

# Purpose-built Cloud Platform for Enabling Identity-centric and Internet of Things Solutions

Connecting people, systems and things across the extended digital business ecosystem.

## Secure information access is critical & more complex than ever

The age of social, mobile cloud and big data has resulted in a shift of where innovation takes place. The race to win the attention and affection of a new generation of customers, with radically high expectations, has led enterprises to team up for innovation. As enterprises collaborate with partners outside of their firewalls to disrupt markets, the need to securely share sensitive information is critical – and also more complex and risky than ever before.

In the mainframe era there were only a few dozen, or maybe a few hundred people who needed access to digital information. In the client server age, internal networks gave employees access to essential company information. There was concern about who had access to what, but it was easy to secure information inside the firewall.

As cloud emerged, companies could safely store information outside the firewall. They would avoid the hassle of managing infrastructure and data centers, much more easily scale as they grew and shift their focus back to their core business initiatives. It became much easier to share information, but more difficult to ensure that information was in the right hands, at the right time – it required new ways to identify and authenticate access to the information that was being shared both within and outside of the company.

Fast forward to today, where the complexity no longer just revolves around the identities of millions of mobile consumers, or thousands of employees, but billions and billions of devices. Customers want access to data about their products and manufacturers want to leverage sensitive usage data. In order to control, aggregate and distribute data accordingly, these devices, sensors and complex connected products need to be able to provide data to the enterprise and access data within company firewalls.

## COVISINT PLATFORM:

- *2,000+ Global Customers*
- *212K+ Connected Organizations*
- *30M+ User Identities*
- *4B+ Yearly Transactions*
- *\$1T+ in Transacted Business*

The ability to securely identify and authenticate these billions of access points is becoming a new business necessity.

The Covisint Platform enables organizations to build highly scalable cloud applications for sharing trusted information across complex external ecosystems of customers, suppliers, dealers, and distributors, making it easy to collaborate securely outside of company firewalls. Covisint has provided authentication and access to systems across disparate security domains to the world's largest enterprises for over 15 years.

Identity is at the core of every application for the Internet of Things, and the Covisint Platform makes it possible to go beyond connect and collect to distribute information from complex connected product ecosystems.

As the manufacturer of a product, sharing data to and from products and with the extended value chain is simultaneously made easy and secure.

The ability to apply fine-grained authorization access controls to people, systems and things, outside of the organization, ensures that trusted information gets to the right people, systems and things at the right time, across legal entities.

## Build identity-centric & IoT solutions faster with a purpose-built PaaS

Why a purpose-built platform? It's all about speed. Why build apps from scratch by using general purpose PaaS and SaaS point solutions that have to be stitched together manually, and then maintained? The truth about building applications from general-purpose components is that this process is slow and error-prone.

The Covisint Platform is built to accelerate the pace of innovation, with security in mind. Developers have access to SDKs and a comprehensive suite of RESTful APIs, making it easy to quickly build and customize IoT and identity-centric solutions or applications according to specific needs. By removing the headache of managing security, and modeling the complex relationships between people, systems, process and things, developers can move from concept to product as quickly as possible.

The bottom line: less time will be spent building infrastructure and designing complex business logic, and more time can be allocated to delivering tangible business value.

There are three foundational technologies, delivered via an infrastructure-agnostic PaaS that enable these platform capabilities:

1. Securely sharing trusted information with identity and access management.
2. Integrate and aggregate complex data, to and from internal systems of record.
3. Connect manufacturers and customers to their products with advanced IoT services.

These capabilities allow the business to provide exceptional customer experiences, sharpen core competencies, and transform operationally.

## Powerful identity and access management services secure access to critical resources

The Covisint Platform enables enterprises to centrally manage the entire identity lifecycle of their internal and external users, as well as their access to resources across the enterprise. Identity SSO and broker capabilities are essential for the enterprise to rapidly enable and control access to key resources. The identity framework creates a unified user experience while eliminating technology constraints and providing centralized policy enforcement, audit, and reporting. Where most point solutions simply provide single sign-on for internal users that need access cloud applications from inside their firewall, the Covisint Platform is unique in its ability to manage, automate and govern the complexities inherent to providing external entities with access to information that resides behind company firewalls. Covisint specializes in unlocking the previously inaccessible value that comes from sharing trusted information with extended value chain constituents. To deliver this value, Covisint has leveraged years of experience in delivering custom solutions to the world's largest organizations and developed feature-rich Identity Services.

**Identity manager** – designed for comprehensive identity and access management across the complex ecosystem of enterprise identities.

**Authentication manager** – validate that a user is who they claim to be, and establish trust across domains for single sign on.

**Identity intelligence** – inspect identity, access and endpoint data then convert it to actionable information and insight.

