

Optimizing Heartcore CMS:

Migration

Integration

Customization



PROJECT OVERVIEW

DESCRIPTION:

- Developed marketing or eCommerce websites using Heartcore.
- Migrated traditional websites to Heartcore CMS, including website language conversion.
- Developed and maintained Heartcore CMS/CXM and CXM cloud systems.
- Provided support for Heartcore installation and usage.

LOCATION: Japan

industry:

- Websites, Content Management (CMS), eCommerce, Customer Experience Management (CXM)

SIZE: 2 ~ 15 man-months depending on the phase.

KEY TECHNOLOGIES: Java, JSP, Oracle Database, MySQL.

CLIENT AND OBJECTIVE:

- Heartcore CMS is a leading CMS in Japan, attracting clients who seek a comprehensive website management system. The team's task is to use Heartcore CMS to develop or migrate websites for clients.
- Additionally, the team provides support and resolves issues that arise during installation and usage.
- The goal is to create websites that are easily managed and professionally developed.



PROJECT OVERVIEW

CHALLENGES:

- The client faced issues with Heartcore CMS/CXM where certain features and functionalities did not align with their specific business needs.
- The client encountered difficulties after customizing Heartcore CMS/CXM beyond the standard version, which prevented them from upgrading to newer versions smoothly.
- The client preferred to integrate CMS/CXM into their existing system rather than migrating to a completely new platform.

SOLUTION

Customization and Extension of Heartcore CMS/CXM:

- Customized and developed extensions to add new functionalities to the Heartcore CMS/CXM system.
- Created separate packages that inherited and reused resources from the standard system.
- Ensured system integrity without compromising performance.

Integration of Heartcore with previous Java System:

- Luvina encapsulated the CMS/CXM system into a library and integrated it into Tomcat or the client's existing Java Web Service system.
- This solution addressed the client's requirement to retain their previous Java system while utilizing Heartcore as an additional service.

Separation of Old Custom Functions Using Microservices:

- Luvina assisted the client in separating customized functions from the Heartcore CMS/CXM system.
- Transitioned these functions to the standard system using a microservice architecture.
- This approach maintained the integrity of the standard version while preserving the customizations previously made by the client.
- It also facilitated easier future upgrades for Heartcore CMS/CXM.

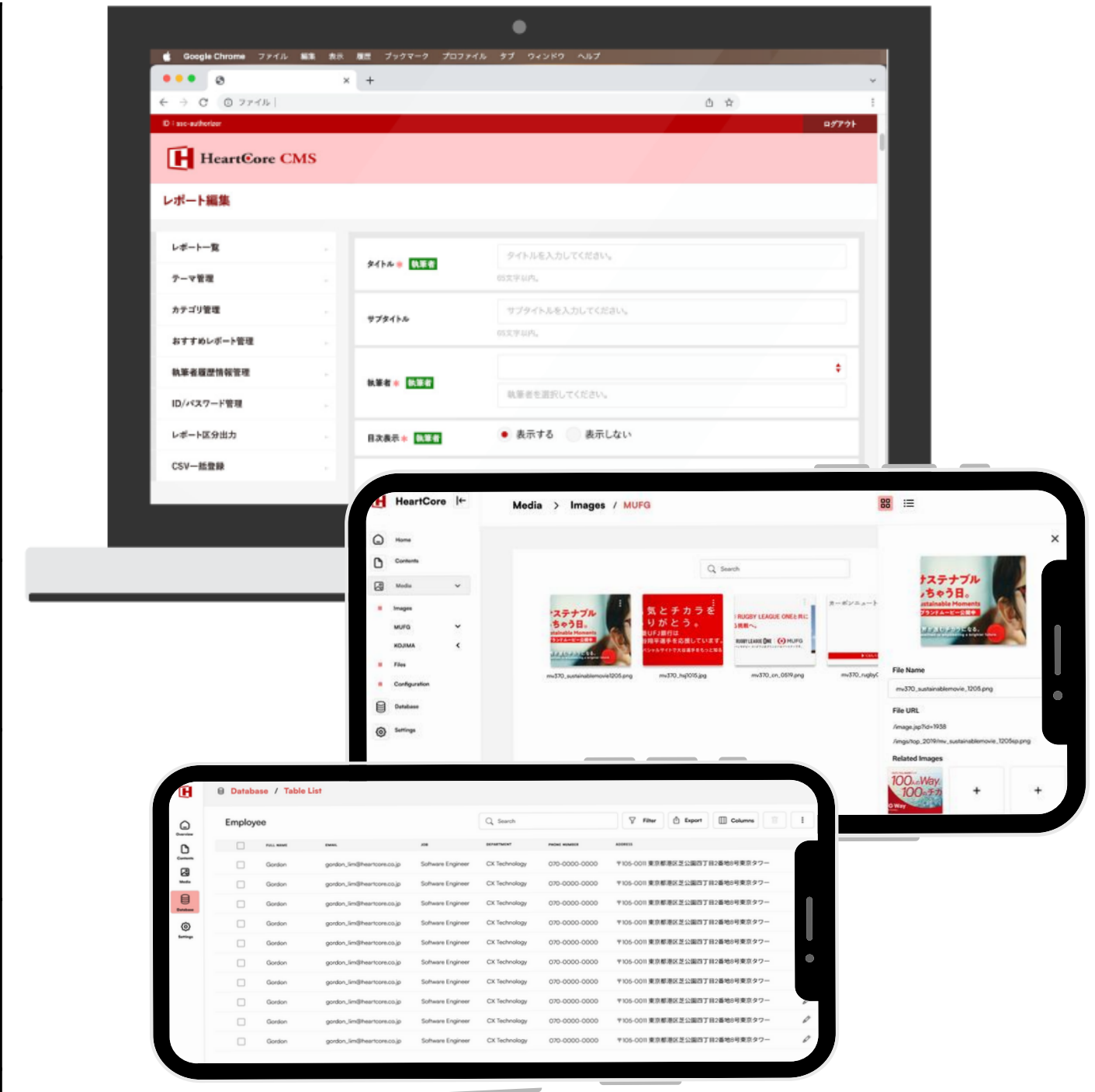
Building the Version Upgrade Process:

