

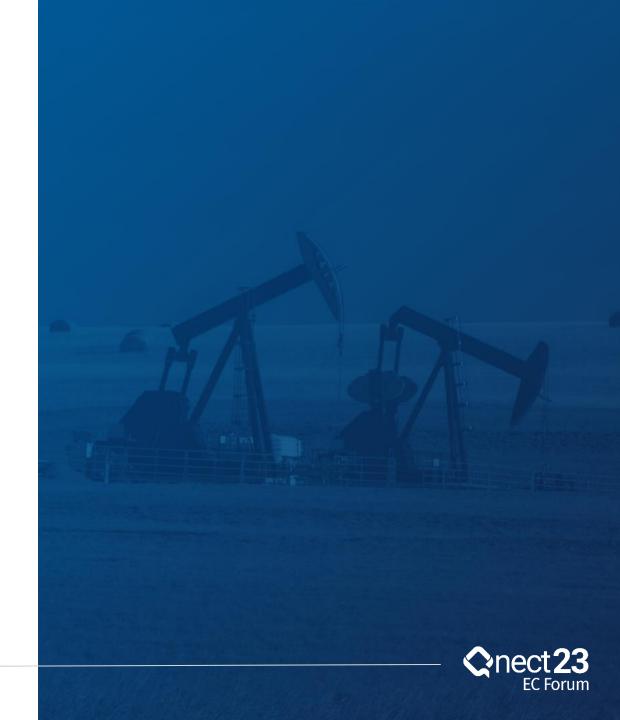
Hydrocarbon accountingIndustry Best Practices

Daniel Gilje Fonnes, Product Manager, Quorum Software



Topics

- Transition to Software as a Service (SaaS)
- Productification of upstream best practices





Transition to Software as a Service (SaaS)

Energy Components: Position and footprint

- More than 100 customers
- Installed in more than 55 countries
- World-wide de-facto standard
- Corporate standard, best practices
- **650** EC licences sold globally

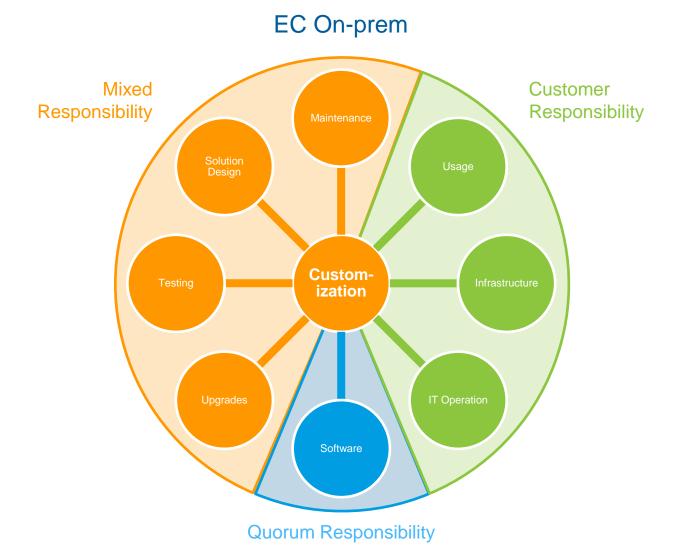






Energy Components: Classical (on-prem) delivery model

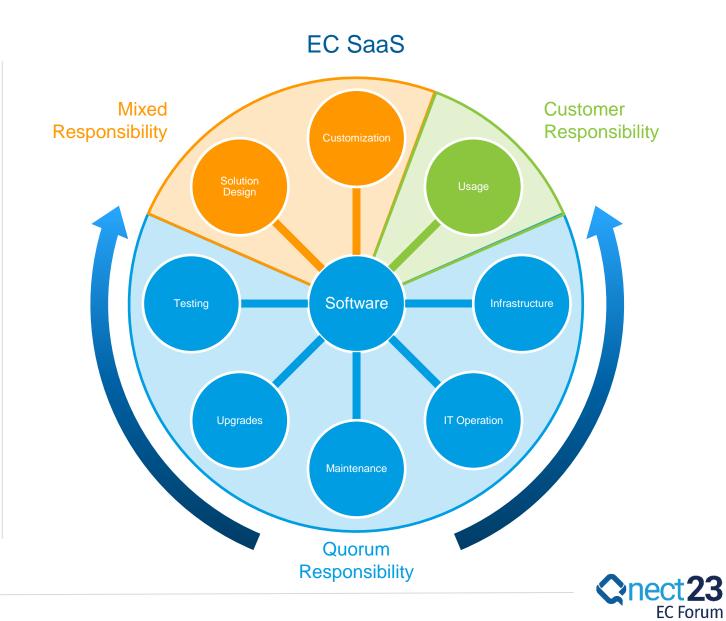
- Quorum software provide perpetual or subscription license and access to new software releases
- Solution design, implementation and upgrades are executed by customer or by Quorum or 3rd party consultants
- Infrastructure, IT security, operation, monitoring to support business usage are executed by customer





