User Guide for mWorkOrder 2502

Connected Worker Solutions

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User Guide for **mWorkOrder**, a *Mobile work order Management Solution* of *Connected Workforce Platform*™.

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Preface

Understand audience, know related documents and products and conventions followed in this document.

Intended Audience

This user guide is for plant maintenance field service technicians in your organization. The user guide familiarizes technicians with features and functionality of the mWorkOrder solution.

Document Conventions

Table 0-1 Conventions followed in the document

Convention	Meaning
boldface	Indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Indicates book titles, emphasis, or place-holder variables for which you supply values.
`monospace`	Indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter

Related Products & Solutions

- Work Order Management
- Inventory and Warehouse Management
- Operator Rounds
- Inspections Checklist
- Fixed Asset Management
- Field Procurement
- Analytics and Dashboards

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Contents

1. About the mWorkOrder Application

Maintain your assets using mWorkOrder, a mobile work order management solution from Innovapptive. mWorkOrder leverages SAP's Plant Maintenance module.

Using the mWorkOrder application you can do the following to maintain your assets:

- Create and process notifications related to work orders.
- Receive, process, create, and update work orders.
- View, create, and update equipment and functional locations.
- Access equipment details and maintenance history using Measuring Points.
- Perform maintenance, inspection, and repairs.
- Track and automatically report status, progress, and location.
- Capture readings, measurements, and images.
- Record problems, actions, time, parts, and material.

mWorkOrder consists of the following modules:

- Notifications
- Work Orders
- Time sheets
- Equipment
- Functional Location
- Measuring Point
- Inspection Lots - Results Recording
- Usage Decisions
- Crew Management (UI5 only)
- Schedule Work Orders (UI5 Only)

For more information, see

- Asset Management Workflow using mWorkOrder *(on page)*
- Features of mWorkOrder *(on page)*
- New Features and Enhancements *(on page 12)*
- Compatible Devices and Applications *(on page 86)*
- Explore mWorkOrder using Demo Data *(on page 87)*
- Access Integrated Help Documentation *(on page 87)*
- Frequently Asked Questions *(on page 88)*

1.1. New Features and Enhancements

The following are the new features and enhancements for mWorkOrder.

Check the releases below for the information:

New Features and Enhancements in Release 2502

Table 1-1 New Features and Enhancements in Release 2502

Reference No.	Description
SSS-17365	**PDF Conversion Enhancement (iOS)**

Table 1-1 New Features and Enhancements in Release 2502 (continued)

Reference No.	Description
	Added a 'Select All' feature that streamlines the process of converting multiple forms to PDFs with a single action, significantly improving efficiency. For more information, see Capture details related to Work Order tasks in embedded forms *(on page 239)*.
SSS-26002 / SSS-26435	**Intelligent User Status Assignment (iOS, ABAP)** Implemented automatic user status population based on configured default settings during Work Order creation and updates, reducing manual entry and ensuring consistency.
SSS-26501	**Visual Status Tracking in Operations** Enhanced the Operations tab with intuitive color-coded status indicators: amber for Partial Confirmation (PCNF) and green for Confirmed (CNF), enabling users to instantly assess task progress at a glance.
SSS-26503	**Advanced Work Order Search Capabilities** Expanded the Dashboard search functionality to support comma-separated values, allowing users to efficiently locate multiple Work Orders in a single search operation.
SSS-26504	**Flexible Operation Management**

Table 1-1 New Features and Enhancements in Release 2502 (continued)

Reference No.	Description
	Introduced the ability to insert operations between existing sequences, with automatic ascending order arrangement, creating a more adaptable workflow management experience.
MWO-46832	**Streamlined Status Selection** Refined the system status drop-down to display only contextually relevant status values, maintaining consistency with Work Order search functionality and simplifying the user experience.

New Features and Enhancements in Release 2208

Table 1-2 New Features and Enhancements in Release 2208

Reference No.	Description
MWO-33377	**Create Custom Modules and Use them in mWorkOrder (iOS and Android)** • Create modules for your business needs and use them in the mWorkOrder application. Using RACE, you can create a complete, fully functional modules with header, search, list, details, buttons, and so on. • This flexibility empowers organizations to develop custom requirements without any dependency on coding.
MWO-31196	**Productivity and Other Enhancements (iOS and Android)**

Table 1-2 New Features and Enhancements in Release 2208 (continued)

Reference No.	Description
	• Create and View follow-up notifications from the objects tab to notify malfunctions. • Structured folder view for DMS documents and attachments. The single attachments are displayed as individual files. • Auto complete a notification when a related work order is technically completed. • Filter and save work orders list and work order statuses. • Reset user preferences and re-enter them to fetch relevant data. • Technicians can sort and view the transactional data (Work Orders, Equipment) and master data (EQ, FL, MP). • Supervisors can set the default sort criteria organization wide in RACE to have uniform criteria based on the business processes. • Return unconsumed spares to the warehouse on the move and improve the accuracy of inventory. • View attachments count from the work order overview.
MWO-19730	**Create Emergency Notification of Work Order from the Form (iOS and Android)**

Table 1-2 New Features and Enhancements in Release 2208 (continued)

Reference No.	Description
	• Technicians, while doing maintenance tasks using a forms checklist, can create notifications from the form itself. • The form is associated with the notification. For information, Capture and post data using form *(on page 283)*.
MRO-13	**Skip Assets (iOS and Android)** Skip one or more assets in a round plan when the asset is incomplete state or no longer required. For information, Execute the Rounds Assigned to You *(on page 160)*.
MRO-98	**Track and Execute Checklist (iOS, Android, UI5)** • As a planner, a dynamic form is assigned to a technician to fill and execute the form. • As an operator, fill a dynamic form with details such as readings, checklist, and so on. For information, Execute the Rounds Assigned to You *(on page 160)*.
MRO-174	**Localization Settings (iOS, Android, UI5)**

Table 1-2 New Features and Enhancements in Release 2208 (continued)

Reference No.	Description
	• Change the language of dynamic forms to the language understand by many.
MRO-10	**Operator Round Enhancements (iOS, Android, UI5)** • View one level up hierarchy of Functional Location for the Functional Location tasks in My Rounds. This feature helps to view the equipment and tasks related to the specific functional location. • View Unit of Measure (UOM) value next to the numeric field for individual tasks. For example, if you enter the Pressure or Pascal value (155) then UOM for Pressure (Psi) displays next to the field. For information, Execute the Rounds Assigned to You *(on page 160)*.
MRO-22	**Reassign Partially Executed Tasks (UI5)** Assign a different user to a round that is in progress or partially executed. This feature helps when an existing user is unavailable to execute a round, it is assigned to a different user. For information, View Operator Rounds and Update Due Dates *(on page 150)*.
MWO-31196	**Add SAP DMS documents to Work Order (iOS, Android)**

Table 1-2 New Features and Enhancements in Release 2208 (continued)

Reference No.	Description
	Search and add SAP DMS documents into work order attachments.
MWO-33230	**SharePoint Integration (Windows)** Integration with Document Management Systems like SharePoint. With this feature, you can, • Edit, Update and Post new attachments to SharePoint. • Fetch and download the attachments to the local device. • Read PDF Documents from SharePoint. • Make SharePoint Documents available in online and offline mode.
SSS-16666	iOS – In the Operator Rounds module, you can now delete the saved filters.
SSS-17163	iOS, ABAP – In the Notifications module, the Cause Text field updated from the Short text to Long text, allowing more than 40 characters in the Causes tab in online and offline modes.
SSS-16569	iOS – The Stock Overview feature added in the mWorkOder application.
SSS-17559	iOS – Select multiple Photos at once and save them as a single PDF for markup and annotation across the application.
SSS-17560	iOS – The Equipment and Functional Location displays at the top of the dashboard.

Table 1-2 New Features and Enhancements in Release 2208 (continued)

Reference No.	Description
SSS-17686	iOS – In the Equipment/Functional Locations modules, the active work orders and notifications are displayed.
SSS-17793	UI5 – In the Operator Rounds module, the application displays Round Plans for Round Templates.
SSS-17764	iOS – In the Operator Rounds module, when a user adds attachments for the task, the application displays the Save button.
SSS-18213	Android – In the Operator Rounds module, the Maintenance Plant field auto-populats when a user creates a notification from rounds.
SSS-18324	Android, ABAP, UI5 – In the Operator Rounds module, Skip task option for the Mandatory tasks is not displayed.
SSS-18630	iOS – In the Work Orders module, when a user taps on the sub work order linked to a work order, the application navigates to the related work order in the online and offline modes.
SSS-18696	iOS – In the Equipment and Functional Locations modules, the application displays the attachment count in offline mode without tapping on the Attachments tab.
SSS-17652	iOS – In the Operator Rounds module, view notifications that are created in offline mode.
SSS-17953	UI5 – In the Round Plans module, when a user changes a sequence of tasks, it is reflected in the mobile application.
SSS-18452	UI5, ABAP – You tap the check box to view the history of individual tasks in the Operator Rounds module.

Table 1-2 New Features and Enhancements in Release 2208 (continued)

Reference No.	Description
SSS-19572	Android – In the Filter screen, view the saved filters count within the brackets next to the Saved Filters item
SSS-19143	Android – In the Work Order and Notification modules, the 'Delete Filter' button added at the bottom of the screen, next to the 'Apply Filter' button.
SSS-19498	iOS – In the Operator Rounds module, if the Round Plan has more than 10 tasks, the application displays all the tasks for that particular Round Plan in online mode.
SSS-20307	UI5, ABAP – In the Reports module, view the last five Asset exception report task results while hovering task history.
SSS-22502	iOS - In the Operator Rounds module, View Create Notification button at the task level.
SSS-22234	UI5, ABAP - In the Operator Rounds module, inputs task text at both the round and task levels.
SSS-18667	Android, ABAP – In the Work Orders module, view the notification number associated with each version when the form has multiple instances
SSS-19507	iOS – In the Work Orders module, when a you complete a work order, the status of respective notification displays as completed.
SSS-20522	Android – The Operator Rounds icon is removed now in the Home Screen.

Table 1-2 New Features and Enhancements in Release 2208 (continued)

Reference No.	Description
SSS-21042	Android – In the Notifications module, when a user taps on the View Notification button, the application directs to the recently created notification.
SSS-21411	iOS - In the Operator Rounds module, you can enter the actual start and end date and time using a timer during auto confirmation through the Overall Confirmation screen.
SSS-21249	**Dashboard screen enhancements (iOS, ABAP)** Configure and view Recipient in Work Order Configuration DB tabs View Recipient in WO Dashboard as an analytical view View the Work Order list with respect to count against the Recipient. View Work Order count against each Recipient value along with description.
SSS-22509	iOS - In the Work Orders module, View Unit of work in the Operations tab on the Overview screen.
SSS-23065	iOS, ABAP - In the Work Orders module, the timer functionality for Emergency Work Order in the Operations screen is removed.
SSS-23159	Android - In the application, when a user adds an Operation on the User Status window, the two buttons at the top are now at the bottom, consistent with the format used on the Complete notification window.

Table 1-2 New Features and Enhancements in Release 2208 (continued)

Reference No.	Description
SSS-23170	iOS - In the Notifications module, when a user submits a form upon notification creation, the user can now view the Convert to PDF option.

New Features and Enhancements in Release 2203

Table 1-3 New Features and Enhancements in Release 2203

Reference No.	Description
MWO-31030	**Move Unfinished Tasks from one Round to another (iOS, Android)** If an operator round task is unfinished or in the open state, it automatically moves to the next round based on the background job. For example, if the weekly task in Round 1 is not completed then it moves to the next round till the task is completed and if the weekly task is pending for more than seven days then the task status changes to Overdue. This feature helps to act on Overdue tasks faster. For information, Execute the Rounds Assigned to You *(on page 160)*.
MWO-31032	**Move Partially Completed Rounds from My Rounds to Open Rounds (iOS, Android)**

Table 1-3 New Features and Enhancements in Release 2203 (continued)

Reference No.	Description
	• A supervisor can unassign or handover the partially completed round from My Rounds and move it to Open Rounds without any data loss. • You can assign the partially completed round from Open Rounds then it is moved to My Rounds again. • This feature helps to handover the round to the new user with ease and the user in the next shift can take the round and complete it on priority. For information, Move Partially Completed Rounds *(on page 166)*.
MWO-30600	**Add Attachments to Operator Round Tasks (iOS, Android)** Add and view attachments such as documents and images to operator round tasks. You can add manuals, how to videos that help the operator take help of the content and complete the task quickly and easily. For information, Execute the Rounds Assigned to You *(on page 160)*.
MWO-29812	**View More Fields at an Asset Level (iOS, Android)** View more fields at an asset (i.e., Functional Location or Equipment) level. This feature helps operators to identify Functional Location or Equipment quickly.

Table 1-3 New Features and Enhancements in Release 2203 (continued)

Reference No.	Description
MWO-31224	**Navigate to the location for work execution using Google or Apple Maps (iOS, Android)** • Navigate effortlessly and quickly from your location to the location where Work Order is to be executed using Google or Apple Maps. • Filter work orders and notifications by various criteria to view relevant data. • View the details of the Work Order such as WO number and Description, Customer Name, Equipment, and Functional Location along with the Show Directions option on the pin. For information, Navigate to Work Locations using Maps *(on page 123)*.
MWO-31387	**Return Unused Spares (iOS)** Return unused spares using mWorkOrder mobile application and update inventory in real-time. This helps to maintain accurate inventory. For information, Return Unused Spares *(on page 227)*.
MWO-29422 / MWO-29366	**View, filter, and Sort Rounds and Assets (iOS, Android, and UI5)**

Table 1-3 New Features and Enhancements in Release 2203 (continued)

Reference No.	Description
	• View, filter, and sort assets (Functional Location and Equipment) in the round create and edit screens. This feature helps you quickly select relevant assets while creating or updating a round plan. • Sort assets in Open Rounds and My Rounds. This feature helps to select a round quickly to execute. • Filter the open rounds based on Plant, Work Center, Due Date, Start and End dates. This feature helps you to reduce the fetched data amount which increases the application performance. For information, Create Operator Round for Asset Maintenance Task *(on page 143)*.
MWO-31143	**Enhanced User Experience in Operator Rounds (iOS, Android, and UI5)** • Close the round by skipping all open tasks in a round using the Skip All option. • Hide completed tasks in a round using the ON/OFF toggle switch. • Select multiple assets and assign tasks using the Desktop application. • Search assets within a round using the mobile application. • Search templates based on plant and assets as attributes. • Sort rounds based on Due Today, Due Tomorrow, Due this week.

Table 1-3 New Features and Enhancements in Release 2203 (continued)

Reference No.	Description
	For information, Execute the Rounds Assigned to You *(on page 160)*.
MWO-22963	**View Executed Round Details in Planner tool (UI5)** View round details submitted or executed by the operator. This feature helps to track the rounds effectively. For information, View Operator Rounds and Update Due Dates *(on page 150)*.
MWO-27774	**Add PRTs using Desktop Application (UI5)** Add and view PRTs such as Measuring Points and Documents against operation using the Desktop application. This feature helps you refer to the accurate PRTs to execute the work in the field.
MWO-31862	**Improved Work Orders, Functional Locations, Equipment Functionalities (Windows)** • View the Classification details in the functional location create and display screens. • View the Classification details in the equipment create and display screens. • View the description of the selected field in the work order create and display screens.

New Features and Enhancements in Release 2201 SP01 HF03

Table 1-4 New Features and Enhancements in Release 2201 SP01 HF03

Reference No.	Description
TIG-936 / TIG-736	**Access User Profile Screen from any Screen (iOS, Android)** Access the User Profile screen from any screen by swiping from left to right For information, Configure mWorkOrder for your everyday Tasks *(on page 109)*.
TIG-935	**Adjust Text Size Easily (iOS, Android)** The Text Size slider position is moved up in the User Profile screen so that you can access it easily and change text size. For information, Set Text Size *(on page 101)*.
TIG-944	**Data Sync, Transactions Messages Made Prominent (iOS, Android)** The messages for data sync, Offline Outbox transactions, and Online / Offline modes are made prominent so that the user can view the state quickly.
TIG-932 / TIG-933	**Data Downloaded Percentage in Progress Bar is now Made real-time (iOS, Android)** Earlier the data downloaded percentage in the progress bar was more of approximate value. The percentage value is now made re-al-time in the Progress Bar screen.

Table 1-4 New Features and Enhancements in Release 2201 SP01 HF03 (continued)

Reference No.	Description
	For information, Download Data Needed for the Shift *(on page 95)*.
TIG-910 / TIG-938	**Switch to Technician View (iOS, Android)** The user is now able to switch to Technician view from the application home screen. For information, Technician View *(on page 105)*.

New Features and Enhancements in Release 2201 SP01 HF02

Table 1-5 New Features and Enhancements in Release 2201 SP01 HF02

Reference No.	Description
TIG-815	**Add Component with item category 'T' (iOS)** If a user does not find relevant material number, then the user can add components with item category 'T' in a work order. When this option is selected from the drop-down, the Component field changes to the text field. Users can enter the material name manually. For information, Add Components to work order *(on page 214)*.
TIG-816	**Enhanced Experience for Adding Attachments (iOS)**

Table 1-5 New Features and Enhancements in Release 2201 SP01 HF02 (continued)

Reference No.	Description
	The add attachment options such as Take Photo, Choose Photo, Take Video, Choose Video, Files and URL are rearranged in the application for better user experience while adding attachments in a notification or work order. For information, see Add Attachments to Records *(on page 113)*.
TIG-726	**Improved Online / Offline Status Experience (Android)** The color of the status bar changes when a user switches from online to offline mode. This helps users know the state instantly. For information, see Switch Online/Offline *(on page 128)*.
TIG-813 / TIG-814 / TIG-851 / TIG-852 / TIG-833	The following changes are made in the Notification and Work Order overview screens:

Table 1-5 New Features and Enhancements in Release 2201 SP01 HF02 (continued)

Reference No.	Description
	• Enhanced notification and work order overview details on the left side. • The Assembly field is removed from the Header details. • The labels are enhanced and made consistent throughout the application. Now, the initial letter of each label is displayed in the upper case. For e.g., Maintenance Plant. • The field descriptions and object numbers are rearranged and made consistent in all the screens. • The labels for the Follow Notification Create and New Sub Work Order options are renamed to: ◦ Create Follow Up Notification ◦ Create Sub Work Order
TIG-829 / TIG-839	In the Work Orders module, the design of the Material search is simplified, and the storage location wise stock display was fixed.
TIG-882	The Work Order and Notification long text field displays the description without clicking the expand icon.
TIG-890	The Add '+' button is removed from the Notification and Work Order attachment screens.

New Features and Enhancements in Release 2201

Table 1-6 New Features and Enhancements in Release 2201

Reference No.	Description
MWO-29281	**Create Asset Maintenance Tasks Instantly using Template (UI5)**

Table 1-6 New Features and Enhancements in Release 2201 (continued)

Reference No.	Description
	• Create Asset Maintenance Task Templates and use them to create Asset Maintenance Tasks quickly. • For example, create a template Monthly Maintenance Tasks and use it to create an operator round for Asset Maintenance Task for checking temperature. • You can add frequencies such as daily, weekly, monthly, and so on to the template. When you update the task frequency in the template, the round plans which are using the same template are updated automatically. For information, Create Template for Asset Maintenance Tasks *(on page 138)*.
MWO-27991	**View Multiple Statuses of the Work Orders and Operations (iOS, Android)** View multiple active statuses of workorders and operations when there are multiple technicians working on the same workorder / operation. This feature helps you quickly track the status flow and identify the current condition of individual operations. For information, see Work Orders Screen Overview *(on page 201)*.
MWO-22463	**Add External URL Links Under Attachments (iOS, Android, UI5)**

Table 1-6 New Features and Enhancements in Release 2201 (continued)

Reference No.	Description
	• Add external URL links as attachments for Work Orders, Notifications, Equipments, and so on. • Read external documents like manuals, troubleshooting guides, and view videos related to the equipment / functional location. For information, see Add Attachments to Work Orders *(on page 215)*.
MWO-28654	**Access and View DMS Attachments in Objects (UI5)** • Access documents of Work Orders, Equipments, Functional Locations stored in DMS. • Use these documents as required for effective maintenance of assets. For information, see Access Reference Documents *(on page 242)*.
MWO-29807	**Retrieve Technical Objects (Functional Locations & Equipments) using Common Search (Android)** • Retrieve Technical Objects (Equipment or Functional location) using simple search from the unified Technical Objects module. • Need not check whether the object is a Functional Location or Equipment, navigate to the module and retrieve details.

Table 1-6 New Features and Enhancements in Release 2201 (continued)

Reference No.	Description
	For information, see Search and View Technical Objects *(on page 310)*.

New Features and Enhancements in Release 2009 SP06

Table 1-7 New Features and Enhancements in Release 2009 SP06

Reference No.	Description
MWO-25549	**Assign Work Orders based on Split-level Assignment in Operations (iOS, Android)** • Assign each operation in a work order to different technicians based on their expertise. • Divide a work order among multiple technicians based on assigned operations on split-level and get work done quicker. • Reassign operations to other technicians, if required, based on availability. For information, Add Operations and Assign them to Technicians *(on page 209)*.
MWO-27319	**Add Measurement Document for Operations, Objects, and Reading List (iOS, Android)** • Create a measurement document for Measuring Points in Operations, Objects, and Reading List. • Add attachments in the Measuring Document. • View the history of previously added measurement points.

Table 1-7 New Features and Enhancements in Release 2009 SP06 (continued)

Reference No.	Description
	For information, see Create a Measurement Document *(on page 249)*.
MWO-29731	**Technical Objects are auto populated when you select an Assembly Value (iOS, Android)** While creating a work order, the technical object values are auto populated when you select an assembly value from a Functional Location or an Equipment Hierarchy. This reduces the effort to remember and enter the Technical Objects values. For information, see Create a Work Order *(on page 205)*.
MWO-29723	**Drop-down values are filtered in the Notification and Work Order create and edit screens (iOS, Android)** When you enter or select values for a few fields while creating or editing notifications or work orders, the values in the dependent drop-down fields can be filtered. For example, the Work Center drop-down values are auto filtered based on values selected for Notification Type and Priority. This feature helps you select relevant data faster from the smaller list of options. For information, see Create a Notification *(on page 175)* and Create a Work Order *(on page 205)*.

New Features and Enhancements in Release 2009 SP05

Table 1-8 New Features and Enhancements in Release 2009 SP05

Reference No.	Description
MWO-27792	**Create Service Notification and Service Order (iOS)** • Create a Service Notification right from the mWorkOrder application and notify the supervisor instantly. For information, Create a Service Notification *(on page 258)* • Create a Service Order request with partner details, document service completion with all details. • Track service history for equipment and functional location. For information, Create a Service Order *(on page 266)*
MWO-27855	**Convert Service Order forms to PDF and send PDFs through email (iOS)** Convert Service Order forms to PDF and send them through email to people concerned from the mWorkOrder application instantly. For information, see Add Attachments to Service Orders *(on page 275)*
MWO-27857	**Search and retrieve Equipment and Functional Locations using IDs familiar to technicians (iOS)**

Table 1-8 New Features and Enhancements in Release 2009 SP05 (continued)

Reference No.	Description
	• Create extensions in RACE to capture or map Asset IDs used in your organization. • Technicians search and retrieve Equipment and Functional Locations quickly using those IDs.