- Luvina established a version upgrade process to ensure future system updates.
- This process guarantees that the client's system remains up-to-date and avoids becoming obsolete.

PROJECT OVERVIEW

ADVANTAGES OF HEARTCORE CMS/CXM

Criteria	Regular Website	Heartcore CMS/CXM
Management	Difficult to edit, unable to control content.	Centralized, robust management with support for customized workflows.
Content Migration	Unable to perform bulk content migration.	Easily replaces and synchronizes content seamlessly.
Team Collaboration	Teamwork is difficult, unable to manage properly.	Enables easy task delegation and content control for creators.
Language & Device Management	Requires significant resources to develop similar features.	Detailed management, enhancing customization and compatibility.
Development Flexibility	Not flexible for customization, difficult to adjust.	Allows new functionality without impacting the overall system.
User Experience	Requires substantial resources to develop similar features.	Identifies user preferences and interests effectively.
Support Service	-	Provides support throughout the product's lifecycle.



PROJECT OVERVIEW

SUCCESS POINTS IN THE PROJECT

01 Development Approach:

- **Effective Customer Support:** Engaged with the client from the early stages of solution research, providing suggestions and optimal project implementation strategies.
- **Clear Timeline:** Provided a project timeline to help the client visualize the progress early on.
- **Accurate Estimates:** Delivered estimated times (EST) with minimal deviation from actual results for each solution.
- **Continuous Improvement:** Applied the dynamic KPT (Keep, Problem, Try) process at each stage to enhance quality and project completion.
- **Effective Management:** Utilized accumulated techniques and experience to create a suitable management process from the pre-project phase.

02 Team Structure and Management:

- **Optimal Staffing Plan:** Developed a staffing plan including backup personnel to ensure resources are always available.
- **Stable Workforce:** Maintained a stable, skilled workforce capable of handling most project tasks.
- **Responsibility:** Team members demonstrated high responsibility, adhere to deadlines, and covered tasks when delays occurred.

03 Development Process:

- **Adherence to Process:** The development process is strictly followed and improved at each stage.
- **Ready from the Start:** Existing process frameworks are available from the repository to develop projects from scratch.
- **Quick Adaptation:** Ability to adapt to changes in rules and client requirements while maintaining work efficiency.
- **Efficiency Optimization:** Ensures the project operates under strict rules and is optimized for effectiveness.

PROJECT OVERVIEW

SUCCESS POINTS IN THE PROJECT

Estimation:

- **Accuracy in EST:** Achieved high accuracy in time estimation.
- **Detailed Breakdown:** Detailed breakdown of EST units with minimal deviation.
- **Risk Management:** Identified high-risk tasks and planned contingencies.
- **Risk Response:** Listed and addressed risks, providing solutions and detailed estimates.
- **Timeline Understanding:** Helped clients easily grasp the timeline from the start.

Communication and Interaction:

- **Continuous Improvement:** Provided suggestions and proposals for improvement.
- **Experienced BSE:** Experienced Bridge System Engineers (BSE).
- **Clear Communication:** Clear information through multiple communication layers.
- **Ongoing Support:** Continuous technical and documentation support.

PROJECT OVERVIEW

ACHIEVEMENT

CUSTOMER EVALUATION:

8/8 The client and partner organization highly valued the capability in website development.

