ezieco

A comprehensive development and operations tool for fast and flexible project execution

ezi empowers developers and engineers to efficiently manage projects with its variety of automation modules.
It simplifies data management, web development, business process handling, DevOps, and integrated operations,
enabling rapid solution development, deployment, and management to drive innovation.
With ezi, you can maximize efficiency in both development and operational environments.

Field-oriented Optimized service

What does it do?

An Innovative Enterprise Application Ecosystem

ezieco (ecosystem) is an innovative enterprise application ecosystem built to meet the complex IT needs of modern businesses.

It includes eziframe, eziflow, ezictrl, ezidevops, and ezihub, supporting every stage of the application lifecycle from development and deployment to operation and management. By integrating cutting-edge technologies and methodologies, ezieco accelerates digital transformation for businesses.

Key Components of ezieco (ecosystem)

eziframe

- Provides a versatile application library for databases, caching, middleware, and more.

eziflow

- Enables flexible business process management through a BPEL engine and designer.

ezictrl

- Offers dynamic logic control and configuration adjustments based on user requirements.

ezidevops

- Automates standardized CI/CD pipelines and DevOps processes.

ezihub

- Allows centralized application management with performance monitoring, log analysis, and patch management.

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01 Key Features of ezieco (ecosystem)

Key Features	Layer Structure

An Innovative Enterprise Application Ecosystem

- **Enterprise-wide standardization** : Consistent application of technology and business protocols
- **Modular design** : Each component functions independently while seamlessly integrating with each other
- **Scalability** : Maintains compatibility with legacy systems while integrating the latest technologies
- **Flexibility** : A system architecture that quickly adapts to a variety of business requirements
- **Integration** : Supports the entire application stack from front-end to back-end

ezieco (ecosystem) Layer
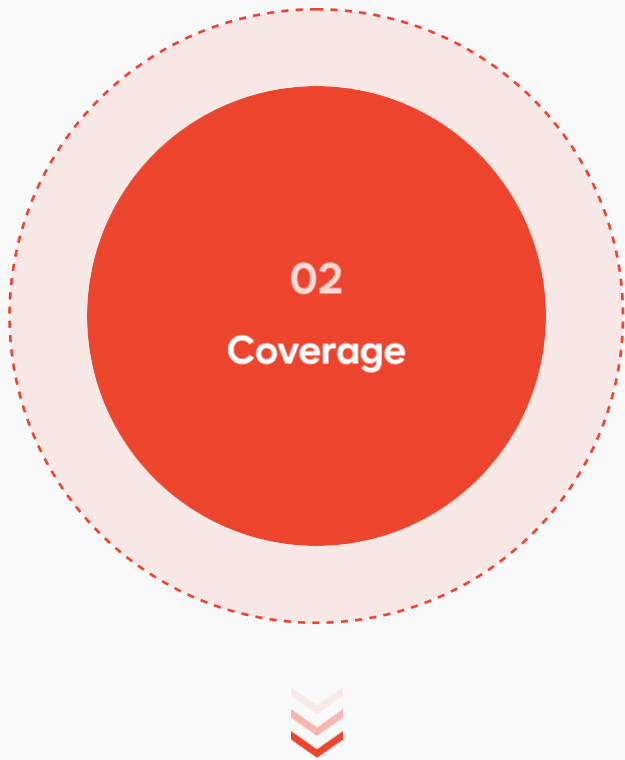
Technical Coverage

- Supports a wide range of programming languages and frameworks, including Java and Vue.
- Compatible with various deployment environments, from on-premise to cloud.

Development Lifecycle Coverage

- Comprehensive support for every stage of the software development lifecycle, including development (templates and standards), build, testing, deployment, operation, and monitoring.
- Embraces Agile-based development methodologies

Scalability Coverage

- Architecture designed to accommodate organizations of all sizes, from small businesses to large enterprises.
- Flexible scalability to handle varying user numbers, transaction volumes, and data sizes.