New Features and Enhancements in Release 2009 SP04

Table 1-9 New Features and Enhancements in Release 2009 SP04

Reference No.	Description
UIA-3026	**Ability to skip tasks during rounds execution with Reason Codes (iOS, Android)** • Users can skip the tasks and select the predefined reasons using the drop-down instead of adding comments manually for skipping the task. • If the reason is not listed in the drop-down, users can select Other and add relevant comments. For information, Execute the Rounds Assigned to You *(on page 160)*
UIA-3024	**Ensure that right Equipment or Functional Location is selected during Rounds Execution by scanning QR codes (iOS, Android)**

Table 1-9 New Features and Enhancements in Release 2009 SP04 (continued)

Reference No.	Description
	• Users can scan the QR code on the asset and ensure that the right Equipment or Functional Location is selected during rounds execution. When asset details in the QR Code and Operator Round task match, the round details are displayed. • If the scanned QR code of the asset (Functional Location or Equipment) does not match with the asset code that is available in the rounds, an error message is displayed. • If the QR code is damaged, the user can manually enter the code. • User can skip the scanning process by selecting the relevant reason. For information, Execute the Rounds Assigned to You *(on page 160)*
UIA-2939	**Ability to indicate the result using drop-down or segment control fields (iOS, Android)** Users can report the equipment or functional location result (e.g., passed or failed) in operator round check by selecting the values from the drop-down field or Segment Control field. For information, Execute the Rounds Assigned to You *(on page 160)*

New Features and Enhancements in Release 2009 SP03

Table 1-10 New Features and Enhancements in Release 2009 SP03

Reference No.	Description
UIA-911	**Enhanced Login and onboarding Experience (iOS, Android** Enhanced user login and onboarding process for improved access to the application.
MWO-23778	**App performance enhancements (iOS, Android)** Faster load times for high volumes of data on the user dashboards.
MWO-19423	**Configurable application session timeout (iOS, Android)** IT Admin can define the application time-out session in the resource bundle. They can set up the application to never timeout as well so that you can continue to be logged in throughout your shift hours. For information, Log in to the mWorkOrder Application *(on page 92)*
UIA-1679	**User specific data synchronization (iOS, Android)** Users can select data they wish to sync to offline to decrease data sync time. For information, Download Data for Offline Use *(on page 126)*
UIA-2617	**Handle offline Initial sync when there are network fluctuations (iOS, Android)**

Table 1-10 New Features and Enhancements in Release 2009 SP03 (continued)

Reference No.	Description
	If there are network related interruptions while synchronizing data for offline use, the mWorkOrder application pauses and resumes the data download process. This ability enhances the data download experience.
MWO-25111	**Avoid data loss due to any unavoidable circumstances (iOS, Android)** mWorkOrder autosaves the data continuously and ensures that you do not lose the data that you are working on in case of abrupt application closures due to network, system idle time out or any other issue. Moreover, the application resumes from the same screen where it last stopped.
UIA-1925	**Connectivity and data sync options are now provided in the Homepage to improve usability (iOS, Android)** These productivity enhancements help users to do the following: • **Offline / Online switch** - Switch between Offline and Online modes. • **Sync/ Refresh** - Sync option displays synchronization status. Refresh option appears when synchronization is complete. Users can tap the Refresh icon to restart the synchronization process • **Outbox** - Shows you the offline outbox. • **Bandwidth availability and Usage** - Homepage displays the Bandwidth availability / usage so that users are aware of low network connectivity.

Table 1-10 New Features and Enhancements in Release 2009 SP03 (continued)

Reference No.	Description
	For information, How to use mWorkOrder in Offline mode *(on page 126)*
UIA-2066	**Share mobile devices seamlessly across multiple users (iOS, Android)** • More than one user can use a device without the need for unregistering users or deleting user specific data. • When a user logs out after the shift, a new user can log into the same device and continue with the tasks. New users can also force logout the previous user if the user forgets to logout. • Users can continue with their tasks from where they left before logout as the application saves both their online and offline data. For information, Remove / Unregister User Profile from Device *(on page 94)*
UIA-2066	**Access offline outbox transactions from any module (iOS, Android)** Access offline outbox from any module and view pending and work on failed transactions quickly. **View offline outbox records in regular list** When you create a new record, for example, a new notification, it appears in both the offline outbox and in the regular notification list. This helps you work on the records without having to shift between screens.

Table 1-10 New Features and Enhancements in Release 2009 SP03 (continued)

Reference No.	Description
	For information, Process Transactions in Offline mode *(on page 130)*
UIA-2162	**Ability to view network bandwidth in the application homepage (iOS, Android)** Users can see network speed on the application homepage to find out good/bad connectivity areas in the plant. This helps the users avoid bad connectivity areas while doing transactions in online mode or when switching from offline to online mode. For information, Buttons and Icons in mWorkOrder *(on page 107)*
MWO-16948	**Improved performance (iOS, Android)** The application is refactored for improved performance to help users do transactions faster.
MWO-25337	**View asset hierarchy from Functional Location (UI5)** You can view the list of assets, floc and equipment under it, filter top level functional locations and get relevant hierarchy. For information, Create Operator Round for Asset Maintenance Task *(on page 143)*
RF-3996	**Support for signature and attachments in sub form (iOS)**

Table 1-10 New Features and Enhancements in Release 2009 SP03 (continued)

Reference No.	Description
	A user can now attach images or attachments, and signatures in a sub form. When the user converts the sub form into PDF, the attachments and signatures also appear in the PDF.
RF-3488	**Activate or Deactivate Forms (iOS, UI5)** Users can deactivate the dynamic forms that are not required and activate them when needed. This ensures that only the active forms are readily available when working.

New Features and Enhancements in Release 2009 SP02

Table 1-11 New Features and Enhancements in Release 2009 SP02

Reference No.	Description
UIA-2066	**Login to the Application with another User when shift changes (iOS)** More than one user can now share the device without deregistering the device after the shift ends. A new user can login to the mWorkOrder application when the previous logs off the application after the shift For information, Remove / Unregister User Profile from Device *(on page 94)*
UIA-2042	**Configurable Application Session Time-out (iOS)** Option to configure the application time-out session so that the user can use the application efficiently during the entire shift.

Table 1-11 New Features and Enhancements in Release 2009 SP02 (continued)

Reference No.	Description
	For information, Log in to the mWorkOrder Application *(on page 92)*
UIA-1925	**Connectivity and Data sync options in Application Home page (iOS)** The following connectivity and data sync options are now provided in the application Home page: • Offline/Online switch • Bandwidth • Full Sync/Download Sync • Outbox For information, How to use mWorkOrder in Offline mode *(on page 126)*
UIA-1679	**User Preferences for Data Synchronization (iOS)** Option to define user preferences filters so that users can configure preferences based on their location and minimize data synchronization time. For information, Download Data for Offline Use *(on page 126)*

New Features and Enhancements in Release 2009 SP01

Table 1-12 New Features and Enhancements in Release 2009 SP01

Reference No.	Description
MWO-24190	**SharePoint Integration (iOS, Android)**

Table 1-12 New Features and Enhancements in Release 2009 SP01 (continued)

Reference No.	Description
	mWorkOrder is now integrated with Document Management Systems like SharePoint. With this feature, you can, • read PDF Documents from SharePoint. • make SharePoint Documents available in offline mode. • save updated documents as new documents and attach them to user jobs. For information, Access Reference Documents *(on page 242)*
UIA-1481 / UIA-1475 / UIA-1474 / UIA-1457 / UIA-1455 / UIA-1441 / UIA-1440 / UIA-1398 / UIA-1439 / UIA-1398 / UIA-1020	**Operator Rounds – Mobile Application (iOS, Android)** Operator Rounds feature had the following productivity enhancements: These help you • See the status of the rounds. • Preview the open rounds and add to My Rounds. • Scan functional location with the QR Code and filter the rounds. • Validate the user input data in rounds. • Execute round tasks when in offline mode. • Capture photos or attachments and attach them to a task or round and add mark up (comments) too.

Table 1-12 New Features and Enhancements in Release 2009 SP01 (continued)

Reference No.	Description
	• Create a notification from the rounds screen. • Execute a task or round against the functional location. • Ereate a notification from the executing the operator rounds tasks. • Sort and filter the records. For information, Create a Notification from Rounds Screen *(on page 167)*

New Features and Enhancements in Release 2009

Table 1-13 New Features and Enhancements in Release 2009

Reference No.	Description
MWO-22974 / MWO-23268	**Operator rounds - Back office web planner (UI5) – Assigning Operators or WorkCentre with Operator Rounds in advance and overdue.** • You can assign rounds to an Operator or WorkCentre. • Overdue rounds can be rescheduled from the planner application. • View rounds available for the round plan. • Selection of required due date from date picker for overdue rounds. For information, Create Operator Round for Asset Maintenance Task *(on page 143)*

Table 1-13 New Features and Enhancements in Release 2009 (continued)

Reference No.	Description
MWO-22992	**Operator rounds - Back office web planner (UI5) – View Drafted Round Plan and Activate.** • Save Round Plan as a draft without activating the round plan. • View drafted Round plans in list with status marked “**Drafted**”. • Edit Drafted Round plans in Edit mode. • Update Drafted Round plan with required data and Activate it. For information, Create Operator Round for Asset Maintenance Task *(on page 143)*
MWO-23423 / MWO-23420 / MWO-23284	**Operator rounds - Back office web planner (UI5) – Configure Control Type and Attributes** As a back-office supervisor (Planner), you have an option to configure a new UI control type from RACE. Attributes like field length, decimals, dropdown values can allow the planner to select the required information for the required UI control type and create or update the task to configure a control type-based validation field. The planner can configure user defined fields with validations and view the field in task and to update. For information, Create Operator Round for Asset Maintenance Task *(on page 143)*

Table 1-13 New Features and Enhancements in Release 2009 (continued)

Reference No.	Description
MWO-23034 / MWO-22973 / MWO-22972	**Operator rounds - Back office web planner (UI5) – Prepare, Update, View existing Round Plan details.** As a planner, viewing, or updating of existing Round plans is now possible. You can verify newly created plans and make any changes if needed. For example, users can add an attachment or update additional tasks to the existing plan. For information, Update Existing Asset Performance Monitoring Tasks *(on page 153)*
MWO-23023 / MWO-22822 / MWO-22821 / MWO-22820	**Operator rounds - Back office web planner (UI5) – Update / Copy / Delete tasks in existing Operator Round plan.** In the Round Plans tab selecting an asset, planner can make the following changes. • **Update:** User can now update the existing tasks assigned against assets, without creating a new one by clicking on "**Edit**" on the top right corner, which would redirect the user to "**Define Round Plan"** to make the required changes • **Copy:** When creating/updating a round plan, the back-office supervisor can copy an existing task and use it on a new one. • **Delete:** Selecting a task from the Rounds plan (Draft or Active) a planner can now delete the task.

Table 1-13 New Features and Enhancements in Release 2009 (continued)

Reference No.	Description
	For information, Create Operator Round for Asset Maintenance Task *(on page 143)*
MWO-23278	**Operator rounds - Back office web planner (UI5) – Delete existing Rounds generated against Round plans.** • Rounds with Open and Overdue status can be deleted by the supervisor. The deleted round will be removed from planner and ECC tables. For information, View Operator Rounds and Update Due Dates *(on page 150)*
MWO-23288 / MWO- 23166 / MWO-23287 / MWO-23286 / MWO-23167 / MWO-17245 / MWO-23023 / MWO-23027 / MWO-23026 / MWO-23025 / MWO-23162	**Foundation Library Integration (iOS)** As a user, consistent user experience for all platforms in terms of secure log in, access to live data, and ease of understanding the error is a must, this integration focuses on them. Below are few of integrations:

Table 1-13 New Features and Enhancements in Release 2009 (continued)

Reference No.	Description
	• Log in user experience across all platforms like iOS, Android and Windows has a uniformity. • All stores (General, Equipment, Functional Location, Attachment and RACE) are handled same across all platforms. • Offline sync, Offline Stores data synchronization happens in parallel and is consistent across all platforms with a set of huge data volumes without any effect. • Integration of a new or existing foundation library helps user fetch services from the library so that the performance can be improved. Currently all the applications and stores (Product/Race) are available in mWorkOrder Product, with the help of the Foundation Library all the collections and stores are integrated to the same library in the product to Call/ Post services.
UIA-1480 / UIA-1478 / UIA-1456 / UIA-1454 / UIA-1401 / UIA-1400 / UIA-1399 / UIA-1010	**Operator Rounds – Mobile Application (iOS)**

Table 1-13 New Features and Enhancements in Release 2009 (continued)

Reference No.	Description
	• Open round tab added to the application where the operator can access unassigned rounds and assign it to them. • Functional location hierarchy has been implemented. • Completed tasks turn into green with a tick and checkbox. • Users can capture photos/attachments against task/round and mark up. • Users can scan QR code or Bar code on an Equipment. • Ability filter list with scanned Functional Location or Equipment. • Ability to sort the list of records by desired field(s) as configured in RACE • Supervisor has the ability to validate the operator's input before submission to check accuracy of data. • Operator has the ability to view and execute tasks and sync in offline mode. • Visibility about the status of the round changes accordingly based on the action taken by the operator. • Execution of tasks against functional location to complete the tasks that are directly related to functional location. For information, Assign and Execute Operator Rounds *(on page 155)*
MWO-23052 / MWO-23054 / MWO-23055 / MWO-23141 / MWO-23142	**Customization of Maintenance Workflow (Create and Update) (Android).**

Table 1-13 New Features and Enhancements in Release 2009 (continued)

Reference No.	Description
	The administrator of RACE (PSO or Customer) or a Maintenance technician will be able to configure and add fields through RACE. Below are few cases where configuration can be done: • Extensions & standard fields are both visible in the list and details view screen of the application. • Extensions or standard field position can be configured by updating the position on the UI Position field on RACE. • Using extensions, a field can be added which is not available in static. Using standard field configuration users can change static fields to extensions.
MWO-22692	**Attachment Enhancement (iOS)** Users will be able to view DMS documents in WO, NO, EQ and FL, these are attachments that are based on filters available in RACE. This enhancement enables offline transactions and refresh delta quickly in online mode. Users can update records immediately after creating, updating the new or existing data, switch offline anytime (sync is successful) and data must be in both online and offline mode.
MWO-23039	**Transaction Count (Offline) (iOS)**

Table 1-13 New Features and Enhancements in Release 2009 (continued)

Reference No.	Description
	You can now see the failed offline transactions in red along with the number of failed transactions. For information, Process Transactions in Offline mode *(on page 130)*
MWO-23416	**Application Performance Improvement (iOS)** Application sync reduced from 2-3 minutes to less than 1 minute.
MWO-23041 / MWO-23040	**View & Reprocess Failed Transactions (iOS)** • Users now have the option to tap on the failed record to make changes in the offline outbox, which would redirect the user to Edit mode, to change the incorrect value.
MWO-22816 / MWO-22742 / MWO-22743	**Templatization For Fields (iOS)** There are multiple field types like Input Drop-down, drop-down, Input, Multi drop-down, Text field etc. In the application consistency for the application has been improved.

New Features and Enhancements in Release 2006

Table 1-14 New Features and Enhancements in Release 2006

Reference No.	Description
MWO-12280	**Monitor asset performance using Operator Rounds (UI5)** As a back-office supervisor (Planner), schedule recurring rounds to monitor the asset performance and detect possible technical failures. You can assign the rounds to the plant personnel (operator) depending on their availability. This helps you avoid probable production loss or equipment breakdown. For example, you could plan a round to check the motor bearings friction twice in a week or check the CO2 cylinder pressure daily. An Operator captures the round observations/results and post them from the mobile application. For information, Monitor asset performance using Operator Rounds (UI5) *(on page 138)*
MWO-19730	**Raise Notification from Forms (iOS)** When working on forms (standalone) like inspection or data collection tasks, you can raise a Notification from the form without navigating to the Notifications module in case of inconsistency like reading exceeds allowable tolerances. Form is attached to the Notification for future reference. For information, Raise Notification from forms (iOS) *(on page 283)*

Table 1-14 New Features and Enhancements in Release 2006 (continued)

Reference No.	Description
MWO-15317	**View or post Work Order forms from Dashboard (iOS)** From now, you (technician) can modify or post forms for your Work Orders from the dashboard without the need to navigate to the Forms tab on the details screen. **Note:** An administrator can configure the fields on the tabs in the technician view using RACE™. For information, View or post Work Order forms from Dashboard (iOS) *(on page 105)*
MWO-15525	**Customize Risk Matrix to assess risk and prioritize asset Notifications (Android)** Customize the Risk Matrix to assess the risk of the incident with respect to safety, environment, asset, people and prioritize the Notifications. For example, you can configure the Consequence and Likelihood values in the Risk Matrix using RACE to identify the overall risk level.
MWO-19228	**Create Work Order with forms from GIS Map (iOS)**

Table 1-14 New Features and Enhancements in Release 2006 (continued)

Reference No.	Description
	When working on assets in the field, you can create a Work Order for an equipment from the GIS Map in case of damage or corrosion. Forms configured for the equipment are added to the Work Order on the Forms tab and the form fields are populated depending on the equipment attributes from the map. Form information, Create Work Order with forms from GIS Map (iOS) *(on page 253)*
MWO-19093	**Navigate to transaction details from success screen (iOS, Android)** After you create a business or technical object like Work Order, Equipment, and the Measuring Point, you can navigate to the details screen from the success screen to review or modify the data. This eliminates manual search from the list screen. To use this feature, enable the following Scoping IDs: • DNOL: To view the newly created notification in the list screen. • DWOL: To view the newly created work order in the list screen. • DMPL: To view the newly created measuring point in the list screen.
MWO-16108	**Simplified view of sort and filter results (iOS, Android, UI5)** Now, the application shows the count of records in the list after you apply the sort *(on page 120)* or filter *(on page 118)* function. For example, if the selected filters show 1000

Table 1-14 New Features and Enhancements in Release 2006 (continued)

Reference No.	Description
	records of the total 5000, the app now shows the count as 1000/5000. You can further filter the records using the search bar, then the count is shown as x/1000. X represents the number of records matching the search string/value. App retains your sort criteria until you continue your work in the same module. For example, if you sort records in the Work Orders list and navigate to the Dashboard, the sort is cleared.
MWO-18964	**Modify and post your transactions multiple times in Offline (iOS)** Now, modify and post your transactions multiple times when the device is not connected to the network. For example, when you post a Work Order in the offline mode, you would want to modify an Operation details. Navigate to the record from the list screen, update, and post. For information, Modify and post your transactions multiple times in Offline (iOS) *(on page 130)*
MWO-15925	**Value with description for drop-down fields (iOS)** Now, the application shows a description of the value you select in the drop-down field. For example, drop-down values for the Equipment Condition field are configured as G – Good, F – Failure and you select G, app

Table 1-14 New Features and Enhancements in Release 2006 (continued)

Reference No.	Description
	shows the description (Good) for the field. This helps the user to understand the value selected for the field without the need to tap on it.
MWO-21278	**Android**—You can now select the Processing Indicator check box for multiple objects of the Work Order with a single tap using the Select All option.
MWO-21279/ MWO-21281	**Track Offline postings status from dashboard (Android)** When you post transactions in Offline mode, the cloud icon on dashboard shows the: • Count of records that are posted in Offline • Count of records that are failed to process • Sync status with a green check mark if successful. Else, a red cross mark is displayed
MWO-20930	**Customize Offline status bar with color of your choice (iOS, Android)** Notify users of the network connectivity with the customized color of the status bar on the top of the screen. You can configure the color in the resource bundle.
MWO-19540	**Xcode and iOS upgrade (iOS)** mWorkOrder application is now upgraded to the Xcode 11.4.1 and supports iOS 13.3.1 and 13.4.

Table 1-14 New Features and Enhancements in Release 2006 (continued)

Reference No.	Description
MWO-20152	**UI5—**When you post time sheets, the Duration field is populated depending on the Start time and End time specified.
MWO-13441	**iOS, Android—**Now, the app populates the Activity Type value on the Operation Confirmation screen.
MWO-21137	**iOS—**Now, you can add a PDF or text document from your device memory to the mobile application. To use this feature, enable the Scoping ID: **ATFILE**.
MWO-20618	**iOS, Android—**App now shows the images added in the form field (IMG) when the device is not connected to the network.

New Features and Enhancements in Release 2003

Table 1-15 New Features and Enhancements in Release 2003

Reference No.	Description
MWO-14506	**Add forms to Work Order on the go (iOS, Android, UI5)** Now, you can add additional forms to the Work Order like checklist, inspection entry or review forms depending on the Work Order status. For example, when working on a Work Order if the form is not available to capture the required data, you can modify the Work Order and add the relevant forms.

Table 1-15 New Features and Enhancements in Release 2003 (continued)

Reference No.	Description
	Note: From the UI5 application, you can only view or post the forms. For information, Capture details related to Work Order tasks in embedded forms *(on page 239)*
MWO-18198	**Save Work Order forms as PDF (iOS, Android)** After you Submit/Accept the form, you can now capture the form details in PDF format and attach it to the Work Order for future reference. Such forms are added to the Attachments tab from where you can either download or review them any time.
MWO-15938	**Eliminate manual search to filter records (iOS, Android)** Now, you need not manually enter the search criteria each time to filter the records. Once you define the search criteria, you can Save it as a favorite and search records quickly. For example, if you work for multiple Work Centers, you can define search criteria for each Work Center and save it as favorite to filter your jobs specific to that Plant/Location.
MWO-15388	**Confirm Work Order Operation using measuring point PRTs (iOS, Android, UI5)**

Table 1-15 New Features and Enhancements in Release 2003 (continued)

Reference No.	Description
	You can now evaluate the condition of the equipment/asset using measuring point production resource tools (PRTs) associated with an Operation. The measuring points are fetched to the mobile application only if the Work Order Operation is created using task list. While confirming an Operation, you must post the measuring document with readings for these measuring points. For example, when doing maintenance for a freezing equipment, you need to capture the readings from components/instruments like regulator (measuring point). You can collect all such data and post them to measurement documents when confirming an Operation to ensure the problem is resolved.
MWO-15317	**View role-based Dashboard (iOS)** Now, you can choose to login to the application as a Supervisor or Technician. Based on the role assigned to you, only the Work Orders and Operations that you (technician) are responsible for are shown on the dashboard. If you are a supervisor, you can track the status of Work Orders and Notifications using the analytics dashboard. For information, Home Screen of mWorkOrder *(on page 103)*
MWO-12829	**Assign jobs to crew/technician (UI5)**

Table 1-15 New Features and Enhancements in Release 2003 (continued)

Reference No.	Description
	As a supervisor, you can now assign Work Orders and Work Order Operations to technicians based on their availability and Work Center from the back office using the **Schedule Work Orders** module.
MWO-15510	**Hide irrelevant fields using UI validations** Configure validations to hide irrelevant fields based on the value selected in the Source field. For example, you can hide Functional Location for Notifications of Type M1. This feature is applicable for static, standard and extension fields configured using RACE.
MWO-18419	**Integration with latest LatLonGO SDK (Android)** App is now integrated with latest LatLonGO SDK to provide increased stability and performance. Also, improved visibility of GIS locations where maintenance activity is required. GIS Map is loaded based on the zone configured for the user in ECC custom table. For example, if the user is assigned to work in the Northern zone of the facility, the GIS map shows only the equipments or work locations for that zone.
MWO-16941	**Library upgrade (UI5)** Libraries for UI5 application are upgraded to version 1.71.
MWO-12688	**Android X and 10 Compatible**

Table 1-15 New Features and Enhancements in Release 2003 (continued)

Reference No.	Description
	Application is now compatible with latest versions of Android X and 10.
MWO-18173	**Xcode 11.3 Compatible** App is now compatible with Xcode 11.3 libraries.
MWO-18172	**SMP SDK upgrade (iOS, Android, Windows, UI5)** Application is now compatible with SMP SDK SP16 library.
MWO-17898	**Android, UI5**—Activity Type (LSTAR) field is now displayed on Work Order Operation Confirmation screen.
MWO-18370	**UI5**—You can now configure ATT(Attachment) type fields using RACE for Standalone form and Dynamic Forms.
MWO-18542	**iOS—**App now shows the count of all records (Work Orders / Notifications) on Configurable dashboard tab though you do not select the value in respective field.
MWO-18964	**Android—**You can now modify Header / Line item / Custom tab /Forms data multiple times when the device is not connected to the network.
MWO-19215	**New Scan icon (iOS)** Scan  icon is revamped across the application.

Table 1-15 New Features and Enhancements in Release 2003 (continued)

Reference No.	Description
MWO-19337	**No Security password pop-up with SAML (iOS, Windows)** App does not prompt you for Security Password when you login using SAML authentication and create or modify records.

New Features and Enhancements in Release 7.4.0

Table 1-16 New Features and Enhancements in Release 7.4.0

Reference No.	Description
MWO-7975	**iOS, Android, Windows—**You can navigate across the application when the Work Order operation confirmation timer is ON.
MWO-14715	**Windows—**You can now modify and repost the Form that is failed to process when the device is connected to the network.
MWO-15123	**iOS, Android—**App now shows the timesheets list by week and date. Number of hours logged by the team for the week and per day is also displayed.
MWO-15603 / MWO-16262 / MWO-16264	**iOS, UI5, Windows—**You can now filter drop-down values in a pop-up search window using wildcard search. For example, if you want to create a Work Order for an Equipment and you remember the equipment name partially, you can do the wildcard search in Equipment dropdown field that is configured as Search Text Field (STF) in RACE.

Table 1-16 New Features and Enhancements in Release 7.4.0 (continued)

Reference No.	Description
MWO-16232	**Windows—**Now, the emergency Work Order timer shows the updated time even if the app is crashed or forcibly closed (terminated from background).
MWO-16242	**UI5**—You can now configure validations to hide/unhide fields based on the value entered by the user in other fields, using RACE. For example, you can configure the set of fields that must be shown for each Notification Type.
MWO-16254	**ABAP—**Now, you can do Work Order confirmation from Overall Confirm screen only if all the sections of the Work Order like Operations, Components, Items, Causes are successfully posted. If any of these sections have invalid data, Overall Confirmation of the Work Order is not processed further until valid data is provided.
MWO-16509	**Android—**You can now configure Long Text and Long text View field types in Forms using RACE.
MWO-16942	**Stability and performance improvements** Bug fixes and improvements are applied thereby increasing stability and performance across the application to get things done faster.
MWO-16979	App now shows the Key (value) and the associated Description for all the fields across the application.
MWO-17020	App is now fully compatible with HTTPs connection for communication with gateway.