4.3/5 The average rating score from the client has been collected quarterly from early 2022 to the present.

ACHIEVEMENT

50+ Extension developed
30+ Extension customized

} For different functions for various clients

>270 Documents and know-how stored as reference materials and project staff training documents.

02 months Training time for a new staff member to perform project tasks.

01 week Project implementation time from receiving the request.

QUALITY HANDLING PRODUCTIVITY

For 2 support projects, the average processing speed can handle 52 incidents per month, achieving 80% resolution of the incidents encountered by the client.



52 Incident/month



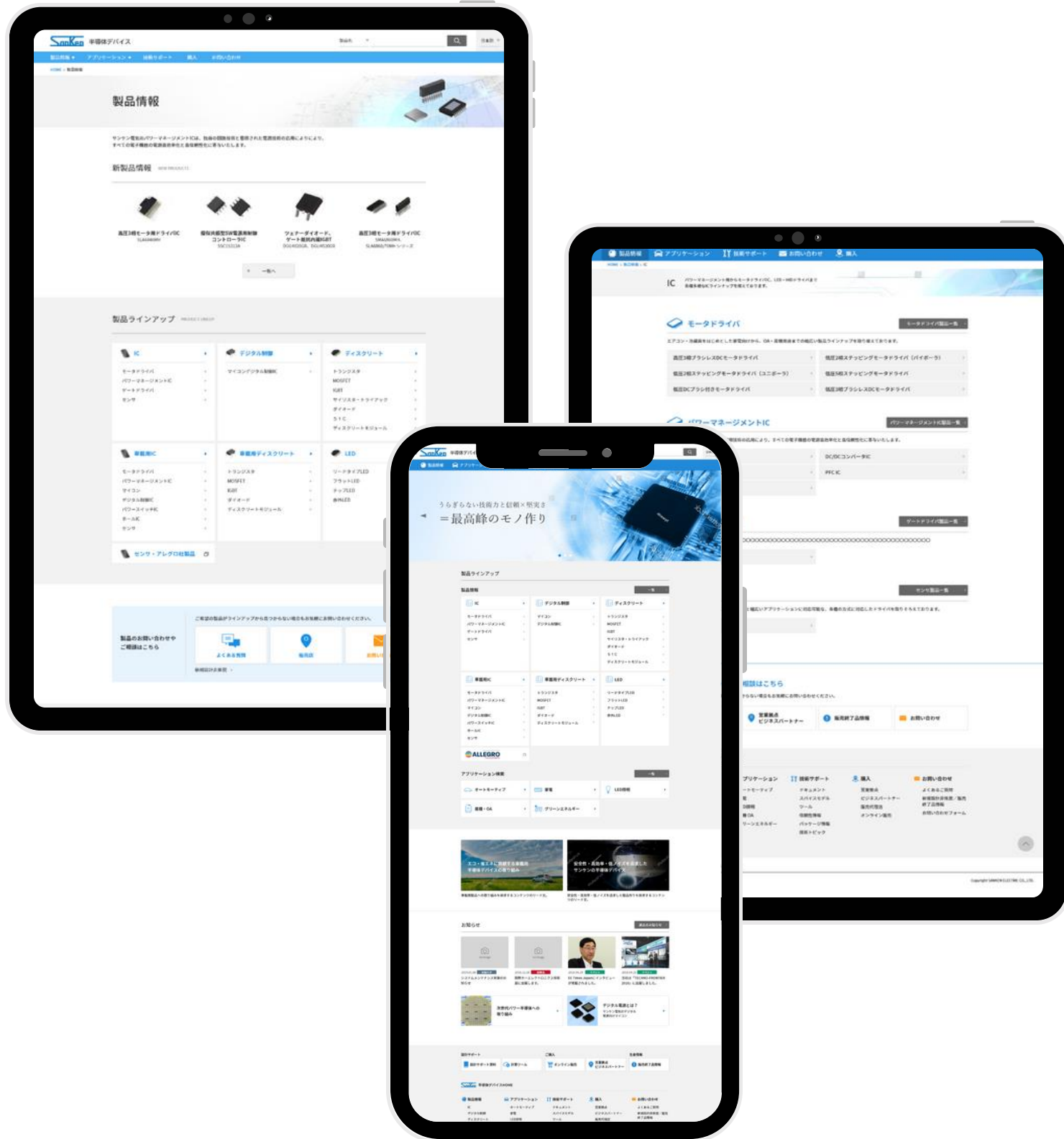
80% Incident

For development projects, all 8 were delivered ahead of schedule, with a bug rate of < 0.5 UAT bugs/Kloc within the committed timeframe, and no UAT bugs outside the committed period.



