



Reinsurance Accounting Blockchain – RITA[®]

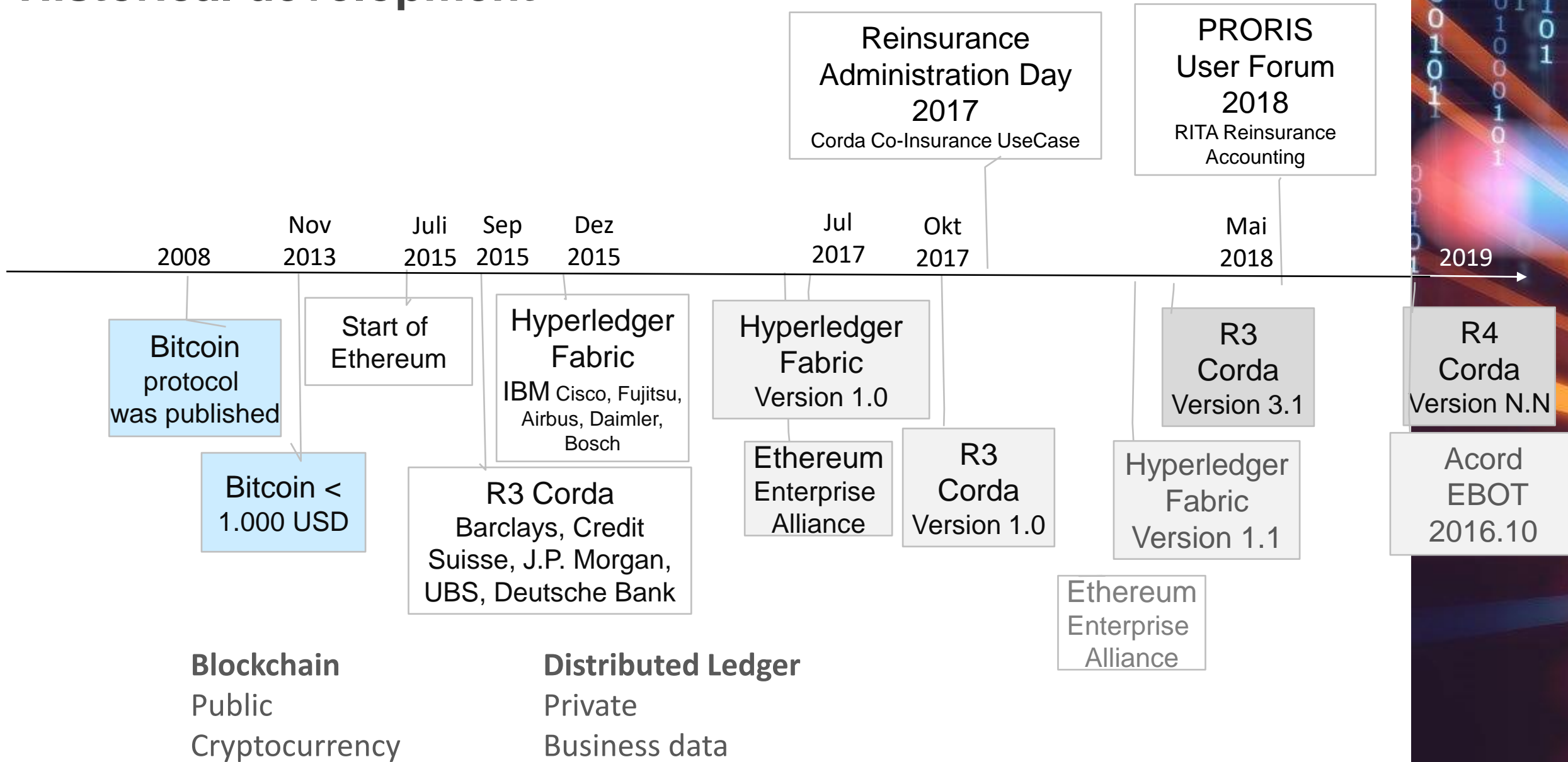
French Run Off Forum 26.06.2019 Paris

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

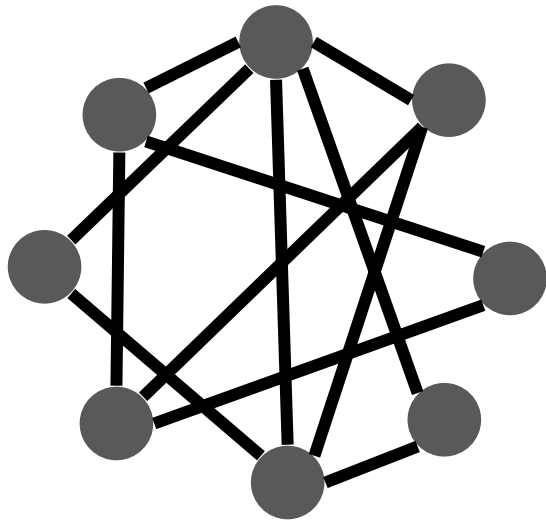
