

Gartner's Digital Integration Hub

Category	: Digital Innovation, API 1st	Concept	: Digital Integration Hub
Solution design	: SAP, API Mgt, In-memory Data store	Customer reference(s)	: Centrica, Atlas Copco

Challenges you might face today



BUSINESS

“How can we create new business opportunities via ecosystems so we can increase our revenues?”

"Experience is everything nowadays: customers expect synchronized multichannel experiences."



OPERATIONS

“It’s no longer enough to just adopt technology: we need to build our own technology to compete and grow.”

"Can we break up our (monolithic) backend systems and find a way to expose our assets more easily?"



IT

“Digital capability is key: how can we deliver IT Integration fast-reusable at the highest quality and security?”

"How can we accelerate the migration to (hybrid) cloud services without jeopardizing our legacy IT?"

Transform with a traditional back-end

Specifics of challenge



Traditional back-end applications focusing on stability simply don't adapt to the change, and speed the business requires today.

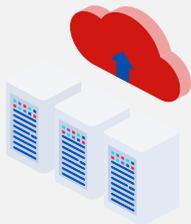
Solution required



Gartner's Digital Integration Hub (DIH): an advanced form of push-caching between a front-end (API services layer), and the back-end (system of record layer).

[Read more on DIH](#)

How IT is done



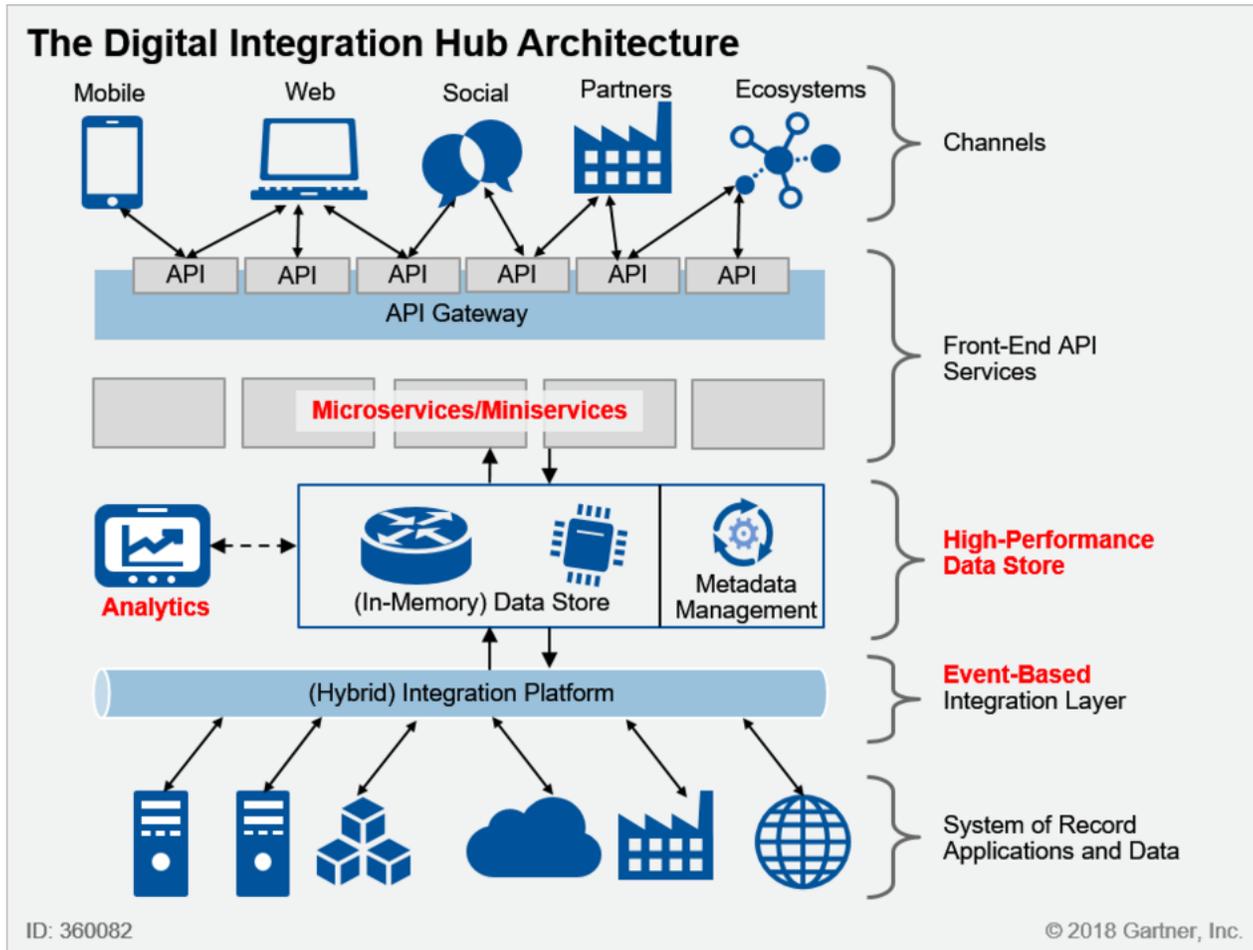
- ✓ Decoupling the back-end data sources from the front-end API services.
- ✓ Avoiding complex integrations to support the API services implementation.
- ✓ Protecting back-end applications from being overwhelmed with excessive API services-generated workloads.

