Reinsurance Accounting Blockchain – RITÂ Italian Run Off Forum 4.04. 2019 Milan

NODE O

al OCK 01

NODE 01

21.0(0)





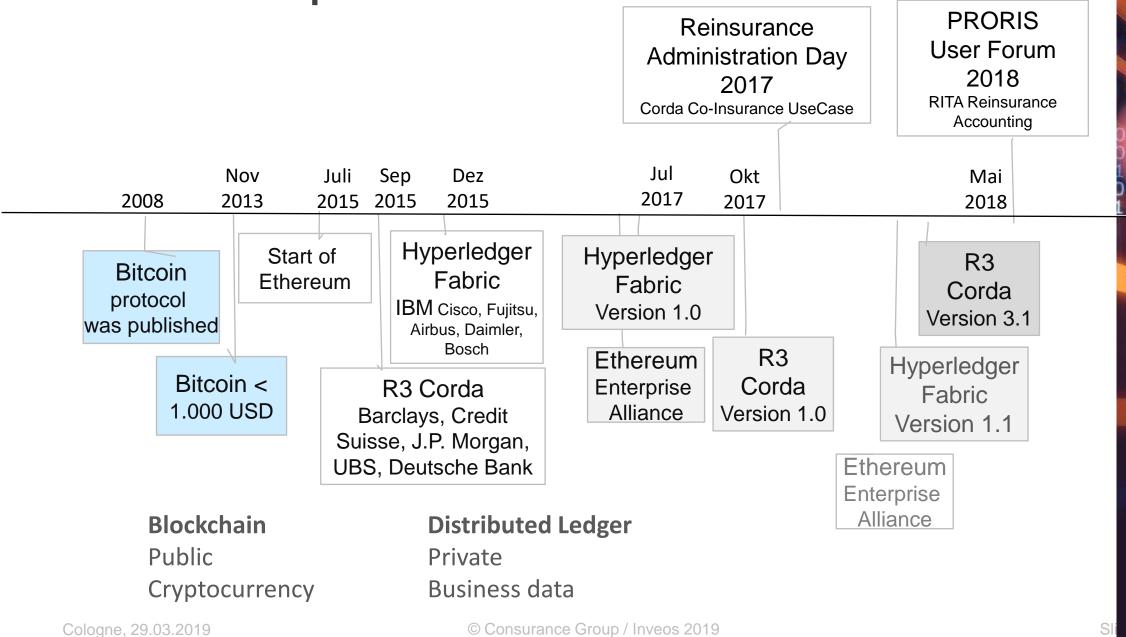


- Blockchain @ Consurance Development prototype
- Reinsurance Technical Accounting Blockchain RITA
 - Target
 - Architecture / Technology
- Integration of RITA in ProRisblue
- Partner Consurance / Inveos
- Next steps

Blockchain @ Consurance -Development prototype

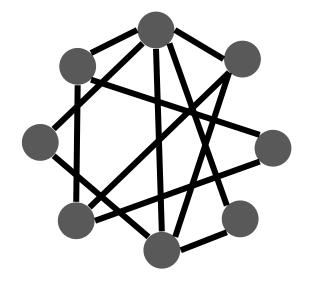


Historical development

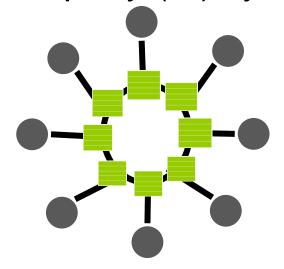


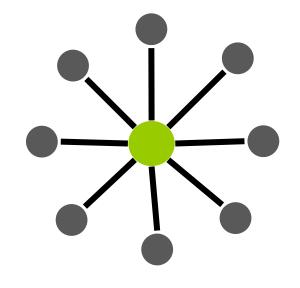
Initial situation

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



Interfaces

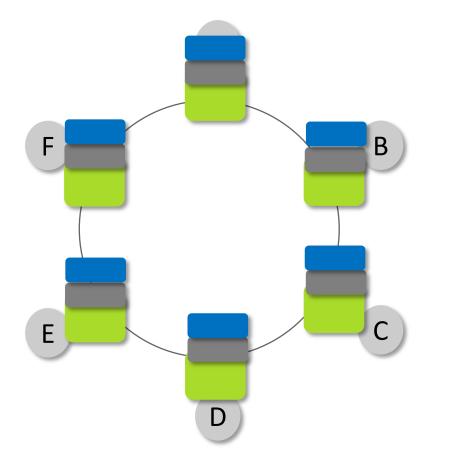




Common business logic Separate data storage Without central administration "Distributed Ledger"