Integration Coverage

- Reduces development time and simplifies complexity with fast and efficient integration of multiple infrastructures and systems.
- Centralized management enhances integrated analysis and monitoring, to enable efficient operations.

User Experience Coverage

- A standardized development environment built on universal frameworks and an integrated platform provides a consistent and intuitive user interface for developers, business analysts, and operators.
- Enables reliable user experience and optimized interaction for diverse system users with a unified platform.
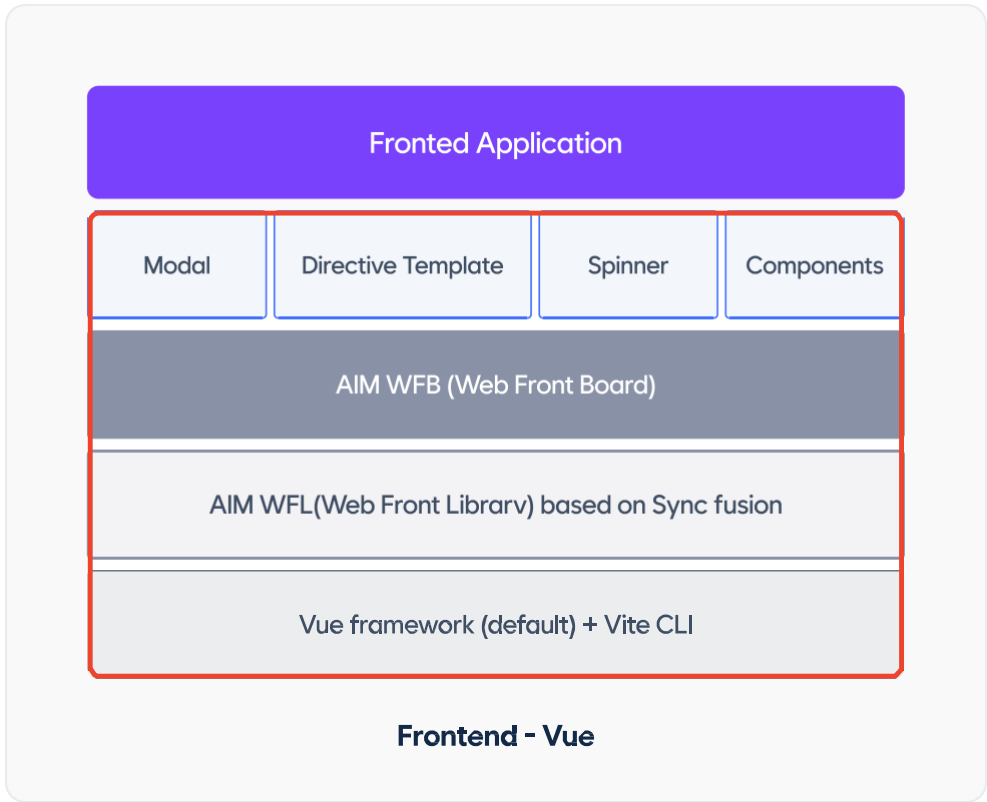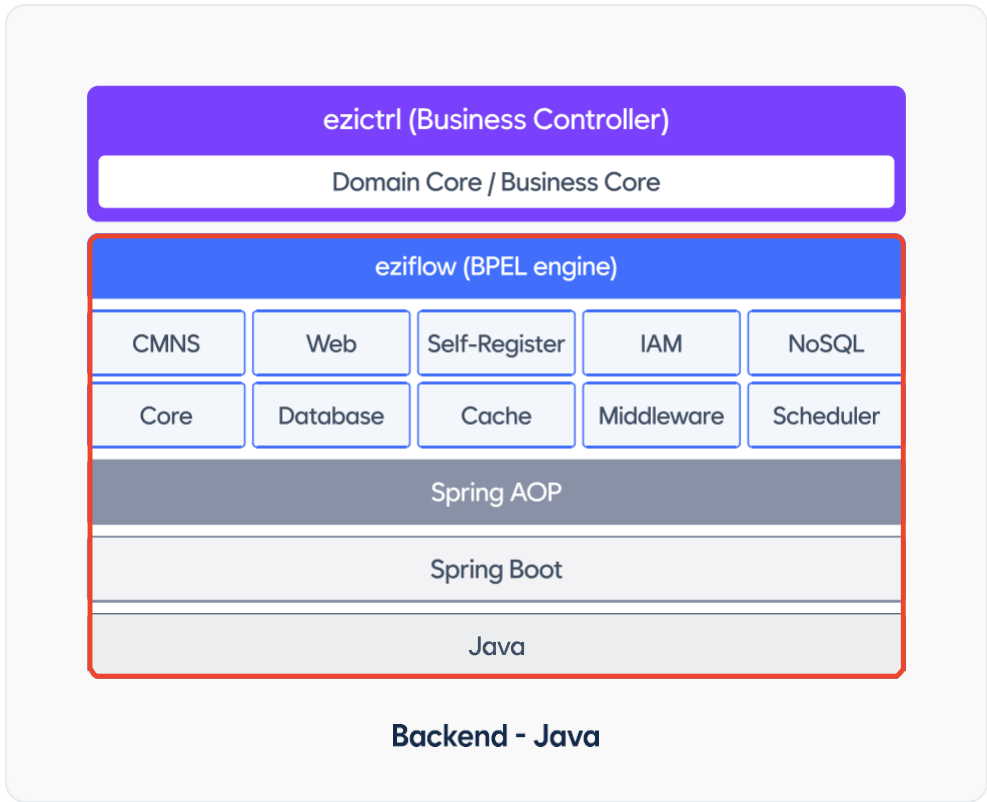
Industry Coverage

