

# Ecosystem Integration for the Internet of Things

Integrating operational data with enterprise systems is a critical step to achieving digital transformation



**Consolidates and extracts data insights** from numerous structured and unstructured sources



**Ingests and publishes data** to and from third-party data stores and enterprise systems



**Extends IoT-sourced data**



**Harnesses the power of the digital twin**

**The benefits gained from the Internet of Things (IoT) are easily and widely recognized. In a recent McKinsey survey, 60 percent of executives stated that IoT provided significant insights.<sup>1</sup> Realizing these benefits requires integrating and extending data beyond its original systems. Interoperability and secure information sharing between all people, systems and things creates competitive advantages across all aspects of business, from customer experience and supply chain to distribution and internal operations.**

OpenText™ Covisint Internet of Things has evolved since its inception as the world's largest B2B marketplace. It has enabled companies, such as General Motors, to operate a global data exchange at massive scale, providing an efficient and reliable "electronic supply chain" with lower cycle times and reduced costs. Today, this Platform-as-a-Service (PaaS) combines all the foundational technologies required for seamlessly integrating disparate systems and enterprise data.

<sup>1</sup>McKinsey & Co., Taking the pulse of enterprise IoT, July 2017.

## Consolidates and extracts data insights from numerous structured and unstructured sources

Delivered as an open, infrastructure-agnostic platform, the Covisint Internet of Things' Ecosystem Integration solution provides the messaging and orchestration needed for transporting IoT-sourced data and integrating it across devices and systems. This eliminates the complexity of creating and syndicating integrations for machine-to-machine, machine-to-people or machine-to-application scenarios.

## Ingests and publishes data to and from third-party data stores and enterprise systems

The Ecosystem Integration solution standardizes how data is identified and represented, ensuring that the highest level of security and integrity can be maintained at scale. Covisint Internet of Things was purpose-built with security and an identity-centric approach to deliver reliability, massive scalability and operational agility. Through this Platform-as-a-Service and Ecosystem Integration, the enterprise can easily enable internal or partner led development and innovate quickly in the application layer.

## Extends IoT-sourced data

Performs rapid, secure and flexible integration of data. This eliminates the cost and complexity of changing document types, data formats, protocols or creating and syndicating integrations for machine-to-machine and application-to-application scenarios. Through its identity-centric approach to Secure Device Management, it creates composite applications and manages provisioning, authentication and authorization for nearly all system integration demands. The platform can create customized business logic based on events, process sequences or analytic thresholds to deliver notifications or to make other informed actions.

## Harnesses the power of the digital twin

A digital twin is a digital representation that mirrors a unique physical object's characteristics and state and is one of the best examples of truly harnessing the power of IoT. Forbes states that Industry 4.0 needs digital twins to push it forward.<sup>2</sup> The demand is exploding as practical applications grow. Enabling process or operation simulations or analyzing device or machine data for actionable insights requires extending data beyond the operating technology that creates the digital twin. Ecosystem Integration provides a seamless and secure path for digital twin data to interact with enterprise applications.

## An identity-centric platform, designed with security for scalability and integration

OpenText's identity-centric approach to IoT is what makes Covisint Internet of Things unique and ready for integration with enterprise applications. The platform includes advanced out-of-the-box Identity and Access Management functionality which would otherwise have to be built from scratch, consuming development time and taxing already strained IT budgets. This approach is realized through relationship and lifecycle management. Register, authenticate and authorize all interactions across the entire lifecycle of people, systems and things. The ability to manage the identity of a device, sensor or machine throughout its lifecycle is critical to security across the entire ecosystem. Managing the relationship that an IoT data source or operator has with anyone or anything that it interacts with is what makes this platform uniquely capable to handle IoT initiatives requiring the highest level of security.



Integrate to standard sensors and ensure seamless information flow across enterprise systems

<sup>2</sup>Marr, Bernard. Forbes, What is Industry 4.0?, September 2018.

## Converge AI, IoT and blockchain to achieve digital transformation

Discover how the convergence of IoT, AI and blockchain, when integrated with more traditional supply chain management systems and business network practices, powers new levels of innovation and efficiency. Get the [MWD Advisors white paper, \*The supply chain gets smarter\*](#), to learn:

- The benefits of an **autonomous and intelligent supply chain**.
- The key capabilities of AI, IoT and blockchain that enable supply chain intelligence, collaboration and connectivity.
- Out-of-the-box use cases illustrating ways to revolutionize everything from tracking, traceability and asset provenance and whole-life lifecycle management to end-to-end insurance, global payments and logistics administration.
- The importance of laying a digital supply chain foundation, prior to integrating AI, IoT and blockchain into business operations and processes.

