Case Study: COFCO International: A Strategic Upgrade with Infor SunSystems

Introduction: This case study illustrates the successful implementation of an extensive Infor SunSystems upgrade for COFCO International, a prominent agribusiness entity headquartered in Geneva, Switzerland. A subsidiary of China's COFCO Corporation and with operations spanning over 35 countries, COFCO International stands as a key player in the global agricultural commodities and food ingredients industry, holding a pivotal role in the global food supply chain. As one of Asia's largest agribusiness groups, the organisation also has one of the biggest SunSystems userbases worldwide.

The upgrade initiative was entrusted to Eclipse Computing, a leading Infor Gold Partner who have been implementing and supporting SunSystems and other business systems internationally since 1987. Renowned for their unwavering commitment to service excellence, Eclipse has consistently delivered effective, robust, and strategic business and financial management systems to organisations worldwide. This case study delves into the intricacies of the upgrade project, shedding light on the collaborative efforts that led to its success and the transformative impact it had on COFCO International's operations.

Business Context:

The primary drivers behind the upgrade were driven by essential considerations. Firstly, the Microsoft Windows Server and SQL Server platforms had reached the end of their support lifecycle with Microsoft. Secondly, adhering to IT best practices (necessitated staying within 1-2 releases of the Infor SunSystems software), enabled the organisation to capitalise on enhanced functionality such as port consolidation and the separation of Tomcat and Java components. Additionally, the latest version of Infor SunSystems promised performance improvements, particularly notable in the upgraded Microsoft SSRS reporting layer. These factors collectively highlighted the crucial need for the upgrade to ensure ongoing support, align with industry standards, and harness the latest advancements in software capabilities.

COFCO International: Key Facts

- A subsidiary of China's COFCO Corporation.
- One of Asia's largest agribusiness groups.
- Operations spanning over 35 countries.
- A key player in the global agricultural commodities and food ingredients industry.
- One of the biggest SunSystems userbases worldwide.

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Scope and Objectives:

- **Upgrade Infor SunSystems to Version 6.4:** Implement the latest version of SunSystems (v6.4) to leverage new features, enhance system performance, and ensure compatibility with evolving business needs.

- **Upgrade Professional Advantage Products:** This includes BankLinks for Business (B4B) and Bank Reconciliation products to their latest versions, ensuring seamless integration and optimal functionality. The upgrade also included developing a custom integration piece between COFCO's in-house developed Master Data Management system (MDM) to take advantage of the new functionalities.

- **Upgrade Infor Query & Analysis (Infor Q&A/Vision) to Latest Release:** Implement the latest release of Infor Q&A, incorporating improvements and features to enhance reporting capabilities and analytical functions. Also migrate/rewrite a substantial number of reports which are unique to users from different geographical locations.

- **Collaborate with COFCO IT for Interface Modifications:** Work closely with COFCO IT to make necessary adjustments to existing interfaces and web services connecting with SunSystems, ensuring smooth data flow and system interoperability.

- **Upgrade/Add-On Products Compatibility:** Ensure that any third-party add-on products required for interfacing with SunSystems are upgraded or updated to align with SunSystems v6.4, maintaining a cohesive and fully functional ecosystem.

- **User Training:** Conduct comprehensive training sessions for users, equipping them with the necessary skills and knowledge to effectively navigate and utilise the upgraded software releases.