- Ideal for simplifying complex processes, integrating systems, and supporting data-driven decision making across various industries.
- Applicable to manufacturing, finance, healthcare, retail, telecommunications, logistics, transportation, energy, utilities, and more.

Product Features

01 eziframe

A solid foundation for application development

It is a comprehensive application framework that helps developers focus on core business logic, ensuring efficient application development.

ezictrl (Business Controller)
Domain Core / Business Core

eziflow (BPEL engine)				
CMNS	Web	Self-Register	IAM	NoSQL
Core	Database	Cache	Middleware	Scheduler

Spring AOP
Spring Boot
Java

Backend - Java

Fronted Application

Modal	Directive Template	Spinner	Components

AIM WFB (Web Front Board)
AIM WFL(Web Front Library) based on Sync fusion
Vue framework (default) + Vite CLI

Frontend - Vue

Key Features ⟫
- Provides libraries and services for universal infrastructure integration such as databases, caching, middleware, and more.
- Includes core functionalities such as authentication, monitoring integration, and scheduling.
- Offers a development environment based on enterprise-standard components and web standards.

Innovation Highlights ⟫
- Prebuilt components that meet on-site requirements reduce the need for customization.
- Modular design supports a variety of application types, boosting development efficiency and productivity.
- Technologically streamlined structure minimizes maintenance costs.

Applications ⟫
- Meets a wide range of requirements for enterprise application development.
- Scales seamlessly from large enterprise systems to small projects.

