

# Platform Overview



# What is the Entando Platform?

The **Entando Platform** is an open source, cloud-native **Application Composition Platform (ACP)** that simplifies composable application lifecycle. The ACP follows a composable architecture framework, leverages **Kubernetes** for scalability, and enables component-based development.

With a **component-based development** approach, the **Entando Platform** enables organizations to create reusable components and assemble them into web applications. This approach increases code reusability, reduces development time, and promotes collaboration.

The Platform follows a **composable architecture** based on **microservices** and **micro frontends**, allowing IT organizations to work independently on different aspects of an application. This architecture promotes **scalability** and **agility**, making it easier to maintain complex projects.

Entando supports DevOps practices with built-in CI/CD capabilities, facilitating automated testing, deployment pipelines, and version control. This enables teams to deliver higher quality software faster.

Thanks to its decoupled architecture, Entando enables organizations to integrate with existing systems and legacy applications, allowing them to modernize their technology stack without disrupting the current infrastructure.

The Entando ACP is an enterprise-ready solution that empowers organizations to build modern web applications with agility, scalability, and extensibility. It streamlines the development process, facilitates collaboration, and enables businesses to stay ahead in a rapidly evolving digital landscape.

# What problems does it solve?

## Complex Development Process

The Entando Platform simplifies development with composable architecture and a component-based approach. It enables teams to work independently, streamlining collaboration and reducing the complexity associated with traditional web application development.

## Scalability and Efficiency

Entando leverages Kubernetes and composable architecture to optimize web applications' scalability, availability, and resilience. It simplifies the process of scaling applications to handle increased traffic, allowing organizations to efficiently manage high loads without compromising performance.

## Legacy System Integration

Integrating new technologies with existing systems and legacy applications can be challenging. Entando's decoupled architecture enables seamless integration, enabling organizations to modernize their technology stack while preserving their current infrastructure investments.

## Time-to-Market Pressure

In today's competitive landscape, organizations must deliver applications quickly to meet customer demands. Entando supports DevOps practices with built-in CI/CD capabilities, enabling automated testing, deployment pipelines, and version control. This helps organizations reduce time to market, with faster releases, shorter development lifecycles, and reliable upgrades.

## Customization and Flexibility

Off-the-shelf solutions may not meet the unique requirements of every organization. Entando provides extensive customization options, allowing developers to tailor applications to specific business needs. Extensible and pluggable, Entando can seamlessly integrate additional features and functions, providing flexibility and adaptability to respond to evolving business needs.

# Who is it for?

Entando is designed to serve various users and organizations developing and managing modern web applications. Technology leaders, businesses, organizations, and architects can benefit from the Entando Application Composition Platform. It empowers them to drive technology innovations, achieve business goals, and design and deliver modern, scalable, and customizable web applications.

## Technology Leaders

Technology leaders, including CTOs and other decision-makers, benefit from Entando's Platform capabilities in driving technology innovation within their organizations.

They can leverage the Platform to:

### Stay at the forefront of technology

Entando enables technology leaders to adopt modern development practices and architectures, allowing them to embrace the latest trends.

### Support digital transformation initiatives

With Entando, they can modernize existing systems, build scalable and customizable applications, and deliver enhanced digital experiences to customers and users.

### Enable flexibility and agility

The Platform's modular architecture and support for customization enable technology leaders to adapt and respond to evolving business needs and market demands.



# Businesses and Organizations

Businesses and organizations across various industries can leverage Entando ACP to address their specific needs and achieve business objectives.

Entando allows them to:

## Build robust and scalable applications

The Platform's micro frontends architecture, component-based development, and Kubernetes integration ensure that applications can grow and adapt to changing requirements.

## Enhance user experience

The Platform's customization options, multichannel capabilities, and integration possibilities enable organizations to create personalized experiences that drive customer satisfaction and loyalty.

## Accelerate time to market

Entando's developer-friendly features, automated scaffolding, and built-in CI/CD capabilities streamline the development process and reduce time and effort.

# Architects

Architects, including solution and enterprise architects, can leverage the Entando Platform to design and deliver modern composable applications.

The Platform supports architects in the following ways:

## Enable architectural modernization

Enable architectural modernization: Entando enables modernization and the adoption of new technologies while preserving investments in current infrastructure.