Blockchain @ Consurance - Development prototype



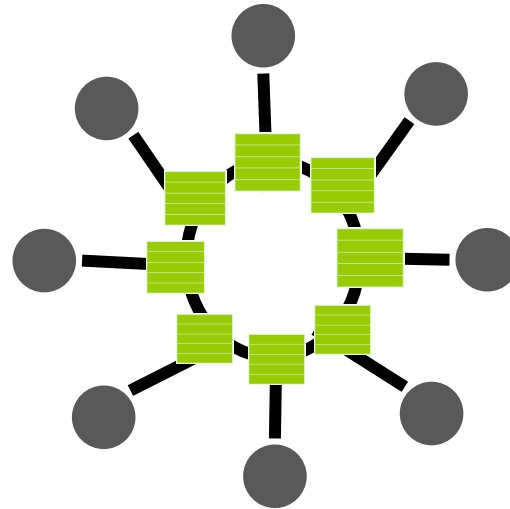
Historical development



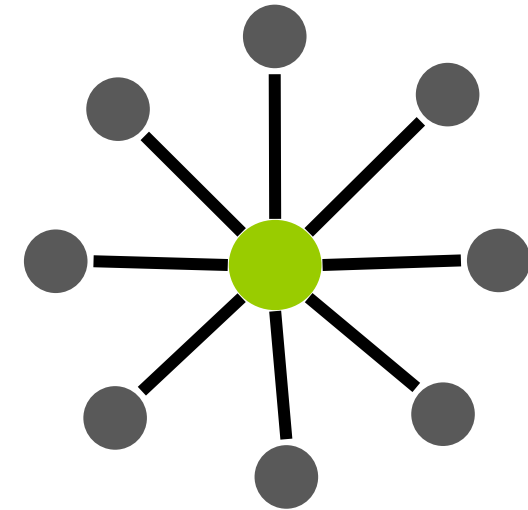
Reinsurance is a cross-company business without a cross-company (IT) system