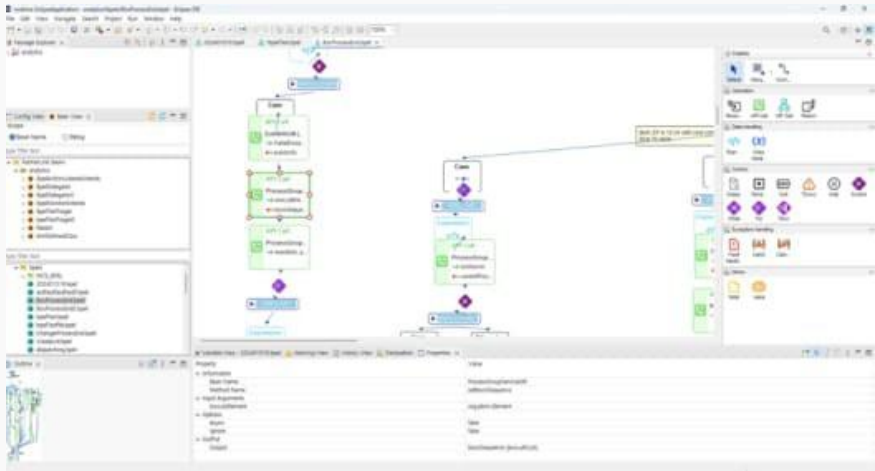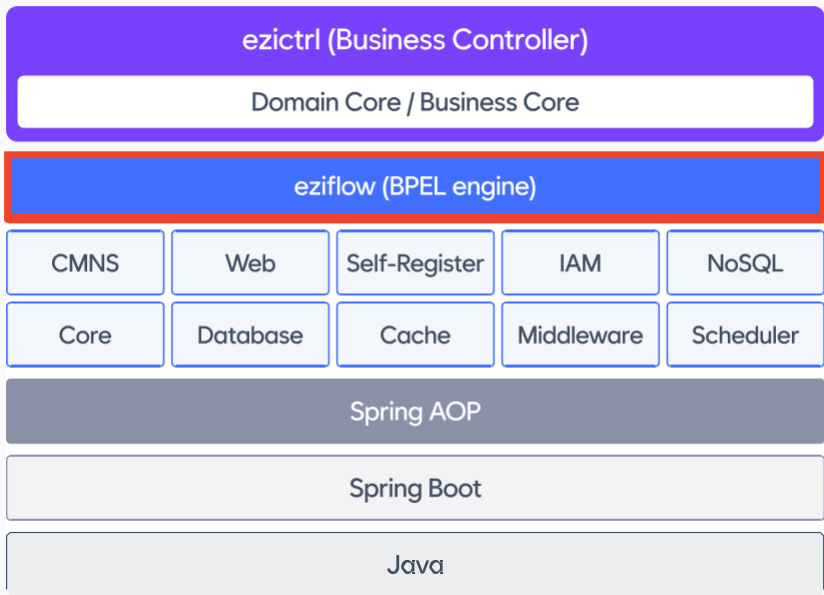## 02 eziflow

Flexible business process execution and management

eziflow enables businesses to visually model and efficiently execute complex processes.

It increases transparency in business logic and empowers businesses to respond quickly to changing market demands.

| ezictrl (Business Controller) |
| Domain Core / Business Core |
| eziflow (BPEL engine) |
| CMNS | Web | Self-Register | IAM | NoSQL |
| Core | Database | Cache | Middleware | Scheduler |
| Spring AOP |
| Spring Boot |
| Java |

Key Features ⟫
- Supports business logic modeling and execution with a BPEL engine and designer.
- Provides flexible workflow configuration tailored to various business needs.
- Offers sophisticated execution control based on the WS-BPEL 2.0 standard.
- Enables integrated management of business execution with a BPEL engine.

Innovation Highlights ⟫
- User-friendly interface enables rapid process changes without code modification.
- Provides mode-switching features with improved readability and convenience.
- Includes concurrency support and efficient concurrency control features.

Applications ⟫
- Supports complex business logic processing across various industries including finance, manufacturing, and services.
- Applicable to both large enterprise systems and specialized business applications.

03 ezictrl

Customizable logic control for a variety of business environments

ezictrl empowers businesses to manage and control business logic more flexibly.