Table 1-16 New Features and Enhancements in Release 7.4.0 (continued)

Reference No.	Description
MWO-17167	Sample data is updated and improved for all the modules and functionalities available to date.
MWO-17442	**iOS, Android, Windows—**You can now configure the fields that must be defaulted when you copy an existing Work Order or Notification. Fields that must be copied should be configured in RACE Defaults.
MWO-17948	**iOS, Android—**You can now navigate to the Time Sheets create screen from the Operations details screen after the Operation is partially or fully confirmed.
MWO-18143	**UI5—**You can now post Goods Issue with partial quantity for maintenance or repair work of a Work Order.

New Features and Enhancements in Release 7.3.1

Table 1-17 New Features and Enhancements in Release 7.3.1

Reference No.	Description
MWO-16260	**iOS—Create Work Order with multiple forms** You can now create a Work Order with multiple forms like checklist, inspection entry forms based on the Order Type, Priority and Planning Plant combination specified.
MWO-16232	**iOS—Integration with latest LatLonGO SDK**

Table 1-17 New Features and Enhancements in Release 7.3.1 (continued)

Reference No.	Description
	App is now integrated with latest LatLonGO SDK to provide increased stability and performance. Also, improved visibility of GIS locations where maintenance activity is required. GIS Map is loaded based on the zone configured for the user in ECC custom table. For example, if the user is assigned to work in the Northern zone of the facility, the GIS map shows only the equipments or work locations for that zone.
MWO-17437	**iOS—Create Emergency Work Order from LatLonGo GIS Maps** You can now create an emergency Work Order from the GIS Map by tapping on the equipment (Object).

New Features and Enhancements in Release 7.3.0

Table 1-18 New Features and Enhancements in Release 7.3.0

Reference No.	Description
MWO-11114	Android - **Log History enhancements**

Table 1-18 New Features and Enhancements in Release 7.3.0 (continued)

Reference No.	Description
	1. App shows the Object number, Description and action performed on the record along with date and time. 2. Success and failure history of the posting. 3. Subsequent sync history is displayed with end date and time for all the Databases. 4. By default, app shows the history for the past week. 5. You can configure the duration for which the log history must be displayed using RACE Scoping module.
MWO-15465	**Windows** - **Sync data using customized filters** You can now set customized filters to sync/ view only the data that you want based on your roles and authorizations. This can be configured using RACE.
MWO-16325 / MWO-16357 / MWO-16611	**Stability and performance improvements** Bug fixes and improvements are applied thereby increasing stability and performance across the application to get things done faster.

New Features and Enhancements in Release 7.2.1

Table 1-19 New Features and Enhancements in Release 7.2.1

Reference No.	Description
MWO-10257	**Windows—**Now, Offline data sync occurs parallelly for multiple modules and sync completes much faster. You can view Offline sync progress for individual modules using Log History.
MWO-11100	**Filter drop-down values using Wildcard search** Now, you can configure drop-down fields as Search Text Fields which allow you to use Wildcard feature to filter field values. This a RACE configurable feature.
MWO-11107	**UI5—**You can now set the sequence of tabs that appear on the screen, using RACE for all the modules.
MWO-12271	**ABAP—**Work Order list and details such as materials, task lists and BOM details are now synced at approximately 50% lesser time than earlier.
MWO-14193	**Delta Sync enhancements** Following changes are implemented for data synchronization when you use the app in On-line and Offline modes:

Table 1-19 New Features and Enhancements in Release 7.2.1 (continued)

Reference No.	Description
	• Now, subsequent refresh takes much less time with updated/created records. • Sync is initiated when RACE filters or User Preferences are updated. • Manual/Auto refresh initiates Delta Sync. • After initial sync is successful, if you lose connectivity, you can do offline transactions and refresh delta quickly when you connect to the network. • You can view updated records immediately after creating/updating the new/existing records.
MWO-15464	**ABAP—Data staging & filtering enhancements** You can now view Notifications, Functional Locations and Equipments assigned to Work Order using the Work Order filter. For example, if you are assigned to Work Orders related to *Plant 001*, the offline sync retrieves only the Notifications, Functional Locations and Equipments associated with these Work Orders.
MWO-15465	**Sync data using customized filters** You can now set customized filters to sync/ view only the data that you want based on your roles and authorizations. This can be configured using RACE.

New Features and Enhancements in Release 7.2.0

Table 1-20 New Features and Enhancements in Release 7.2.0

Reference No.	Description
MWO-8999	**Objects in Work Order** You can now assign multiple technical objects such as Equipment, Functional Location or Notification to a single Work Order. For example, if maintenance is to be performed on similar equipment, functional location instead of creating multiple Work Orders, you can create a single WO and assign multiple Notifications to it using the **Object** tab. You can configure Object tab using RACE.
MWO-12180	**Revision History in Embedded Forms** You can now make multiple revisions to an embedded form. Each time you modify the form a revision is created. You can Submit a form multiple times when working on a Work Order/Notification.
MWO-12797	**Code Group data using Catalog profile** The **Code Group** drop-down values now appear based on object such as Equipment or Functional Location linked to the Catalog profile. This is a RACE configurable feature. For example, if the **Notification Object Profile** parameter is enabled in RACE, the code group values are displayed based on Equipment and Functional Location. **Note**: Applicable for Notifications and Work Order modules.

Table 1-20 New Features and Enhancements in Release 7.2.0 (continued)

Reference No.	Description
MWO-12841	**Long Text templates in Notifications module** You can now view predefined long text templates, and chose to fill long text while creating/updating Notifications
MWO-13567	Login screen of mWorkOrder is enhanced with new user experience. You can now: • Reset your username/password. • Check the network speed using **More** options icon. • View build, framework and release version by tapping on the mWorkOrder logo on Login Screen.
MWO-14022	**Populating and making dependent fields non-editable** When you select a value in a field, certain fields are defaulted with the dependent value and cannot be edited. Also, few fields are greyed based on the value in the primary field.
MWO-14197	**Prioritize Notifications by customizing Risk Matrix** You can now customize the Risk Matrix to assess the risk of the incident with respect to safety, environment, asset, people and prioritize the Notifications. For example, you can configure the Consequence and Likelihood values in the Risk Matrix using RACE. The overall risk level is calculated based on these values.

Table 1-20 New Features and Enhancements in Release 7.2.0 (continued)

Reference No.	Description
MWO-15141	**Windows—**mWorkOrder is now compatible with Universal Windows Platform (UWP) framework.

New Features and Enhancements in Release 7.1.0

Table 1-21 New Features and Enhancements in Release 7.1.0

Reference No.	Description
MWO-8610	**Optical Character Recognition (OCR) (iOS, Android)** mWorkOrder application now supports OCR SDK. The OCR feature enables the user to quickly and accurately capture the equipment information and maintenance plans without the need of manual data entry. This functionality allows you to: • Scan with camera for the OCR field • Scan and update the character/numeric data in the selected field **Note:** This feature is available in offline and online modes across all the modules of the application.
MWO-11469	**Configuring multiple Embedded forms** Users can now configure multiple Embedded Forms in the Work Order and Notification modules. Users can also:

Table 1-21 New Features and Enhancements in Release 7.1.0 (continued)

Reference No.	Description
	• Add custom fields • Draft the form • Submit the form • Edit and accept forms multiple times before the form is Accepted. • Map the document number (Notification) and form in custom table (Document No) in ECC **Note:** This feature is available in offline and online modes.
MWO-12181	**Edit and Save form multiple times before the form is Accepted (iOS, Android, UI5)** With this release, the users can modify and save the forms multiple times. Based on the role, the user can have either **Save Draft** or **Save Form** option. **Note:** This feature is available in offline and online modes.
MWO-8606	**Risk Assessment Matrix in Notifications** The new Risk Assessment feature allows the users to analyze the impact of the incident associated with the Notification on various categories. This helps to prioritize the Notifications.

Table 1-21 New Features and Enhancements in Release 7.1.0 (continued)

Reference No.	Description
MWO-10368	**In-App PDF markup (iOS, Android, Windows)** With this release, users can annotate the PDF attachments and post the annotated PDFs. **Note:** This feature is available in offline and online modes across all the modules of the application.
MWO-12266	**In-App help** Starting this release, users can access the help content from the App. The user can tap on the Floating help  icon on the screen. The help topic associated with the module/feature is displayed in a new screen.
MWO-11209	**Consistent Localization Keys (Windows)** Starting this release, the localization keys have been made consistent also for the Windows platform. Now, the localization is based on the screen name and the module name.
MWO-13323	**Configuring Custom tab (Windows)** Starting this release, users can add custom tabs to the Work Order. The custom tab can be configured with multiple line items, sections and various font styles and colors can be applied to the fields. This feature can be configured using RACE application.

Table 1-21 New Features and Enhancements in Release 7.1.0 (continued)

Reference No.	Description
MWO-12182	**Collapsible sections in forms (Android, UI5)** Starting this release, users can use the collapse feature in the forms (Embedded and Standalone) to collapse the sections. This feature can be configured using the RACE application.
MWO-8552	**Configurable Font Size (Windows)** Starting this release, the Windows users of mWorkOrder can also configure the font size of the text in the application. This allows the user to select a pre-defined font size for text (within user profile) that improves the readability.
MWO-13846	**Online/Offline Toggle Button (Windows)** Starting this release, the **Online/Offline** toggle button is also available for mWorkOrder Windows users. Added on the **Home** screen, the toggle button allows users to switch from Online to Offline mode and vice versa. This feature can be configured through Scoping module of the RACE application.
MWO-13848	**Log History Enhancement (Windows)** The **Log History** has been enhanced for mWorkOrder Windows platform users. From now, the **Log History** displays the Object number, description, action, and date, and time details of the postings.
MWO-14103	**Reprocessing of Failed Transactions (Windows)**

Table 1-21 New Features and Enhancements in Release 7.1.0 (continued)

Reference No.	Description
	This enhancement allows users to view and reprocess the failed transactions from **Offline Outbox** for **Work Orders**, **Notifications**, **Equipment**, and **Functional Locations** modules.

New Features and Enhancements in Release 7.0.1

Table 1-22 New Features and Enhancements in Release 7.0.1

Reference No.	Description
MWO-11208	**Configurable Time Fields—12/24H Format (iOS, Android, UI5)** Starting this release, users can configure the time format of the mWorkOrder application in 12- or 24-hour format. Users can configure the time formats through **User > Defaults > Time Format** in SAP system. This feature is available in both Online and Offline modes.
MWO-10463	**Classification Tab in Functional Location Module (iOS, Android, UI5)** This release introduces a **Classification** tab in the **Functional Location** module. Users can now add **Classes** and **Characteristics** under the **Classification** tab. This feature works in both **Online** and **Offline** modes. This feature is configurable through Scoping, Extensions, and Localization modules in RACE.
MWO-12017 / MWO-12018 / MWO-12019	**Plant Filter for Equipment, Functional Location, Material/Assembly Fields (iOS, Android, UI5)**

Table 1-22 New Features and Enhancements in Release 7.0.1 (continued)

Reference No.	Description
	Starting this release, while creating Notifications and Work Orders, users will get the list of all the Equipment, Functional Location, and Material/Assembly based on the Maintenance Plant selected.
MWO-12015 / MWO-12016	**Top Skip in Offline (iOS, Android)** For faster data loading in the list, top skip functionality has been added for Offline mode. This functionality is already available in Online mode. Users can now apply skip size in RACE separately for Offline.
MWO-11985	**Wildcard Search in Offline (iOS, Android)** mWorkOrder application now offers wildcard search feature, which allows you to search for any records in Offline. You can search for records irrespective of case sensitivity. This feature works across all the search screens available throughout the application.
MWO-8998	**Add or Remove Equipment from Functional Location Module (iOS, Android, UI5)** Starting this release, users can add or remove **Equipment** from the **Functional Location** module. An **Install-EQ** button has been added under the **Hierarchy** tab in the **Functional Location** module to facilitate the addition of Equipment. Users can also remove the Equipment/Sub-equipment from the **Functional Location** module by tapping the **Dis-**

Table 1-22 New Features and Enhancements in Release 7.0.1 (continued)

Reference No.	Description
	mantle EQ button. This feature is available in both **Online** and **Offline** modes. The **Install-EQ** and the **Dismantle EQ** buttons are configurable through RACE Scoping module.
MWO-10131	**User Status for WO Operations (iOS, Android, UI5)** This newly added feature allows users to add User Status for the Work Order Operations. Users can select single sequential status and multiple non-sequential statuses for the operation created. This feature works in both Online and Offline modes.
MWO-9359	**Separate Keys for Creating Work Order (WO) and Notification (NO) across Different Modules in RACE (iOS, Android, UI5)** This release introduces separate keys in RACE to activate or deactivate the Create WO and Create NO functionalities across different modules of mWorkOrder application.
MWO-10272	**Staging Table Capability (ABAP)** For fast and smooth retrieval of backend data, staging table concept has been added in this release. Staging table is a temporary table that is used to stage the data for temporary purpose in ECC before loading it to target from the source table in ECC.
MWO-11780	**Single Record Posting (iOS, Android)**

Table 1-22 New Features and Enhancements in Release 7.0.1 (continued)

Reference No.	Description
	Starting this release, users can see the newly created or updated records (in Online) immediately on their device application even when the data retrieval is set to **Offline** in RACE. Earlier, when the data retrieval was set to Offline, the newly created or updated data was available only when the offline refresh was done.
MWO-12144	**Editable Measurement Position (iOS)** Starting this release, users can edit the value in **Measurement Position** field while editing the Measuring Point.
MWO-11443	**Forms Dashboard (Android)** This release introduces a new module called **Forms Dashboard**. This module consists all the standalone forms in one place. Users can post form entries both in Online and Offline modes through this module.
MWO-11209	**Consistent Localization Keys across Platforms (iOS, Android, UI5)** Starting this release, localization keys have been made consistent across all the platforms. Now, localization is based on the screen name and the module name.
MWO-11265	**Online/Offline Toggle Button (Android)**

Table 1-22 New Features and Enhancements in Release 7.0.1 (continued)

Reference No.	Description
	Starting this release, **Online/Offline** toggle button is added on the **Home** screen. The toggle button allows users to switch the m-WorkOrder application from Online mode to Offline mode and vice versa. This feature can be configured through RACE Scoping module.

New Features and Enhancements in Release 7.0.0

Table 1-23 New Features and Enhancements in Release 7.0.0

Reference No.	Description
MWO-8426	**Extended RACE Configurable—Dashboard (UI5)** This release extends the RACE configurability of the dashboard for mWorkOrder application on **UI5** platform to provide better user experience.
MWO-8332	**Hierarchy-Based Drop-down and Selection—Equipment and Functional Location** Starting this release, a hierarchical structure view for the **Equipment** and **Functional Location** is available to the users. This feature is available throughout the application wherever **Equipment** and **Functional Location** fields are available. Users can now select these two fields from this hierarchy view.
MWO-8552	**Configurable Font Size**

Table 1-23 New Features and Enhancements in Release 7.0.0 (continued)

Reference No.	Description
	Starting this release, the users will be able to configure the font size of text on mWorkO-rder application. The users can select a pre-defined font size for text (within user profile) that improves the readability.
MWO-8333	**Graphical View—Measurement Readings** For better readability and calculations, this release introduces graphical representa-tion of **Measurement Readings** in **Measuring Points** module. This enhancement provides a quick insight on the recorded measurement data and users can take fast decision to do maintenance.
MWO-8551	**iOS 12 Compatibility** mWorkOrder application is verified and is now compatible with iOS 12.
MWO-8020	**Video Size Limitation** Starting this release, users can configure the limit for video recording (length and size) as attachment through RACE Performance set-tings.
MWO-8254	**Improved Offline Data Synchronization** The mWorkOrder application is enhanced for more robust, reliable, and faster offline data synchronization and usages. The application now opens and manages multiple databas-es in parallel to achieve higher performance and to reduce the time of offline data syn-chronization.

Table 1-23 New Features and Enhancements in Release 7.0.0 (continued)

Reference No.	Description
MWO-8245	**Reprocessing of Failed Transactions** This enhancement allows users to view and reprocess the failed transactions from **Offline Outbox** for **Work Orders**, **Notifications**, **Equipment**, and **Functional Locations** modules.
MWO-8027	**UI Changes—Header Offline Outbox** The mWorkOrder application is enhanced to display the **Work Order Number** and **Action** performed in the **Header** of the **Offline Outbox**. This enhancement allows users to identify the Work Order for which the action has been performed and submitted.
MWO-8697	**PDF Markup** This newly added feature allows users to annotate the PDF attachments. Users can add their comments, signature, and highlight text in a PDF document.
MWO-5620	**Push Notifications** The newly added push notification feature notifies the users with all the actions performed in the application related to **Work Order** and **Notification** modules. This feature can be configured through RACE Push Notifications section.
MWO-7274	**RACE Configurability for Screen Sequence**

Table 1-23 New Features and Enhancements in Release 7.0.0 (continued)

Reference No.	Description
	From this release, the mWorkOrder application will allow users to configure the screen sequence for each of the modules through RACE Scoping. This feature is applicable to all the screens of mWorkOrder application except the Header and General tabs.
MWO-7945	**Reference Documentation** Starting this release, users can access the reference documents from each of the mWorkOrder application screens. A new document icon is added (RACE configurable) at the top-right corner of the application screen. Tapping this icon will open a pop-up screen, where users can search and download the documents from anywhere within the application. Reference Documents include help documents, work instructions, references, design documents, and so on.
MWO-9719	**GIS Support–LatLonGO** The mWorkOrder application is enhanced to support the latest **LatLonGO** GIS SDK that provides a standalone GIS App with improved UX and integration flexibility for mWorkOrder.
MWO-8241	**GIS Support–Lemur** The mWorkOrder application is enhanced to support the latest **Lemur** GIS SDK that provides a standalone GIS App with improved UX and integration flexibility for mWorkOrder.

Table 1-23 New Features and Enhancements in Release 7.0.0 (continued)

Reference No.	Description
MWO-8852	**Task List-Based Operations, Components, and PRT Documents** mWorkOrder application is now enhanced to include the following functionalities while creating Work Orders from Notifications: • View Task Lists based on technical objects (Equipment, Functional Location, Assembly). • Upon selection of Task Lists, operations and components will be added automatically. • View Production Resource Tool (PRT) documents at each operation level.
MWO-8257	**Overall Confirmation—Work Orders** The newly added **Overall Completion Confirmation** feature allows users to: • Confirm operations for Work Order with multiple activity types • View confirmed operations • Post goods • View posted materials • Post Items, Causes, Tasks, and Activities • Add measurement documents during confirmation • Goods issue reversal • Customer and Vendor Warranty information
MWO-8803	**Wearable Integration—Android**

Table 1-23 New Features and Enhancements in Release 7.0.0 (continued)

Reference No.	Description
	mWorkOrder application is now enhanced to support the wearable devices. Starting this release, users can create, update, and release Work Orders by using the wearable device. Users can also create Notifications through wearable device. This feature is currently available only on Android platform. **Note:** Minimal integration is done to enable sales and demos. Complete solution will be implemented later based on the demand.
MWO-8985	**Online/Offline Toggle Button** Starting this release, **Online/Offline** toggle button is added on the **Home** screen. The toggle button allows users to switch the mWorkOrder application from Online mode to Offline mode and vice versa. This feature can be configured through RACE Scoping.
MWO-9163	**Log History Enhancement** The Log History has been enhanced to show action, description, date, and time details. The duration can be configured through RACE Scoping.

Related information

New Features and Enhancements in Release 2502 *(on page 12)*

1.2. Compatible Devices and Applications

To run mWorkOrder, you need the following compatible devices and applications.

Table 1-24 System Requirements for mWorkOrder

System	Minimum Requirement
Compatible OS Platform and Version(s)	• iOS 13 and above, iPadOS 13 and above • Android 9 and above • Windows 10 • UI5 1.71 and above
Compatible Form Factors	• iOS—Tablets and Phones • Android—Tablets and Phones • Windows—Tablets and Desktops • UI5—Desktops
Compatible Devices	• iPad Air (2 and above), iPad (5th gen and above), and iPad Mini (4 and above) • All iPad Pro models • iPhone 6S and above and iPhone SE • Samsung S6 and above, Samsung Galaxy tab, Nexus Tablet9, Moto G2 and above, Moto X
Compatible Browsers	• Chrome 53 and above • Internet Explorer (IE) 10 and above
Device Storage and Memory Requirements	All devices must have a minimum of 32GB storage and 4GB RAM for online data processing. 32GB storage and 4GB RAM are recommended to support higher volume data including documents and offline store capabilities. Performance varies based on the amount of data and installed RAM.

1.3. Explore mWorkOrder using Demo Data

You can explore all the modules/screens of mWorkOrder with predefined data to understand how the application caters to your workflows.

> **Note:**
> Install and open the application. Tap the **Try App Demo! > Let's Go!** to fill in your details and explore the application.

To explore the application with predefined data:

1. In the **Configurations** screen, tap **Try App Demo**.

   You can explore the app for around 30 seconds. After 30 seconds, the **Tell us about Yourself** form appears.
2. Enter the required details such as **First Name**, **Last Name**, **Designation**, **Company**, **Email**, and **Mobile**.
3. Tap **Continue**.
   A verification code is sent to the email address.
4. Enter the verification code and tap **That's Me!**.
   You can continue to explore the application with predefined data.

1.4. Access Integrated Help Documentation

To access help documentation in the application, tap the **Floating help** icon and click **Done** on the top right corner of the screen to go back to the application.

Help feature is available for:

- The application Home screen (**My Home**)
- Work Order Module
- Notifications Module

Using the In-App help feature, you can:

- View the help content associated with the screen.
- Access Related concepts or Related tasks.
- Search for the help topic using the search bar.
- Navigate to the help topics/sub-topics using the topics on the left and use the breadcrumbs on the top.

1.5. Frequently Asked Questions

Check the frequently asked questions by users and the answers (solutions)

1. **I am searching by a sort field in work order search. Why can't I find my functional location or equipment?**

   There are two other reasons why you cannot find records:

   - Innovapptive mWorkOrder application is a mirror of your back-end system (for example, SAP). If the necessary data is not maintained in your back-end system, the app will not find the required data.
   - Use of ***** to search for specific objects gives better results. For example, when you search for a Functional Location,
     - XXX - Searches for Functional Locations that start with
     - *XXX" - Searches for Functional Locations that contain
     - XXX* - Searches for Functional Locations that end with
2. **I copied a notification to create a follow up notification, but it does not copy the notification type, priority, and description. Is this normal?**

   Yes, the app is designed not to copy these fields. You must enter the notification type, priority, and description for a notification that is copied.

3. **My app crashed unexpectedly. Did I lose all my data? What do I do now?**

   Just like any other software like Microsoft Excel and PowerPoint, we too sometimes can experience app crashes. This happens when there is intermittent loss in internet connectivity, or when the app cannot process something unexpectedly. However, your data is not lost even when you are working in offline mode. When you re-login to the app in **Offline** mode and you find that the data you entered when you last experienced the crash is saved. Moreover, the Innovapptive team is proactively notified of any crash you face, and our support teams proactively fix such exceptions.

4. **I want to report a bug in the software. How do I do it?**

   Insta-Bug software, a third party add-on is embedded into the Innovapptive mWorkOrder app which makes it easy for you to capture the bug. When you face an issue while using the app, shake the device and it mWorkOrder automatically captures the screen and a video, and creates an email for you to email the issue to helpdesk@innovapptive.com. You can also email your issues to the email ID.

For Offline Mode FAQs, see Frequently Asked Questions (Offline Mode) *(on page 135)*

2. Configure the mWorkOrder Application

Establish connection with the server before you start using the mWorkOrder application.

Once you connect to the server, do the following configurations:

- Connect to Server *(on page 90)*
- Choose Language *(on page 91)*
- Choose Time Format *(on page 91)*

2.1. Connect to Server

When you open the application for the first time, you are directed to a connection settings screen. Enter the connection parameters and connect to the server.

Contact your server administrator for **Host, Port,** and **App Id** information.

To connect to the server:

1. Open the mWorkOrder application.
2. Tap **Set-up App**.
3. Enter **Host**, **Port** and **App Id**. in the **Configurations** screen.

> **Note:**
> Contact your mobile application administrator for the values.

4. Tap **Enable HTTPS** if you want to enable the HTTPS connection.
5. Tap **Save**.

   Read and accept the End-User License Agreement (EULA) of Service.

Remove Server Configurations

To remove/modify the server configurations when not required or when device is not in use:

1. Logout of the application and tap Settings icon.
2. In the **Configurations** screen, tap **Edit**.
3. Tap **Remove** in the confirmation pop-up.

> **Note:**
> You can remove configuration only when they are pre-defined by your administrator.

2.2. Choose Language

Configure to view the menu items (labels and messages) in the language of your choice.

To choose the language of your choice:

1. Open the Application.
2. In the Login screen, tap the Language icon on the top-right corner.
3. Select the language of your choice.
4. Tap **Save**.
   The labels and messages appear in the language that you have chosen.