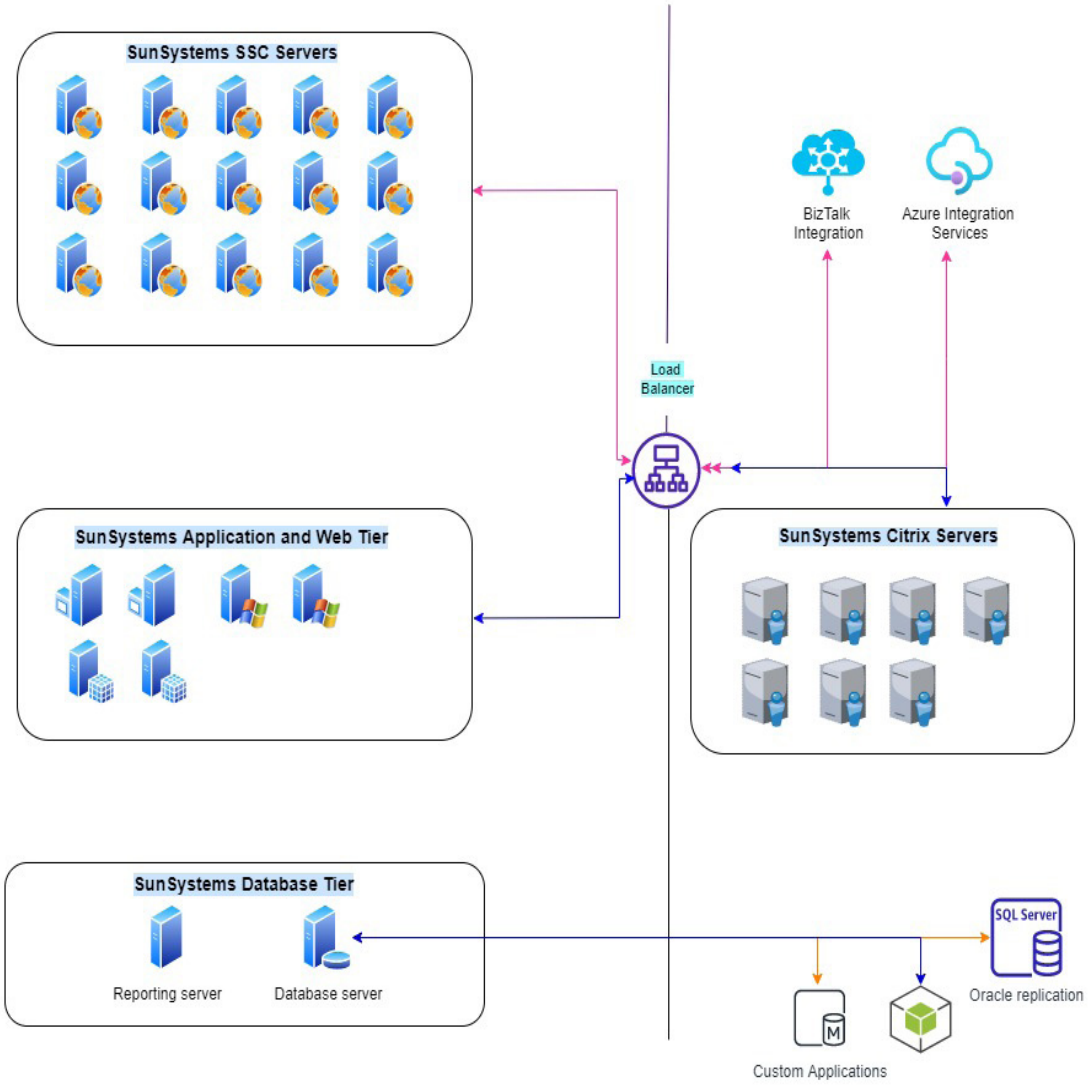
- **System Readiness by Mid-2023:** Complete all upgrades and enhancements, ensuring the entire system is ready for live operation by mid-2023, aligning with project timelines and organisational objectives.

Technological Landscape:

COFCO International has a very sophisticated setup for Infor SunSystems and related software spread across 15+ servers and has dedicated UAT and DEV environments in place. In addition, there are multiple integration points connecting via SunSystems Connect (SSC) and custom applications running off SunSystems SQL databases.

With Microsoft Azure and BizTalk as the main integration platforms, SunSystems integrates with 20+ critical business applications like SAP Ariba and BPC, Microsoft Dynamics AX, Master Data Management, FX portal, Concur. The upgrade needed to ensure all the integration points worked seamlessly as before, but with improved performance and elimination of a few bugs reported with the previous version.

