



Global Integration Hub | Project Brief

Implementation of a global Integration Platform as a Service (iPaaS) at Olympus

22-06-2022 | Olympus Corporation | Global Integration Hub | Global IT – Solution Delivery – Shared Services – Integration

O 1 Project Brief

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The Global Integration **Hub** defines the long-term integration platform providing seamless and secure data exchange and process integration while establishing a global integration governance enabling Olympus to become a global leading medtech company.

Liberate data via APIs

APIとマイクロサービス

Provide simplified and secure data access for different consumers across regions, processes and applications via one common global Integration Platform and API Management.



Enable the global organization

グローバル組織を有効にする

Tear down regional silos by leveraging current expertise and creating a global Center for Enablement to centrally provide integration services and ensure governance.

Global Integration Hub



市場投入までの時間を短縮

Facilitate faster time-to-market by seamless integration in hybrid application landscapes and on global level while reducing costs focusing on one simplified, scalable and longterm Integration Platform.





Use future-proven technology only

将来性のある堅牢な統合テクノロジー

Enable the Global IT and projects with state-of-the-art integration technologies to reliably build and run integrations to drive the digital transformation.



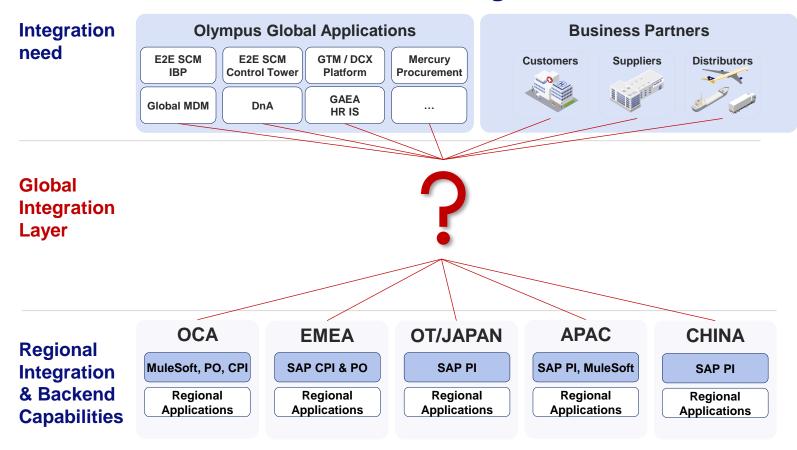
Support new business models

新しいビジネスモデルをサポートする

Easily extend the business model by integrating Olympus and 3rd party applications based on reusable APIs, event-driven architectures and microservices.

Global Integration Hub There is a lack of global capabilities and a heterogenous, partly outdated regional legacy toolset

Current Challenge



Pain Points

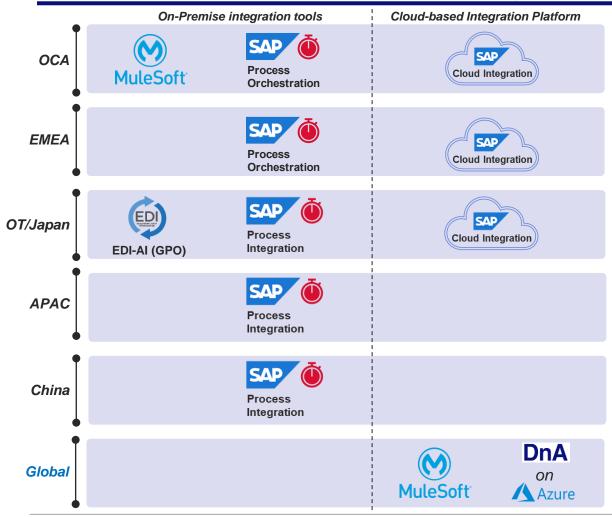
- Lack of global integration capabilities
- Various regional toolsets, partly outdated technology
- No API-driven integration yet
- Limited support of modern near realtime and event-driven integration
- Lack of agility and re-usability
- Limited or no integration governance
- Resources are not aligned globally
- High costs to manage heterogeneous integration landscape

GLOBAL INTEGRATION CAPABILITIES ARE HIGHLY NEEDED



Current State of Integration The heterogenous regional toolset does not fit for global integration and must be consolidated

