*.

- Selection in ProRis dialog
- Display of new messages with accounting data
- Direct export of data at the sender to all partners involved
- Data import directly from the Blockchain without media discontinuity
- Feedback about the processing status via the integrated status concept
- Use of the existing mapping functionalities in ProRis
- Acceleration of processing
- Integration of external partners with different admin systems into the accounting process



**Ongoing test to ensure a productive  
usage and deployment**



# Participants RITA Testphase





# RITA - Roadshow Frühjahr 2019

A nighttime photograph of a city skyline with several tall skyscrapers illuminated with blue and white lights. In the foreground, there are long, horizontal light trails in white and yellow, suggesting a long-exposure shot of traffic or a moving camera.

**Düsseldorf • Hannover • München • Zürich**





- Ready for a productive launch in spring 2019
- Further comprehensive test with additional customers, beginning from April 2019
- Extension to accommodate ACORD (ebot)
- Extensions, e.g. policy and loss data

Contact:

[www.ritablock.com](http://www.ritablock.com)

The background is a dark blue space filled with glowing orange and blue light trails that suggest data flow. Scattered throughout are various labels for network components: 'NODE 01', 'NODE 02', 'NODE 03', 'NODE 04', 'NODE 05', 'BLOCK 01', and 'BLOCK 02'. These labels are on small, pill-shaped icons with red and blue segments. Faint vertical columns of binary code (0s and 1s) are visible in the upper left and right areas.

Thank you for your attention.