< 0.5 Bugs UAT/ Kloc

PROJECT OVERVIEW



- 2016/06 – 2019 ● *Maintain CXM project*
- 2018/06 – 2019 ● *Develop a website for client PP**
- 2019/07 - 2019/09 ● *Develop a website for client Sanke**
- 2020/07 - present ● *Deploy support desk and CXM cloud services (support for HeartcoreCMS/CXMcloud users)*
- 2022/08 – 2023/02 ● *Develop/maintain HeartcoreCMS NewUI*
- 2022/09 – 2023/02 ● *Develop website for client Caro* (Heartcore partner)*
- 2022/12 – 2023/02 ● *Develop a website for client Shin* (Heartcore partner)*
- 2023/02 – 2023/04 ● *Develop Tealium integration functionality on the CXM cloud*
- 2023/05 – 2023/06 ● *Upgrade UA to GA4 for CXM cloud services*
- 2023/11 - present ● *Deploy dedicated support services for client Suzuy* (Heartcore partner)*
- 2024/03 – 2024/04 ● *Version up for Hisy* system (Heartcore partner)*
- 2024/06 - present ● *Develop website for client Caro* (Heartcore partner)*

PROJECT OVERVIEW

Achievements – Sectors Rated Highly by the Client:



TECHNICAL SUPPORT:

Clients received technical support from Luvina at each stage of development.



QUALITY:

- Luvina has demonstrated the ability to estimate job tasks quickly.
- The team is flexible in supporting clients with unexpected small tasks during the ITA phase.
- Work is completed efficiently, often requiring less time than initially estimated.
- Continuously improving quality by reducing the number of feedback issues at each stage.
- Experienced Bridge System Engineers (BSE) ensure smooth communication and high-quality test case translation.



COMMUNICATION:

A 2-hour time difference, but it does not significantly impact the project.



MANAGEMENT:

The client relied on Luvina for task estimation and detailed planning, allowing a degree of independence from the team in Japan and ensuring project satisfaction.

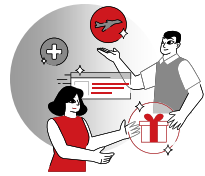


TEAM STRUCTURE:

- The structure in Vietnam involves a subleader checking the deliverables of team members, which has allowed Luvina to complete deliverables with minimal discrepancies.
- When adjusting the structure or increasing personnel, Luvina has responded flexibly.



SOLUTIONS - KEY FEATURES & ALIGNMENT TO GOAL



Input criteria for personnel

Criteria:

- Knowledge of Java, JSP
- Logical thinking ability
- Ability to explore and learn
- Stable orientation

Sources:

- Employees at Luvina or LA
- Newly recruited staff



OJT

Duration: 1.5 months, 8 hours/day

Content:

- Practical project process
- Planning methods training
- Problem-solving and decision-making methods training
- Teamwork training
- Development processes training: Design, development, test case creation, and testing
- Reporting process training

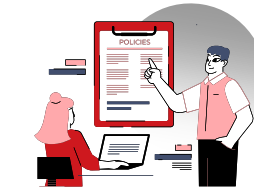


Dự án Heartcore

Duration: 2 months; 8 hours/day

Content:

- Heartcore CMS business training
- CXM and CXM Cloud business training
- CMS-CXM system flow training
- Investigation methods training
- Function development, maintenance, and bug fixing methods training
- Web development with Heartcore CMS training
- System verification training



Định hướng phát triển

Content:

- Thorough understanding of system operations
- Ability to write test cases/test Heartcore system
- Strong knowledge of Java JSP
- Strong knowledge of JavaScript
- Proficiency in developing websites using Heartcore
- Good knowledge of environment and system configuration