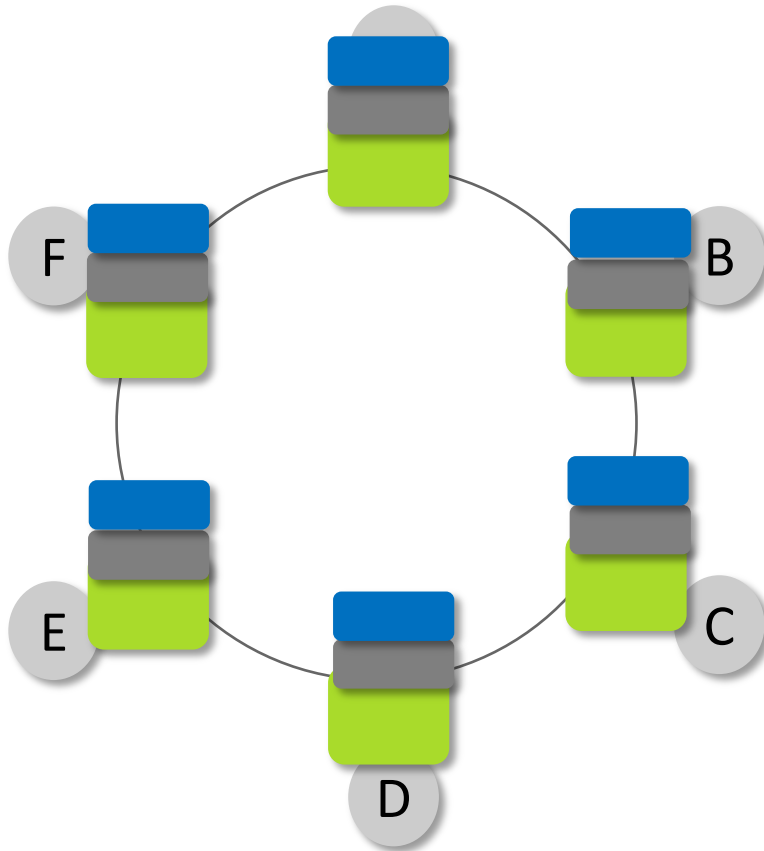
Interfaces



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



Portal- / Platform solution

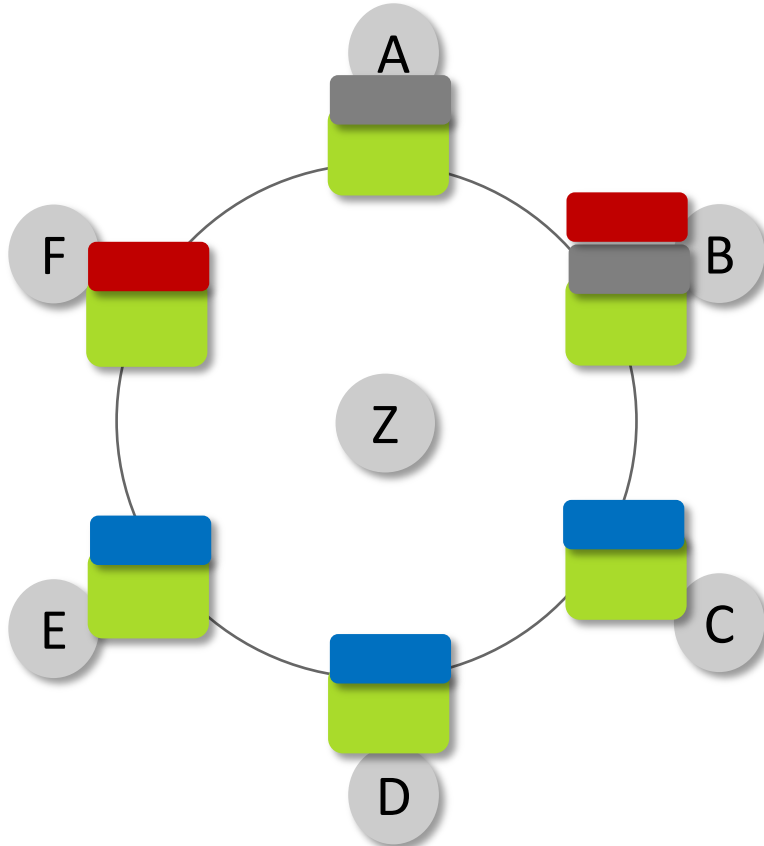


Advantage