Current toolset is partly outdated and does not fit for global use



Main Findings

- The market-leading MuleSoft platform covers A2A integration in the Americas
- SAP Cloud Integration is used for A2A integrations in EMEA and covers SAP SuccessFactors integrations in OCA
- SAP PI / PO is used in all regions, but will be out of maintenance in 2027 implicating a migration need; in OCA it is only used for B2B/EDI integration
- The outdated EDI-AI (GPO) in OT is used for file-based EDI integration between S-BCs and M-BCs in conjunction with OT SAP PI
- Part of the B2B/EDI integration with external partners is outsourced (e.g., Cancom in EMEA, OpenText in OCA)

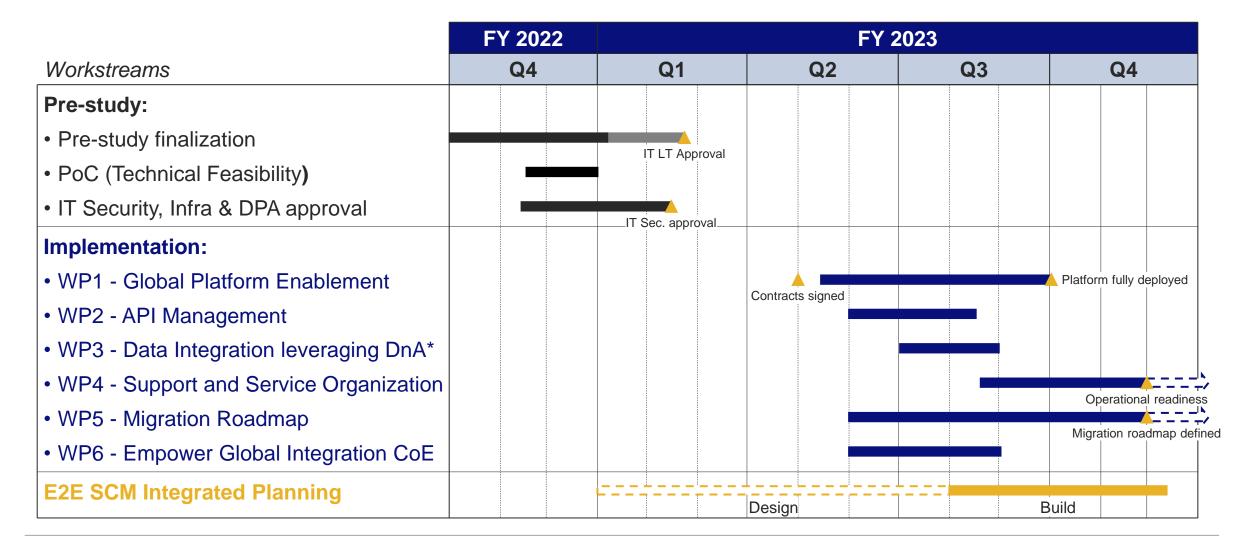
Key actions to improve the integration landscape

- Establish one global Integration Platform as a Service (IPaaS) combined with decoupled data integration leveraging DnA
- Establish an **API-first integration approach** on global level and manage all APIs in an **enterprise API marketplace** enabling reuse and faster time-to-market.
- Upgrade to a state-of-the-art EDI platform supporting classical EDI communication where needed with customers and partners. Leverage 3rd Party B2B Integration Services for simplified partner integration and specific uses cases.
- **Consolidate the different regional integration solutions** to the global IPaaS following a managed evolution path for migration.





Global Integration Hub Implementation Timeline



The platform setup and organizational enablement will lay the basis for integration on global scale



WP1: Global Platform Enablement

- Provision the global Integration Platform as a Service based on MuleSoft
- Define global development standards and naming conventions
- Set up central integration monitoring, alerting and analytics
- Enable connectivity to regional data centers and applications



WP2: API Management

- Set up the global API marketplace
- Configure API gateways and loadbalancers
- Define global development standards and naming conventions for APIs
- Implement layered template API abstracting from regional legacy applications (API-led)