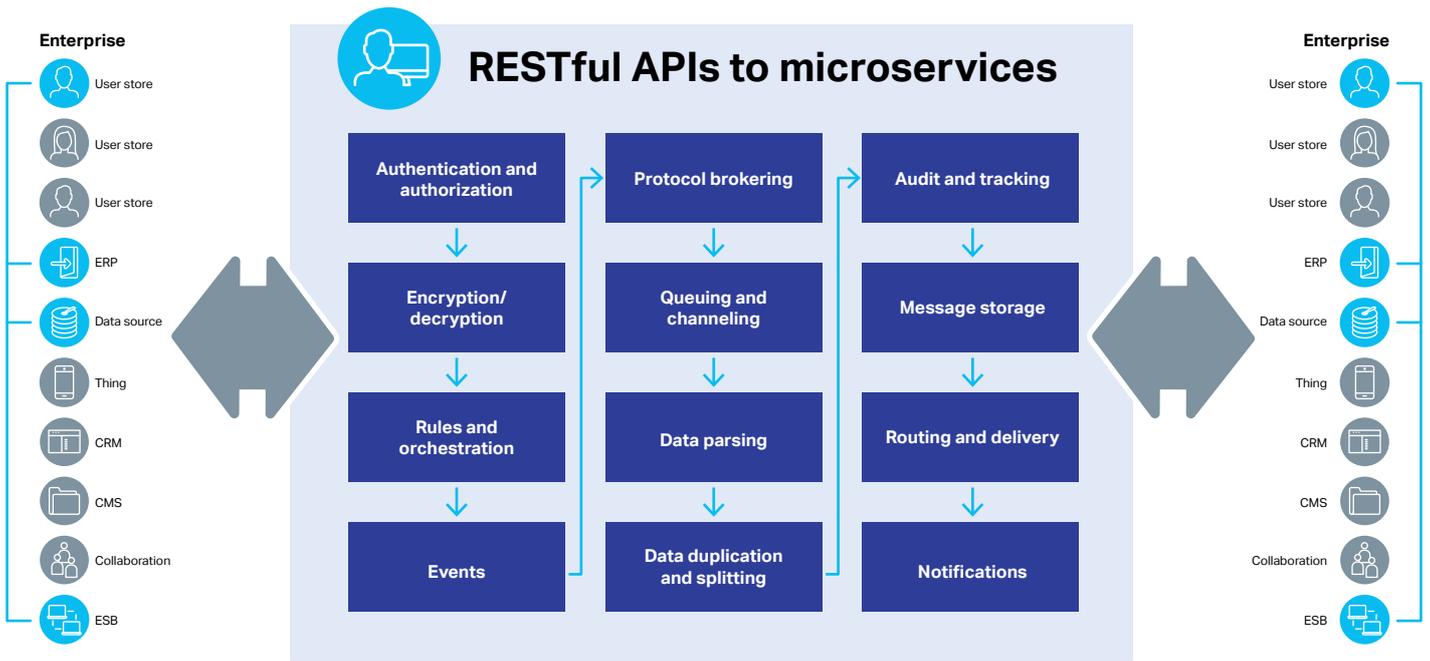
## AI, IoT and analytics in action: Powering the intelligent and connected vehicle

Today's manufacturers are sitting on a gold mine of IoT data that can be sent automatically from vehicles to numerous entities, enhancing offerings and improving Customer Experience (CX). [Download the eBook \*Delivering the continuous, connected journey\*](#) today to get started on your customer journey.

<p>Secure device management for IoT </p> <p><b>opentext™</b>   Covisint</p> 	<p>Ecosystem integration for IoT </p> <p><b>opentext™</b>   Covisint   <b>opentext™</b>   Business Network</p> 	<p>Unified messaging for IoT </p> <p><b>opentext™</b>   Covisint</p> 	<p>Actionable insights for IoT * </p> <p><b>opentext™</b>   Magellan™</p> 
<p>Prevent cyber security threats across different industries by securely provisioning devices</p>	<p>Integrate to standard sensors and ensure seamless information flow across enterprise systems</p>	<p>Aggregate information from different IoT providers to obtain a single data feed for analysis or archive</p>	<p>Leverage AI/ML to monitor performance and maximize availability of serviceable equipment and assets</p>

\* Future roadmap offering

In addition to Ecosystem Integration for IoT, the OpenText Covisint Platform can also deliver Secure Device Management, Unified Messaging and Actionable Insights



The above diagram highlights a simple enterprise integration use case and sample capabilities. Once the integration endpoint is set up, customers can manage integrations and track messages and failures.

## Ecosystem Integration components

Messaging and orchestration services offers a robust and scalable way to manage enterprise integrations:

<b>Enterprise adapters</b>	Ingests and publishes data to and from third-party data stores and enterprise systems and integrates with third-party web services.
<b>Pub-sub engine</b>	Realtime messaging service for publishing and subscribing to events, as well as exchanging messages.
<b>Trading partner management</b>	Configures and manages collaborating entities, with the ability to logically separate message traffic and establish messaging privileges.
<b>File management</b>	Manage files with SCOUT for agent-based file transfers with external sites, API-based file transfers, Messaging Hub (up to 10 MB) and Enterprise Message Bus (for EDI files).
<b>Audit and traceability</b>	View messages, metadata, routing and control information, before and after transformations, command acknowledgements, detailed timestamps for all processing steps and trace failed messages.
<b>Monitoring, metering and throttling</b>	Configure failure monitoring, with policies based on message type and priority.
<b>Electronic Data Interchange (EDI)</b>	Electronic interchange of business information uses a standardized format with support for machine-to-machine (traditional) EDI, web EDI and a CSV messaging solution that translates .csv files to EDI.

## Ecosystem Integration components

Synchronize and consolidate information across applications and sources:

<b>Event source hub</b>	Pub-sub model for app-to-app data synchronization, where a change triggers an event and subscribers receive the latest data.
<b>Authorization policy framework</b>	This security layer acts as the gatekeeper for access to protected resources.
<b>Provisioning</b>	Syndicates user, application and device profiles, as well as authorizations across the digital ecosystem.
<b>Composite service creation</b>	Custom App Protocol Service (CAPS), along-with an orchestration engine, enables the creation of composite services.
<b>API security and syndication</b>	Allows enterprises to create and manage APIs once and then syndicates them into various internal and external developer communities, each with their own branding, licensing, security and other localized attributes.

 [See the demo](#)

 [Learn more](#)