- ▶ 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



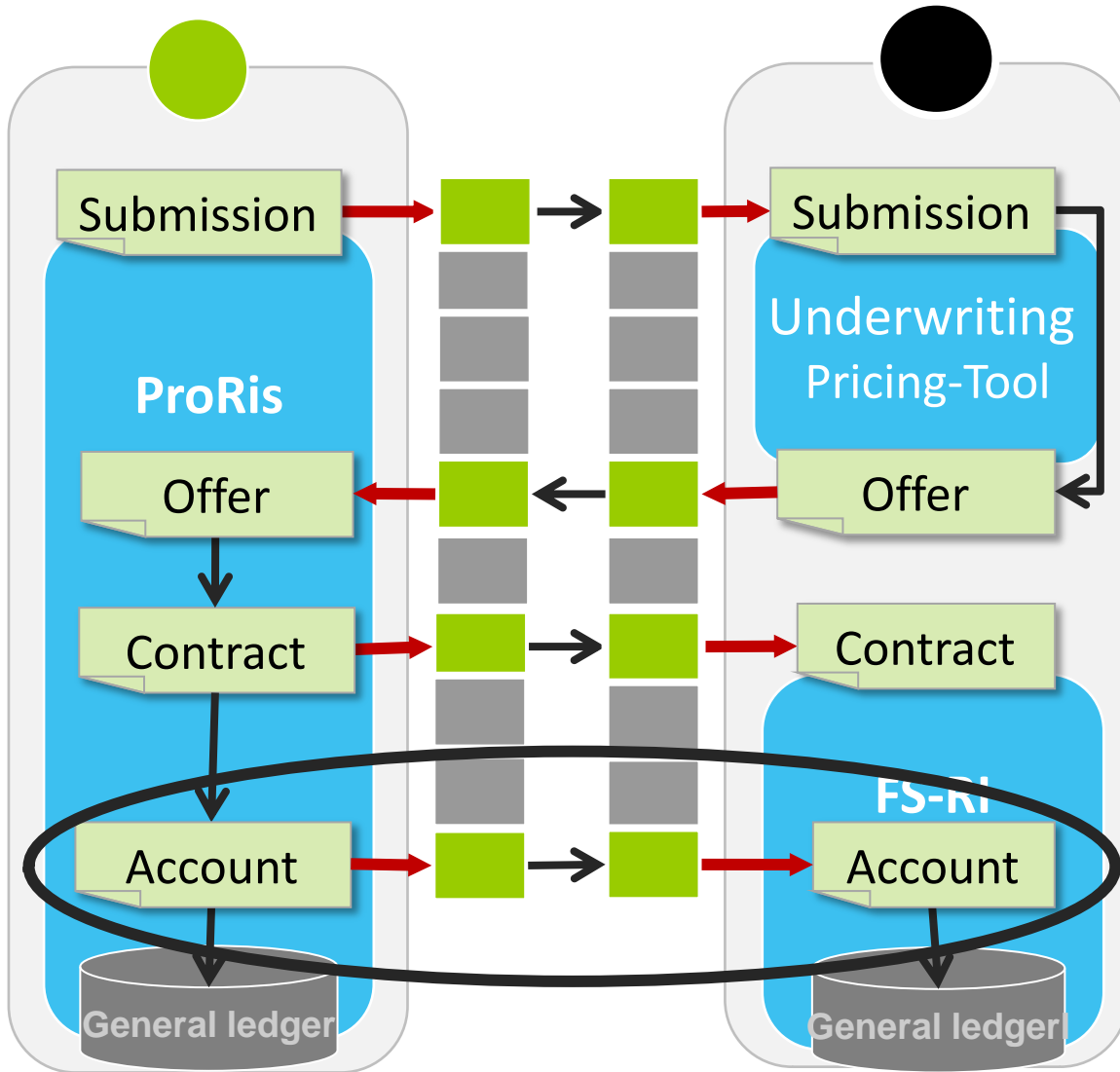
Advantage

- ▶ 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

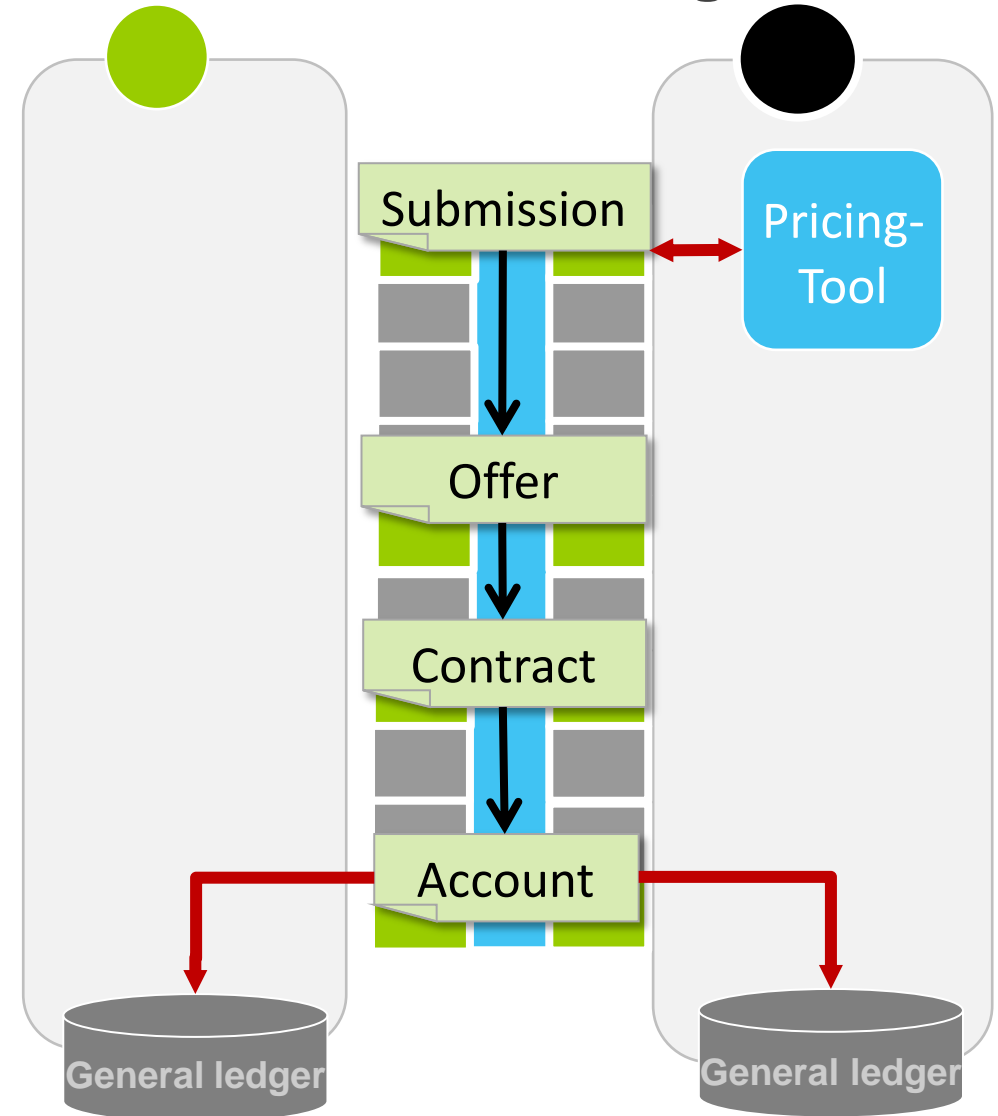
Disadvantage