WP3: Data Integration leveraging DnA

- Define solution architecture and connect DnA with the Global Integration Hub
- Define global development standards and naming conventions for data integration via DnA
- API Factory: Identify, define, implement and securely expose most frequently required standardized Data APIs
- Advise on the data integration pilot project as part of the E2E SCM project



WP4: Support and Service Organization

- Define global support and services processes for operations
- Prepare service and operational handbooks
- Guide selection of a global AMS partner
- Onboarding and training of support team



WP5: Migration Roadmap

- Gather and categorize interfaces in a global interface catalogue
- Define a migration roadmap
- Calculate the business case for the migration roadmap
- Align the migration roadmap w/ relevant stakeholders from business and IT
- Define a Project Charter and approach to run migration project(s)



WP6: Empower Global Integration CoE

- Train the Olympus Global IT Integration team on the MuleSoft toolset
- Provide advisory services to set up a global Center of Excellence (CoE) with Center for Enablement (C4E) aspects



2 Additional Information

Global Integration Hub

Integration Use Case Patterns for Olympus

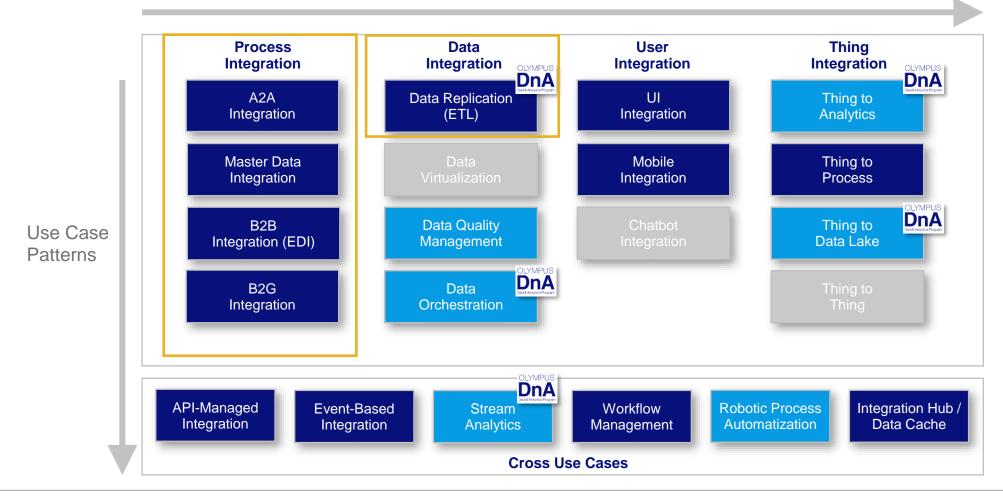
Foreseen in DnA

Use cases vendors had to answer within the RFP

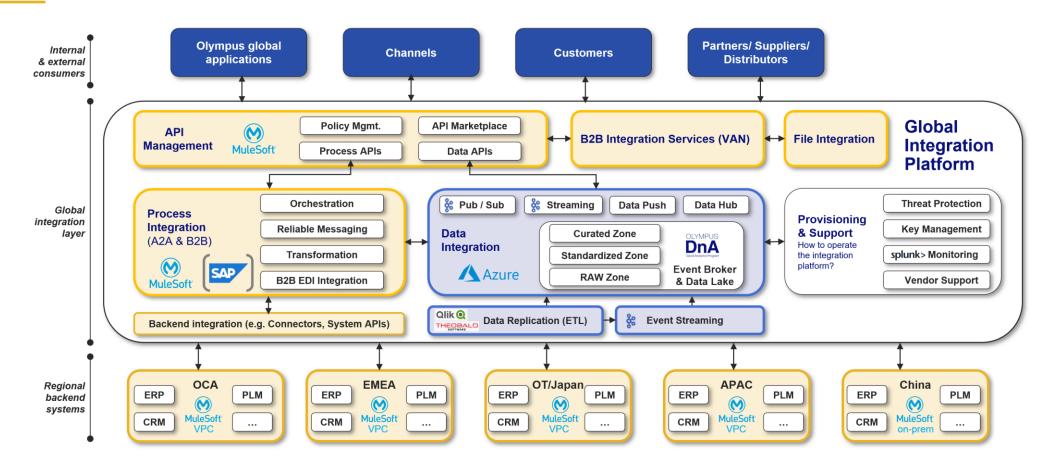
Already covered by other Olympus Teams

Focus

Integration Styles



The recommended Target Architecture comprises leveraging MuleSoft as one global IPaaS in combination with DnA/Azure