The diagram below shows the overall architecture:



Stakeholder Involvement:

Optimal stakeholder engagement emerged as a pivotal factor in achieving success for the project. The client team included a dedicated project manager, complemented by a group of SunSystems super users, who played a central role. Additionally, there were key technical representatives from both the integration and infrastructure teams, each leading their respective spheres. Eclipse further enriched the collaboration, by bringing in an experienced team of dedicated professionals, including a project director, together with experienced consultants.

Throughout the project's evolution, communication channels were seamless. A well-structured framework encompassed separate weekly catch-up sessions involving the entire project team, as well as distinct dialogues with the project owners.

In parallel, project managers convened regularly for focused discussions, ensuring a meticulous alignment of tasks and milestones for each week. These agile-style meetings were characterised by efficiency and swift decision-making. Outside of the meetings, notes were promptly shared, promoting transparency and a shared sense of responsibility.

This collaborative and communicative approach not only optimised project management but also cultivated an environment of mutual understanding. It stands as a testament to the effectiveness of stakeholder engagement in navigating the intricacies of a comprehensive upgrade.

Planning and Strategy:

Following an exhaustive phase of requirement gathering that incorporated inputs from various stakeholders and a keen understanding of project owners' top priorities, a meticulously crafted timeline was established. This timeline was designed to facilitate a thorough User Acceptance Testing (UAT) phase, which, notably, encompassed both end-user testing and concurrent integration build and testing.

Beyond UAT, the planning extended to user training sessions strategically aligned with critical month-end processes and global time zones. This approach ensured that training sessions were optimised for relevance and accessibility.

A key strategic decision involved maintaining three separate environments (Test, Development and Production), including test stage, pre-production and production. This deliberate separation was aimed at reducing dependencies during testing and build processes. By having distinct environments, each dedicated to specific aspects, the project team mitigated potential conflicts and streamlined the overall testing and development workflow. This strategy contributed significantly to the project's efficiency and the ability to address challenges proactively.

Challenges Faced:

Inevitably, a project of this scale presented numerous challenges, but the meticulous requirement gathering, and detailed planning phases ensured anticipatory measures and multiple solutions were at disposal. Inevitably, a project of this scale presented numerous challenges, but the meticulous requirement gathering, and detailed planning phases ensured anticipatory measures and multiple solutions were at disposal. Among the pivotal challenges critical to project success were:

- **Load Balancer Setup:** In alignment with IT policies and the need to mirror other business applications and integration points, the client opted for the standard Azure Load Balancer (ALB) setup. However, technical limitations surfaced. The Eclipse consultants identified a workaround, subjected it to rigorous testing, to ensure that it complied with software author guidelines before deploying it across all environments.

- **Data Migration:** Reducing downtime for SunSystems, a business-critical application atprimary project objective. However, the sheer volume of data and post-migration tasks posed challenges. Considering users' varied time zones and the subsequent integration tasks, having multiple environments proved advantageous. Eclipse consultants conducted live migration simulations, offering a highly accurate timescale.

Challenges at a Glance

- Technical limitations with the existing standard Azure Load Balancer (ALB) setup.
- Data migration challenges in relation to the sheer volume of COFCO International's data and post-migration tasks.
- To reduce the go-live window by ensuring downtime was kept to a minimum during the live data migration phase.

- **Reducing the Go-Live Window While Seamlessly Switching Integration Points:** Given that various COFCO business applications relied on SunSystems, any downtime during live migration would impact other business units. Careful planning, and avoiding month-end processes, resulted in a very brief downtime window of 3 days (including weekend). This necessitated meticulous pre-planning of all tasks, with minimal buffer time, streamlined for optimal efficiency. Achieving this required full team buy-in and effective communication under time pressure, a challenge successfully met by the entire team.

Results and Benefits:

Following the successful implementation of the upgrade, the client has reported significant achievements and key benefits:

- **Enhanced Performance Across SunSystems Application and Infor Q&A Reporting:** The upgraded system has demonstrated marked improvements in performance, particularly within the SunSystems application and the Infor Q&A reporting process. Users have experienced a noticeable boost in system responsiveness and efficiency, contributing to a more seamless and productive workflow.