Portal- / Platform solution

Blockchain – z.b. Bitcoin



Advantage

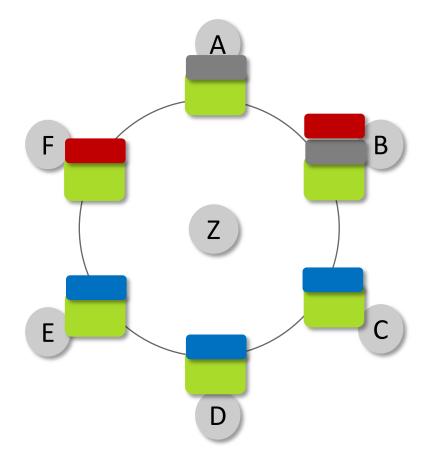
- Common Business Logic
- Common Data Base
- Decentralized Data Storage

Disadvantage (for business processes, OK for Bitcoin)

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

IODE 01

Distributed Ledger – z.B. Corda

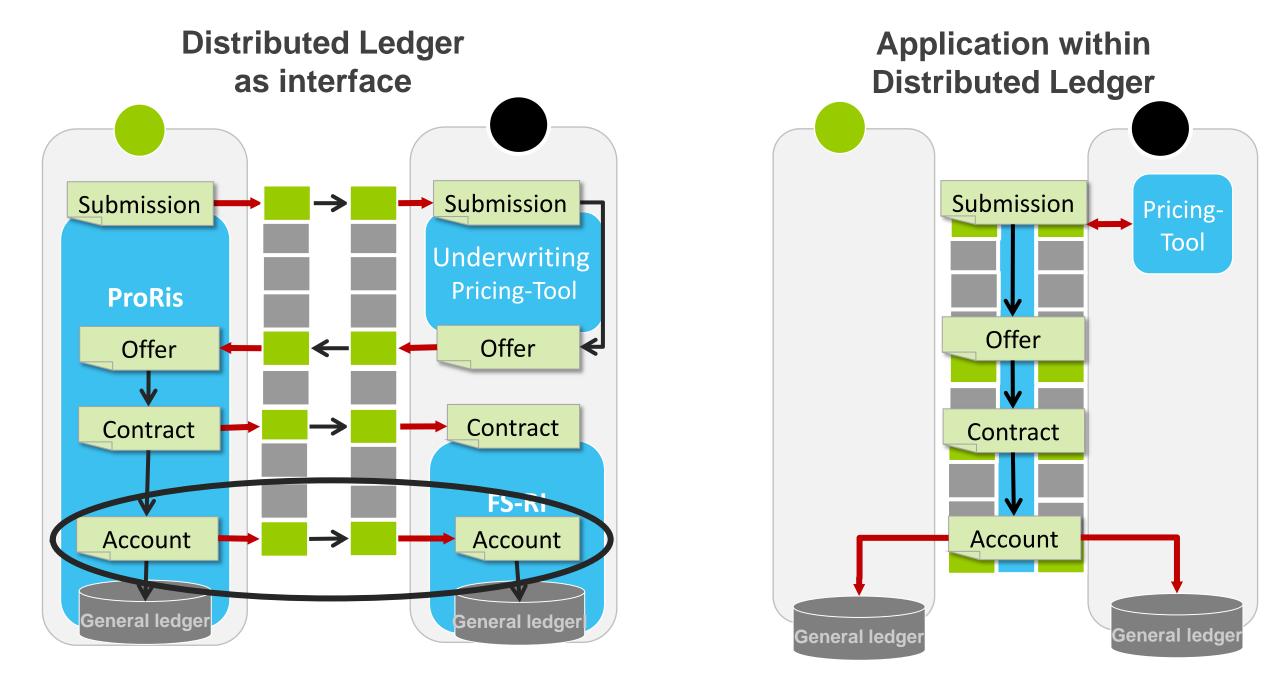


Advantage

- 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)



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.