Benefits IT will bring



- ✓ More agility in your IT landscape
- ✓ An infrastructure designed for change
- ✓ Keeping the core of your back-end applications clean
- ✓ Assets exposed as APIs that can be reused over & over & over again

Gartner's Digital Integration Hub (DIH)



Gartner defines the DIH as an advanced application architecture that aggregates multiple back-end system of record data sources into a low-latency and scale-out, high-performance data store.

A DIH typically supports access to data via an API services layer. The high-performance data store is synchronized with the back-end sources via event-based, request-based, and batch integration patterns.

The goal of a DIH is to enable the implementation of large-scale, high-throughput and low-latency front-end API services by:

- Preventing the back-end systems from being overwhelmed with excessive API services-generated workloads.
- Avoiding intractably complex integrations to support the API services implementation.
- Decoupling the back-end data sources from the front-end API services.

Integration architecture by AppyThings



Users

Consumers (developers) connect apps, data & devices with APIs & event streams



Employees



Partners



Customers



Developers



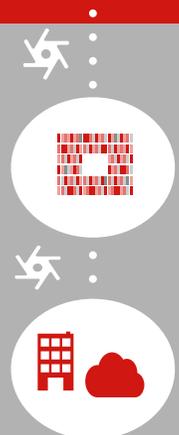
CoE Integration (centralized) (builds,) runs & manages API proxies and event streams

API Management Event Streaming

Runtime Security Analytics Governance Ecosystems Dev. Productivity

Microservices

FTP ESB API Gateway Event Streaming



Producers (developers) create a suite of services, each running in its own process