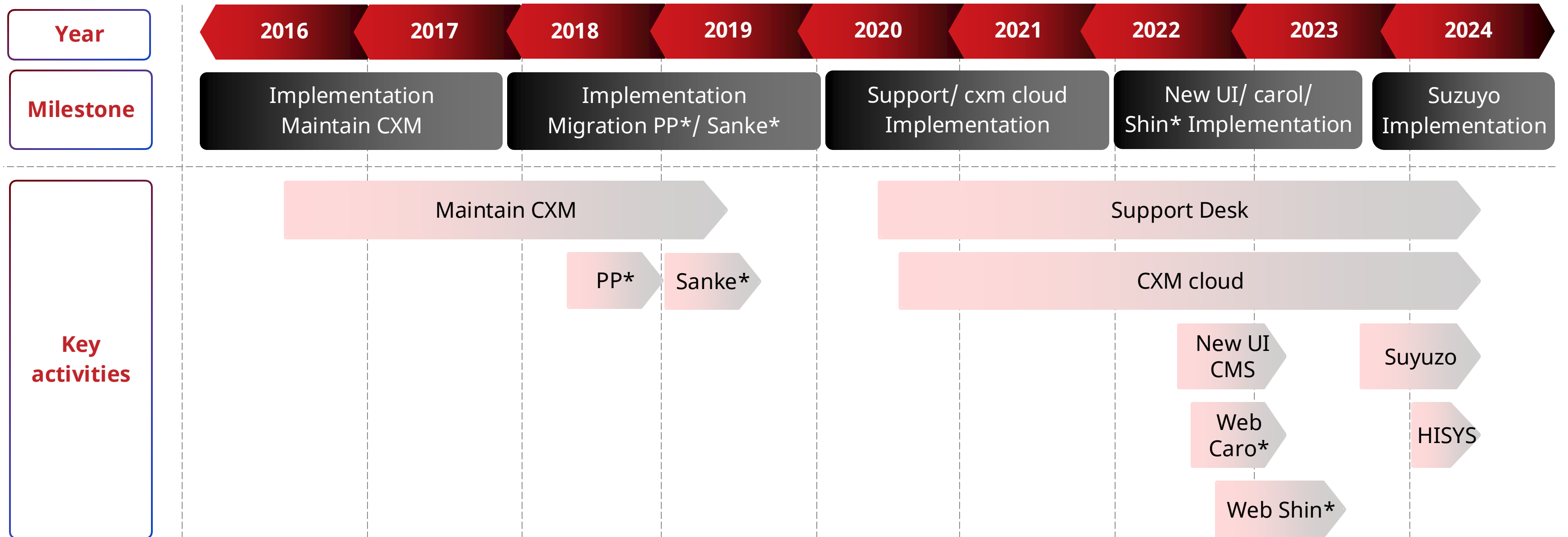


Tài liệu đào tạo

Content:

- Repository of CMS business documents
- Repository of CXM business documents
- Repository of related environment documents
- Repository of requirements for each system function and functions developed by the project
- Repository of extensions developed and accumulated by the project

TIMELINE

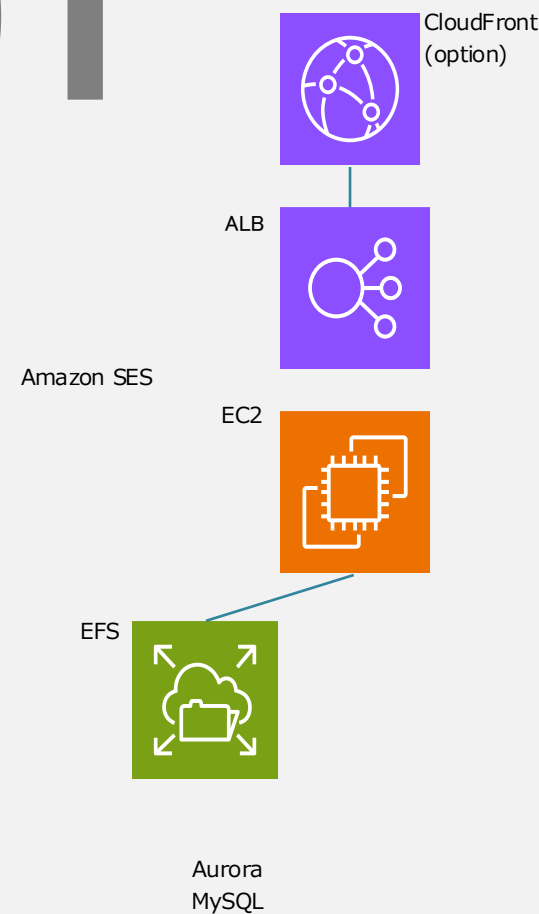


TECHNICAL DETAILS – Configuration by option

Basic plan

Single Configuration: Small-scale, typically used for testing purposes.