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

Distributed Ledger as interface



Application within Distributed Ledger



RITA

**Reinsurance Technical Accounting
via Blockchain**



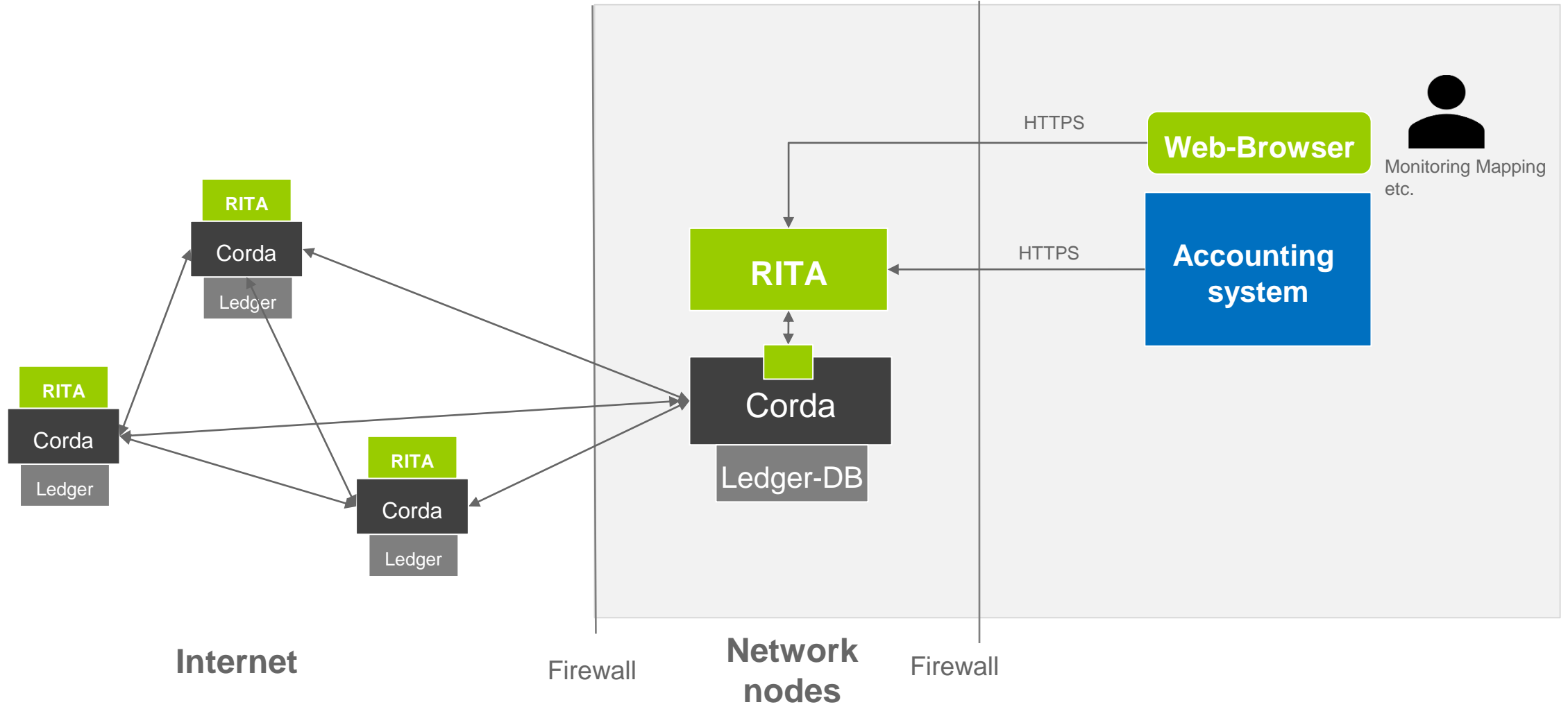
RITA's goal is to easily integrate each participant's RI accounting system for easy delivery and receipt of accounting data.

- 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.