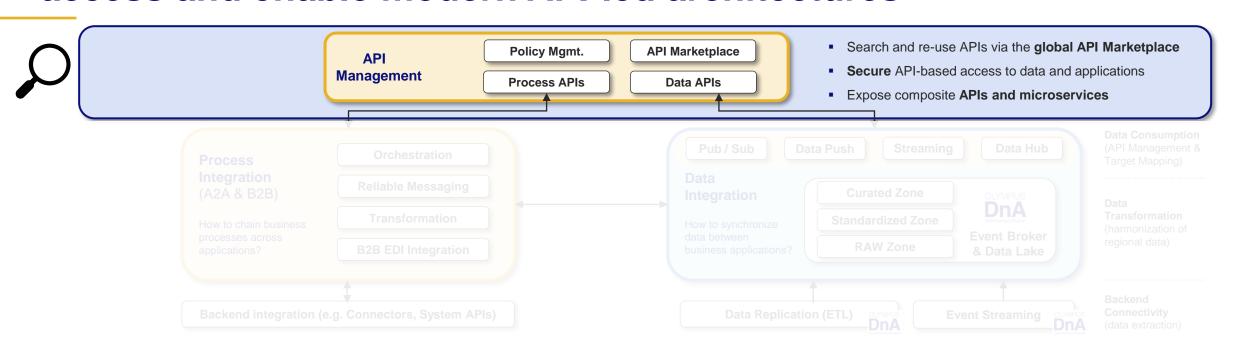
- Hybrid Integration Platform as a Service
- API marketplace & focus on re-use
- Central E2E integration monitoring & log analytics

- Near real-time data integration leveraging DnA
- Digital Decoupling: Reduced regional dependencies
- Supports microservices, streaming and pub/sub architectures