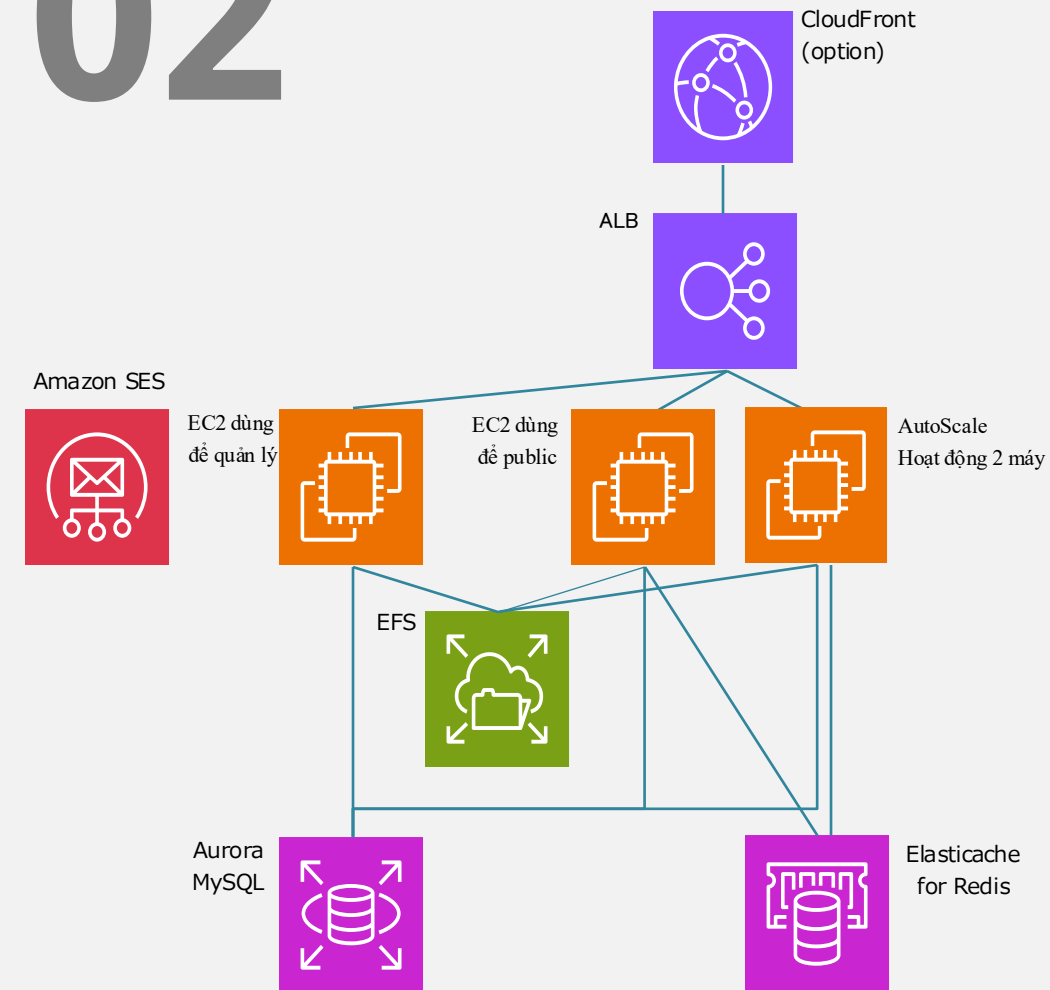
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Standard plan

Backup Configuration: Two public backup servers, with a separate management server.