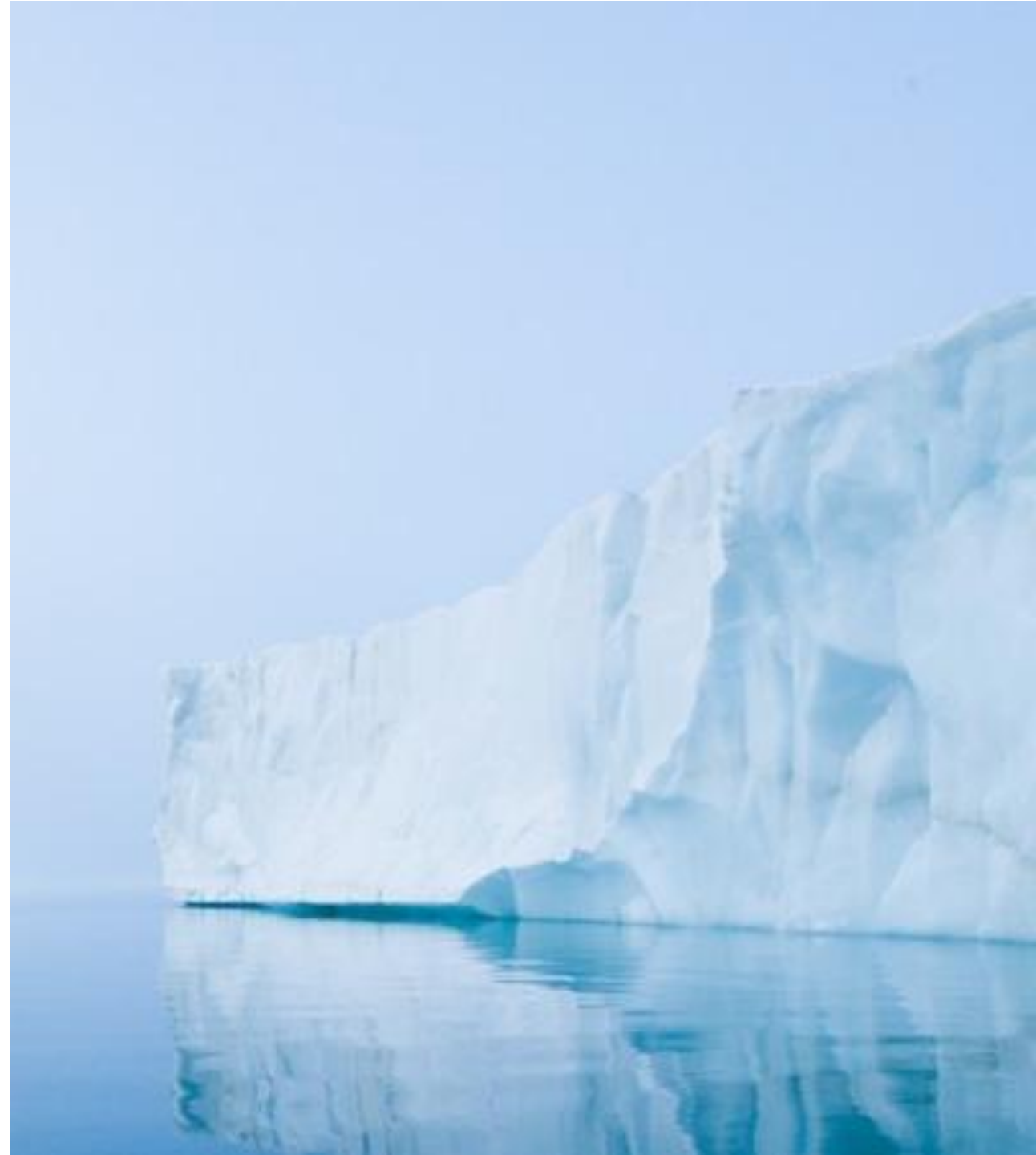
- Status management and monitoring of the entire business workflow of accounting processing by both the sender and the recipient
 - Processing of error messages from the accounting system
- Securing data consistency
- Web Client as a user interface
- Integration of accounting system (ProRis, SAP FS-RI, 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

Verband 
öffentlicher Versicherer



Deutsche Rück



Munich RE 



hannover re 

Ober  österreichische
Versicherung AG



helvetia 

consurance
consulting for insurance and reinsurance



 **inveos**

A nighttime photograph of a city skyline with several tall skyscrapers illuminated with blue and white lights. In the foreground, there are blurred light trails from a moving train or tram, creating a sense of motion and energy.

RITA - Roadshow Spring 2019

Düsseldorf • Hannover • München • Zürich



- Network and partner development
- Finalization of the 2nd test phase in July 2019
- First productive usage end of July 2019
- Extension of RITA by a premium and loss bordero

Contact:

www.ritablock.com

A futuristic digital network diagram with glowing nodes and blocks. The background is dark with vibrant, multi-colored light trails in shades of blue, orange, and purple. Several nodes are labeled 'NODE 01' through 'NODE 05' and two blocks are labeled 'BLOCK 01'. The nodes are connected by thin lines, and the overall scene is filled with a sense of dynamic energy and data flow.

Thank you for your attention.