Liquid UI Blogs

What is Clean Core in SAP: Extending SAP Without Compromising Core Integrity

In the fast-paced digital world, businesses face the challenge of staying agile without sacrificing stability in their SAP systems. The concept of "Clean Core" is an important strategy for maintaining the integrity of your core ERP system by minimizing custom code and modifications.

This Clean Core approach ensures that your core system remains robust, secure, and up-to-date while allowing businesses to extend functionalities and innovate using modern, flexible, and scalable methods.

What is a Clean Core in SAP?

A Clean Core means that the core functionalities of your SAP system are kept as close to the standard as possible. This involves minimizing custom code, extensions, and modifications that can complicate the system's architecture.

By adhering to SAP's best practices and utilizing standard features, businesses can ensure their systems are stable and future-proof.

Importance of Maintaining a Clean Core

SAP highlights the importance of maintaining a Clean Core for several reasons:

- **Simplified upgrades**

  Upgrading to newer versions of SAP is more straightforward when the core system is clean. A clean core minimizes custom code and modifications that could conflict with the new version's functionalities and structures. As SAP releases updates or new versions, they are designed to work seamlessly with the standard, unmodified core. This reduces the risk of encountering issues that customizations might introduce, such as incompatibilities or errors during the upgrade process.

- **Lower Maintenance Costs**

  When your SAP system has fewer customizations, it requires less time and fewer resources for maintenance and troubleshooting. Custom code often necessitates specialized knowledge and can be time-consuming to manage. Additionally, each customization can introduce unique issues that complicate system maintenance.

- **Improved Performance**

  Standard SAP functionalities are optimized for performance. With fewer custom elements, the system is less likely to experience performance issues or slowdowns.

Liquid UI Blogs

Implementing a Clean Core Strategy

To implement a Clean Core strategy in SAP S/4HANA, businesses should:

1. **Conduct an assessment**: Evaluate the current state of the SAP system, identifying areas where customizations and modifications can be reduced or eliminated.
2. **Adopt best practices**: Follow SAP's best practices for standardization and optimization, ensuring that business processes are aligned with SAP's guidelines.
3. **Continuous monitoring**: Regularly monitor the system to ensure it remains clean and efficient, making adjustments as needed to address new business requirements or technological advancements.

By focusing on these key components and dimensions, businesses can maintain a Clean Core in SAP S/4HANA, ensuring their systems are robust, scalable, and ready for future growth.

SAP Clean Core Extensibility

Extensibility here refers to the ability to extend the functionalities of SAP without modifying its core components. This can be achieved through various tools and frameworks, to allow businesses to **add custom features, integrate with other systems, and automate processes while keeping the core system intact**.

Types of Extensibility

There are several types of extensibility in SAP S/4HANA:

1. **In-App Extensibility**: This allows users to make changes directly within the SAP S/4HANA environment. In-app extensibility includes the ability to add custom fields, create new business logic, and develop new user interfaces.
   Example: A business can add a custom field to a sales order screen to capture specific information required for their process, without altering the underlying SAP code.
2. **Side-by-Side Extensibility**: This involves extending SAP S/4HANA functionalities using the SAP Business Technology Platform (BTP). Side-by-side extensibility allows for developing applications and extensions that run on BTP but interact with SAP S/4HANA through APIs and other integration tools.
   Example: A company can build a custom analytics application on BTP that pulls data from SAP S/4HANA, processes it, and presents it in a user-friendly dashboard, all without modifying the core SAP system.

Common Questions About Clean Core

As businesses work towards maintaining a Clean Core in their SAP systems, several common questions often arise. Understanding these concepts is crucial for

effectively implementing and sustaining a Clean Core strategy.

What is Clean Code in SAP?

Clean code in SAP refers to writing code that is simple, readable, and maintainable. It adheres to best practices and standards set by SAP, ensuring that custom developments do not complicate the core system. Clean code is:

- **Readable**: Easy for other developers to understand and maintain.
- **Efficient**: Optimized for performance and resource utilization.
- **Modular**: Broken down into reusable components, making it easier to manage and update.
- **Documented**: Accompanied by clear documentation that explains the purpose and functionality of the code.

What is Core SAP?

Core SAP refers to the standard functionalities and components SAP provides out of the box. It includes the essential modules and processes that form the backbone of the SAP system, such as finance, sales, materials management, and production planning. The core SAP system is designed to be robust, scalable, and capable of handling various business processes without requiring extensive modifications.

How Does Clean Core Relate to SAP BTP?

SAP Business Technology Platform (BTP) is a comprehensive suite of tools and services that enable businesses to extend and enhance their SAP systems without modifying the core. Here's how SAP BTP supports a Clean Core:

- **Integration**: SAP BTP provides robust integration capabilities, allowing businesses to connect their SAP S/4HANA system with other applications and data sources seamlessly.
- **Extensibility**: With SAP BTP, businesses can develop custom applications and extensions that run independently of the core SAP system. This side-by-side extensibility ensures that the core remains clean and unaltered.
- **Analytics and Insights**: SAP BTP offers advanced analytics and data management tools that help businesses derive insights from their data without impacting the core system's performance.
- **Innovation**: By leveraging the cloud-native capabilities of SAP BTP, businesses can adopt new technologies and innovations, such as machine learning and IoT, while maintaining a Clean Core.

In the next section, we will discuss how Liquid UI can complement SAP's Business Technology Platform (BTP) and support Clean Core compliance through customizable user interfaces, automation, and mobile access.

Empowered SAP UI Extensibility With Liquid UI

Transitioning to a Clean Core approach in SAP allows businesses to maintain system stability and operational efficiency, and reduce costs. However, achieving this while

still meeting the unique needs of your business can be challenging.