This improves responsiveness, operational efficiency, and the capacity to provide services tailored to customer requirements.
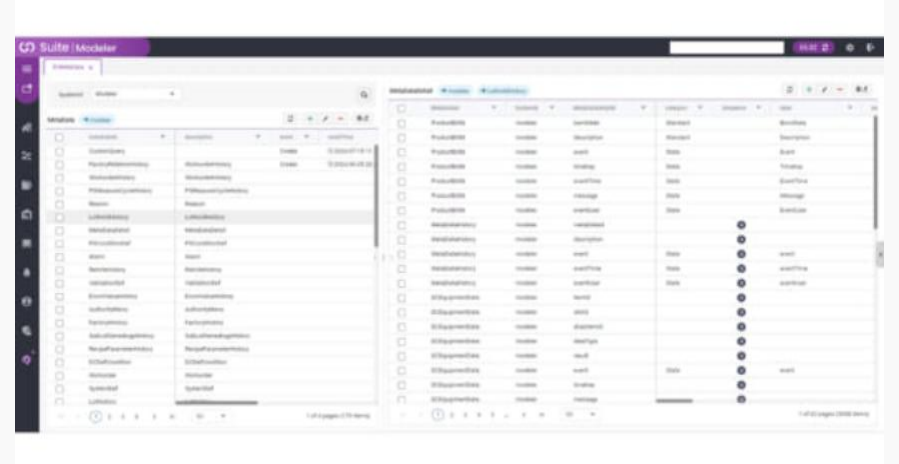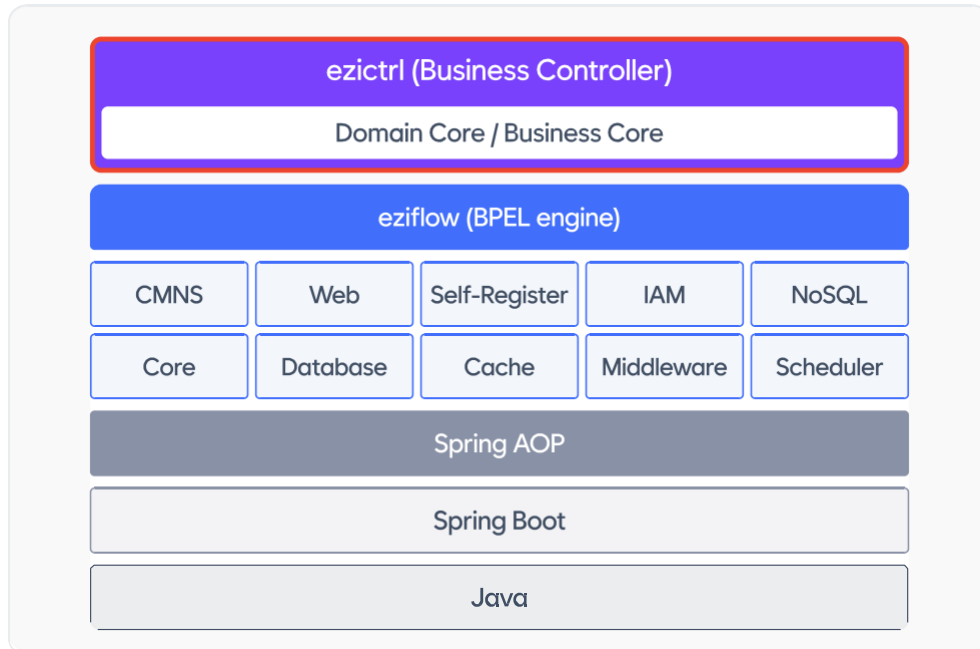
Key Features 〉〉
- Provides core service logic control modules.
- Allows process and validation control with user-driven configuration changes.
- Supports dynamic and flexible service configurations.

Innovation Highlights 〉〉
- Offers consistent service calls with standardized service protocols for universal applications.
- Automates service model registration and configuration.
- Provides customizable templates based on industry and customer environments for quick setup changes and verification.

Applications 〉〉
- Implemented in key services of our factory automation solutions.
- Suitable for standardizing protocols across enterprise-wide core business services.
- Applicable to service configurations that require enterprise-wide dynamic flexibility.

04 ezidevops

Innovation in DevOps standardization and CI/CD automation

ezidevops helps businesses accelerate software development and deployment cycles, improve quality, and maximize operational efficiency.