## Design scalable and maintainable applications

By breaking down applications into independent micro frontends and components, architects can create a modular architecture that supports scalability and ease of maintenance.

## Facilitate customization and extensibility

Architects can leverage the Platform's customization options and plugin system to tailor applications to specific business requirements.

# What are the main features and capabilities?

## Development Platform Features



### Customization and Extensibility

Entando provides extended options, allowing developers to tailor applications to specific business needs. The Platform's plugin system facilitates the integration of additional features and functionalities seamlessly.

### Composable Architecture

With its decoupled composable architecture, Entando allows organizations to integrate with existing systems and legacy applications. This facilitates the modernization of technology stacks without disrupting current infrastructure.



### Enterprise-grade Features

The platform offers role-based access control (RBAC), user management, auditing, and monitoring. These features ensure security, scalability, and compliance with industry standards.

These key features and capabilities of the Entando ACP empower users to develop modern web applications with agility, scalability, customization, and enterprise-grade capabilities. The platform streamlines development processes, enhances productivity, and promotes the delivery of superior applications.

# How does it work?

The Entando Platform's Composable Application lifecycle involves four stages: Create, Curate, Compose, and Consume. This process is not linear but agile and iterative, especially for companies further along their composability journey. Let's explore the "Create, Curate, Compose, Consume" stages in detail:



## Create

Creators use the Entando Platform to build new application components from scratch or bundle existing code, with the freedom to choose the technologies and frameworks that meet their needs. The platform provides a developer-friendly environment with features like hot reloading, automated scaffolding, and code generation to streamline the development process.



## Curate

In this stage, curators discover and organize bundles and components to share and reuse across teams or projects. The components can be sourced internally or from the Entando Cloud Hub, which offers a selection of pre-built components and solutions that can be easily integrated into any application. Curators evaluate, publish and communicate component features, versions, and metadata to enhance their application's functionality and accelerate development.



## Compose

This stage involves assembling the curated bundles and components into a complete application. The Entando Platform provides tooling and a visual interface that allows composers to define the structure, layout, and interactions between micro frontends within an application. This enables the creation of a cohesive and seamless user experience across a complex application.



## Consume

End-users interact with the application, accessing web browsers, mobile devices, and conversational interfaces at this stage. The application provides a rich user experience, leveraging the capabilities of micro frontends and integrated components. End-users can consume the application's features, perform tasks, and achieve their objectives.

In essence, the "Create, Curate, Compose, Consume" stages emphasize the Platform's ability to support an agile development process. It enables IT organizations to create new applications, curate components, assemble them into a complete application, and deliver a seamless experience to end-users across multiple channels.

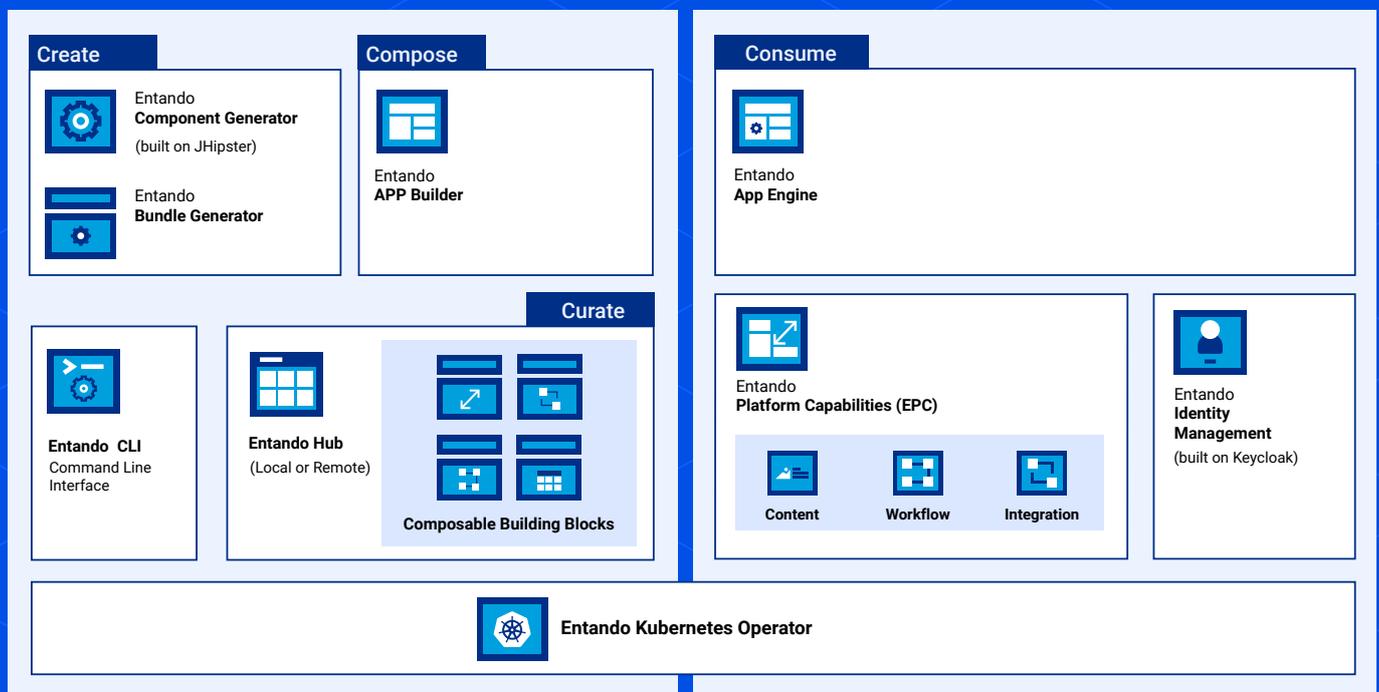
# What is the Platform Architecture?