Backend systems focusing on stability & not to support (everlasting) change

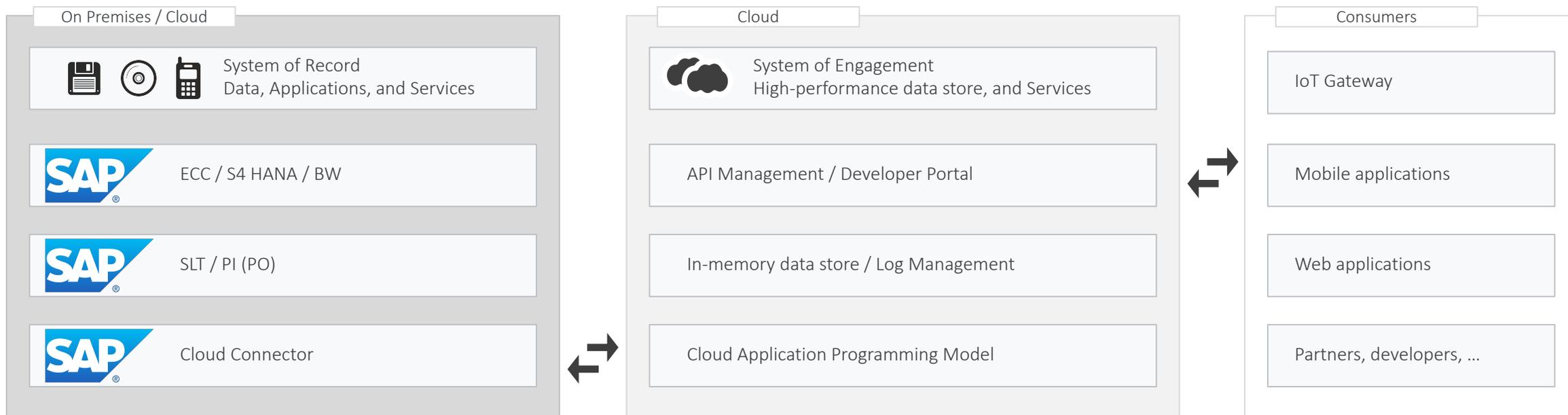
CRM ERP Data Lake Financials Logistics

Gartner's DIH in an SAP landscape

 Wrap legacy SAP services into modern APIs to provide better data access for internal and external app developers.

 Provide reliable interfaces to SAP systems, regardless of physical location or changes to the underlying SAP deployment model.

 Make structured SAP data available via the cloud to enable new business models and innovation at scale.



Customer story Centrica



Making energy more sustainable

“As an international energy, services and solutions company, everything we do is focused on satisfying the changing customer needs in an evolving energy market.

In the UK, Ireland and North America we serve approx. 12 million households and 1,2 million business. In the UK we have nearly 8,000 engineers and technicians.”

The challenge

With a large SAP footprint handling and supporting its core processes, a solution had to be designed to integrate the SAP systems to the new world of front-end personalization, mobile apps, IoT, securely and performant.

The solution

Rationalize Centrica’s IT Integration landscape by implementing Gartner’s Digital Integration Hub (DIH) to make SAP part of the new digital world and exchange data with SAP easy.

The results

- Implemented Digital Integration Hub on SAP
- Improvement of speed from 2s to <100ms now
- Established framework for API 1st governance
- Delivery of state-of-the-art APIs

Customer details

- Name : Centrica
- Country : United Kingdom & Ireland
- Industry : Utilities

Services provided

- Reference architecture
- API 1st governance
- Solution onboarding
- Dedicated team
- Managed services (24 * 7)
- API intelligence
- Solution training

Customer story Atlas Copco



The challenge

Atlas Copco's vision is to become and remain First in Mind – First in Choice. This is challenging in a world that increasingly digitizes. At the same time Atlas Copco has Microsoft Azure as its cloud, a variety of front-end & back-end to be connected.

The solution

Architecture and implement a future state API Management solution, deliver smart API solutions for eCommerce, APIs for system integration, and APIs to automate manual business processes.

The results

- Fully automated eCommerce process
- Built-in automated checks like VIES-check
- SAP integrated with the front-end solutions

Customer details

- Name : Atlas Copco
- Country : Sweden & Belgium
- Industry : Manufacturing

Services provided

- Reference architecture
- API 1st governance
- Solution onboarding
- Dedicated team
- Managed services
- API intelligence

Home of industrial ideas

“We are a world-leading provider of sustainable productivity solutions. Customers benefit from our innovative compressors, vacuum solutions and air treatment systems, construction equipment, power tools & assembly systems.

We are active in 180 countries with approximately 34,000 employees.“

.Inspire .Innovate .Perform .Adapt

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