**Directory services** – cloud-based directory and the tools to integrate and synchronize directories.

## Messaging and orchestration services seamlessly integrate enterprise data

Covisint has deep knowledge in integrating enterprise systems. Messaging & Orchestration services provide the integration layer for transporting customer data and integrating across devices and systems. The Platform enables enterprises perform rapid, secure and flexible integration of data eliminating the cost and complexity of changing document types, data formats, protocols, or creating and syndicating integrations for machine-to-machine, application-to-application, creating composite applications or managing provisioning, authentication and authorization for your system integration needs. Leverage platform capabilities to create customized business logic based on events, process sequences, or analytic thresholds, to deliver notifications, or take other actions.

**Routing and orchestration** – robust enterprise service bus to transfer, route, prioritize and orchestrate messages.

**Transformation** – flexible transformation of message payloads across document types, data formats and protocols.

**Integration** – enterprise adapters to ingest and publish data from/to third-party data stores and enterprise systems.

**Syndication** – synchronize and consolidate information across applications and sources.

## IoT services accelerate secure, scalable connected solutions

Register and manage physical things and create solutions that connect your people and systems with the integrated world. The Covisint Platform provides everything you need to monitor the health of products and equipment create secure interactions and integrations, and manage the identity lifecycle of connected things. With identity and data exchange at the center of almost every Internet of Things project, a set of services that support rapid development around the identity of things, is essential. Like organizations, people, applications and devices have a broad spectrum of attributes – these entities and their relationships need to be carefully managed. But the number of connected things in the world is expected to exceed 20 billion by 2020 (Gartner) and the sheer volume of identities will grow in parallel. The Covisint Platform standardizes how these device identities are represented, making sure that the highest level of integrity can be maintained at scale. Common entity definitions allow for consistent identity relationship behavior, versioning, and extensibility. IoT Services make it easy to isolate, manage and orchestrate device behavior and model for security.

**Profile management** – define entity profiles and leverage templates for creation and update in bulk.

**Relationship and lifecycle management** – register, authenticate and authorize interaction across the entire lifecycle of people, systems, things.

**IoT messaging** – internet-scale message transport and management.

## Portal services deliver a consistent and personalized user experience

The Covisint Platform Portal Services enable fast, customized UI for information you need to share with employees, partners, customers. Instead of pulling together and maintaining open source or application-centric solutions, businesses get ease and speed of development vs. the cost and complexity of the do-it-yourself approach to enterprise portals. Built-in identity and access management provides a single-sign-on environment that's secure, compliant, and fully auditable. With drag-and-drop ease, businesses can build their own applications and easily integrate back end systems – from mainframes to document management systems.

**Mobility** – responsive and adaptive design for mobile devices.

**Content management** – integrated content and document management with social collaboration and easy to use site and page templates.

**Presentation** – configurable page layout with customizable look & feel and built in notifications and alerts.

**Personalization** – dynamically customize content by user profiles.

## APIs and developer resources accelerate custom development

The Covisint Platform provides a framework to learn, build, deploy and monitor enterprise grade applications rapidly. Each development environment gets a dedicated portal, identity realm and ID to access APIs and services. Solutions can be deployed through the developer portal, and act as a logical grouping of environments dedicated to an application.

**Developer community** – developer resources to get started quickly and access available platform APIs, code samples, with the ability to publish 3rd-party APIs.

**Solution center** – self-service tools for developers and administrators to create, build, launch and monitor new apps.

### Software development toolkits

**(SDK)** – accelerate development and provide easy to use frameworks.

**UI frameworks** – UI accelerators to build custom applications with popular languages and libraries.

### Purpose-built for reliability, massive scalability, and operational agility

The Covisint Platform is an infrastructure agnostic, highly scalable, and purpose-built Platform-as-a-Service (PaaS) for unlocking the potential of IoT and identity-centric solutions.

**Modern cloud architecture** – internet scalability via micro services.

**Microservices exposed via RESTful API's** – developer-ready, UI-independent API gateway.

**Elastic infrastructure** – built on Cloud Foundry to dynamically scale, ingest data rapidly, upgrade with no downtime and run on any IaaS.

**Proactive operational monitoring** – incident management and response with 24x7 NOC.

### The Covisint difference

**Differentiation is in the solution** – a cloud-based PaaS unlocks customer and partner led development and faster innovation in the application layer.

**Infrastructure agnostic and highly scalable** – to meet the privacy, security and performance demands of increasingly global businesses.

**Purpose-built for solutions that connect people, processes, systems and things** – enables faster innovation in the platform capabilities and your solutions.

**Offered as a cloud service** – to drive operational simplification and reduce costs for customers through economies of scale.

