

Cloud Application Integration

Modernize Your Data, API and Application Integration in a Multi-Cloud and Hybrid Environment



Automate Business Processes, Accelerate Transactions and Fuel Real-Time Analytics

Enterprises are rapidly expanding their application and data footprint to multiple cloud deployments. At the same time, they are retaining their mission-critical apps and data on-premises. It is not uncommon that a business process, like an order flow, traverses through multiple applications — order entry, pricing, CRM and inventory management — in real time. These applications and the corresponding data repositories, such as order databases, pricing databases and customer databases, are typically deployed in a distributed manner — some on-premises and others on disparate public or private cloud infrastructures. For an order process to be completed successfully, the applications and the corresponding databases must be tightly integrated. Existing enterprise integration technologies are rigid, expensive to maintain and too slow to respond to the speed and requirements of the new business.

The Informatica Cloud Application Integration (CAI) service offers a single, trusted solution to support virtually any integration pattern, data set, user type or endpoint to automate business processes, expedite transactions and enable real-time analytics. It is based on a modular, microservices-based architecture for agile support of future business requirements. It supports multiple new and unique integration patterns, which include on-premises to cloud real-time data integration, real-time/B2B application integration, process orchestration, data synchronization and more.

Key Benefits

- Implement processes and APIs with zero code
- Build APIs with sophisticated data integration capabilities
- Leverage out-of-the-box connectivity to over 400 endpoints or develop your own in seconds
- Future-proof your integration needs with a microservices architecture
- Run your missioncritical apps on a highperforming, scalable, available platform supporting trillions of transactions per month
- Experience an industry-leading and comprehensive iPaaS solution

CAI provides a consistent look and feel across all experiences tailored to user roles such as developers, citizen integrators and operators/administrators using a common user interface shell. It provides out-of-the-box integration to over 400 cloud and on-premises applications and databases for quick deployment. Users can integrate multi-cloud and hybrid applications without writing a single line of code. CAI is an industry-leading, comprehensive integration platform as a service (iPaaS) solution supporting cloud data integration, cloud application and process integration, API management, data quality and governance, master data management and data security, to name a few.



Figure 1: Define a business process without writing a single line of code.

Key Features

Low-Code/No-Code Integration Designer

Cloud users demand an easy-to-use web interface for creating integrations and automating processes. Informatica Cloud Application Integration Designer offers a suite of tools designed for building cloud-based processes. It enables the creation of integrations, workflows and processes within Informatica iPaaS, as well as embedded guides that can reside and run on other endpoints. Additionally, it facilitates the design of a sequence of steps that specify a business processe, connecting services, applications and APIs while accessing or updating data. These processes are defined with a low-code/no-code approach, utilizing built-in wizards to significantly increase productivity. The interface caters specifically to technical power users – automation designers – who may not necessarily be developers but understand the business processes and services needed.

No-Code Enterprise GenAl Applications

Enterprises are currently developing generative artificial intelligence (GenAI) apps using complex handcoding tools. These tools demand specialized skills, require significant effort and are not ready for enterprise-wide use. In addition, maintaining and supporting these hand-coded apps is expensive and complex. With Informatica CAI easy-to-use, low-code/no-code development capabilities, enterprises can seamlessly build GenAI apps without any coding expertise. With a user-friendly drag-and-drop interface, creating GenAI applications at scale has never been more accessible.

Enterprises can seamlessly deploy and operationalize virtually any AI or machine learning (ML) model with out-of-the-box large language model (LLM) connectors, facilitating rapid prototyping and development. CAI supports popular GenAI use cases such as prompt engineering, RAG, AI agents and fine-tuning. Enterprises can harness the reusability capability to modernize their existing app or API integrations and can orchestrate LLM calls and RAG pipelines with ease based on their users' needs.

Self-Serve API and Application Integration Guides

Many organizations implement Salesforce in their call centers but soon realize they need access to data outside of Salesforce. API and application integration guides facilitate interactive access to data, which can be embedded natively within applications like Salesforce or hyperlinked in browser applications. Users such as call center agents are guided through various call scripts while accessing data from other systems — including on-premises and cloud-based systems — and all data related to each call is recorded automatically and accurately, either to Salesforce or external systems, as needed.

End users interact with data and applications in real time, irrespective of the app or data location and without the need for simultaneous access to multiple applications. For example, a screen might display account details or prompt the user to confirm the status of a sales call. Behind the scenes, the user's process interacts with multiple applications or data repositories by extracting, presenting and updating data. API and application integration guides eliminate the need for end users to perform swivel chair integration, which is tedious and error-prone.