2.3. Choose Time Format

The application supports both 12 and 24 hour time formats.

Configure the time format your organization uses in the SAP system and mWorkOrder application shows the chosen time format.

3. Get Started with the mWorkOrder Application

Once you connect to the server, you can login to the mWorkOrder application either using your credentials or by using App Passcode or Fingerprints.

- Log in to the mWorkOrder Application *(on page 92)*
- Download Data Needed for the Shift *(on page 95)*
- Login as Different User *(on page 100)*
- Set Text Size *(on page 101)*

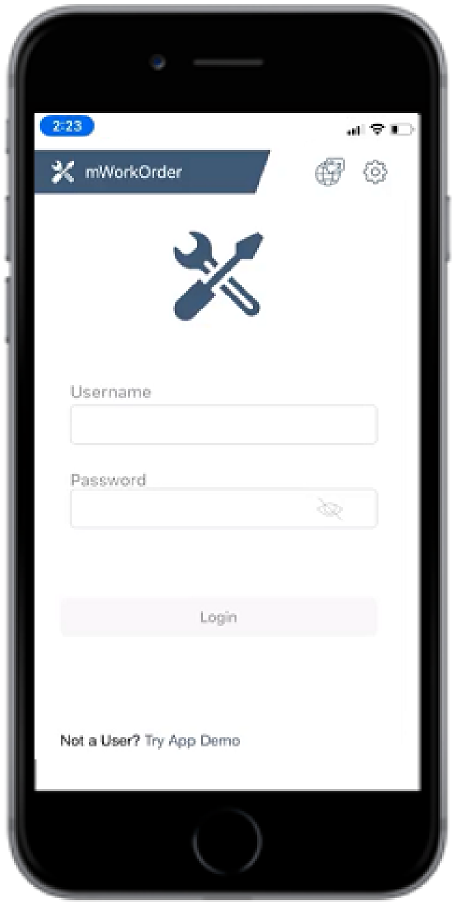
3.1. Log in to the mWorkOrder Application

Login with username & password, and configure passcode, touch ID, and face ID.

To login using Username and Password:

1. Open the application.

Figure 3-1 Login Screen



2. Enter your **Username** and **Password** in the Login screen.
3. Tap **Login**.
4. Create and confirm App Passcode in the **Create Passcode** and **Confirm Passcode** screens.

Note:

- You can use only numeric characters (numbers) for Passcode.
- Passcode is device specific; you can use it only in the device that you have set.
- If you forget the passcode, you must reinstall the application and create the passcode again.
- You must create the passcode every time you log out of the application. If you close the application without logging out, you can use the same passcode.
- You can now skip the passcode without logging into the application.

5. In the **Enable Quick Login** screen, enable Face or Fingerprint identification for login access by tapping Enable Touch ID or Face ID.
   When you open the application the next time you can use either *username & password*, *touch ID* or *Face ID* to access the application.
6. After login, you can Download Data Needed for the Shift *(on page 95)*

Note:

Application Session Timeout: If you keep the mWorkOrder application idle (without using) for some time, it logs you out. This is a session timeout feature that helps you secure your data in the application from accidental misuse when you keep your device away for any reason. The ideal time after which mWorkOrder can log you out can be configured in the RACE configuration application. Ask your RACE configurator to modify the session timeout time depending on your need. This session timeout feature is applicable in both online and offline modes.

Remove / Unregister User Profile from Device

When you login, your profile is registered with the device and continues to be registered to your username even after you logout. Multiple users can be registered to the same device. You don't have to unregister when your shift ends. When you log off, another user can log in to the same device and continue to use it.

To unregister a user from the device:

1. In the Login screen, tap **Remove User**.
2. Enter Username and Password in the Remove User screen.
3. Tap **Remove User**.

3.2. Download Data Needed for the Shift

The mWorkOrder application downloads the data that you need to complete your tasks onto your device. You can use the data that is downloaded, when you are in a location where there is no or limited internet connectivity.

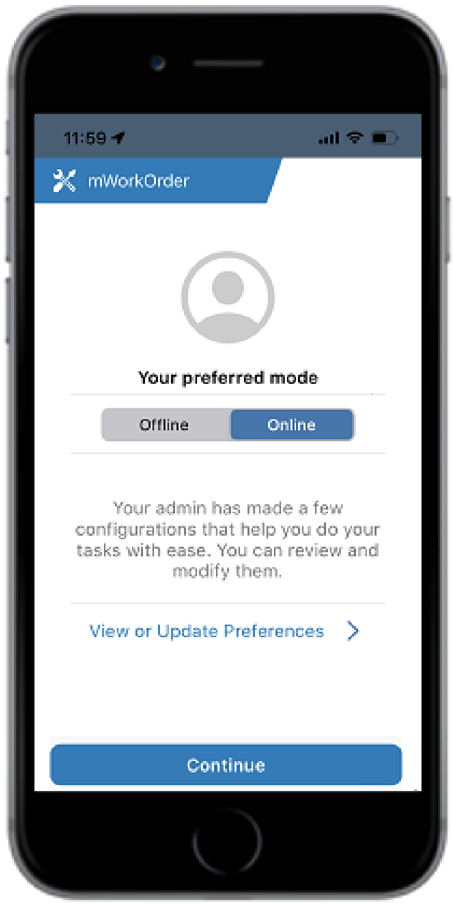
Once you login, the application prompts you to select either **Online** mode (for locations with good internet connectivity) or **Offline** mode (for locations with limited or no internet access). Irrespective of your choice, the application downloads data onto your device.

Use the **View/Update preferences** option to choose and download Master data (equipment and functional location details) and Transactional data (notifications, work orders, etc.) that you need to complete your tasks for the day.

To download the data that is needed for your shift:

1. In the **Tell Us Your Preferences** screen, tap **Online** or **Offline** depending on the internet connectivity of the location where you will be working.
2. Tap **View/Update Preferences**.

Figure 3-2 User Preferences Screen



3. Choose the **Master Data** and **Transactional Data** that you want to download.
    - You can choose *Functional Locations*, *Equipment* using created on data for Master Data.
    - You can choose *Notification Type*, *Order Type*, *Work Orders Created On* dates for Transactional Data.

Figure 3-3 View or Update User Preferences

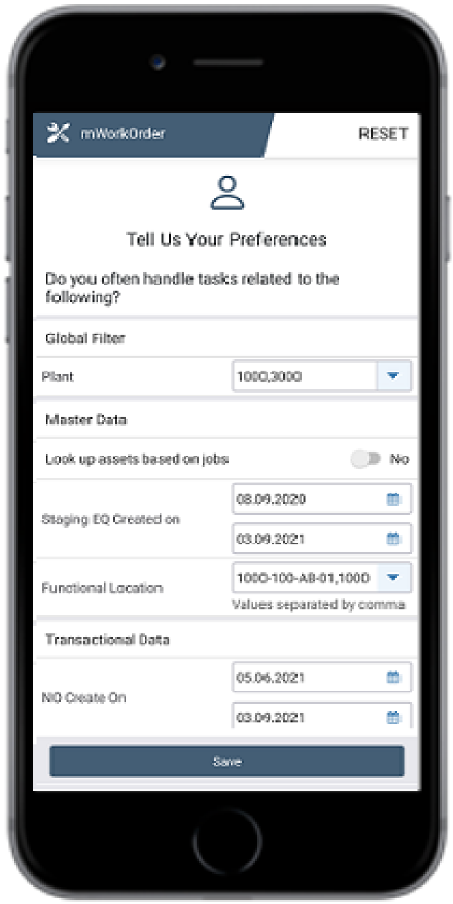
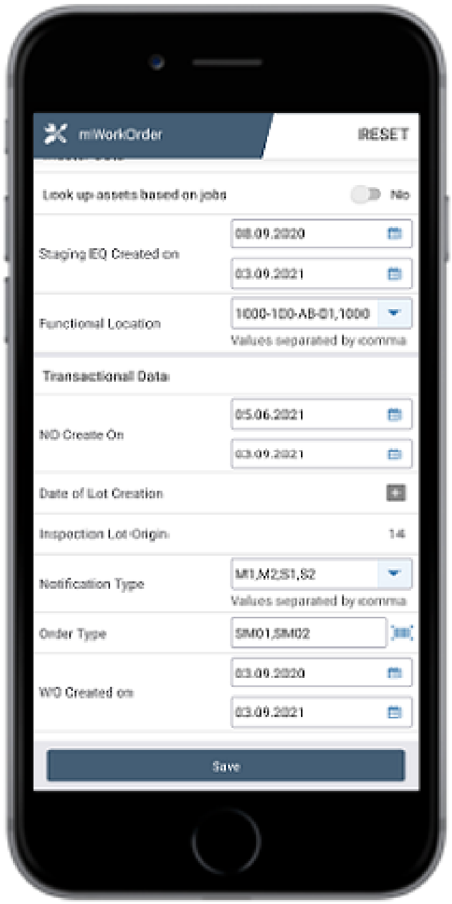
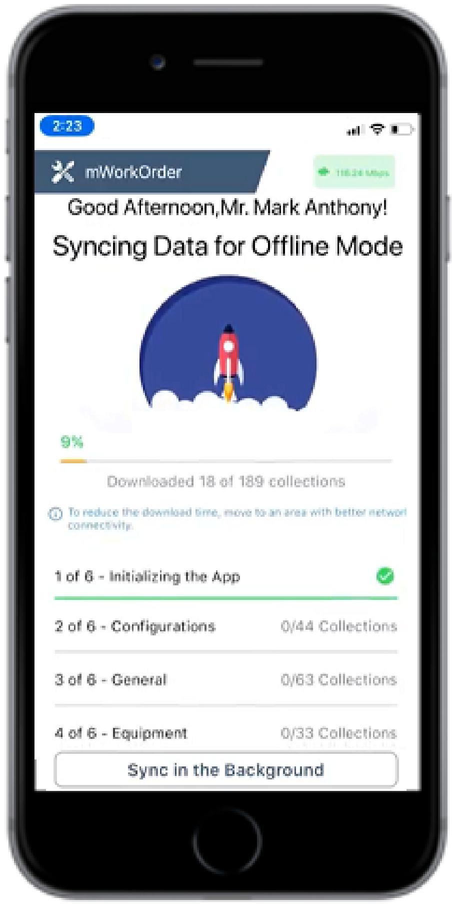


Figure 3-4 View or Update User Preferences



4. Tap **Save** when done.
5. The Progress Bar screen displays the sync status with the success or failure indication.

Figure 3-5 Progress Bar Screen



6.

Note:

- Reset user preferences and re-enter them to fetch relevant data.
- Sort and view the transactional data (Work Orders, Equipment) and master data (EQ, FL, MP).
- If you have chosen the Online option, **Sync in the Background** button appears and you can tap that and continue with your work. The data downloads onto your device in the background while you do your tasks.
- If you have chosen the **Offline** option, you will not see Sync in the Background option and you must wait till the entire data is downloaded onto your device.
- You can activate or deactivate the start/end shift functionality using RACE.

For more information on using the mWorkOrder application in offline mode, see How to use mWorkOrder in Offline mode *(on page 126)*

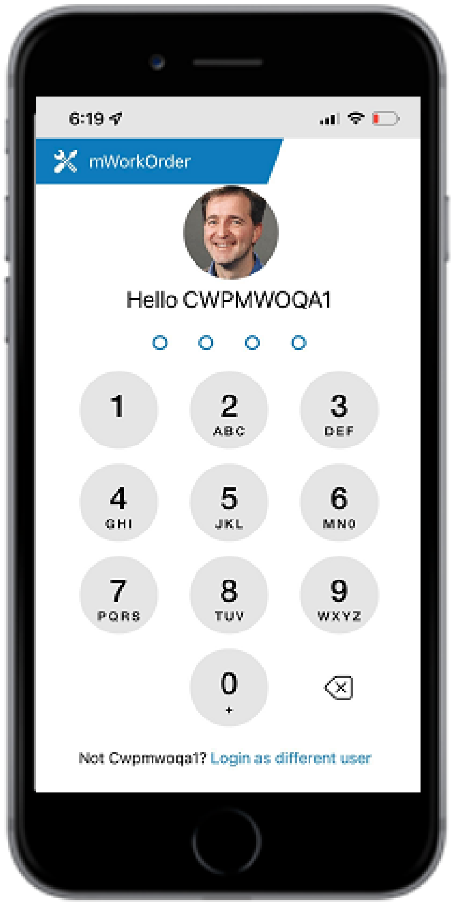
3.3. Login as Different User

If the previous user forgot to log out, you can log them out and log in with your credentials.

To login with a different user:

In the App Passcode screen, tap **Login as different user**.

Figure 3-6 Log in with Different User



The previous user is logged out and you can login with your credentials.

3.4. Set Text Size

Increase or reduce the font size of the text for readability using the **Text Size** slider button.

This feature is device-specific which means that when you log out of the application and a new user log in, the application displays the font size that is set by you.

To set the text size for readability:

1. In the **Home** screen, tap the **User Profile**  icon.

   You can access the **User Profile** screen from any screen by swiping from left to right.
2. Adjust the **Text Size** slider.
3. Tap **Close**.

This text size applies for all the screens in most of the major modules.

4. Overview of the mWorkOrder Application

This chapter familiarizes you with the basic functionality of the mWorkOrder application.

4.1. Home Screen of mWorkOrder

The Home screen of mWorkOrder is organized into modules.

Work Orders and **Notifications** are the key modules of mWorkOrder. The Home screen also displays **Equipment**, **Functional Locations, Time Sheets, Readings Lists**, **Measuring Points, Inspection Lots, Usage Decisions**, and **Product Feedback Form** modules. Tap the module to work on tasks.

You can view only those modules that you have access to. Your view of the home screen depends on your job role. For now, mWorkOrder application offers two views to help you access right information quickly to complete your job.

4.1.1. Supervisor View

As a supervisor you can view total items / tasks in the module (in parenthesis) and their status in the form of bar or line graph (Analytics view), and tabular format. You can track the orders by Order Type, Status, Priority, Work Center, Date Created, and so on. Analytics view is available only for the Work Orders and Notifications modules.

> **Note:**
> **RACE** administrator can enable/disable analytics for **Work Orders** and **Notifications** modules and and customize the order of the modules to see relevant modules at the top.

Figure 4-1 Home Screen - Supervisor Dashboard

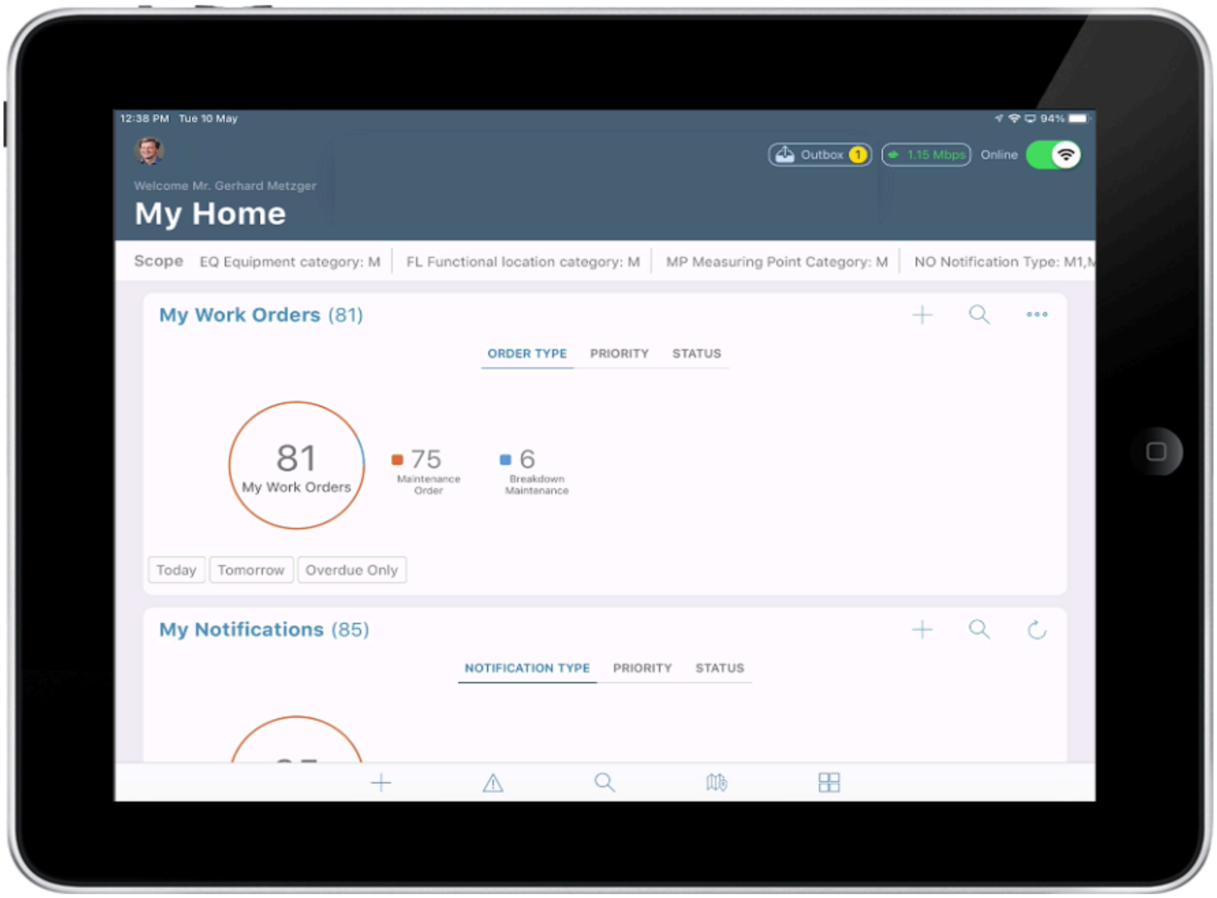
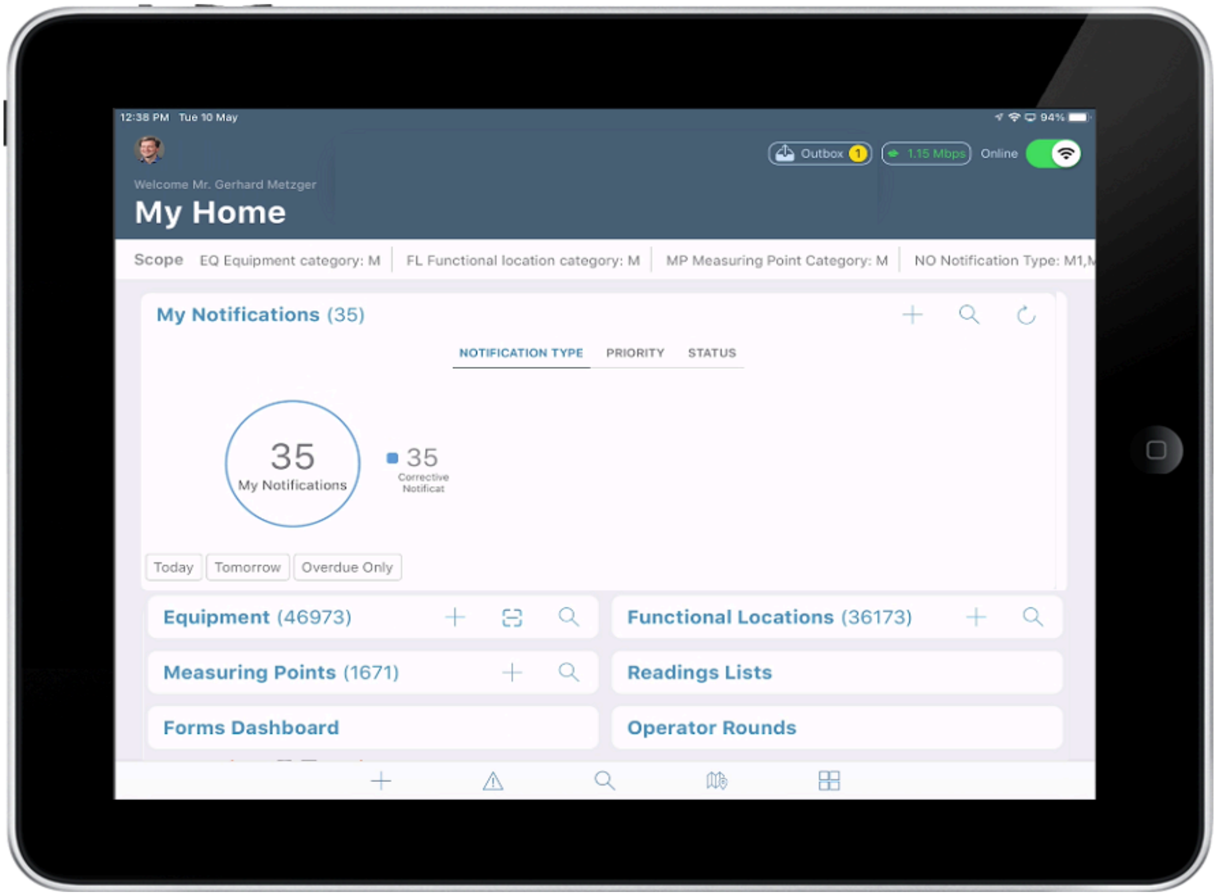


Figure 4-2 Home Screen - Supervisor Dashboard



4.1.2. Technician View

If you log in as a Technician, you can view your jobs (Work Orders) along with operations and forms on your home screen.

These sections (tabs) and fields on the Technician dashboard are configured using RACE. See 3.1.1 Configure fields of your choice for technician dashboard section in *Configure mWorkOrder using RACE* document.

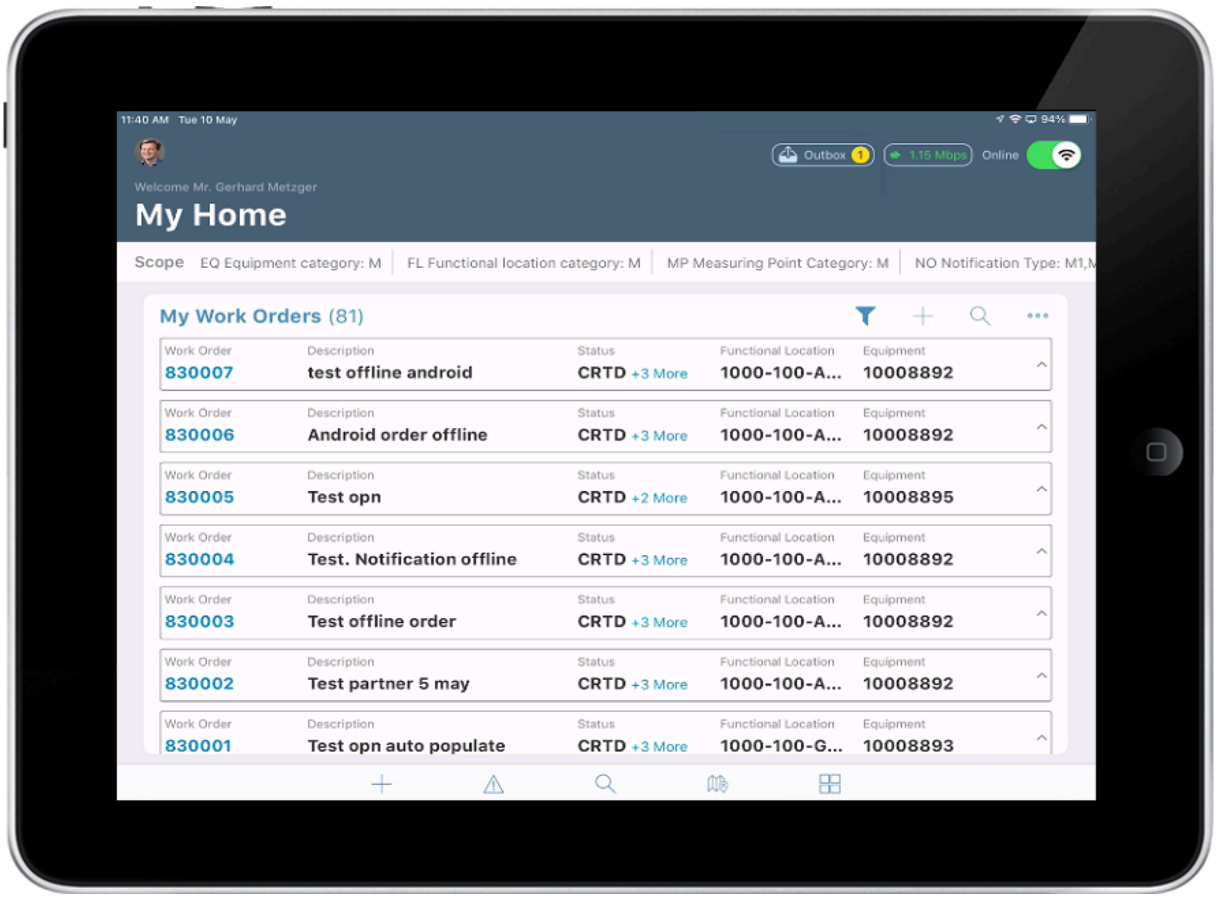
In the Work Orders tile, you can do the following:

- Tap the Work Order to view the Operations and Forms assigned to it.
- Tap the **Work Order Number** (hyperlink) and navigate to the details screen.
- Tap the Operation and view details in a pop-up window. In this pop-up window, you can:
  - Tap **Edit** to navigate to Operations tab in the Work Order screen and modify the details.
  - Tap **Confirm** to do either Manual or Auto confirmation of the operation.
- View the forms associated with the Work Order in the Forms tab. Tap on the form to Draft or Submit form for approval. For more information, see Capture details related to Work Order tasks in embedded forms *(on page 239)*.

