

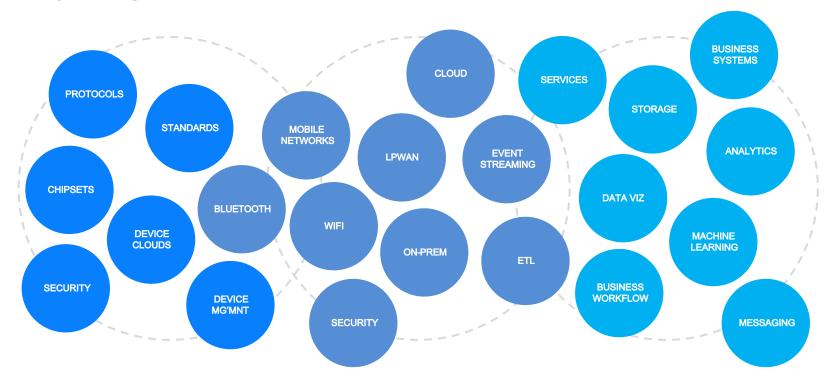
An Industrial IoT Integration Cloud

January 2021

As well as the growing amounts of application-based data, the modern enterprise will treat IoT/IIoT and physically-created data (SCADA, etc.) as just another data source to influence their business decision making in tools that are remotely available in the cloud.

They will need to manage a fragmented physical infrastructure of sensors and networks, alongside their traditional automation tools and assets, and enterprise business applications. Reekoh is the fastest way to achieve agile enterprise integration between IoT/IIoT, Edge, business process, application, and emerging technologies.

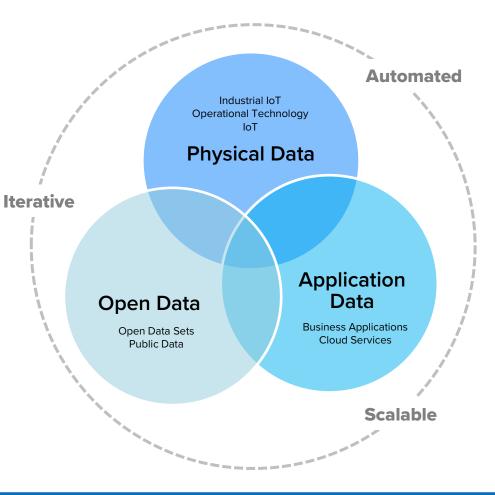
Why integration matters



Gartner. "... half the cost of implementing IoT solutions will be spent on integration."

Gartner Market Guide for IoT Integration (featuring Reekoh)

Reekoh uses familiar integration methodologies and approaches for unifying the Integrated Data Landscape across the OT and IT domains.



"What are the greatest capability gaps related to the Enterprise IoT?"

70% said Integrating IoT solutions into existing business workflows

McKinsey "Taking the Pulse of enterprise IoT"" https://www.mckinsey.com/featured-insights/internet-of-things/our-insights/taking-the-pulse-of-enterprise-iot Through 2020, integration work will account for 50% of the time and cost of building a digital platform.

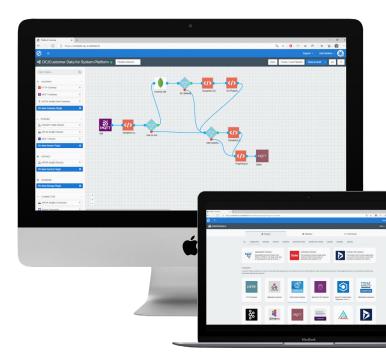
Use a Hybrid Integration Approach for Digital Transformation





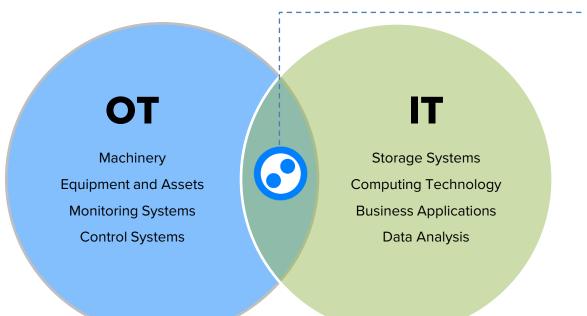
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Reekoh is designed to be agile, vendor-agnostic, and low-code for use by 'citizen integrators' across an organisation.