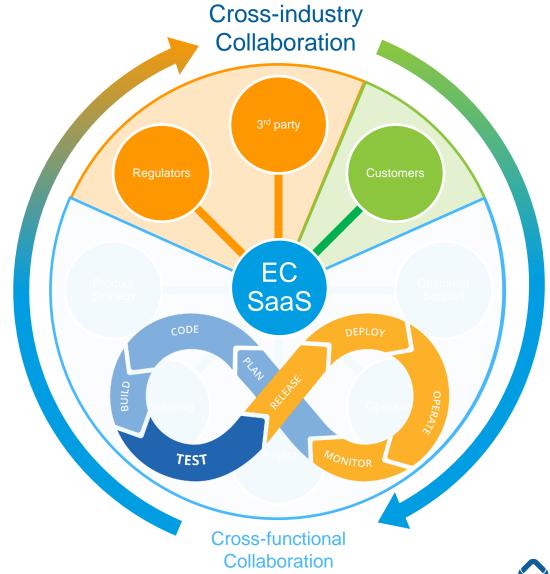
Transition to Software as a Service (SaaS)

- Quorum software provide EC as Software as a Service (SaaS) and is responsible for hosting, operation and the full application life-cycle
- Solution design and implementation executed by customer and Quorum Software to understand business needs and define technical solution
- With SaaS model our customers are enabled to dedicate focus on core business execution



Unlocking value through collaboration

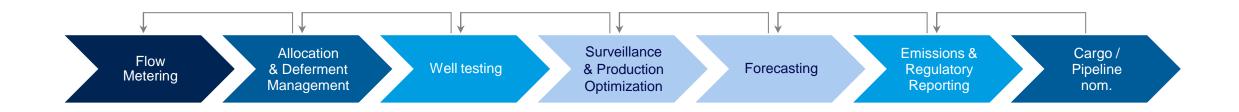
- Cross-functional Collaboration
 - Leverage the extensive experience from development, design, implementation and upgrades within Quorum Software
 - Optimization of technology, tools and process to drive performance improvements
- Cross-industry Collaboration
 - Customer Advisory Board
 - Co-innovation
 - Pilot projects





Productization of industry best practices

Productification of upstream best practices



Automation of upstream best practice workflows





Productification initiatives

- Standard building blocks and sub-workflows to support common business workflows
- Standard integration to connect data, functionality and workflows (internal & external)
- Analytics & automation to execute repetitive assessment, task and procedures
- Notification and generation of user tasks to involve relevant users to execute manual task

Commercial Add-ons



Operational Add-ons



Upstream workflow example

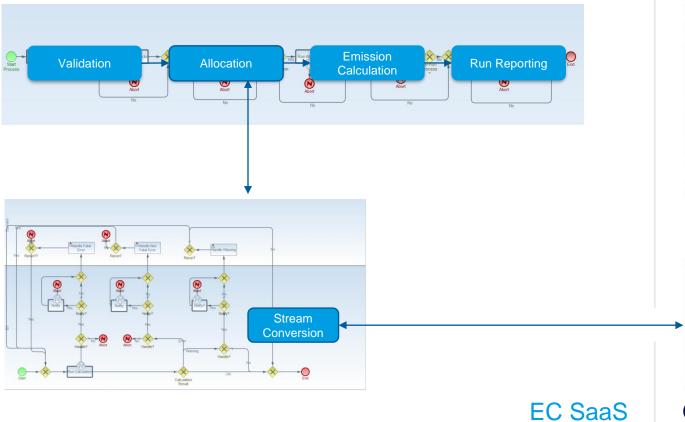


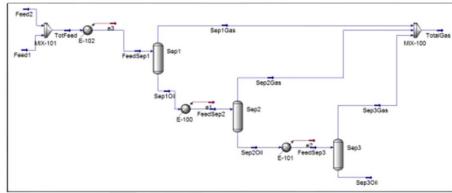






Upstream Hydrocarbon Accounting Workflows





Process
Simulation

Open HYSYS
Model

Open HYSYS
Model

Open HYSYS
Model

Feed quantity
Operating conditions (p, T, etc)

Simulation Outputs
Oil Recovery Factors
Quantities (mole, mass, volume)

ORF
Calculation

On customer premises



