

Petronas Improves Operational Efficiency by 70% Using Liquid UI Offline for SAP EWM

Petronas, with operations in over 100 countries, was experiencing several issues with its warehouse management process, resulting in challenges such as intermittent connectivity, desktop-based systems, frequent disruptions in productivity, and a significant amount of time lost. Petronas using Liquid UI removed these barriers and increased operational efficiency by 70%.



About Petronas

Headquartered in Malaysia, Petroliaam Nasional Berhad, also referred to as "Petronas," is a dynamic international energy company with operations in more than 100 nations and over 30 years of experience in a variety of petroleum-related activities. Petronas produces the solutions and energy required to advance society morally and sustainably. The team fuels their passion for innovation and helps increase the cause of sustainable energy by serving as both pillars of stability and partners in growth.

Challenges

- Frequent disruption in productivity
 - Cause : Petronas personnel would lose connection to SAP intermittently when aboard oil rigs.
 - Effect : SAP becomes inaccessible, blocking access to equipment records and asset details.
- Potential for asset loss
 - Cause : Without connectivity, users would rely on error-prone paper and pen to record different material details.
 - Effect : This was completely manual and laborintensive, opening up possibilities for costly errors.
- Inventory tracking was delayed
 - Cause : Reliance on handwork during connection loss was very time-consuming, requiring personnel to attend to relogging data leading to delays.
 - Effect : Possible delays in preventive and scheduled maintenance

Solutions

The Petronas team decided that simplifying its SAP processes with Liquid UI was the right solution for the company's challenges. Liquid UI Offline, an expert at "store and forwards," keeps the data and sends it to SAP ERP after a successful connection. Furthermore, mirrors every SAP screen that was initially customized or simplified by Petronas, keeping the same user experience and making everything the same, lowering user errors when offline.

Liquid UI Offline

Liquid UI Offline operates on two primary principles: Single Source of Truth and UI Mirroring.

Single Source of Truth

The functionality of Single Source of Truth (SSOT):

- Automatic data collection - data is collected to the Liquid UI Offline Server and is uploaded the first chance network connectivity is established, ensuring the preservation of any relationship that the SAP ERP application logic enforces. This is automatically done by loading data via NCA (link to NCA page)

to SAP ERP, thereby any PAI (Process After Input) verification will be accomplished as usual before data is stored in the database.

- Utilizing Lookup Values - Lookup Values, F4 Search Help gives the user a limited reference of possible values, thereby eliminating errors from data that creep in. Liquid UI Offline Server accomplishes SSOT with Lookup Values, by downloading the pertinent values as part of the upload. In other words, data is exchanged both ways, during network connectivity, to download valid lookup values.

UI Mirroring

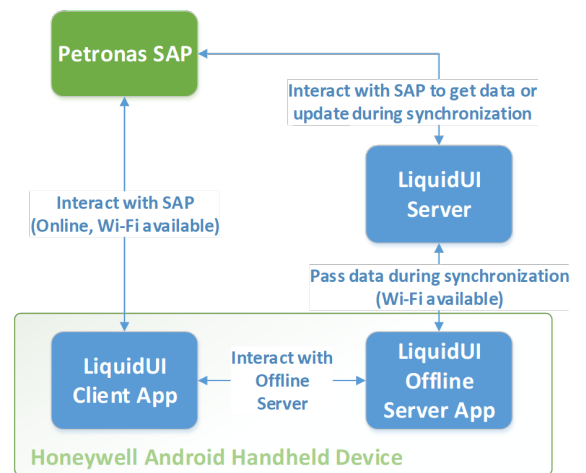
The functionality of UI Mirroring:

- Identical SAP UI - UI Mirroring ensures that users have a seamless, identical UI (user interface) whether they are connected to Liquid UI Offline or SAP ERP

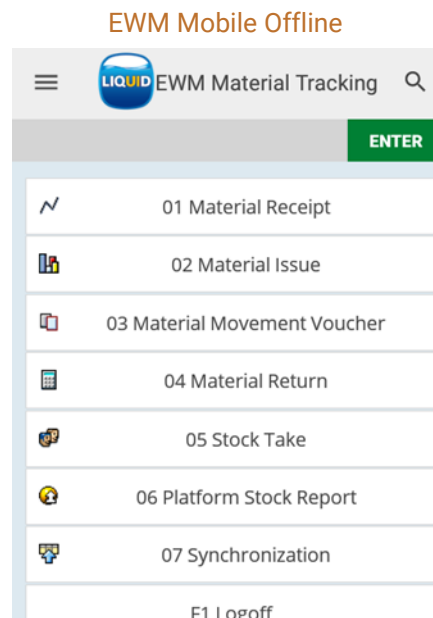
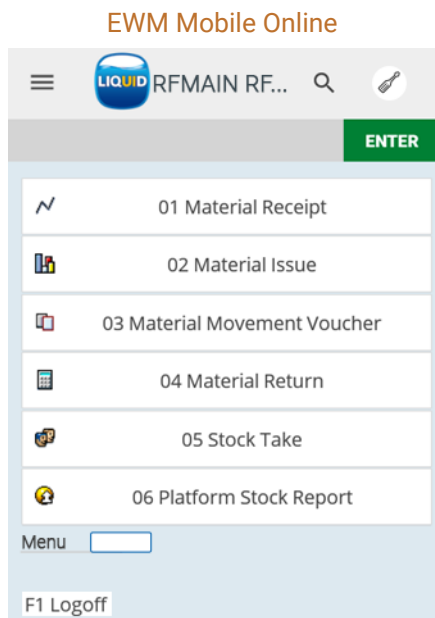
Liquid UI Offline In Action

Application of SSOT: Petronas SAP users can access SAP data and functionality anywhere on the rig without live network connectivity. Liquid UI Server is scheduled to automatically upload records to SAP every night and download data from SAP every morning, guaranteeing all data accuracy and synchronization for all locations.

Application of UI Mirroring: Through the preservation of the SAP UI, Petronas personnel are empowered to seamlessly utilize Liquid UI Offline without additional training, thereby ensuring uninterrupted workflow continuity.



Liquid UI Customized Launchpads



Value-Driven Results:

- 70% increase in operational efficiency
- 35% increase in productivity for maintenance personnel
- Time spent on training and IT support reduced