It is not just a tool; it's a key enabler for digital transformation in organizations.
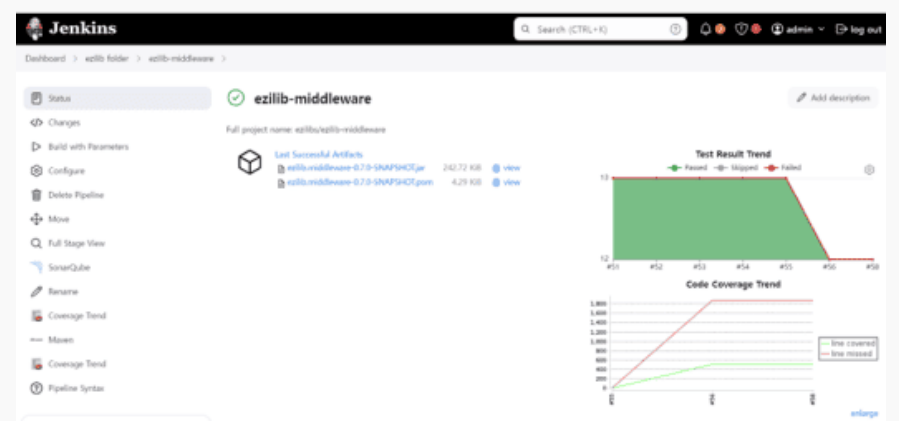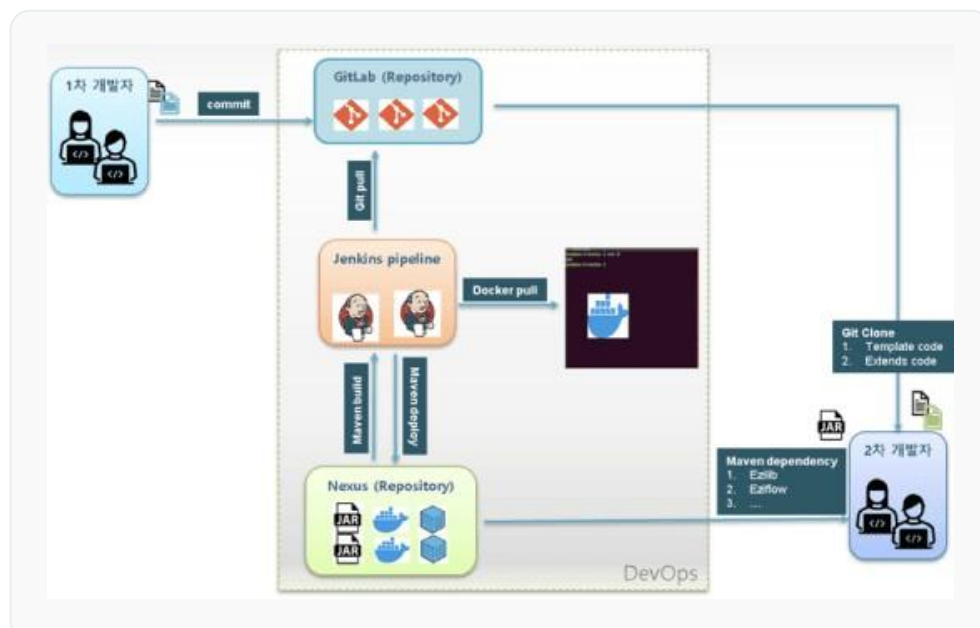
Key Features 〉〉

- Establishes and automates standardized CI/CD pipelines.
- Offers tailored DevOps processes based on project types.
- Implements a structured deployment management system.
- Integrates seamlessly with various development tools and environments.

Innovation Highlights 〉〉

- Reduces human error and maximizes development productivity with automated pipelines.
- Fully integrates Agile methodologies with modern development processes.
- Enables real-time monitoring and continuous feedback for process improvement.
- Integrates automated security and compliance checks in the pipeline.

Applications 〉〉

- Suitable for organizations of all sizes, from startups to large enterprises.
- Tailored for product development, project execution, and various software development environments.
- Applicable to cloud-native applications and legacy system modernization projects.