- **Successful Load Balancer Setup Resolution:** Challenges associated with the previous load balancer setup were effectively addressed.

Benefits at a Glance

- Marked performance improvements across SunSystems & Infor Q&A reporting applications.
- Elimination of previous technical limitations of SunSystems' integration with the standard Azure Load Balancer (ALB) setup.
- Resolution of bugs associated with previous software versions, providing a more stable environment for data integration & exchange.
- Alignment with Infor OS & latest on-premise SunSystems release ensures compatibility with latest security standards, technologies & support.

The upgraded system now seamlessly integrates with the standard Azure Load Balancer (ALB), resolving previous technical limitations. This accomplishment ensures optimal performance and adherence to IT policies, aligning with the client's broader business application and integration needs.

- **Resolution of Challenges Related to Integration Data Volume and Timeout Issues (SSC):** Bugs that were encountered with previous versions, specifically those tied to integration data volume and timeout-related issues, have been successfully resolved. The upgrade has mitigated these issues, providing a more stable and reliable environment for data integration and exchange.

- **Alignment with Latest Infor OS/Database Platform and On-Premise SunSystems Software Release:** The client has successfully transitioned to the latest operating system and database platform, ensuring compatibility with contemporary technologies and security standards. Additionally, the on-premise SunSystems application is now running on the latest software release offering access to enhanced features, functionalities, and ongoing support from the software provider.

In summary, the successful upgrade has not only addressed existing challenges, but has also positioned the client on a technologically advanced and optimised foundation, translating into improved operational efficiency and a more robust IT infrastructure.

Post-Implementation Support:

Following the successful delivery of the upgrade, Eclipse extended its commitment to post-implementation support by offering a comprehensive hypercare support package during the critical post go-live phase. This tailored support package encompassed 24x7 assistance, ensuring an immediate and dedicated response to any incidents related to SunSystems and its associated components.

The hypercare support package was warmly received, signifying its effectiveness in addressing potential issues promptly. To facilitate seamless support, a structured system for logging and escalating support issues was implemented. This collaborative approach involved close coordination with the SunSystems administration team at COFCO, fostering a proactive and efficient resolution process.

By providing continuous support and rapid response mechanisms, Eclipse ensured that any unforeseen challenges were addressed swiftly, minimising disruptions, and maximising the benefits of the upgraded system. This commitment to post-implementation support not only underscored the dedication to client success but also solidified the partnership between Eclipse and COFCO in maintaining a robust and reliable IT infrastructure.

Key Insights Drawn from the Success of this Project:

- **Thorough Requirement Gathering:** The project underscored the paramount importance of embarking on a comprehensive requirement gathering phase. This proved instrumental in gaining a profound understanding of diverse stakeholder needs and priorities.

- **Meticulous Planning and Timelining:** The project's success hinged on the meticulous planning and crafting of a detailed timeline. This underscored the significance of these preparatory steps in ensuring the seamless execution of a complex upgrade project.

- **Agile and Transparent Communication:** The project emphasised the critical role of agile and transparent communication. This was exemplified through regular catch-up meetings and the immediate dissemination of meeting notes. Such practises proved vital for fostering effective collaboration and streamlined decision-making processes.

- **Stakeholder Engagement:** The project highlighted the value of engaging key stakeholders throughout the entire process. This encompassed project owners, dedicated project teams, and external consultants. The result was a cultivated culture of shared responsibility and open communication, vital for project success.

- **Planning Strategies for Anticipated Challenges:** The project reinforced the importance of planning strategies with foresight, anticipating potential challenges, and providing a spectrum of options for resolution. This proactive approach proved pivotal in navigating unexpected hurdles during the project.

- **Multiple Environments for Testing:** The project underscored the efficiency gained from maintaining multiple environments for testing. This strategic decision significantly reduced dependencies and streamlined the overall testing and development workflow, contributing to the project's overall success.

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