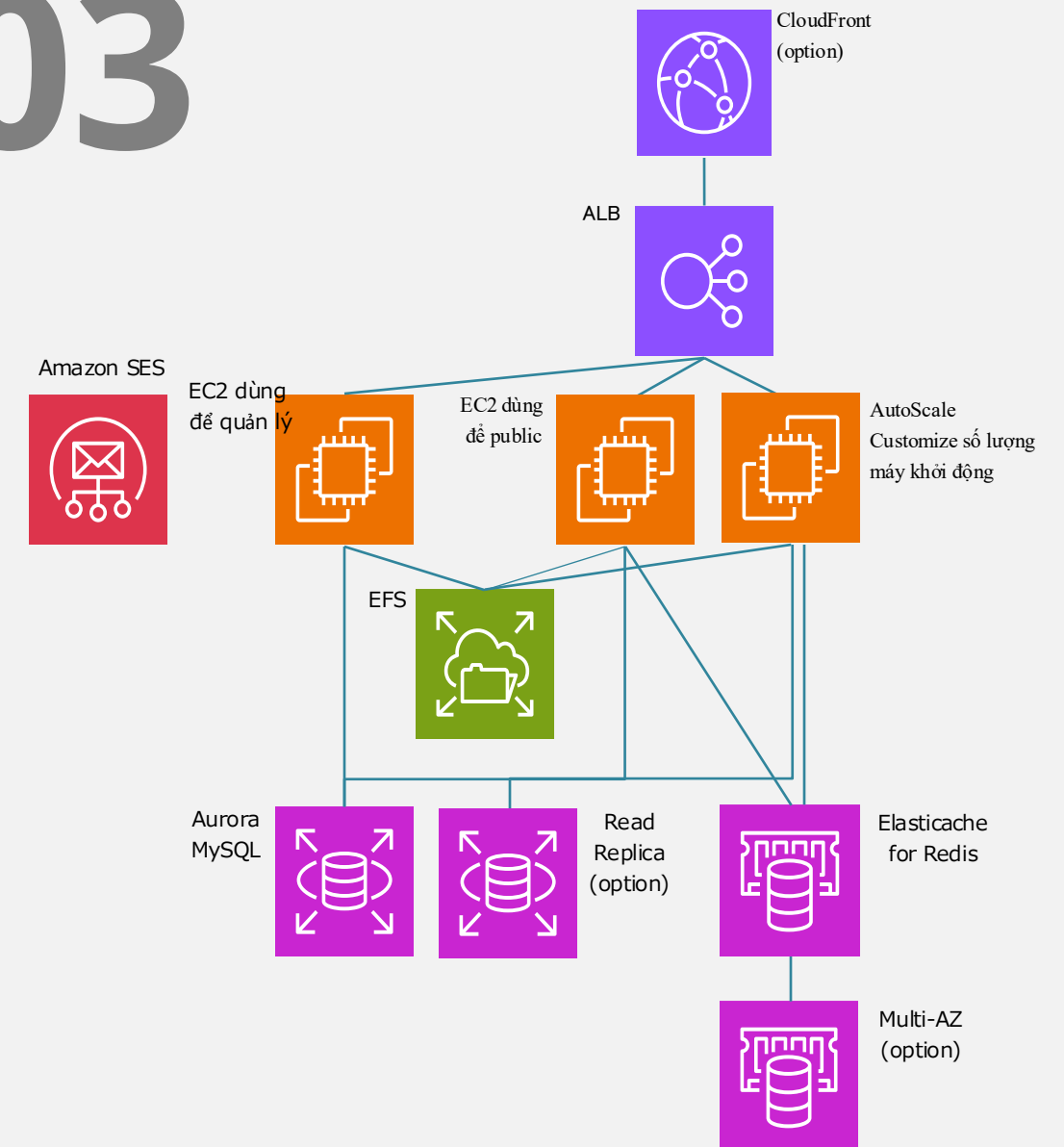
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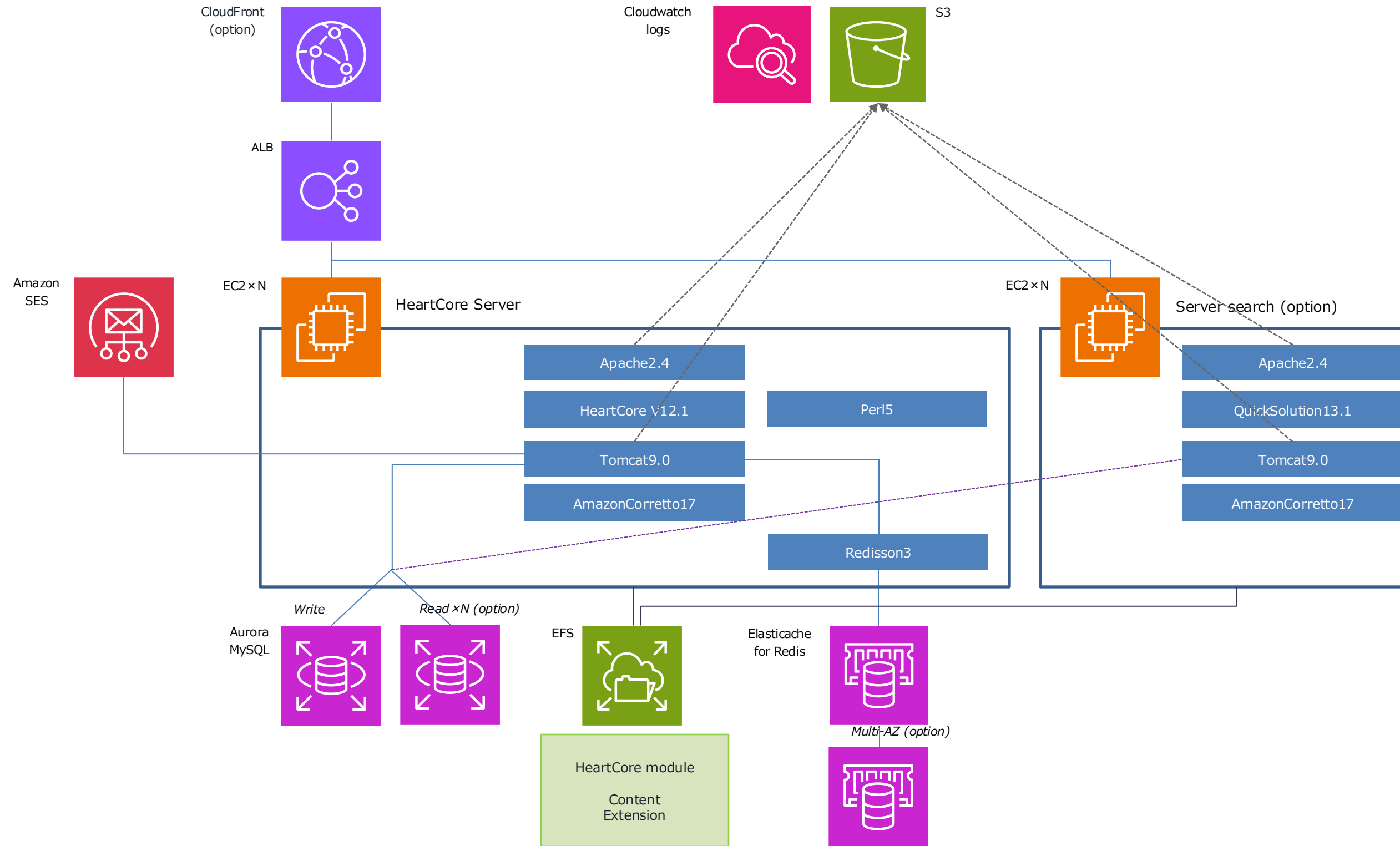
Premium plan