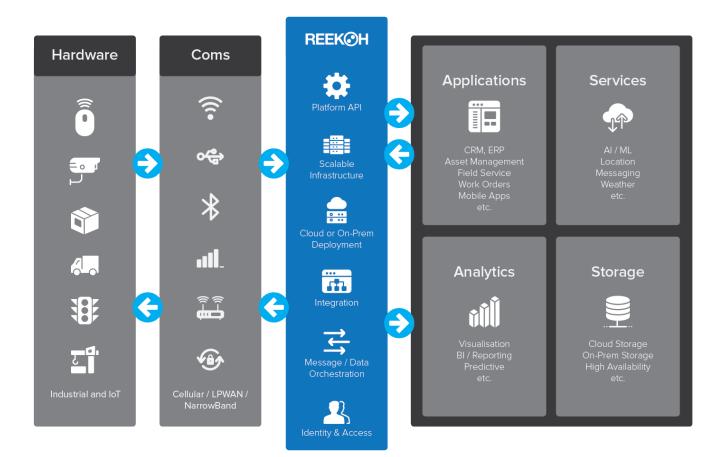




Solving the pain of OT/IT convergence



- Smart connected assets
- IoT sensors and systems
- Data transformation, orchestration and integration
- Interoperable systems and API's
- Hybrid environments (public/private cloud, on-prem, edge)
- Best-practice Cloud / Data
 architecture and governance

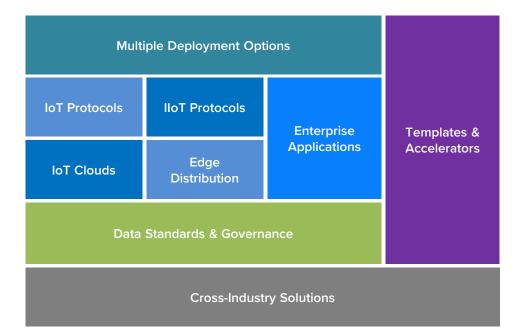


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A Comprehensive Industrial IoT Integration Cloud[™]

Framework for delivering agile and robust IoT/IIoT data driven business outcomes

- IoT and IIoT protocol support and translation
- Integration to IoT device and network clouds, solutions and management tools
- Distribution to the industrial Edge
- Full data lifecycle integration with Enterprise Applications acting as data source and destination, plus data enrichment (lookup) for logic and context
- Enforcement of data standards and common data models, as well as data governance
- Templated and accelerated cross-industry solutions to enable agile pilot to production development and evolution – for both end customer and system integrator partners



Common Use Cases

- Data acquisition from IoT sensors into cloud architecture / database
- Data acquisition from SCADA/OPC/PLC system into cloud and business applications
- Remote asset monitoring
- Data visualisation / Unified Operations
- Integration of service request / work order / asset management systems to factory / field assets for automated business workflows
- Integrate the Connected Worker to factory and business application data

As a User I might want to ...

- See if a piece of equipment has any outstanding maintenance work orders.
- Look at the previous maintenance tasks undertaken on a piece of equipment.
- Initiate a work order from the process control (HMI) system.
- Initiate and track maintenance requests and ensure that a proper workflow and escalation process is follow as required.
- Utilise financial information regarding the cost of electricity to generate real-time KPIs regarding current cost of power being consumed within the facility.
- Log my facilities data to an Azure Data Lake for further visualisation and analysis.
- See summary information from my DCIM (Data Centre Information Management) application within my overall Data Centre UoC (Unified Operations Centre)

Reekoh Accelerate[™]