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05   ezihub

Unified application lifecycle management platform

ezihub is a comprehensive solution for the centralized management and optimization of enterprise application ecosystems.
Its centralized management and automated process reduce operational costs and allow IT teams to focus on strategic tasks.
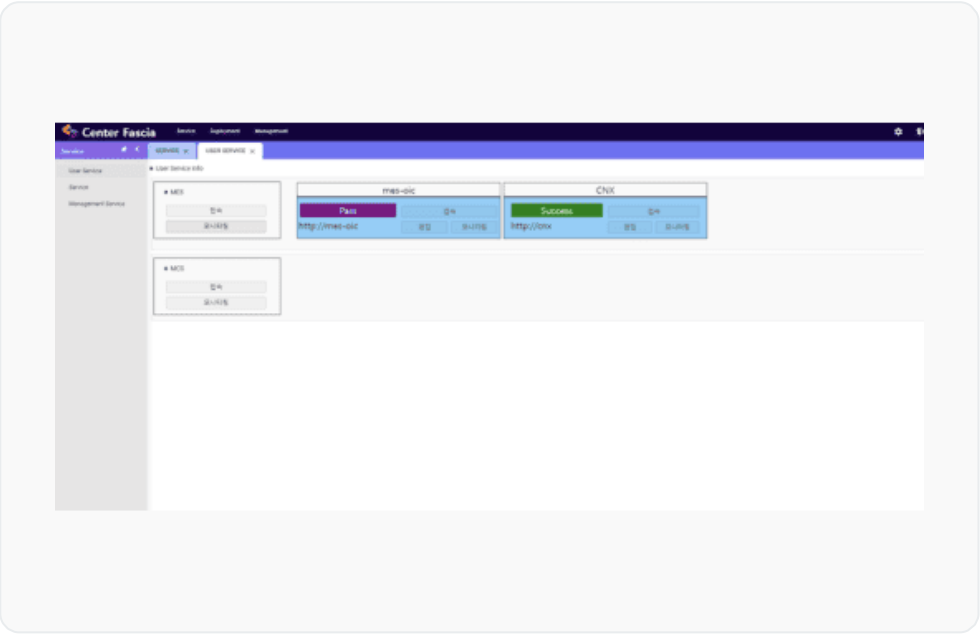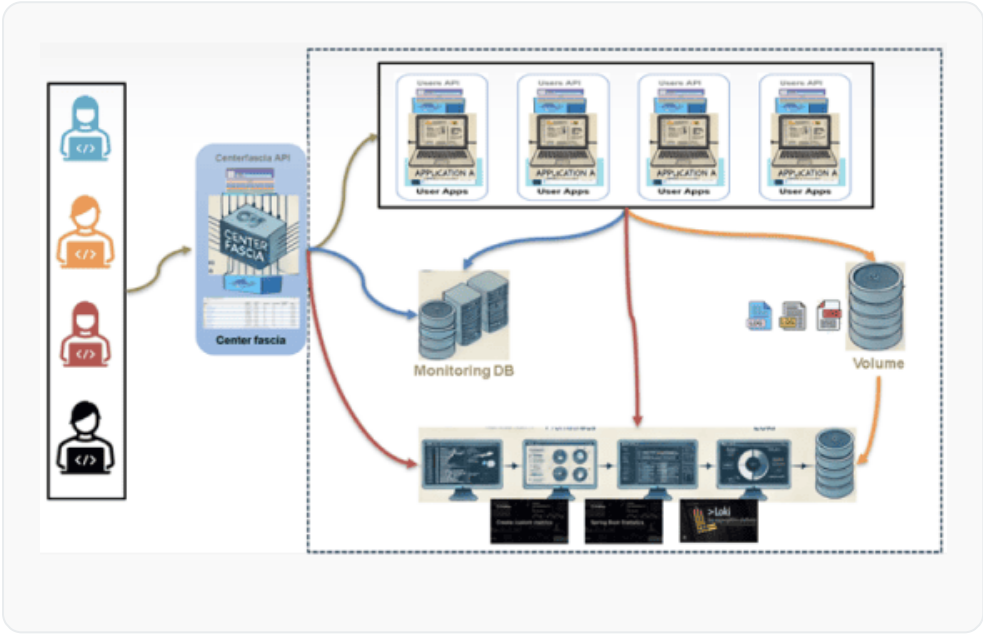
Key Features 〉〉

- Real-time performance monitoring and analysis with an integrated dashboard.
- Automated patch management and deployment.
- Granular security and access control with IAM integration, including activity logging and auditing.
- AI-based analytics and log correlation analysis powered by centralized log collection.