Customization: Specify the number of AutoScale instances, Multi-AZ (Availability Zones), and ReadDBs.

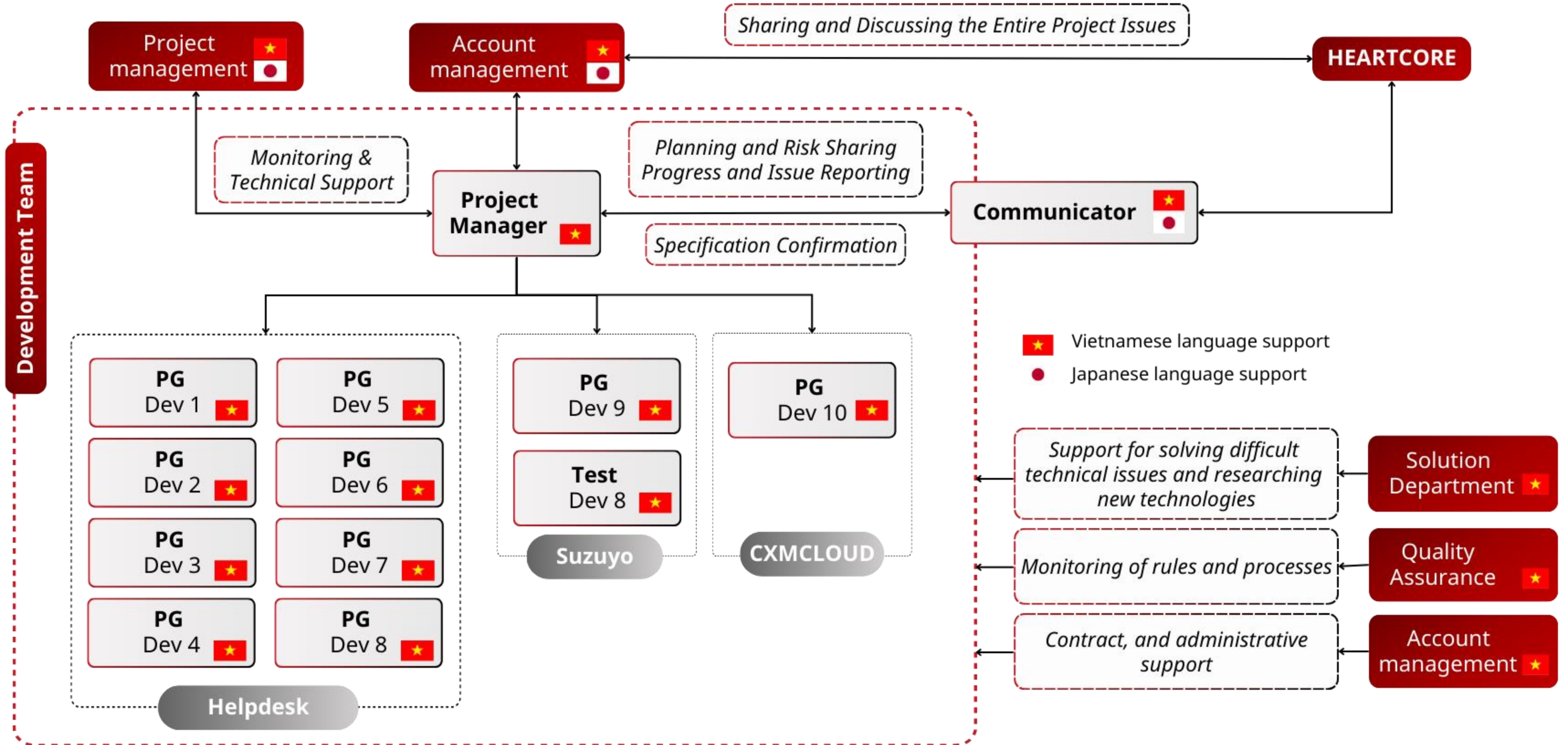
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TECHNICAL DETAILS – Standard configuration



IMPLEMENTATION - TEAM STRUCTURE





Thank You

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