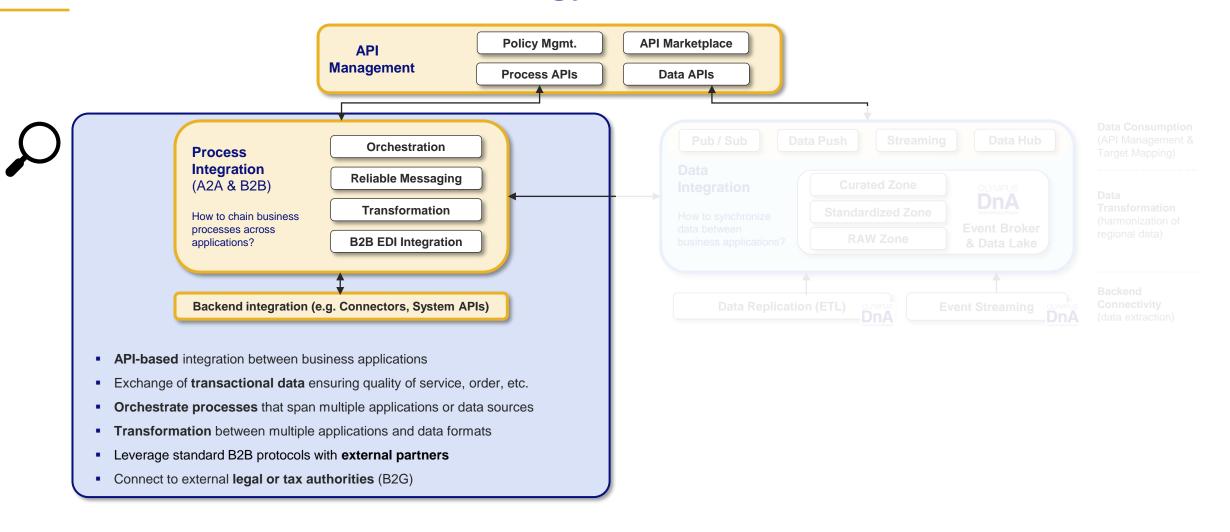




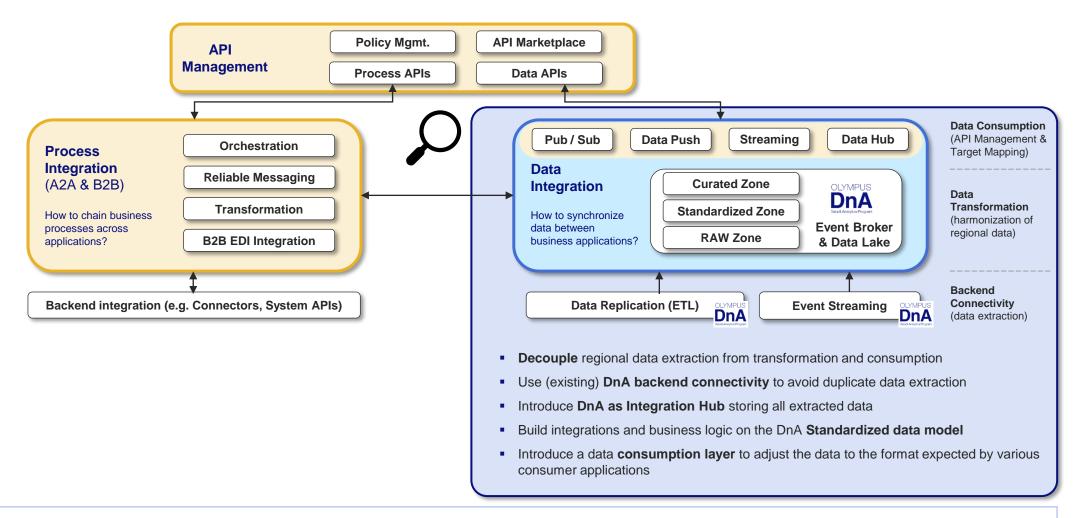
The global API Management will provide simplified and secure data access and enable modern API-led architectures



The Process Integration capabilities will enable the Global IT with state-of-the-art technology and faster time-to-market

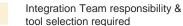


Data Integration in conjunction with DnA will be one new core component reducing dependencies on regional legacy applications





A combination of **API Management**, **Process Integration** and **Data Integration** will provide all capabilities for future-proof and accelerated integration.



Global Integration Business Case Many value drivers are hard to quantify



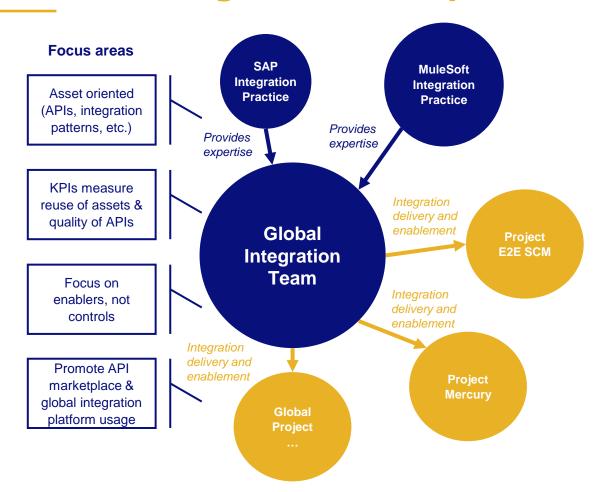
Quantitative use				————— Qualitative use —————				
Reduced platform costs	Reduced API & interface costs	Reduced labour costs	Reusable APIs across the regions	Faster time to market	Increased productivity for employees & developers	Cross-enterprise collaboration & governance	Higher IT service quality	Reduced risks
Unified platform reduces software cost and allows a common skill-set	Shorter development cycle due to unified platform and simplified workflow	Reduced cost to operate and maintain Olympus' IT environment	Established architecture for reusable API services	Better enablement through C4E to ramp-up projects	Reusage of standard templates	Globally aligned resources and skills	Higher quality deliverables (code quality)	Reduced project risk through pre- aligned IT security approvals
Lower IT costs by using fewer regional integration solutions	Fewer defects through pre-packed integration content	Lower IT spend for external developers and advisors	Globally harmonized B2B integration	Standard processes and experiences to collect the requirements	Reusage of existing assets (e.g. patterns, reference architectures, APIs)	Usage of standard estimation tools for API & integration development and implementation	24/5 support and global AMS partner	Usage of a central API gateway to ensure high-quality, standardized APIs
Usage of technology building blocks ready to use with out-of-the-box functionalities	righer integration	Less labour cost by automating activities and workflows	Time saving due to reuse and enhancement of already existing APIs	Higher business agility and accelerated TTM (one team one platform)	Ability to scale and free up resources to focus on innovation	Enhanced governance with embedded standards and security	Embedded testing will result in better code quality with less maintenance effort	Usage of globally aligned integration guidelines
Usage of standardized infrastructure components	Developers become productive faster with a graphical and web- based tooling	Usage of already existing in-house skills to support new projects	Reusable assets to jumpstart and accelerate new projects	Scalable platform and integration capabilities to deliver projects faster	Ability to enable citizen integrators in API creation and simple mappings	Exchange of integration knowledge across regions to support new projects	Enhanced monitoring and management capabilities lowers the risk of service outages and increase service availability	