Cloud application integration developers, citizen integrators or business analysts can create guides at design time without needing technical expertise or formal training. A screen step for end users to interact with backend applications and to access/review/update data can be defined with just a few clicks without the need for coding. Adding a step is as simple as defining the name of the next step. Guide designers can then simulate how a guide appears when it is run, either from the beginning or from any step. This ensures higher productivity and fewer errors. Guides run within Salesforce's mobile apps or the Salesforce Classic or Lightning experience.

The following image shows the guide design process:





Figure 2: A guide driving the user from lead to opportunity.

Packaged Integration Processes

Packaged integration processes provide a jumpstart for developing common app-to-app and process automation scenarios. They boost implementation speed with single-click reuse of pre-built integrations for the most common use cases. These processes enable an in-app user experience for seamless discovery and consumption of pre-built processes. They also offer specific help documents, including 'how-to articles' and ready-to-use downloadable solutions to provide additional information.

Seamless Connectivity Across Data, Applications and Systems

CAI provides out-of-the-box (OOTB) connectivity to hundreds of cloud and on-premises systems, applications and data sources. This broad range of pre-built connectors, accelerators and multicloud integration tools simplifies integration efforts, allowing customers to easily connect and exchange data between disparate systems without the need for custom development:

- Build REST (XML/JSON, JSON/RPC, or SOAP) service integration using a simple form. If the service offers a web services description language (WSDL) or Swagger interface document, the service connector can be created by importing the interface document. Informatica has established a GitHub repository to publish service connectors. Customers and partners are free to use these definitions without restriction, including the rights to use, copy, modify, merge, publish and distribute these under a Massachusetts Institute of Technology (MIT) license. Contributions back to the community are encouraged to drive innovation and reduce perceived barriers to adoption.
- Utilize data service connectors and connect to JDBC, OData, SAP Table Reader, SAP BAPI, Workday and NetSuite (capable of various CRUD operations). Use OData clients such as Salesforce Lightning Connect to access OData streams across the web and on-premises.
- Support for different types of messaging systems such as Kafka, RabbitMQ and others. Integrate with messaging services using built-in JMS, AMQP (includes Azure Service Bus) and Amazon Web Services SNS/SQS messaging services for queue and topic processing.
- Integrate content using file content listeners/writers to consume or deliver data sets held on file system, S3 or FTP/s.
- Natively supports SaaS applications such as Salesforce Platform events.
- Create user-led, on-demand connector creation in minutes using service connectors.

Hybrid Runtime and Process Management Engine

Informatica Cloud Application Integration's runtime and process management engine (Process Server) can scale to meet the demands of the cloud and enterprises of any size. It supports both on-premises and serverless deployment models. The system ensures business continuity and is deployed as a cluster in failover mode to guarantee high availability for on-premises execution. It securely partitions users into discrete tenants. CAI supports a single-tenant architecture through the on-premises model and a multi-tenant architecture through the serverless model. In this multi-tenant architecture for the serverless deployment model, each tenant shares hardware and software resources but has its own private and secure access to the Process Server.

Centralized Process Operations

CAI provides a process console, which serves as a central location to configure and manage Process Server instances and their deployed resources. It enables the scheduling of integrations, workflows, processes and the deployment of new or updated processes. Additionally, it monitors end-to-end integration workflows and assets. Tenants can perform root cause analysis if a process exception occurs and then take corrective actions. Process rewind — a process exception management feature — offers the ability to visually rewind a process to a specific activity and redo the work without invoking any built-in compensation logic, giving organizations unprecedented flexibility in managing and running in-flight processes.

Process Developer

Development teams must often work on multiple projects, including Java, service-based development and orchestration. They shouldn't have to adopt new development tools whenever they switch between projects. For this purpose, Informatica also offers Process Developer, a rich Eclipse-based IDE intended for developers that incorporates the BPMN, BPEL and BPEL Extensions for People (BPEL4People) standards. Its optimized and easy-to-use features make it easy for developers to create business process applications quickly. It automates business processes and user workflows with the application integration designer and facilitates human intervention through human workflows. Additionally, it enables multi-pipeline orchestration with decision trees, process management and notifications.

Highest Level of Security

Customer data and workload security are considered design principles at every stage of the application integration lifecycle. In addition to being GDPR-compliant, IDMC has been certified for SOC2, SOC3, FedRAMP and HIPAA compliance.

Cloud and On-Premises Interaction

CAI is built for hybrid and multi-cloud environments. Incoming service and API requests to a clouddeployed process (depicted below) can originate from a cloud or on-premises consumer over JSON/RPC SOAP and REST (XML/JSON). These either initiate a new process or represent a callback or an event the process is waiting to receive. The API gateway secures and applies various access policies to provider APIs. Invoking cloud-based services (ex. Salesforce or NetSuite) employs the security mechanism offered by that service. REST (XML/JSON) or JSON/RPC services exposed by customers are secured using HTTPS basic-auth or handled by third-party OAuth providers. SOAP services exposed by customers are secured using basic auth at the HTTPS layer. Additional forms of authentication are available via WS-Security in the form of WS-Security tokens. Username, X.509 and SAML token formats are supported.Username, X.509 and SAML token formats are supported.