Note:

To switch between Technician and Supervisor view, use the more options  icon in the bottom of the Home screen.

Figure 4-3 Home Screen - Technician Dashboard



4.2. Buttons and Icons in mWorkOrder

The following table lists the buttons/options that let you process a series of operations.

Table 4-1 Buttons and Icons

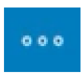
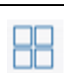
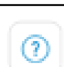
Icon	Name	Description
	User Profile	View your profile, modify/set profile picture, view shift start/end timings, and configure offline preferences and settings.
	Data Sync	View data sync history and access offline outbox.
	Option Menu	Refresh application data, access Reference Documentation and switch between Technician and Supervisor view.
	Online/Offline Toggle Switch	Switch the application between Online and Offline modes.
	Create New	Create new Work Order, Notification, Equipment, Functional Location, Time Sheet, and Measuring Point.
	Emergency Work Order	Create Emergency Work Orders and Work Order from Maintenance Plan.
	Search	Search items/records in the modules.
	Map	View and track the Work Orders and Notifications by location.
	Plant Maintenance Module	Access modules of mWorkOrder.
	Refresh	Clears the field/defaulted values.
	Integrated Help	Access help documentation for the screen.

Table 4-1 Buttons and Icons (continued)

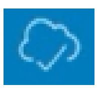
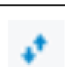
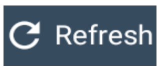
Icon	Name	Description
	Filter records	Filter and view records based on the search criteria entered.
	Refresh Dashboard	Refresh module data like DB Config and Value Descriptions collections.
	Scan	Scan and capture the values like Equipment Number, Functional Location.
	Log History	View status of application data stored on multiple databases.
	Application Home	Navigate to the home screen of the application.
	Data Sync Success	Indicates successful Data Sync process.
	Equipment Asset Dashboard	Access equipment dashboard to track related Work Orders, Notifications and Maintenance Plans.
	Current Location	Shows your current location.
	Close Map	Returns to the screen from which you accessed the Map.
	Reference Documents	Access manuals, guides, help files, design documents, references, and work instructions.
	Sort	Sort records in ascending or descending order or by a specific criterion.
	Filter	Filter records based on date (from & to), and associated field like Work Center and Status.

Table 4-1 Buttons and Icons (continued)

Icon	Name	Description
	Sync	Indicates the success/failure Sync in the mobile app. When the Sync is completed, the label changes to Refresh. If the Sync fails, it indicates in red color
	Refresh	Refreshes the data in the mobile app.
	Online / Offline status	Switch the app to online or offline mode in the mobile app. Online button is displayed only after the Sync is completed successfully.
	Offline Outbox	Shows your offline transactions in the mobile app. If the OutBox sync fails, an error icon is displayed on top of it

4.3. Configure mWorkOrder for your everyday Tasks

You can configure mWorkOrder to fill in default values when creating records. This helps you create records like Notifications, Work Orders, and so on faster.

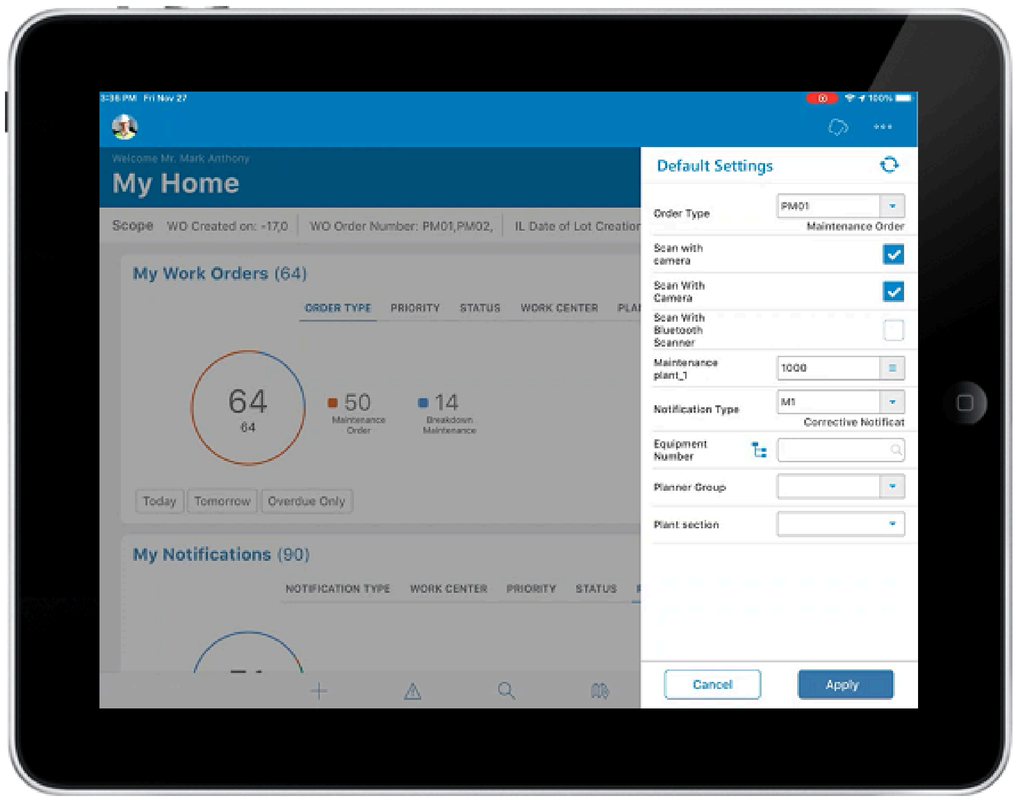
Consider this scenario: Your job requires you to create work orders for **Equipment** *PS001*. When you create a record like notification or a work order, you want the field value for **Equipment** to be auto-populated by *PS001*. You can configure this in **Default Settings** screen.

To configure mWorkOrder for your everyday tasks:

1. Navigate to the **User Profile** screen and tap on **Default Settings**.

   You can access the **User Profile** screen from any screen by swiping from left to right.

   Figure 4-4 Default Setting screen in User Profile

2. Enter the default values for any or all of the **Order Types**, **Priority**, **Maintenance Plant**, **Person number**, **Recipient**, **Equipment**, **Planner Group**, **Plant Section**, **Type of Technical Object**, and **Work Center** fields in the **Default Settings** screen.
3. Tap **Apply**.

4.4. Scan Text Using Optical Character Recognition

Use Optical Character Recognition (OCR) to scan text, numbers and Bar & QR codes using your device camera and fill the fields automatically both in the online and offline modes.

You can configure the feature through RACE for all the data fields in the dynamic search and default screens. Tap the OCR icon on the field to scan the value.

> **Note:**
> This feature is not applicable for the embedded and standalone forms.

4.5. Search Items and Tasks in Modules

You can search Work Orders, Notifications, Equipment, Functional Locations, Measuring Points, Time Sheets, Inspection Lots, and Usage Decisions.

You can search in either of the following ways:

- Using the search icon in the **Home** screen.
- Using the search field in the respective module screen.
- Using Wildcard search in the Offline mode.

Note:

- You might not view a few records when you search. If you are searching when in offline mode and do not find the records, it indicates that your data download filters have restricted the downloading of those records for offline mode use. Adjust your offline data sync filters to include the work orders and notifications that you need for offline use and mWorkOrder downloads those. For information, see Download Data Needed for the Shift *(on page 95)*
- There are two other reasons why you cannot find records:
  - Innovapptive mWorkOrder application is a mirror of your back-end system (for example, SAP). If the necessary data is not maintained in your back-end system, the app will not find the required data.
  - Use of ***** to search for specific objects gives better results. For example, when you search for a Functional Location,
    - XXX - Searches for Functional Locations that start with
    - *XXX" - Searches for Functional Locations that contain
    - XXX* - Searches for Functional Locations that end with

4.5.1. Search from the Home screen

Search items and tasks from the Home screen of the application.

Define the search criteria and save it as a favorite to use it later for quick search. For example, if you work for multiple Work Centers, you can use this feature to view jobs specific to the Work Center with a single tap on the favorite. This eliminates the need to enter the search criteria manually each time.

1. In the **Home** screen, tap the **Search** icon next to the module you want to search.
2. In the **Search** screen, enter the search criteria for that module. For example, you can search for work orders by **Equipment**, **Work Center Description**, **Maintenance Plant**, **Order Types**, **Planner Group**, and so on.

> **Note:**
> - To do a quick search later using this search criteria, tap **Save As** to save it as favorite.
> - Tap **Saved Searches** to view the existing favorites and then tap on the favorite of your choice. If you no longer use the favorite, swipe to the left and tap Delete.
> - The search parameters differ for each module and you can show / hide using **RACE**.

3. Tap **Search**.

> **Note:**
>
> To clear the data that you entered in search fields, tap the **Refresh** icon.

4.5.2. Search from the Module Screen

This section guides you to search from the module screen of the application.

1. In the **Home** screen, tap the module for which you want to perform a search operation.
2. In the top left section of the module screen, tap the **Search** bar to search.

4.5.3. Search using Wildcard feature

Use wildcard search to search records and filter field values. The search results are non-case sensitive.

Wildcard search is applicable for the fields that are configured as **Search Text Field** (STF) in RACE.

- For search screen fields, configure STF in RACE Searches.
- For fields on the details screen, configure STF in RACE Extensions.

Note:
You can filter values only for the Functional Location, Equipment, and Material fields in all the modules.

For example, if you want to create a Work Order or Notification for an Equipment and you remember the equipment name partially, you can do the wildcard search in Equipment drop-down (STF) to filter equipment.

To filter data using Wildcard search:

1. Tap the **Search** icon on the home screen to do wildcard search or tap on the Search Text Field (STF) in the Create or Edit screen.
2. Enter the search keywords in one of these formats, to perform wildcard search.
   - *keyword*
   - *keyword
   - keyword*
   - keyword
   - key*word*
3. Tap **Return**.

4.6. Add Attachments to Records

The attachments provide additional information about the repair / maintenance and help understand the gravity of the situation.

You can add multiple attachments like images, videos, PDF documents, and external URL links to notifications, work orders, and so on.

You can select multiple images from the gallery and add or convert the multiple images into a single PDF file, which can be easily attached. You can also markup the PDF and the updated PDF can be saved as GOS or SharePoint attachment.

Note:
The attachment size is limited to 20 MB, and you can upload up to 10 images at a time.

1. In the right section of the **New Notification** screen, tap the **Attachments** tab.
2. Tap **Add Attachments**.
3. Select one of the following options from the pop-up screen:
    - Capture Photo (Using your device camera)
    - Select Photo (Selecting from your device gallery)
    - Take Video (Using your device camera)
    - Choose Video (Selecting from your device gallery)
    - Files
    - URL
    - Drop Box
    - Google Drive (add multiple files at a time).
4. Tap **Save**.

> **Note:**
> All attachments display in thumbnail view to help recognize and organize images.

You can view the count of the attachments in offline mode without selecting the Attachments tab.

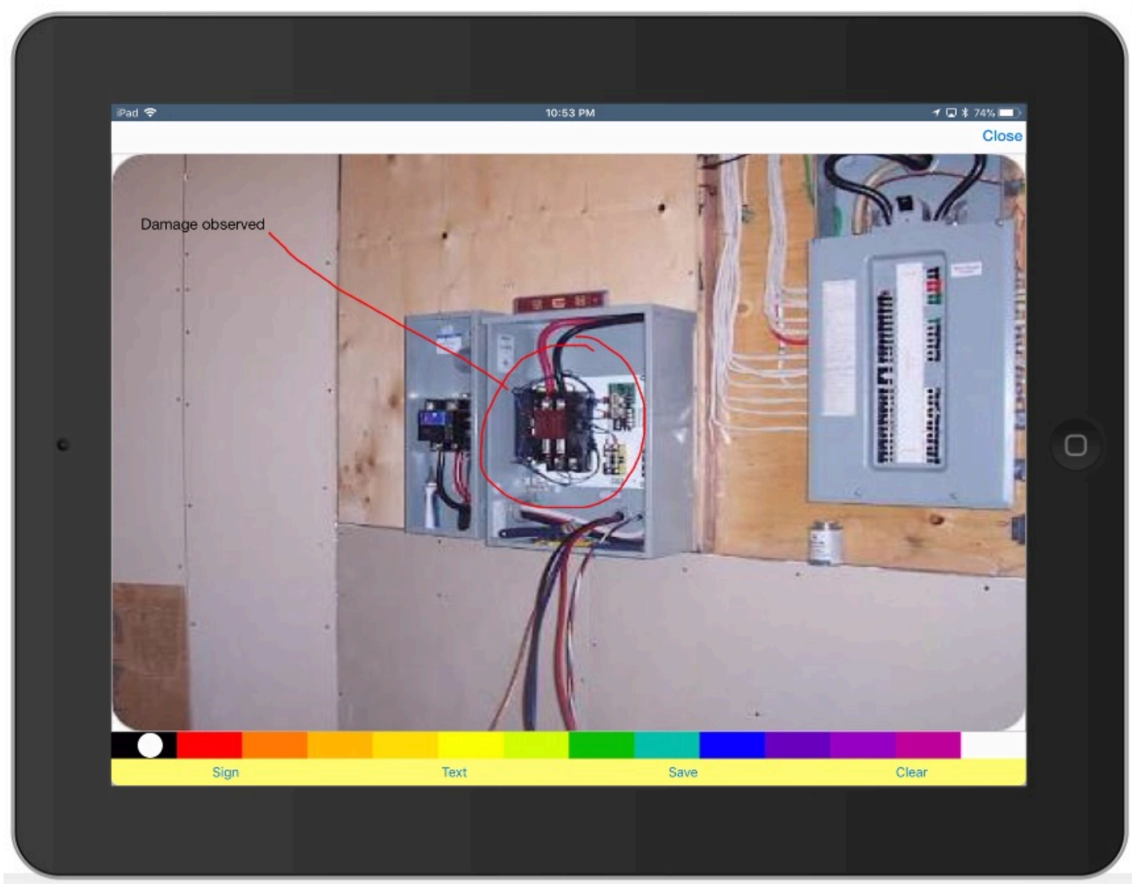
4.6.1. Annotate Images

You can draw a shape on an image or mark a region of an image to highlight the issue. You can use well defined shapes like circles, ellipses, and/or user defined shapes.

To annotate images:

1. Open the image.
2. Select the color from the colors pallet and make any of the following changes:
    - Tap **Sign** and add a digital signature and highlight the section of the image file.
    - Tap **Text** and enter any desired text in the image file.
    - Tap **Clear** and undo the changes that are made.
    - Tap **Save** to save the image file with the changes made.

Figure 4-5 Annotate Image



4.6.2. Upload Videos

You can upload video attachments to Work Orders, Notifications, Functional Locations, and Equipment.

You can limit the video size or video duration through **RACE**. If you limit the video attachment recording with size, the application allows you to complete your recording and shows a warning message “File Size Exceeded. Do you want to Save or Cancel?”. If you tap **SAVE**, the application gives you options to save the video in three different sizes (**Large/Medium/Small**) and compresses the video size accordingly.

If you limit the video attachment recording with time duration, the application stops the recording when you reach the predefined time and asks you to **SAVE** or **CANCEL** the attachment.

> **Note:**
> If you configure the video attachment limit both by size and duration, it will take duration by default.

4.6.3. Add Markup to PDF

You can add markup for PDF attachments in the **Notifications**, **Work Orders**, **Measuring Points**, **Functional Locations** and **Equipment** modules.

To add markup:

1. **Notes**: Tap the **Notes** icon to add notes in the PDF.
2. **Text Highlight:** Tap the **Text Highlight** icon to highlight the text in the document.
3. **Strikethrough**: Tap the **Strikethrough** icon to strike-off the text.
4. **Underline**: Tap the **Underline Text** icon to underline the text.
5. **Signature**: Tap the **Signature** icon to add your signature in the document.
6. **Draw**: Tap the **Brush** icon to draw.
7. **Eraser**: Tap the **Erase** icon to erase the selected text or drawings.
8. **Add Text**: Tap the icon to enter text in the document.
9. **Drawing Tools**: Tap any of these icons to draw the selected shape in the document.

   Other Actions with PDF

   - Use the icon to perform the selected operation at two different places of the document.
   - Open the PDF file in the Attachments tab.
   - Edit multiple pages of the document.
   - Save and replace the existing document with the edited copy using the **Save As** option.
   - Save the edited document as a separate copy.

- Fill forms in the PDF.
- View the pages in PDF as thumbnails.
- Zoom in and zoom out the PDF page.
- View the PDF pages in Night mode.

4.7. Download the Attachments

You can download attachments related to Work orders, Notifications, Equipment, Functional Locations, and Measuring Points. These attachments are organized and grouped under the respective work package

You can drill down the work package and access individual attachments to download. This helps optimize data when operating in the offline mode. Instead of syncing all attachments, you can choose to download only the necessary ones, resulting in quicker data transfer. This also reduces storage space required on your device. The downloaded work packages are synced in the offline mode.

> **Note:**
> Using AR_MGR scoping ID, you can download the required attachments in work packages.

Highlights:

- When you select "Offline" as preference, you are prompted to select attachments for work orders and notifications before the dashboard is loaded.
- Work order attachments are grouped in a single package for easy download.
- Drill down into objects to access specific attachments and DMS documents.
- View attachment sizes before syncing for efficient storage management.
- Filter by object type for focused viewing.
- Configurable filter criteria for easier maintenance.
- Progress bar shows attachment synchronization status.
- Filter and sort attachments within objects for quick access.
- Option to remove synced attachments individually or all at once.
- Data resynchronization is available after initial sync.
- Completed work order attachments automatically removed from device.
- Ability to delete downloaded attachments as needed.

To download the attachments,

1. In the Work Orders module, select the work order from the list.
2. Go to the Attachments tab to view the list of attachments associated with the work order.

   Each attachment has a download button, and the count of attachments are displayed.
3. Select the attachment, and a list of associated attachments are displayed.

   > **Note:**
   > You can download individual attachments or a group of attachments simultaneously. The attachments can be in Image, PDF, or Microsoft Word formats.

   You can view the size of the downloaded attachments.
4. Once the attachments are downloaded, you receive a notification confirming that the downloaded attachments are available in the offline mode.

4.8. Filter Records

You can filter the records that appear on the left side section of a refine search results further based on date (from & to), associated Work Center, Notification type, status, Equipment and so on.

To filter the records:

1. In the left section of the module screen, tap Filter.
2. Tap any of the attributes on the right side of the filter screen. For example, in the notification filter screen, you see fields like Notification, Work Center, and Status Date.
3. Tap **Relation** and then tap the appropriate mathematical relation (equal to, less than, and so on) to specify the appropriate condition for retrieval of records.
4. Tap **Min Value** and then tap the appropriate code that specifies the lower limit within which the specified records should be retrieved.
5. Tap **Max Value** and then tap the appropriate code as the upper limit that specifies the defined range within which you need to retrieve the records (applicable for only certain conditions).
6. Tap **Filter** .

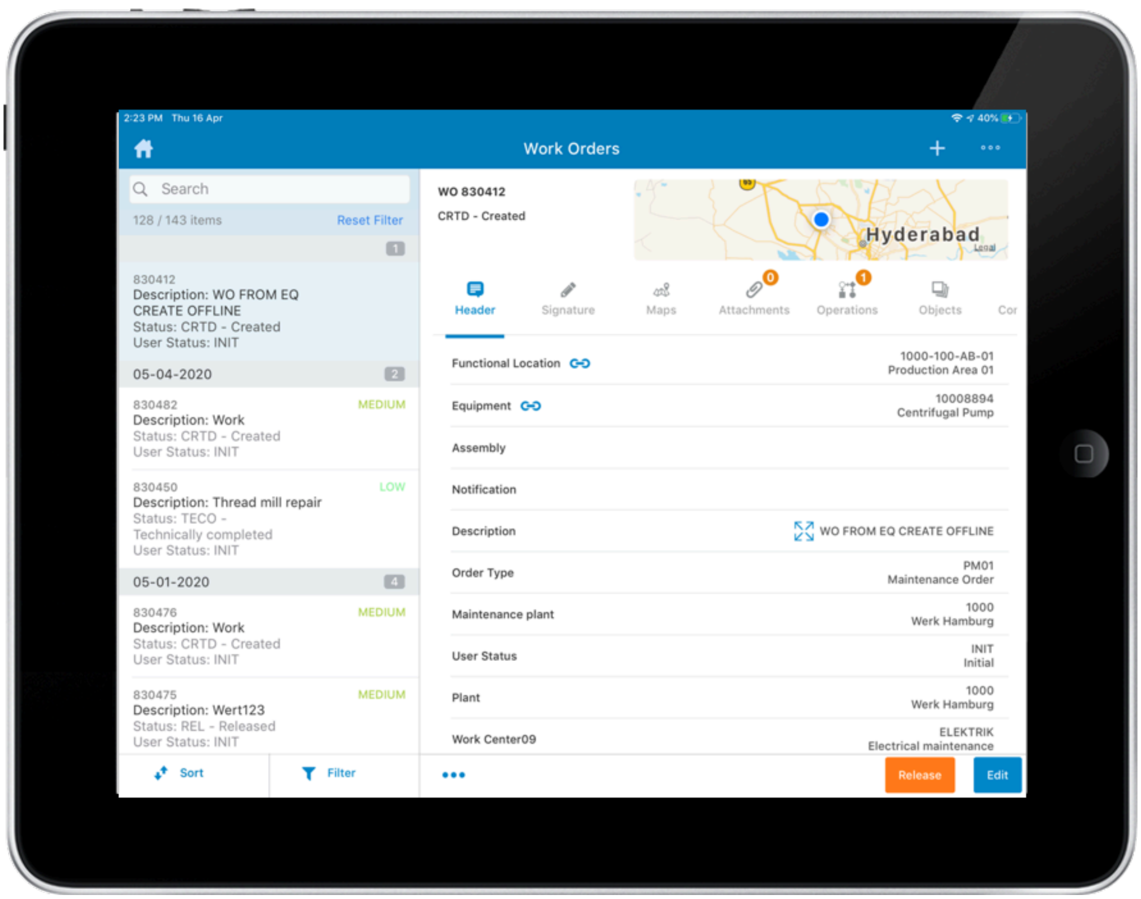
   You can filter work orders based on different criteria and save work orders list and work order statuses.

> **Note:**
> You can view the saved filter count within the brackets that appear next to the saved filter item.

7. Tap **Apply**.
    - List of filtered records is shown along with the count of records depending on the filters selected. For example, if the total count of the records is *1000* and you select filters, the application shows count as *X/1000.* X represents the number of filtered records.
    - You can also filter the records using the search bar. Count is shown as *Y/1000.* Y represents the number of records matching the search string/value.

    NOTE: If you search from the filtered records (*X/1000*) and clear the search, the application shows the count as *X/1000*.
8. To delete the saved filter, select the saved filter and tap the Delete icon.