Entando is a modern development and runtime platform for your chosen Kubernetes provider. An open source platform, Entando provides tools to configure an environment and build, reuse, and assemble applications to run on Kubernetes.

Entando can also be described as a bundle orchestrator that simplifies the development, deployment, and management of applications composed of modular bundles.

Let's break down this description to help you understand what it means.

On Entando, a bundle refers to a collection of self-contained modules or components that make up an application. A bundle encapsulates a specific functionality, feature, or service. Entando manages and coordinates this bundle, and all the other bundles, orchestrating them and the environment required to create a cohesive application.





### Entando App Builder

The Entando App Builder lets users quickly create and customize web applications using a low-code, drag-and-drop page manager. With the App Builder, they can visually design interfaces, define logic, and integrate data sources without extensive coding.



### Entando App Engine

The Entando App Engine is a runtime environment for deploying and running applications built with Entando. It is the core execution engine that hosts and delivers web applications created using Entando's development tools.



### Entando CLI

The Entando CLI is the command-line interface tool the Entando Platform provides. It allows developers to manage and interact with their Entando projects directly from the command line, offering a streamlined and efficient way to perform various tasks.



### Entando Component Generator

The Entando Component Generator is a tool to help developers quickly create and scaffold various application components. It automates the generation of the initial code structure and files for the skeleton of an Entando project, saving developers time and effort.



### Entando Hub

The Entando Hub is a repository containing reusable, modular components built with the Entando Platform. It serves as a centralized bundle repository within the Entando ecosystem where users can share, discover, and access solution bundles.



### Entando Platform Capability (EPC)

The EPC is a packaged capability that adds functionality to the platform and/or additional UX controls to the App Builder. EPCs enable Composers to extend the Entando Platform by enabling tight integration with other decoupled enterprise applications such as headless services.



### Entando Kubernetes Operator

The Entando Operator is a Kubernetes operator designed to manage and direct Entando applications and services within a Kubernetes environment. It simplifies the deployment, scaling, and management of Entando applications by automating tasks and providing configuration settings.



### Entando Identity Management System

Entando Identity Management System is a Keycloak-based user management and authentication system. It allows the Platform to connect to external identity providers and federated systems, extending its capabilities beyond Keycloak.

# What support and resources are available?

Entando is open source and licensed under LGPL v3. Entando Community Edition (CE) is free for anyone to use. The Entando community's technical team believes that open-source enterprise software development is vital to meeting its requirements and facilitating rapid and dynamic innovations.

Entando offers Enterprise Support options for organizations using the Community Edition of the Platform.

Enterprise Support provides additional benefits and services beyond the standard community support. These services are tailored to meet the specific needs of organizations and provide enhanced assistance for critical deployments and production environments.

Organizations interested in Enterprise Support should contact us at [sales@entando.com](mailto:sales@entando.com).



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