Innovation Highlights 〉〉

- Minimizes management overhead with automated system integrations.
- Provides time resource monitoring and dynamic resource allocation.
- Maximizes operational efficiency through centralized management.

Applications 〉〉

- Supports a wide range of container clusters, from small to large scale.
- Ideal for large-scale system integration and application performance management.
- Compatible with multi-cloud and hybrid environments.

Key Advantages

01 Customer Benefits

1. Faster time to market

- With the libraries and frameworks provided by eziframe, repetitive tasks are minimized for faster application development and deployment.

2. Business agility

- eziflow supports flexible business logic execution, enabling businesses to quickly adapt to changing market demands.

3. Customization and control

- ezictrl offers granular control over logic, allowing businesses to tailor operations to meet specific customer needs.

4. Automation efficiency

- ezidevops automates DevOps processes to minimize manual effort and maximize productivity.

5. Centralized operations

- ezihub provides integrated application management to reduce operational complexity while offering centralized performance and security management.

02 Industry Standards

ezieco (ecosystem) supports leading industry standards and protocols for software development, automation, and application management.
Each component ensures compatibility and reliability in a variety of industries with widely adopted standards.

1. Sustainability and ESG compliance

- Energy-efficient cloud infrastructure and DevOps solutions maximize resource efficiency.
- Supports the development of sustainable IT solutions that are aligned with environmental, social, and governance (ESG) principles.

2. Implementation of international security and data protection standards

- Adopts a zero-trust security framework for robust protection.
- Regularly updates features to meet global data protection regulations such as GDPR and CCPA.

3. Enterprise standard compatibility and scalability

- Integrates seamlessly with external authentication systems such as LDAP, Active Directory, and social login platforms
- Ensures high interoperability with other systems with open standard APIs.

4. Standardized DevOps and Agile methodologies

- Implements industry-leading DevOps practices through automated CI/CD pipelines.
- Supports Agile development with built-in tools and processes.
- Automates infrastructure and application management following GitOps principles.

5. Adoption of cloud-native technology standards

- Actively adopts Cloud Native Computing Foundation (CNCF) projects and standard technologies.
- Supports Kubernetes-based container orchestration for improved portability across cloud environments.

6. Compliance with business process management standards

- Follows Business Process Execution Language (BPEL) standards for seamless business process execution and orchestration.
- Offers industry-specific process templates for rapid implementation and adherence to standard workflows.

ezieco employs a comprehensive, multilayered security strategy to safeguard customer data and systems for robust protection while continuously improving security measures to address evolving threats.

1. Identity and access management (IAM)
- Strengthens security with multi-factor authentication (MFA)
- Implements role-based access control (RBAC) and attribute-based access control (ABAC).
- Provides single sign-on (SSO) and integrated ID management.

2. API security
- Centralizes security policies with API gateways.
- Ensures secure API authentication and authorization using OAuth 2.0 and OpenID Connect.
- Implements API traffic monitoring and anomaly detection systems.

3. Configuration management security
- Safe and efficient configuration management using Jasypt, standard encryption methods, Kubernetes Secrets, and ConfigMap.
- Prevents exposure of confidential information with environment variables.
- Supports encrypted volume mounts for secure secrets management when needed

4. Cluster security
- Strengthens access restrictions and monitoring for API servers.
- Enforces least-privilege principles through RBAC.
- Implements granular permissions to prevent unnecessary administrative API access.

5. Data security
- Protects data in transit with end-to-end encryption using TLS 1.3 or higher.
- Secures stored data with robust encryption technologies such as AES-256.