This is where Liquid UI comes into play. Liquid UI empowers organizations to enhance their SAP environments through advanced UI customization, automation, and mobile access-standing as a powerful solution for those looking for a **Clean Core-compliant, quick-to-deploy tool that requires no extensive building from scratch**.

By leveraging Liquid UI, businesses can achieve the flexibility and functionality they need without compromising the integrity of their core SAP system.

How Liquid UI Supports Clean Core Compliance

- **Customizable User Interfaces**

  Liquid UI enables extensive customization of SAP screens and workflows without modifying the core code. These customizations are done with low-no code solutions and allow businesses to tailor their user interfaces to meet specific needs while maintaining core stability and compliance.

  Real-life Use Case:
  A utility company utilizes Liquid UI to enhance the user interface for its SAP Plant Maintenance (PM) module. Technicians in the field often need to perform complex tasks such as creating work orders, logging equipment issues, and scheduling maintenance activities. Liquid UI allows the company to streamline these workflows by merging multiple steps into a single, simplified interface where technicians can easily input data, update task statuses, and capture equipment details.
  This customization reduces the time spent navigating through multiple screens and minimizes errors, all while keeping the core SAP PM functionalities intact.

- **Automation**

  Automating repetitive tasks and integrating with external systems reduces manual intervention and errors.

  Real-life Use Case:
  A logistics company uses Liquid UI to automate the process of updating shipment statuses in SAP. When a shipment reaches a certain milestone, Liquid UI automatically updates the SAP system, sends notifications to relevant stakeholders, and logs the event, reducing the manual effort required by employees, minimizing the risk of human error, and ensuring real-time data accuracy, all without altering the core SAP code.

- **Mobile Access and Hardware Integration**

RL: https://www.guixt.com/knowledge_base/content/92/1429/en/what-is-clean-core-in-sap-extending-sap-without-compromising-core-integritybr-_.ht

Liquid UI Blogs

Liquid UI extends SAP functionalities to mobile devices with native apps, allowing users to access and interact with SAP systems on the go. This ensures that critical business processes can be performed efficiently without core modifications, aligning with clean core principles.

Real-life Use Case:
A warehouse management company equips its field technicians with tablets running Liquid UI, allowing them to access SAP Warehouse Management (WM) data remotely. Technicians can update inventory levels, capture photos of damaged goods, utilize the device's hardware features like barcode scanning or RFID, and record stock movements directly into the SAP system while in the field.

- **Integration with External Systems**

  Liquid UI facilitates seamless integration between SAP and external systems such as Salesforce, Excel, and databases like Oracle and SQL. This integration allows businesses to extend SAP functionalities and improve data flow between different platforms without altering the core SAP system.

  Real-life Use Case:
  An enterprise uses Liquid UI to integrate SAP with Salesforce, allowing customer data to flow seamlessly between the two systems. When a new customer is added in Salesforce, the information is automatically updated in SAP, ensuring consistency and reducing duplicate data entry efforts. This integration enhances the overall efficiency of customer relationship management.

How Liquid UI Manages Clean Core Compliance

Liquid UI operates as a powerful frontend customization tool that interacts with SAP systems through standard protocols and APIs. This means it can modify user interfaces, automate processes, and integrate external systems without directly altering the underlying SAP code. Here's how Liquid UI achieves this:

1. **Frontend Customization**:
   Modifies the user interface by adding, removing, or rearranging elements on the screen. This customization is done at the presentation layer, meaning the changes are applied only to how data is displayed and interacted with by users. The core business logic and data handling remain untouched.
2. **Script-Based Automation**:
   Uses scripts to automate repetitive tasks and streamline workflows. These scripts interact with the SAP GUI using standard SAP protocols, ensuring that the automation is performed without modifying the core code. This approach maintains the integrity and stability of the core SAP system while enhancing operational efficiency.
3. **APIs and Integration Tools**:

RL: https://www.guixt.com/knowledge_base/content/92/1429/en/what-is-clean-core-in-sap-extending-sap-without-compromising-core-integritybr-_.ht

For integrating with external systems like Salesforce, Liquid UI uses APIs and other integration tools to facilitate data exchange. By leveraging these standard interfaces, Liquid UI can seamlessly connect SAP with other platforms without requiring changes to the backend code. This method ensures that integrations are robust and compliant with SAP's standards.

4. **Mobile and Hardware Integration**:
   Extends SAP functionalities to mobile devices and leverages hardware features like barcode scanners and RFID readers. These integrations are handled through the device's operating system and standard communication protocols, ensuring that the backend SAP system remains unaffected. This allows for enhanced mobility and real-time data capture without compromising core system stability.

Conclusion

Maintaining a Clean Core is crucial for ensuring the stability, operational efficiency, and cost-effectiveness of SAP systems. By adhering to the principles of a Clean Core, organizations can simplify upgrades, reduce maintenance costs, and ensure their SAP environment remains robust and scalable for future growth.

In the realm of UI and interfacing with SAP, Liquid UI empowers organizations by providing quick-to-deploy, extensive customization of user interfaces, automating repetitive tasks, enabling mobile access, and facilitating seamless integration with external systems—all without modifying the core SAP code. This approach ensures that businesses can meet their unique needs and innovate continuously while maintaining the integrity of their SAP systems.

Maintaining a Clean Core in your SAP environment is essential for long-term success. Liquid UI offers a powerful, Clean Core-compliant solution that enhances your SAP systems without compromising core stability.

By choosing Liquid UI, you ensure a streamlined, efficient, and future-proof SAP environment that adapts to your evolving business needs while keeping your core system intact and easy to manage.

Visit Liquid UI to learn more and get started today.

Unique solution ID: #2443
Author: Devi Prasanthi Korada
Last update: 2024-08-05 09:21