Figure 4-6 Filter Records



4.9. Sort Records

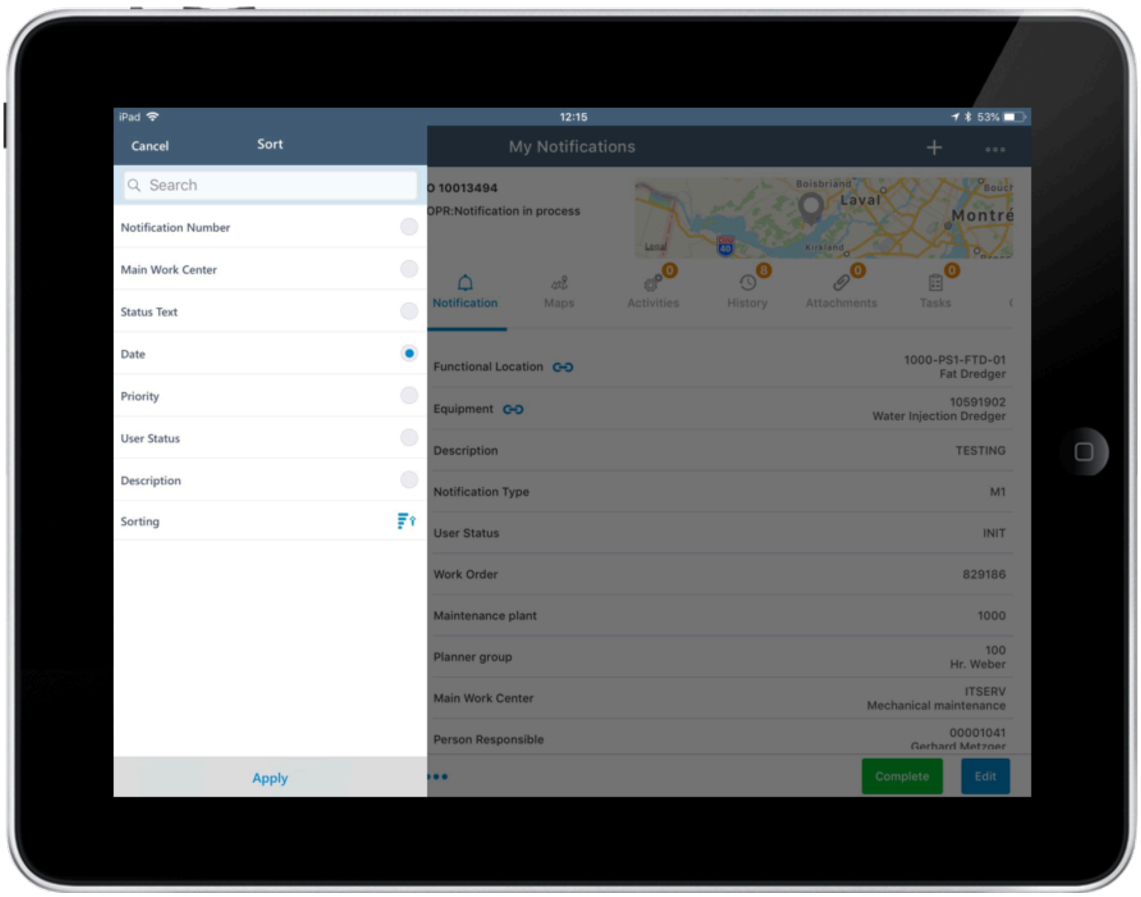
You can sort the records that appear on the left side section of the screen.

Tap **Sort** in the left section of the module screen to view the list / records in ascending or descending order or by a specific criterion. For example, in notification lists/records you can sort by **Notification**, **Priority**, or **Main Work Center** and so on.

1. Tap **Sort** in the left section.
2. Under **Sort**, tap any of the sort criteria like Work Center, Priority, and Status.
3. Select the Sort Type using the **Sorting** icon.
4. Tap **Apply**.

> **Note:**
> Application retains your sort criterion until you continue your work in the same module. For example, if you sort records in the Work Orders list and navigate to the Dashboard, the sort is cleared.

Figure 4-7 Sort Records



4.10. Edit Records

You can edit the details of the records like **Notifications**, **Work Orders**, **Functional Location**, **Equipment**, **Measuring Points**, and so on.

To edit **Notifications**, **Work Orders**, **Functional Location**, **Equipment**, **Measuring Points**, and so on.

1. In the **Home** screen, tap the module.
2. Search and select the record from the module home screen from the left-side section.
3. Tap the **Edit** button on the bottom right side section.
4. Edit the required fields.
5. Tap **Save**.

4.11. Track Work Orders and Notifications by Geographical Locations

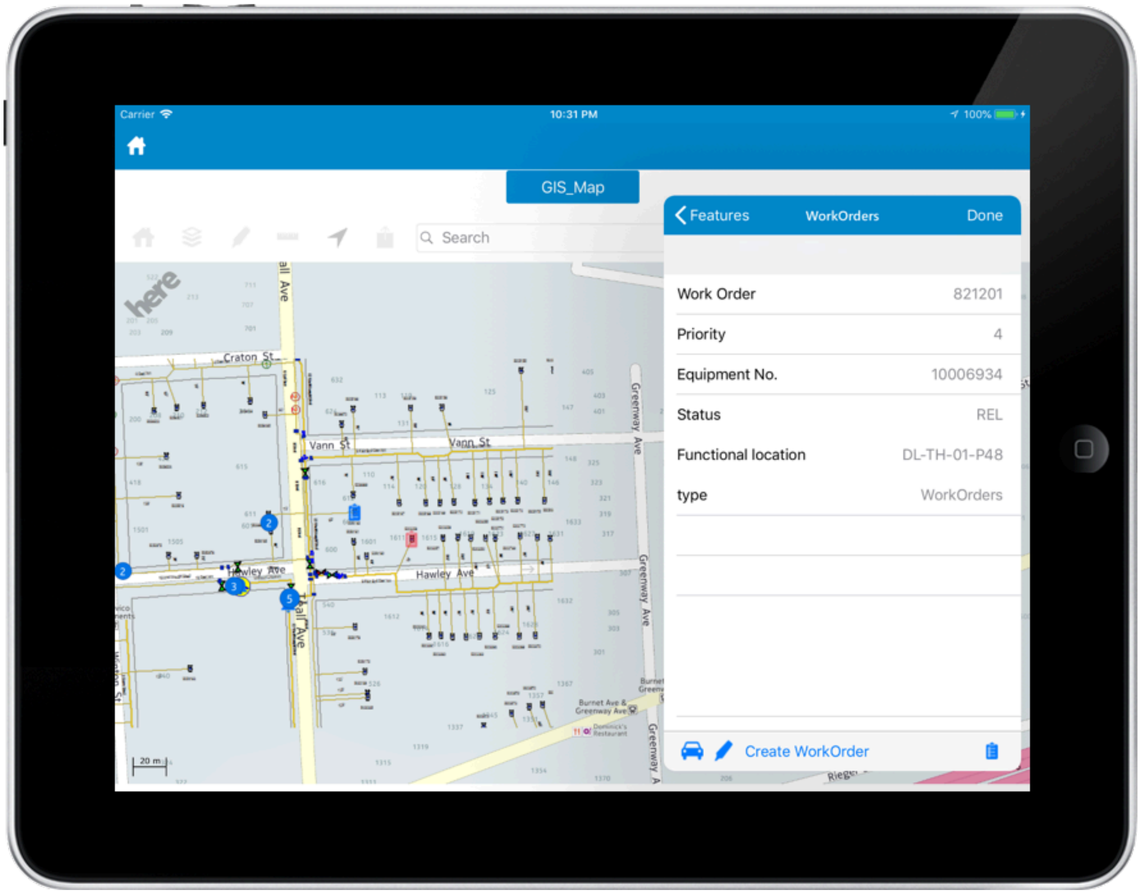
Using mWorkOrder, you can track work orders by geographical location.

Tap the Map  button at the bottom of the home screen to view and track the **Work Orders** and **Notifications** by geographical location based on the zone configured for the user in the ECC custom table. For example, if the user is assigned to work in the Northern zone of the facility, the GIS map shows only the equipments or work locations for that zone.

You can raise a Notification or create a Work Order / Emergency Work Order for an equipment (object) that needs maintenance / repair from the GIS map.

mWorkOrder application supports the latest **LatLonGo** GIS SDK, which provides a standalone GIS application for improved UX and integration flexibility.

Figure 4-8 GIS Map



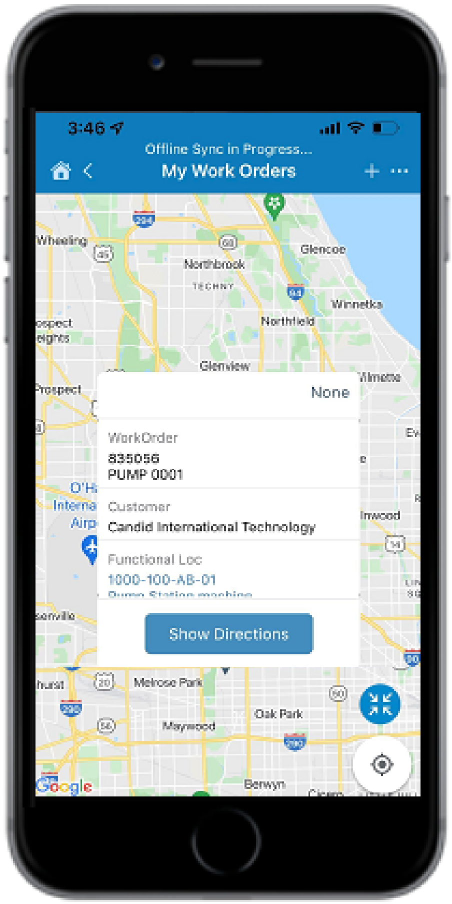
4.11.1. Navigate to Work Locations using Maps

Navigate effortlessly and quickly from your location to the location where Work Order is to be executed using Google or Apple Maps. You can see and access the Map when you open Work Orders, Notifications, Equipment, or Functional Locations.

You also can,

- View multiple work orders, notifications, equipment, or functional locations on the same address pin in the Map.
- View the details like WO number, Notification, Description, Customer Name, Equipment, and Functional Location along with the **Show directions** button when you tapped the pin.
- Click the **Show Directions** button, it displays the options like Google Maps or Apple Maps to select the relevant map and navigate.

Figure 4-9 Navigate to Work Locations using Maps



4.11.2. Filter Work Order / Notifications using Maps

You can filter the work orders/notifications using predefined filters such as Basic Start/Finish Dates, Priority, and Status.

You can,

Filter Notifications using Maps

1. Click the Collections dropdown, select notifications from the dropdown list.
2. Select Priority from the list.
3. Enter status and click Apply.

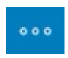
Filter Workorders using Maps

1. Click the Collections dropdown, select workorders from the dropdown list.
2. In the Created on field, select the date.
3. Select Priority from the list.
4. Select Basic Start and Finish date.

4.12. Access Reference Documentation

You can access manuals, guides, help files, design documents, references, and work instructions through **Reference Documentation** in both Online and Offline modes. These reference documents must be first configured as **Active** in **RACE**.

To access reference documentation:

1. Tap the **Option Menu**  icon in the **Home** screen.
2. Tap **Reference Documentation**.

   The Attachments pop-up screen appears. You can view all attachments, and file size of individual and all attachments. Use the search option to find an attachment.

3. Tap the document you want to view.

5. How to use mWorkOrder in Offline mode

When the network connection is low or unstable, you can switch to offline mode and continue working. The transactions that you do in offline mode are stored in Offline Outbox. The records in the Offline Outbox are automatically posted to backend systems you switch from offline to online mode.

5.1. Download Data for Offline Use

Data in the backend systems is automatically downloaded onto your device when the device is online.

By default, mWorkOrder downloads all the records that you have access to. However, downloading all the records is not only time consuming, but could slow down the performance of your device. To avoid this, you can configure to download only the data that you need for your tasks for the day using the **View / Update Preferences** screen.

For example, The **Plant** filter in RACE is configured to display Work Orders for plants 1000, 2000, and 3000. but you need only the records for *1000*, set the Plant filter as *1000* in the **View / Update Preferences** screen. For information, see Download Data Needed for the Shift *(on page 95)*.

Note:
You can view/set the filter value other than filters configured in RACE only if:

- Related **Collection Name** is configured for the **Filter Field** in RACE.
- You have the required roles / access permissions.

Once you complete your login procedure, if you want to change the data download preferences, tap **User Profile** and tap **User Preferences**. Update your data preferences as described in Download Data Needed for the Shift *(on page 95)*.

Note:
RACE configurator can define user preferences filters in RACE, so that the mWorkOrder users can configure preferences based on their location and minimize the time required for data synchronization.

5.2. View Log History

Before you switch to offline mode and get started with your work, view the log history to ensure that your device has downloaded the entire data that is required for completing your tasks. Incomplete data download causes errors. Error prone data causes rework and delays causing huge losses for your organization.

You can view the following in Log History:

- Successful and failed downloads with object number, description, action, date, and time.
- History of data download with time stamp.

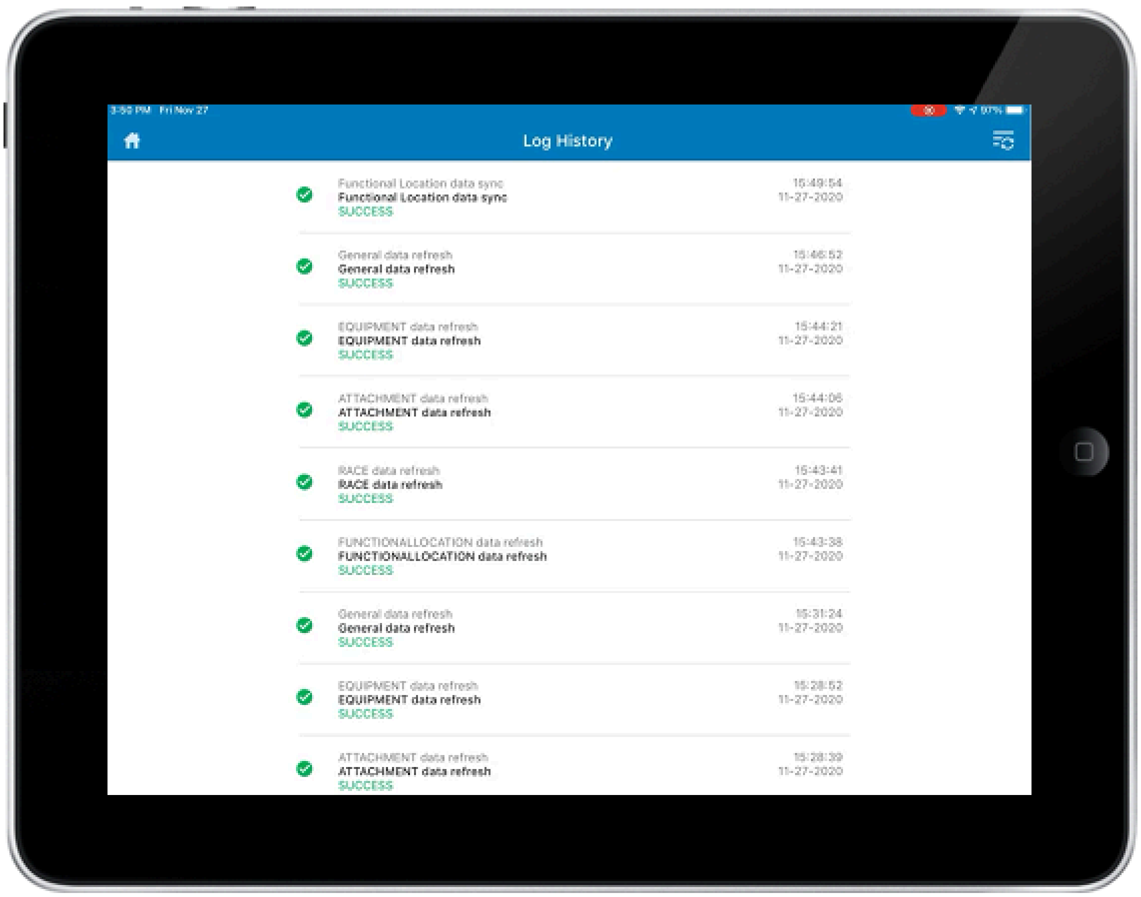
To access log history.

1. In the **Home** screen, tap the **User Profile**  icon.

   You can access the **User Profile** screen from any screen by swiping from left to right.

2. Tap **Log History**.

   Figure 5-1 Log history

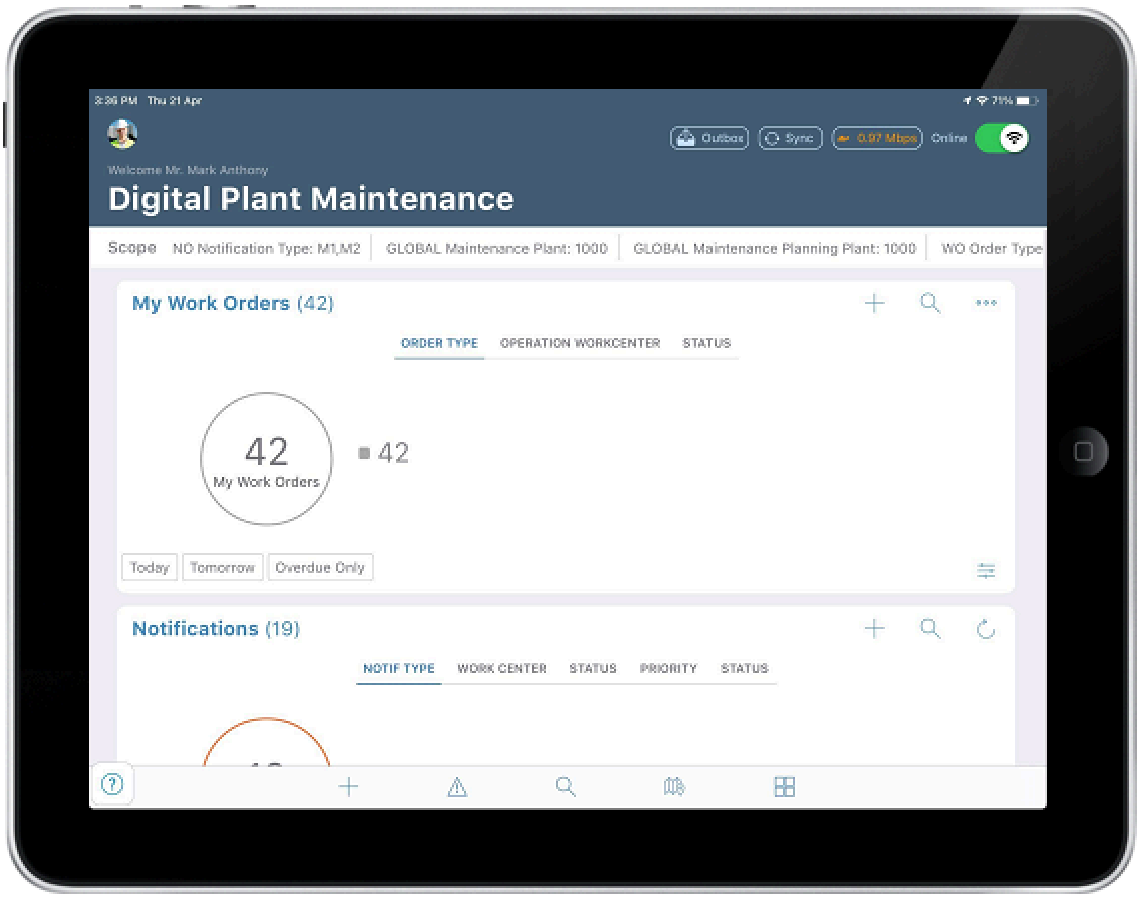


5.3. Switch Online/Offline

A toggle button is available on the top right corner of the screen. Tap it to switch between Online/Offline modes.

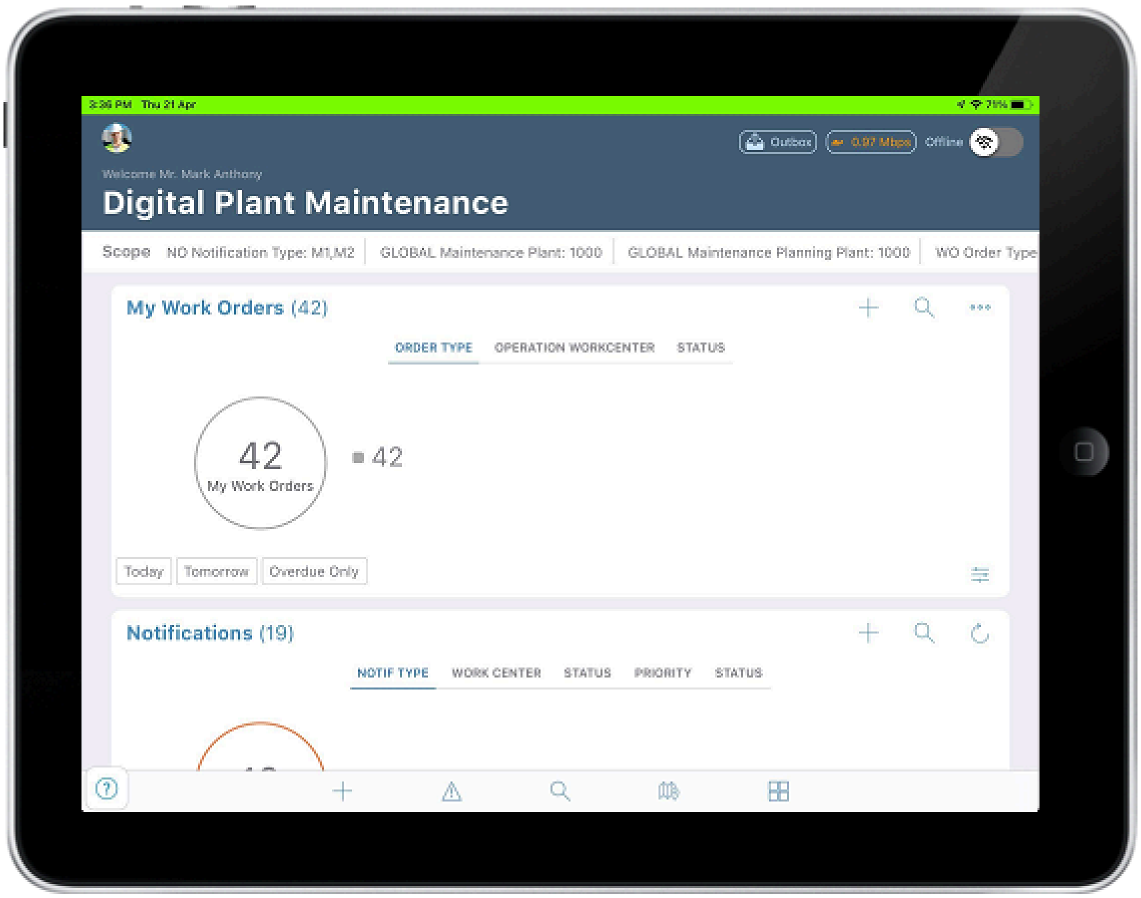
When the data download is complete or sync is successful, the **Online** toggle button appears on the top. You can tap the toggle button to switch to offline mode and use the data on the device to complete your transactions.

Figure 5-2 Online Mode



When you switch to offline mode, the color of the status bar changes on the top of the screen.

Figure 5-3 Offline Mode



Note:

- The option to switch between offline and online can be turned ON or OFF through **RACE**.
- The **Online/Offline** toggle button appears only after the data is downloaded completely.
- When network connection is lost, the application switches to offline mode. You must manually switch the application to online mode when network is available.

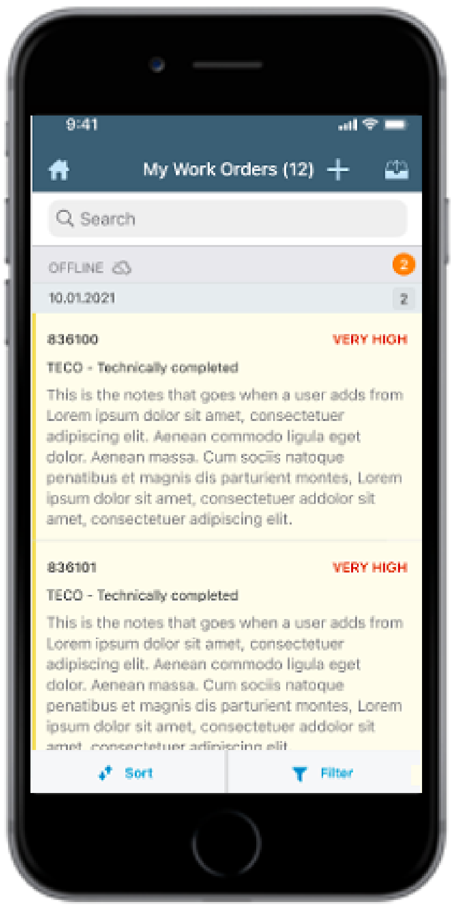
5.4. Process Transactions in Offline mode

Once data is downloaded onto your device, you continue to do your tasks using the mWorkOrder application like you do when you are online. These offline transactions are stored in **Offline Outbox** .

For example, when you modify and post a work order, the record is stored in Offline Outbox. These changes are synchronized with backend systems when you tap the online button. If the transactions have errors, they remain in the Offline Outbox. Open these transactions from Offline Outbox, correct the errors, and repost them.

The records that you work on in offline mode also appear in respective modules along with the regular list. For example, if you have created a new Notification in the offline mode, it appears in the regular Notification list with a dummy notification number and in the offline outbox. When the application switches from offline to online mode, the dummy number is replaced with a regular number and the new record is moved from the Offline Outbox to the backend system.