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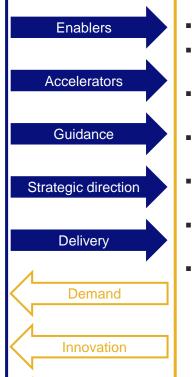
Global Integration Team Competencies

Global integration team provides integration delivery & enablement



Global integration team

- First point of contact for all integration projects
- API and interface development (factory approach)
- Steering of system integrators
- Enable project teams
- Ensure Integration governance
- Evangelize API-first approach
- Integration architecture
- Provisioning of templates, patterns & standards
- Ensure quality and security
- Build up community & provide trainings



Improvements

Projects

- Project planning
- Select system integrator
- Request API and interface development
- API and integration design, build and test
- Raise requirements for platform extension
- Reuse and enhance APIs
- Contribute reusable assets to C4E team

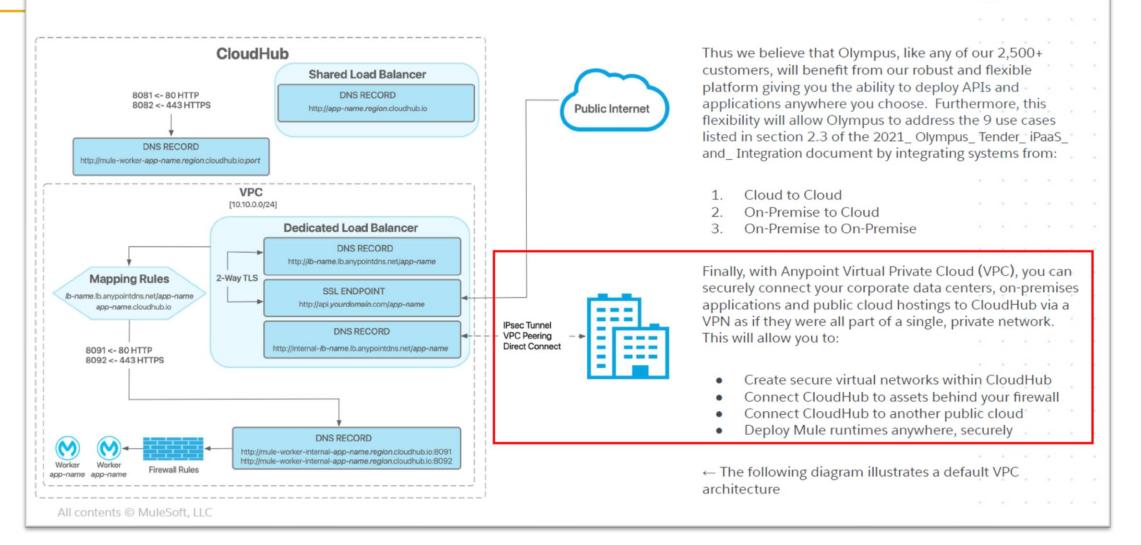


The *Global Integration Team* manages and governs the overall project integration. It provides a central API marketplace for consumers with a strong integration governance, not only guidelines. *Delivery* as part of a implementation team to provide integration development and implementation. *Enablement* as part of a modern integration system to avoid bottlenecks and to enable the organization by sharing integration assets, standards and policies.



Architectural Deployment Recommendation





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