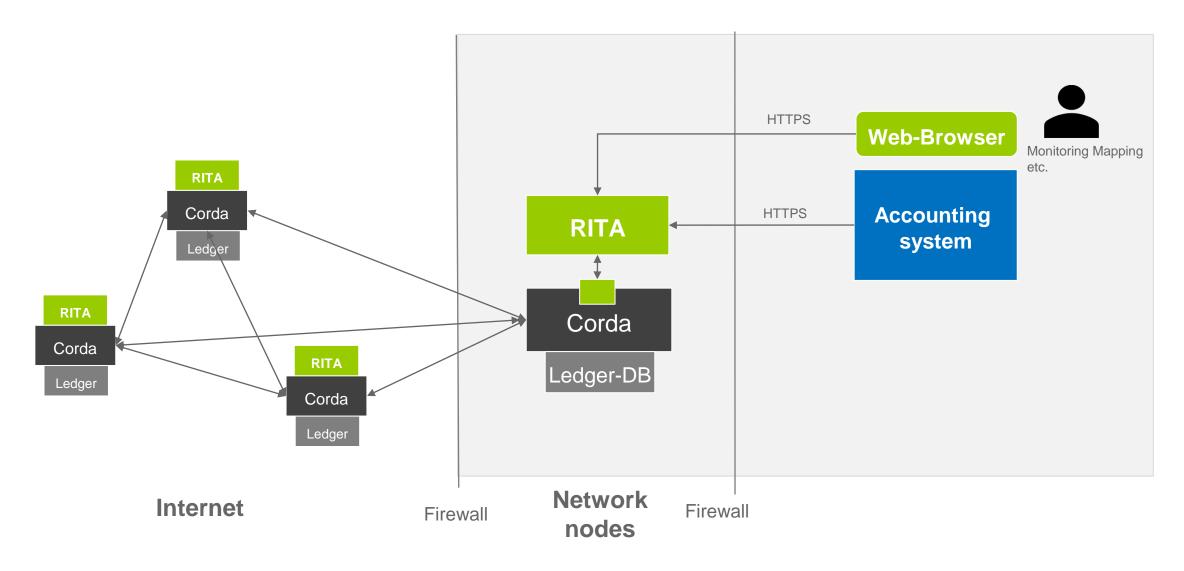
- Direct bilateral exchange of accounting data with all involved partners via "Blockchain"
- Avoidance of media discontinuities and manual data entry at the recipient's side
- Exchange of structured data between sender and recipient
- Direct integration with own RI system or an individual database
-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

IODE 01

Architecture / Technology



Architecture



Architecture (1)

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

Architecture (2)

- 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)

Architecture (3)

- 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.

VODE 01

Architecture (4)

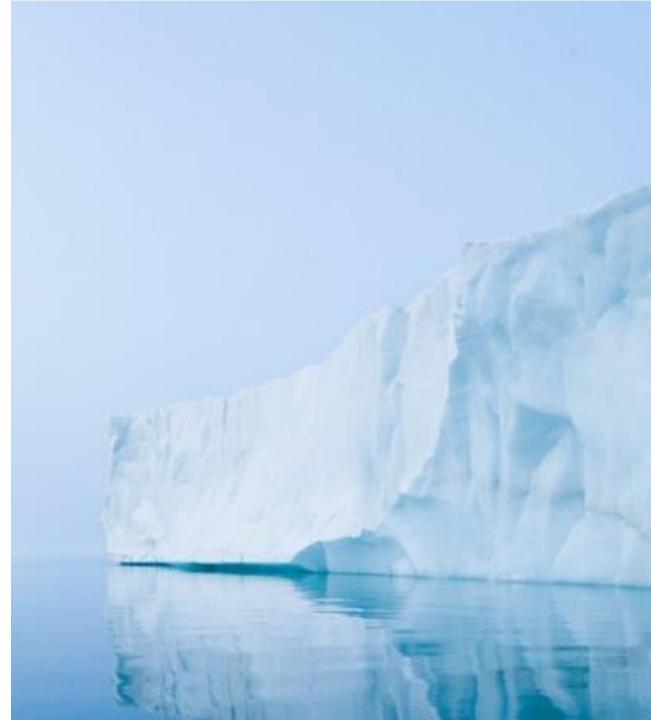
- Status management and monitoring of the entire business workflow of accounting processing by both the sender and the recipient
 - Processing of error messages from the accounting system
- Securing data consistency
- Web Client as a user interface
- Integration of accounting system (ProRis, SAP FS-RI,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

IODE 01

Example

Integration of RITA into ProRisblue





The Reinsurance Technical Accounting Blockchain RITA can be supplied with accounting data directly from 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







Düsseldorf • Hannover • München • Zürich



Next steps / Contact

- 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

Thank you for your attention.

NODE 05

BLOCK 01

NODE 02

NODE 01

NODE 02

BLOCK 0