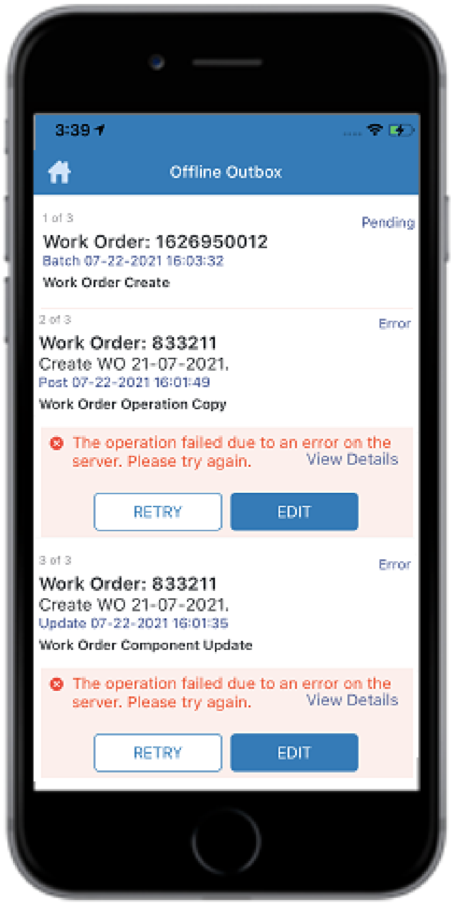
Figure 5-4 Offline Regular List View



If you log out from the application when the shift ends, the pending or failed transactions are stored in Offline Outbox. When you log back into the application, you can access the pending or failed transactions from the Offline Outbox and reprocess them.

To access the Offline Outbox, tap **Outbox** on the top of the screen.

Figure 5-5 Offline Outbox



Note:

- App prompts you if you log out without completing the synchronization.
- If you uninstall or unregister, the transaction entries are removed from Offline Outbox.
- The Work Orders with drafted failed form postings are not displayed in the Offline Outbox.
- You can post and view multiple entries, ranging from 7 to 10, containing huge data and attachments.
- You can edit notifications, work orders, time sheets, and Measuring Documents that are created in offline mode.

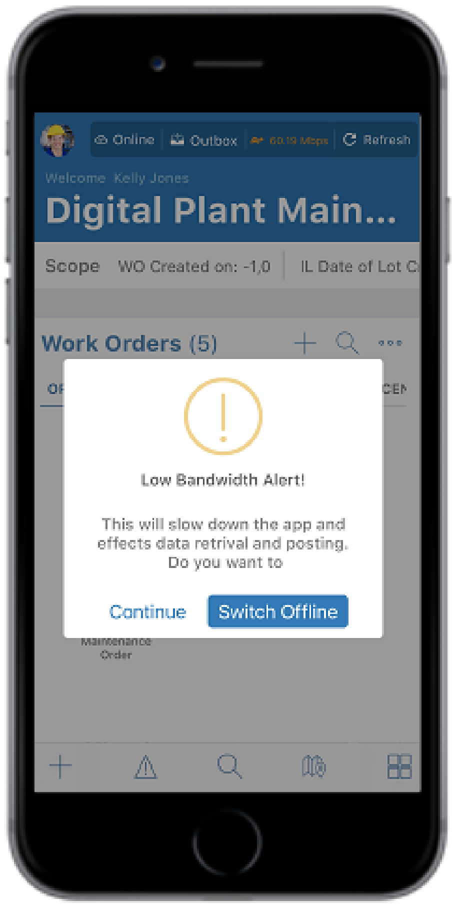
5.5. How to Handle Low Bandwidth and No Network Scenarios

You get alert messages in the following low bandwidth or no internet connection scenarios.

Following are the scenarios when you get alert messages:

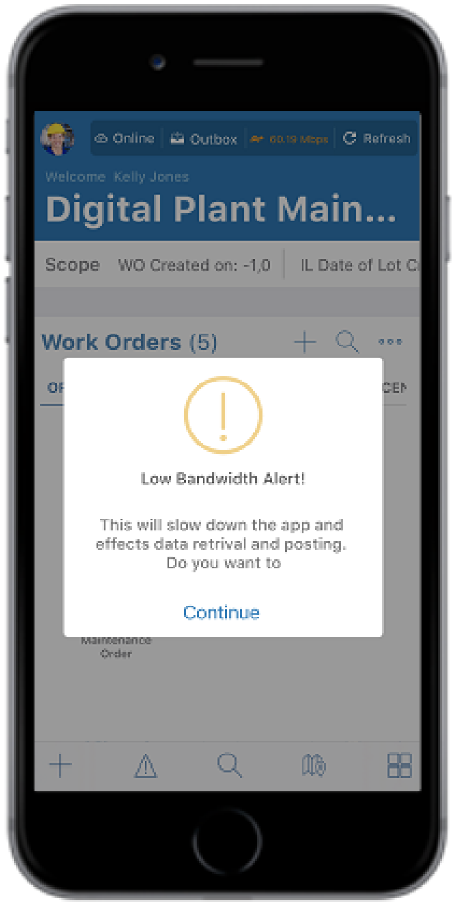
- **No Internet Connection** message when the internet connection is lost and **Connected Online** message when internet connection is back.
- **Unstable Internet** message when there is network fluctuation. The message also prompts you to **Switch Offline** to continue the transaction in offline mode or **Continue** to continue the transaction in online mode with a fluctuated network.

Figure 5-6 Unstable Internet



- **Low Bandwidth** message when the network bandwidth drops below the threshold value. The message also prompts you to **Switch Offline** to continue the transaction in offline mode or **Continue** to continue the transaction in online mode with low bandwidth.

Figure 5-7 Low Bandwidth



Note:
You can configure the network threshold value in RACE.

5.6. Frequently Asked Questions (Offline Mode)

Check the offline sync and offline use questions frequently asked by users and the answers (solutions)

1. **My offline sync is taking longer than 30 minutes. Is this normal?**

   Yes. Offline sync time depends on your internet bandwidth speed. Depending on your internet bandwidth speed, offline sync time can take anything between 10 minutes and 2 hours. The following table lists the average sync times for various internet bandwidth speeds.

   Table 5-1 Bandwidth Speeds and Offline Sync Time

Bandwidth Speed	Offline Sync Time
1 MBPS	> 2 Hours
10 MBPS	> 60 Minutes
20 MBPS	> 30 Minutes
50 MBPS or >	> 15 Minutes

2. **I have a very high internet speed, still my offline search takes longer than 30 minutes. Why?**

   You are downloading large data onto your device. The time to complete your initial data synchronization depends on both your internet speed and size of data you are downloading onto your device. For quick download and optimal performance of your device, we recommend you set the following preferences. For information, see Download Data Needed for the Shift *(on page 95)*. The more data filters you set, the better speeds you will experience in your initial offline sync.

   Table 5-2

Preferences	Data
Work Orders	Assigned to me
Notifications	Last 30 Days
Plant	Limit it to your plant
Work Center	Limit it to your work center

3. **I switched from Offline to Online, and then my Offline Outbox has several errors. Is this normal?**

Yes, this is normal. When you switch from **Offline** to **Online**, mWorkOrder posts the data that you added when you were offline to back-end systems like SAP. The back-end systems validate the data that you captured when offline and reject your posting if validations fail. Repost after correcting the issues identified by the back-end system.

4. **I switched from Offline to Online, and then my application stopped responding.**

   This happens sometimes when there is an intermittent network connection drop or if for some reason your server rejected the application's re-authentication. Under these situations, the app can go into a **limbo** state. If you run into such an unusual situation, kill the app and re-login to establish the connectivity. You will not lose data when you kill the application. After you re-login, mWorkOrder continues to process your outbox.

5. **I cannot find search results of a specific work order or a notification, nor my linked notification to work order. Is this normal?**

   Yes. This happens if your data download filters restrict the downloading of specific work orders and notifications for offline mode use. Adjust your offline data sync filters to include the work orders and notifications that you need for offline use and mWorkOrder downloads those. For information, see Download Data Needed for the Shift *(on page 95)*

For generic FAQs, see Frequently Asked Questions *(on page 88)*

6. Monitor Asset Performance

Use the Operator Rounds module to assign a functional location or an equipment monitoring and maintenance tasks to operators. These scheduled tasks help the operator detect possible technical failures / equipment breakdown and avoid production losses.

An Operator Rounds task involves a Planner (supervisor) and the Operator (plant personnel) who plan and execute maintenance tasks, detect and report anomalies, if any, to the right technician by raising a notification.

- If you are a Supervisor, see Plan and Schedule Asset Monitoring Tasks *(on page 142)*
- If you are an Operator, see Assign and Execute Operator Rounds *(on page 155)*

6.1. Create Template for Asset Maintenance Tasks

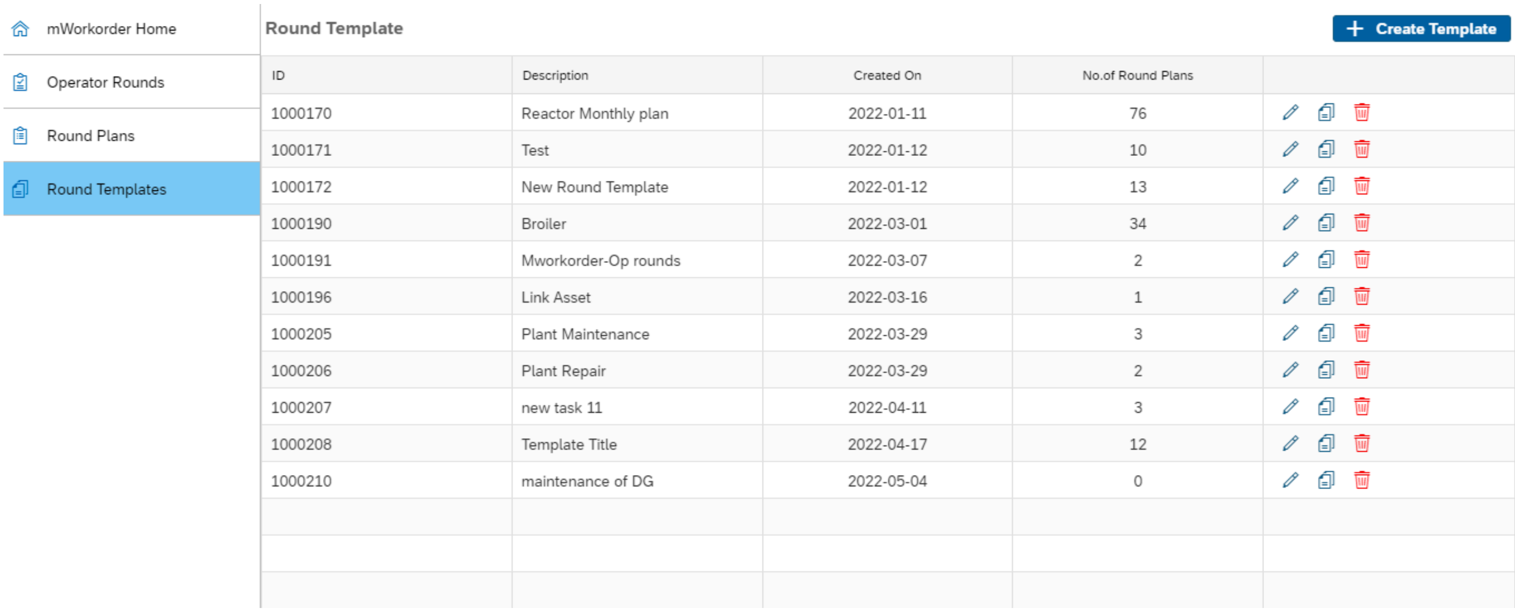
You can create Asset Maintenance Task Templates which can be used to create Asset Maintenance Tasks quickly. For example, a template **Monthly Maintenance Tasks** can be created. When supervisors need to create tasks for checking temperatures, they can use the **Monthly Maintenance Tasks** template and create an operator round for Asset Maintenance Task.

You can add frequencies such as daily, weekly, monthly, and so on to the template. When you update the task frequency in the template, the round plans which are using the same template are updated automatically. This helps you to identify and assign maintenance tasks for assets quickly and you can re-use templates for similar tasks, which saves time.

To create a template:

1. Login to Desktop application.
2. In the Dashboard, click **Operator Rounds Planner**.
3. Click **Round Templates** on the left side pane.

Figure 6-1 Round Templates Screen



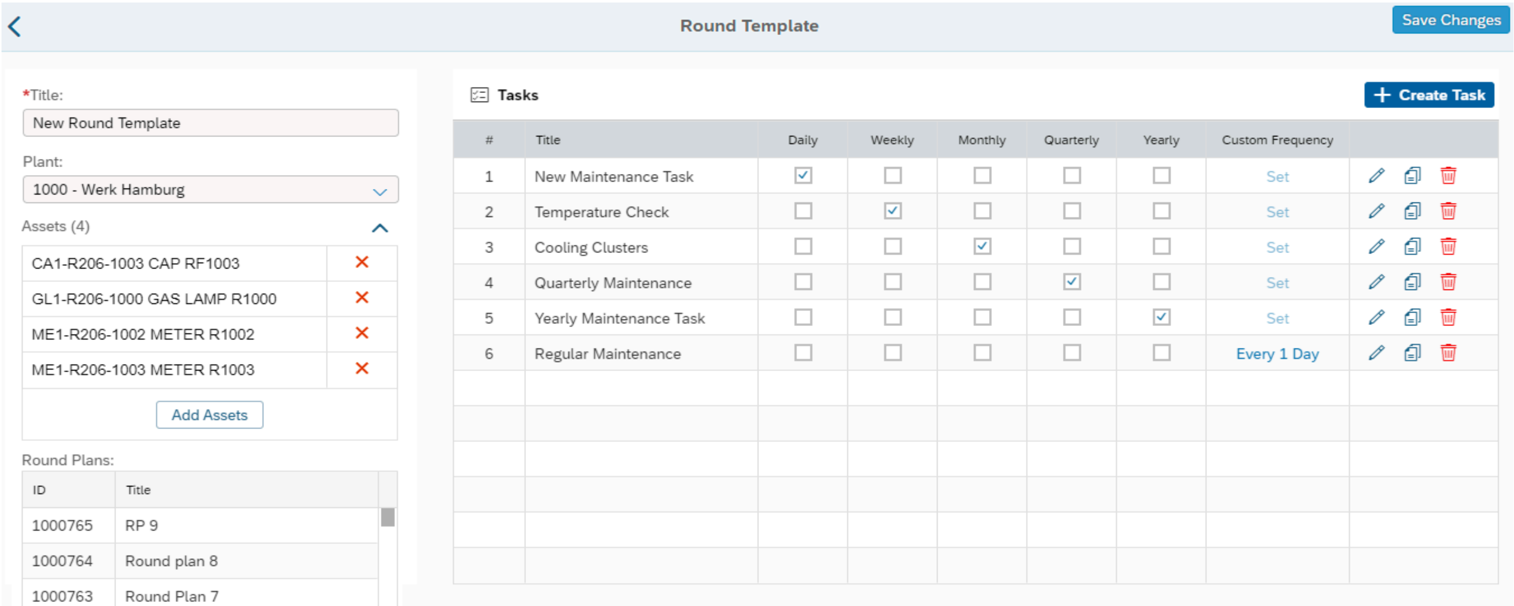
ID	Description	Created On	No.of Round Plans
1000170	Reactor Monthly plan	2022-01-11	76
1000171	Test	2022-01-12	10
1000172	New Round Template	2022-01-12	13
1000190	Broiler	2022-03-01	34
1000191	Mworkorder-Op rounds	2022-03-07	2
1000196	Link Asset	2022-03-16	1
1000205	Plant Maintenance	2022-03-29	3
1000206	Plant Repair	2022-03-29	2
1000207	new task 11	2022-04-11	3
1000208	Template Title	2022-04-17	12
1000210	maintenance of DG	2022-05-04	0

In this screen you can,

- Sort and filter templates by ID, Description, Created On (sort only), No. of Round Plans.
- Edit the template using Edit icon.
- Copy the template using Copy icon.
- Delete the template using Delete icon.

4. Click **Create Template** on top right.

Figure 6-2 Create a Template with Maintenance Tasks



5. In the **Round Template** screen, enter **Title** of the template, select **Plant**, and add assets by clicking the **Add Assets** button on the left side.
6. Click **Create Task** on the right side.
7. In the **New Task** window, enter the following:

Field	**Description**
Title	Enter the name or code of the task.
PI Tag	Enter the reference or threshold value for the task.
Compo-nent	Enter the name of the component where the task to be performed. For example, Engine.
Failure Mode	Enter the mode of the failure. For example, bearing failed.
Mainte-nance Method	Enter the method of the maintenance. For example, remove the failed bearing and add the new one.
Lock Out	Enter the asset/equipment lock out information if you want to lock or shut down the asset/equipment.
UI Control Type	Type of the task. Possible values:

	◦ Button ◦ Text Input ◦ Segment Control ◦ Drop-down ◦ Date Picker ◦ Numeric Input **Note**: ◦ Value in this field corresponds to a dynamic form configured in RACE. ◦ Additional fields are displayed depending on the form (option) selected. ◦ When you select a task type as Drop-down or Segmented Control, the three fields such as Value, Result, and Color are displayed.
Start Date	Select the date when the task should start.
End Date	Select the date when the task should end.

8. Click the **Add** icon in the **Attachments** section to add images or reference documents.
9. Click **Create Task**.
   The newly added task is added to the list in the Tasks section. In this section, you can edit, copy, or delete the tasks.
10. Select the frequency for the task such as **Daily**, **Weekly**, **Monthly**, **Quarterly**, **Yearly**, or **Custom Frequency**.

    To select **Custom Frequency**,

    ◦ Click the **Set** link.

    > **Note:**
    > You must unselect all the other frequencies to enable the Set link.

    ◦ In the **Custom Frequency** window, enter the number and select the frequency from the drop-down such as **Day**, **Week**, or **Month**.
    ◦ Click **Save**.
11. Click **Save Changes** on top right.
    The new template is created and is displayed in the Round Template section.

6.1.1. Create Round Plan (Asset Maintenance Task) Using Template

You can create a round plan for assets using templates based on task type and round plan frequency.

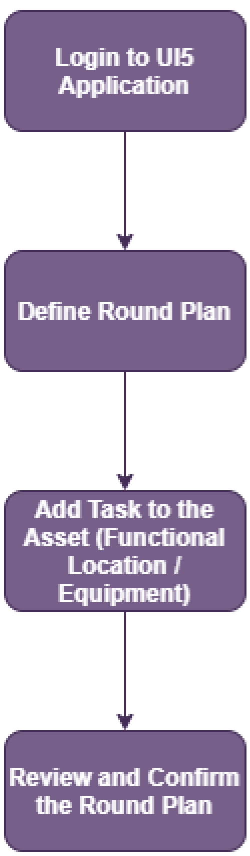
When you update the task information in the template, all the rounds that are created with the template are updated automatically. For more information, see Create Operator Round for Asset Maintenance Task *(on page 143)*.

6.2. Plan and Schedule Asset Monitoring Tasks

As a back office supervisor (Planner), you can define and schedule recurring rounds and assign the rounds to the plant personnel (Operator) depending on their availability.

You could plan a round for motor inspection to check the bearings, wiring and other components twice a week or verify the elevated sprocket once in 15 days. Data obtained from an Operator Round helps you take further actions like notifying the appropriate technician or supervisor.

Figure 6-3 Operator Rounds - Planner Workflow



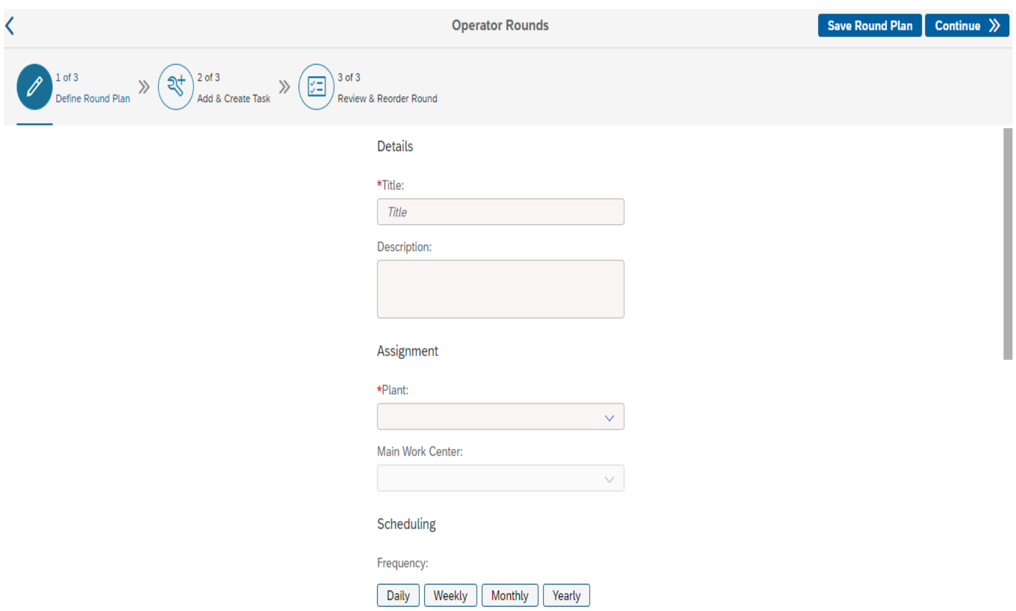
6.2.1. Create Operator Round for Asset Maintenance Task

Use the Operator Rounds module in the mWorkOrder Desktop application to plan an operator round with details like start and end date, person responsible, and tasks to be done on equipment and functional location.

To create asset maintenance task:

1. Login to Desktop application.
2. In the Dashboard, click **Operator Rounds Planner**.
3. Click **Round Plans** on the left side pane.
4. Click **Create New Round Plan** on top right.

Figure 6-4 Define Round Plan



5. In the **Define Round Plan** tab, enter the following:

Field	Description
Details	
Title	Name of the round plan like AHU (Air Handling Unit) Motor Monthly Inspection.
De-scrip-tion	Short description for the round plan.
Assignment	

Plant	Select the Plant where the plan is executed.
Main Work Center	Select the Work Center where the asset that needs inspection is located.
Scheduling	
Frequency	Select the duration between the consecutive rounds like: ◦ Daily ◦ Monthly ◦ Weekly ◦ Yearly
Custom Frequency	You can set the custom frequency by clicking the **Set** button. For example, if you want to schedule the round for every 5 Days, Weeks, or Months enter the number as 5 and select Day, Week, or Month from the drop-down.
Shift	The time slot in a day when the personnel execute the tasks.
Start Date	Select the date from when the Rounds are assigned to the Operator.
End Date	Select the date until which the rounds must be assigned to the Operator.
Extras	
Accessibility	Select **ON** or **OFF** to enable or to disable voice commands.
Notes & Instructions	Enter the notes or text like instructions or procedure to assist the personnel when executing the round.

6. Click the **Add** icon to add files like reference documents or images in the **Attachments** field.

> **Note:**
> You can configure the supported file types like jpeg, pdf, and png using RACE.

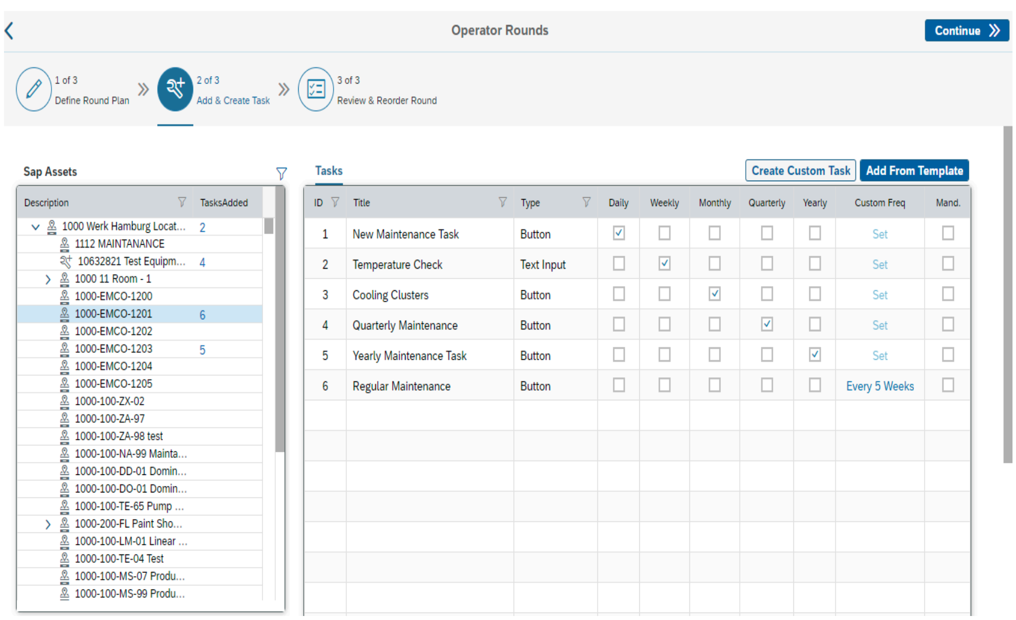
7. Click **Continue** to add tasks to the Functional Locations and Equipment in the **Add & Create Task** tab.

> **Note:**
> After clicking **Continue**, the **Asset Filters** window appears where you can filter the Functional Location and Planner Group or you can continue without filter.

In this tab, you can:

- View SAP Assets (Functional Location and Equipment) on the left section of the screen.
- View Tasks and Templates on the right section of the screen.
- Filter and sort assets on the left side.
- Edit, Filter and sort tasks on the right side.