Figure 3: Informatica iPaaS, third-party (Salesforce, etc.) cloud and on-premises interactions managed by the Informatica Secure Agent.

Key Benefits

Support Virtually Any Integration Pattern, Data or User

Informatica Cloud Application Integration supports virtually any integration pattern (data integration, application integration, business process automation, B2B, pub-sub, event-driven, streaming, API lifecycle), virtually any data (structured, unstructured, locked and unlocked) and various user types (developers, LOB users, application admins or citizen integrators).

Implement Processes, APIs and Guides Without Code

Build your integration applications and APIs with Informatica's integrated design environment. Combine and orchestrate real-time data or services from cloud applications, such as Salesforce or Workday, with on-premises data sources like Oracle or SAP or API-based REST (XML or JSON) and SOAP services, even if they reside outside corporate firewalls. Develop various classes of APIs such as application, data service or data set APIs. When you're ready to expose APIs to your partners, customers, or within the enterprise, use the built-in API gateway to secure and monitor your REST, OData and SOAP applications and data APIs. In addition, developers, citizen integrators or business analysts can create guides at design time without technical expertise or formal training. No coding is required.

Automate Long-Running, Real-Time Processes

Essential business processes that span cloud and on-premises assets, applications and data services – such as discount approval, order-to-cash or service-call resolution – can take days or weeks to complete and involve complex interactions between systems and human workflows. Automate your data ingestion, propagation and business processes using CAI's sophisticated orchestration capabilities.

Integrate On-Premises, Cloud Messaging Systems

Use CAI to integrate your existing queuing and pub/sub messaging systems. CAI interoperates with various messaging systems, including JMS, AMQP AWS SNS/SQS and Microsoft Azure Messaging. When ready, you can phase out your ESB and replace it with the CAI service for broader integration and hybrid capabilities. In addition, Kafka support by CAI significantly increases current message-based pub/sub interactions between data and applications. For example, bridging these message-based events with cloud integration offers unique flexibility to customers. Hub, for example, offers unique flexibility to customers.

Integrate Applications With Rich Connectivity

Choose from a vast array of connectors or join hundreds of customers who have configured tens of thousands of custom connectors to integrate your data sets, applications and services anywhere: in the cloud or on-premises. Build your data APIs using sophisticated data integration capabilities, including synchronization, replication, transformation and mass ingestion.

Democratize Generative AI

CAI enables enterprises to build and deploy enterprise GenAI applications at scale with a user-friendly drag-and-drop interface. Its no-code capabilities empower a broader range of non-technical users — such as domain experts, business analysts and data engineers — to leverage GenAI technology for their specific needs without extensive programming knowledge.

Develop a Custom Connector in Seconds

CAI can define custom service connectors for custom API-based applications that do not include off-theshelf connectors. You can use CAI to define custom service connectors and create "connectors on the fly" by either importing a WSDL/Swagger document or manually creating them in web form. It takes just a few clicks to create connectivity that behaves the same way as native connectors.

Speed Up Implementation and Improve Time-to-Value

Informatica Cloud Application Integration offers packaged integration processes (PIPs), which are prebuilt integrations designed for common use case scenarios. These PIPs enhance developer productivity by allowing single-click reuse of pre-built integrations, eliminating the need for organizations to develop integrations from scratch and thereby accelerating time-to-value.

Support Your DevOps Practices

Easily enable your DevOps practices using CAI's project/folder/asset export and import function, which facilitates continuous delivery through automation with external version control systems, releases and deployment pipelines. In addition, headless SDLC (no UI needed, given the use of APIs) for CI/CD support increases developer flexibility and efficiency. This helps teams with many developers and hundreds of integration artifacts fully automate backup and recovery to any source control system and continuously assemble and deploy across environments.

Learn More

To learn more about Informatica Cloud Application Integration, please visit www.informatica.com/cai.



Informatica (NYSE: INFA) brings data and AI to life by empowering businesses to realize the transformative power of their most critical assets. When properly unlocked, data becomes a living and trusted resource that is democratized across your organization, turning chaos into clarity. Through the Informatica Intelligent Data Management Cloud[™], companies are breathing life into their data to drive bigger ideas, create improved processes and reduce costs. Powered by CLAIRE[®], our AI engine, it's the only cloud dedicated to managing data of any type, pattern, complexity or workload across any location — all on a single platform.

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