The Platform for the Business of Things®

Agile Integration Platform-as-a-Service Open Plugin Framework IoT and Internet Protocols Device Management & Security Data Ingestion & Management Data Transformation & Enrichment Orchestration & Application Integration Containerised Deployment



splunk Reekoh has hundreds of plugins already available, bringing together hardware, network, cloud platforms, tools, open data and web services. BOM



Agile Integrations

- An extensive library of pre-built integration plugins and tools to enable rapid and agile data ingestion, transformation and orchestration
- IIoT, IoT device protocols and networks (e.g. Sigfox, LoRaWAN, HTTP, MQTT, Modbus, OPC)
- Data enrichment services
- Extensive data storage, IT/business application and API integrations
- Operational monitoring integrations

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Data management

- High + low code options for comprehensive data management, data modelling and standardisation
- Data Schemas for enforcing common data models for source and target systems
- Data Mapping tools for agile data transformation, field mapping, filtering and more
- Complex Business Rules Engine for conditional data flow



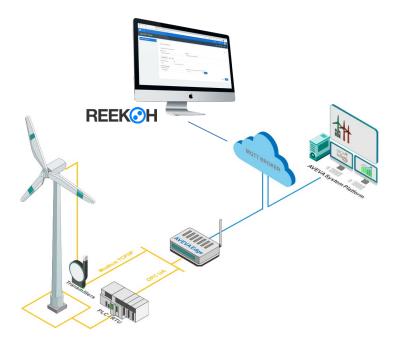
Modular orchestration

- Visual integration design tools
- Validation & Filtering
- Caching and Comparison
- Conditional Paths
- Dual Feeding
- Endpoints across the realm of
 Enterprise applications, databases or
 other cloud services such as
 visualisation or analytics

Reekoh MQTT Cloud Broker

Standalone, enterprise MQTT Cloud Brokers – used independently or combined with iPaaS. Compliments the AVEVA MQTT data flow, simply and with scale.

- Highly-scalable managed AEDES Broker
- MQTT 3.1 and 3.1.1
- Sparkplug B, Dynamic Topics, TCP
- Automatic scalability and resiliency with persistence
- Backpressure management
- Fault tolerant and resilient clusters
- Zero downtime upgrades or configuration updates

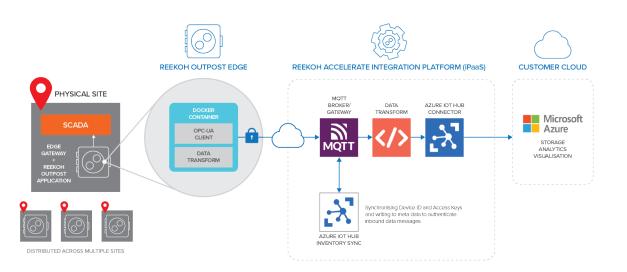


Benchmarked Load

1,100,000 messages / second

Reekoh Outpost Edge

- Reekoh Outpost is an Edge container solution for running Reekoh integration plugins and components at the Edge
- Completes a full hybriddeployment model for Reekoh platform components
- Reduces need for full private Reekoh platform deployments to solve most on-prem integration requirements





Industrial IoT

Smart Building

Smart Cities

Smart Energy

Smart Water

Ideal for asset-heavy industry segments dependent on legacy physical infrastructure and business systems, and that are adopting greater cloud services for digital transformation

"I used to think that integration with Supply Chain from the OT layer was complex, but not any more with Reekoh. I can now have both transactional and real time streaming data all in one platform without any heavy programming!"

> GK Tay General Manager, Industry 4.0 Expert ISDN Software Business, Singapore





"Moreton Bay Regional Council is excited to partner with Reekoh to deliver Smart City services to our region. Reekoh's IoT integration platform offers a unique mix of flexibility, capability and extensibility and is delivered in a robust service offering helping to accelerate Council's Smart City project development."

> James Peet Chief Digital Officer





Partnerships across: Device & Hardware – Communication Networks – Cloud & Infrastructure – Applications – Services & Implementation





The Platform for the Business of Things®

For more information, contact

Steve Terry, Chief Commercial Officer steve.terry@reekoh.com