Figure 6-5 Add Tasks



8. In the **SAP Assets** section, select the asset.
   You can select multiple assets at a time and assign the tasks.

Note:

Equipment assigned to the Functional Location are shown in the hierarchy view. You can also view a list of assets, functional locations and equipment under it, filter, sort, top level functional locations or assets and get relevant hierarchy or relevant assets.

9. Add maintenance tasks using the following options:
   a. To add a custom task:
      i. Click **Create Custom Task** on the right section.
      ii. In the **New Task** window, enter the following:

Field	**Description**
Title	Enter the name or code of the task.
PI Tag	Enter the reference or threshold value for the task.
Compo-nent	Enter the name of the component where the task to be per-formed. For example, Engine.
Failure Mode	Enter the mode of the failure. For example, bearing failed.
Mainte-nance Method	Enter the method of the maintenance. For example, remove the failed bearing and add the new one.
Lock Out	Enter the asset/equipment lock out information if you want to lock or shut down the asset/equipment.
UI Con-trol Type	Type of the task. Possible values: ▪ Button ▪ Text Input ▪ Segment Control ▪ Drop-down ▪ Date Picker ▪ Numeric Input **Note**:

		▪ Value in this field corresponds to a dynamic form configured in RACE. ▪ Additional fields are displayed depending on the form (option) selected. ▪ When you select a task type as Drop-down or Segmented Control, the three fields such as Value, Result, and Color are displayed. ▪ When you select a task type as form, a dynamic form is assigned to a technician to fill and execute the form.

iii. Click the **Add** icon in the **Attachments** section to add images or reference documents.

iv. Click **Create Task**.

Task is created and the count of tasks is shown next to the Functional Location / Equipment.

> **Note:**
> When a task is created, you can change the sequence of the tasks, and these changes are reflected in the mobile application.

v. In the **Tasks** section, do the following:

- Select the frequency for the task such as **Daily**, **Weekly**, **Monthly**, **Quarterly**, **Yearly**, or **Custom Frequency**.

> **Note:**
> The frequency is selected by default based on the **Frequency** or **Custom Frequency** selected in the **Define Round Plan** tab.

- To select **Custom Frequency**, unselect all the other frequencies, click the **Set** link, enter the number, select the frequency from the drop-down such as **Day**, **Week**, or **Month**, and click **Save**.
- Select the Task checkbox to view the history of the individual tasks.
- Select the **Mandatory** checkbox to make this task mandatory for the Operator.

> **Note:**
> You cannot skip the mandatory tasks.

b. To add a task from the template:

i. Click **Add From Template** on the right section.

ii. In the **Choose Task Template** window, select the template.

iii. Click **Use Template**.

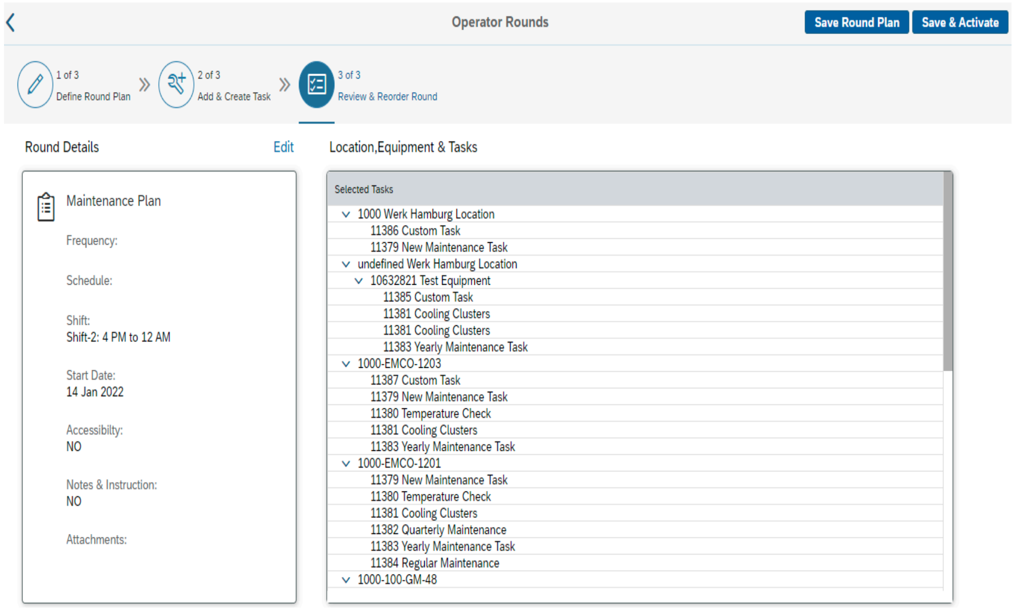
Tasks are added and the count of tasks is shown next to the Functional Location / Equipment.

> **Note:**
> The tasks are added based on the **Frequency** or **Custom Frequency** selected in the **Define Round Plan** tab. For example, if you select the **Frequency** as **Daily**, the daily wise tasks are added. If the **Frequency** is not selected then all the tasks are added from the template.
>
> You cannot edit/select the frequencies for the tasks if the **Frequency** or **Custom Frequency** is selected in the **Define Round Plan** tab.
>
> You can edit/select the frequencies for the tasks if the **Frequency** or **Custom Frequency** is not selected in the **Define Round Plan** tab.

iv. In the **Tasks** section, select the **Mandatory** checkbox to make the task mandatory for the Operator.

10. Click **Continue** to review the round plan details.
11. In the **Review and Reorder Round** tab, verify the round details in the **Round Details** section on the left.
12. Click **Edit** to navigate to the **Define Round Plan** tab and modify the details.
    Review the tasks that are created for the asset in the **Location, Equipment and Tasks** section on the right and reorder the position of the tasks under Asset (or) move assets to reorder operator rounds inspection route.

Figure 6-6 Review Round Plan



13. Click **Save and Activate**.

    A message appears confirming that the Round Plan <number> <task name> successfully created.

14. Click **OK**.

    You can view the rounds depending on the Round Plan in the Round Plan menu.

> **Note:**
> Rounds for the newly created round plans are shown depending on the schedule of the batch job configured in SAP.

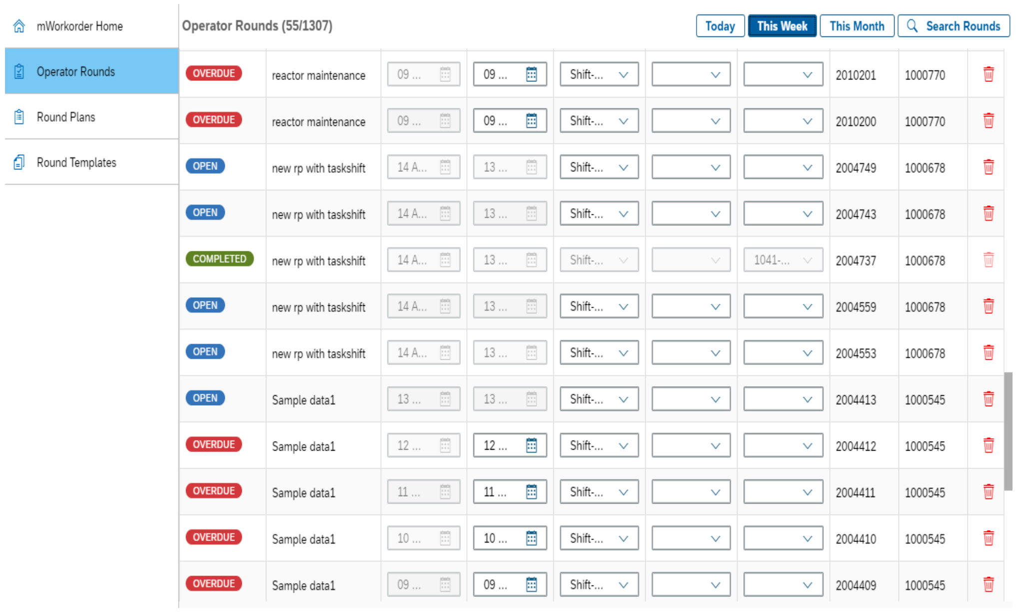
6.2.2. View Operator Rounds and Update Due Dates

View planned operator rounds which are in open state and that are past their due date. You can modify the due dates to the rounds that are in the overdue state and also delete the rounds that are not required.

To view operator rounds and modify due dates:

1. Login to Desktop application.
2. In the Dashboard, click **Operator Rounds Planner**.
3. Click **Operator Rounds** on the left side pane.

Figure 6-7 View Round Plans



4. You can view the following details in the Operator Rounds screen.

Table 6-1 Operator Rounds Parameters

Field	Description
Status	Whether the operator round is in the **Open** or **Overdue** state.
Title	Name of the Operator Round.
Due Date	Due date of the operator round. As a supervisor, you can edit the due date of the operator round that is in the **Overdue** state and move it back to **Open** state. **Note:** When you update an **Overdue** Plan with a future date, the status changes to **Active.**
Shift	Time slot when the personnel can execute the tasks. As a supervisor, you can make changes to the shift from the drop-down.

Work Center	Work center where the asset that needs inspection is located.
Operator	Operator to whom the round plan is assigned. As a supervisor, you can allot the Asset to another operator from the drop-down. **Note:** If a round is not completed by an existing user, you can reassign the partially executed or in progress round to a different user.
Round ID	ID automatically generated by the system when a new round plan is created.
Round Plan	ID automatically generated by the system when a new round plan is created.
	Option to delete the operator round.

5. Search / filter operator rounds with the following parameters:

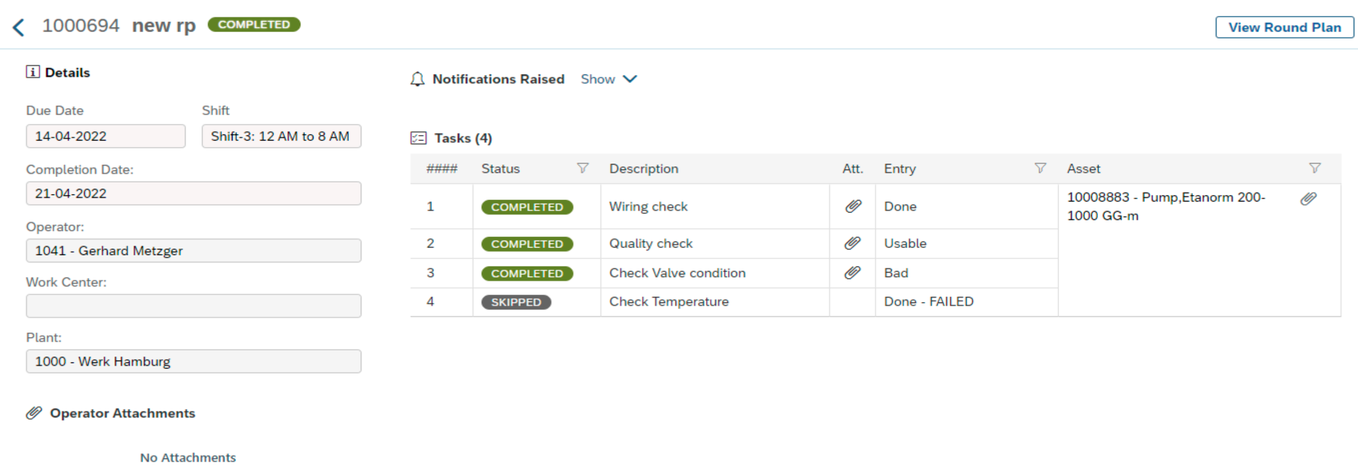
Table 6-2 Search / Filter Operator Rounds

Option	Description
Today	Operator Rounds created on the same day.
This Week	Operator Rounds created in the current week.
This Month	Operator Rounds created in the current week.
Search Rounds	Search a round by entering any or all the below details, ◦ Round ID ◦ Work Center ◦ Equipment ◦ Functional Location ◦ Status ◦ Description ◦ Round Plan ID

	Note: You can either enter the details or select the round from the drop-down. All the fields are dynamic and can be enabled or disabled as required.
Sort Rounds	Sort rounds based on Due Today, Due Tomorrow, Due this week.

6. Click on the round with the status COMPLETED to see the round details submitted or executed by an operator.

Figure 6-8 View Executed Round Details



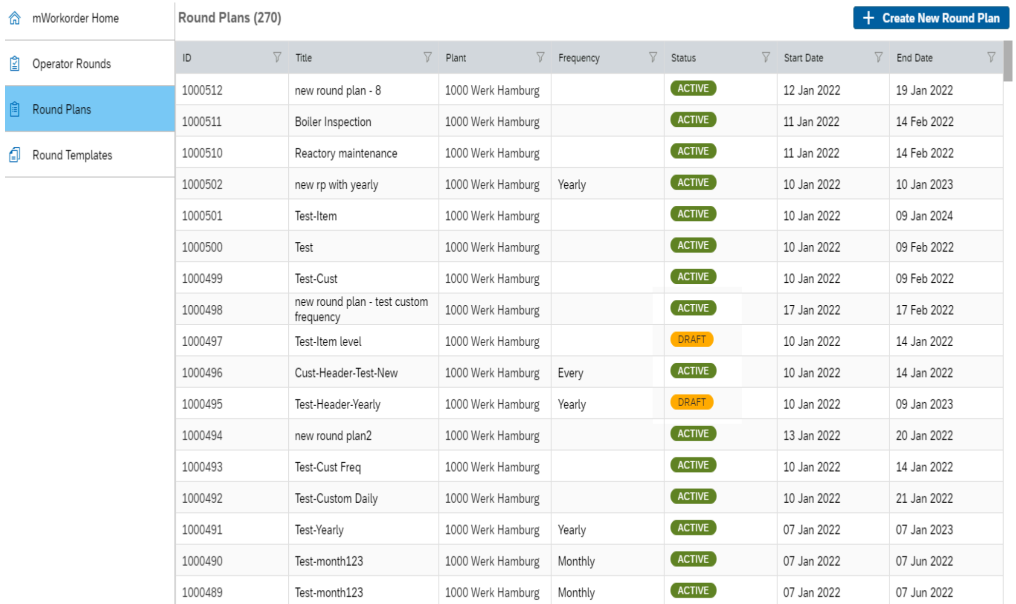
6.2.3. Update Existing Asset Performance Monitoring Tasks

When you click the Round Plans, you can view the plans that are Active or saved as Draft. You can click the round plans and edit them.

To edit asset performance monitoring tasks:

1. Login to Desktop application.
2. In the Dashboard, click **Operator Rounds Planner**.
3. Click **Round Plans** on the left side pane.

Figure 6-9 View Round Plan



Field	Description
Round Plan ID	Auto-generated Round Plan ID.
Title	Name of the round plan.
Plant	The Plant where the plan is executed.
Frequency	Duration between two consecutive rounds. **Note:** Depends on what is selected at the time of creation of the round plan.
Status	Whether the round plan is in **Active** or in **Draft** mode
Start Date	Date when the round plan is scheduled to start by the operator.
End Date	Date when the round plan is scheduled to be completed.

4. Select the round plan that you want to edit.
5. Click the **Edit** button.
6. Use the toggle switch 

in the round plan details screen to make the round plan active or inactive (draft).

> **Note:**
> Edit and Copy options will be available in the future upgrade.

6.3. Assign and Execute Operator Rounds

As the plant personnel (Operator), you inspect the enterprise assets/equipment and report the inconsistencies to your supervisor.

You can inspect the equipment or functional location by scanning the asset QR code. This ensures that you select the right asset to execute the round. When asset details in the QR Code and Operator Round match, the round tasks are displayed.

If the scanned QR code does not match with the asset code that is available in the rounds, an error message 'Wrong Asset' is displayed. If the barcode of the asset is damaged, enter the asset code manually.

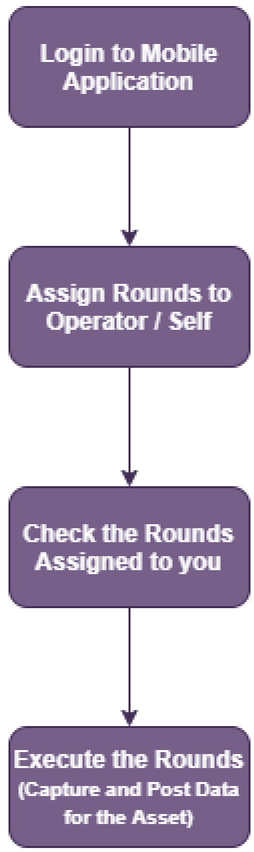
You can skip the scanning process by selecting the relevant predefined reason and if the required reason code is not available in the drop-down, select the reason as Other and enter the relevant reason manually.

For example, when your supervisor assigns you a round to check the motor bearings friction twice a week, you visit the functional location or equipment, review the check points, capture the data like rpm and voltage, and submit a report using the operator rounds module. If you find any anomaly, you can raise a notification immediately for the equipment or the functional location.

Use the Operator Rounds module on the mobile application to:

- View and execute rounds assigned to you with Overdue and Open statuses
- Assign open tasks to yourself from the Open Rounds
- View the reference documents that help you complete the round
- Review and complete the checklist items of the round like:
    - Capture measurements like temperature, pressure, humidity, or viscosity
    - Capture and add images or video of the equipment/asset
- Post data

Figure 6-10 Operator Rounds - Operator Workflow



6.3.1. Assign the Open Rounds to Self

When a Supervisor creates a round but does not assign it to a technician the round appears in the Open Rounds screen. As an Operator you can select the round and assign it to yourself.

To assign a round to yourself from the Open Rounds screen:

1. In the Home screen, tap **Operator Rounds**.
2. In the **Operator Rounds** list screen, tap the **Open Rounds** tab.

> **Note:**
> In the list screen, you can:
> - Sort and filter the rounds or assets that are not assigned to you.
> - Tap the Search field to search the round.

3. Select the Round ID with the status **OPEN** and tap on the **Add to My Rounds** button.
   A message appears confirming that Round Status is updated successfully.
4. Tap **OK**.
   The selected Rounds are assigned to you and you can see the assigned rounds in **My Rounds** tab.

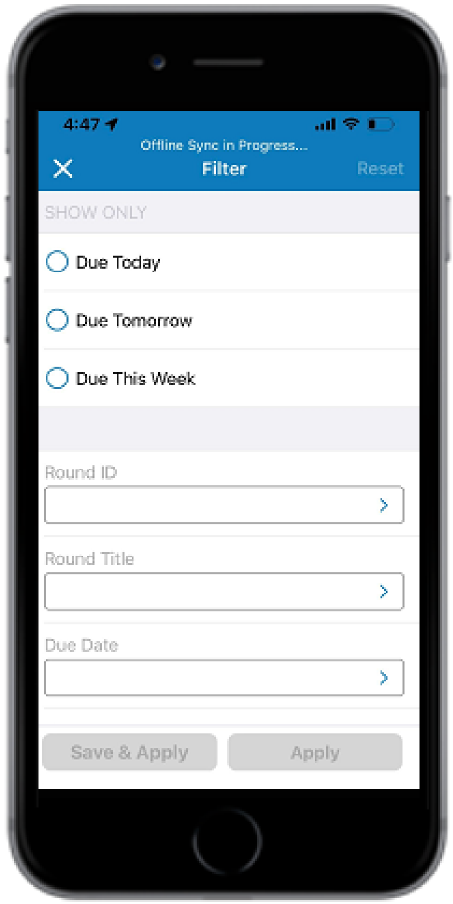
6.3.2. Filter Operator Rounds

You can filter the rounds based on the User Preferences. You can filter the round by **User Preferences , Round ID, Round Title, Due Date, and Status.**

To filter the operator rounds:

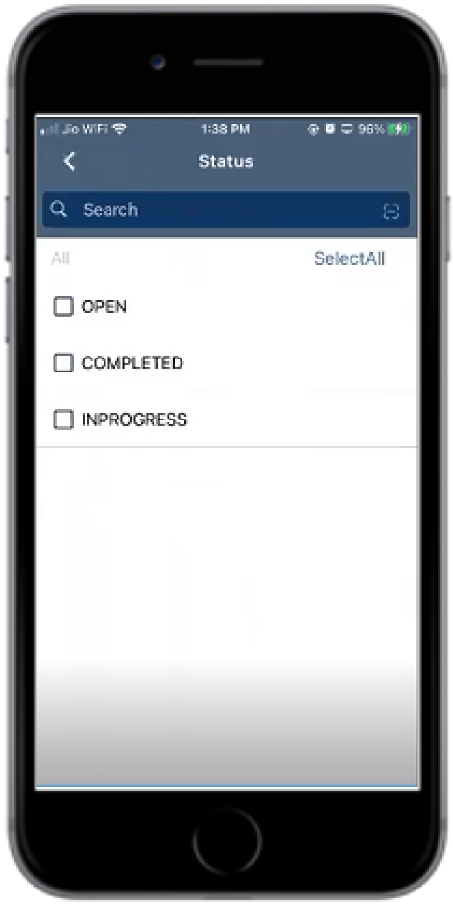
1. Tap the  icon in the **Operator Rounds** list screen to filter the rounds.

Figure 6-11 Operator Rounds - Filter



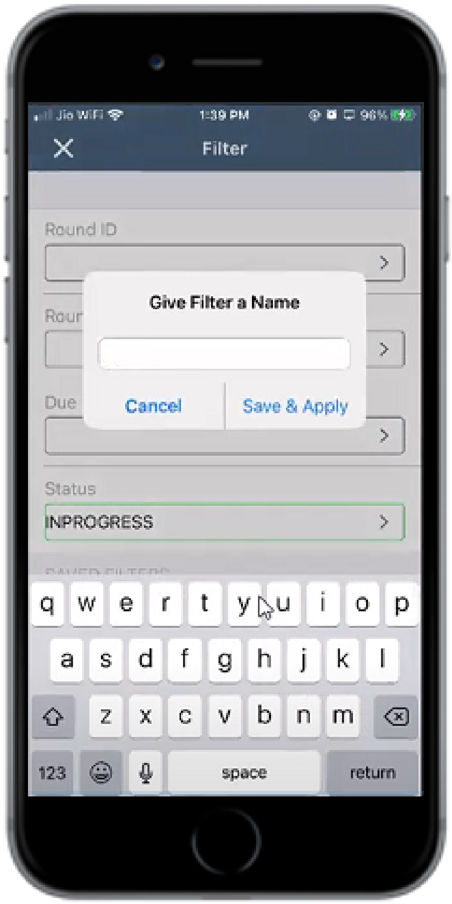
2. Enter the required information in the **Filter** screen.
   You can filter rounds based on Due Today, Due Tomorrow, Due This Weekx, Work Center, Date, and Shift.
3. Select the **Status** field.
4. In the Status screen, select the following status based on the status of the round:
   - OPEN – When the round is yet to be started.
   - INPROGRESS – When the round is in progress.
   - COMPLETED – When the round is completed.

Figure 6-12 Operator Rounds – Select Status



5. Tap the back arrow to go back to the Filter screen.
6. Tap **Apply** to apply the filter.
   OR
7. Tap **Save & Apply** to save the filter for future use.
8. Enter a filter name in the **Give Filter a Name** window.

Figure 6-13 Operator – Filter Name



9. Tap **Save & Apply**.
   The filter is saved.

> **Note:**
> To delete the saved filter, swipe the filter and tap Delete.

6.3.3. Execute the Rounds Assigned to You

When a Supervisor assigns a round, you (operator) can view the round in the mobile application.

You can either execute the task or skip the task by selecting the relevant reason. Also, if the reason for skipping the task is not listed in the drop-down you can select the reason as Other and add comments manually.

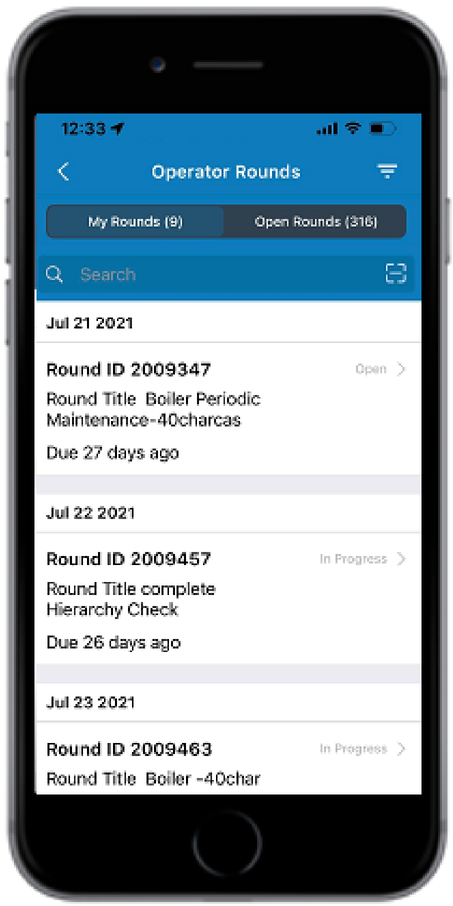
You can report the result of the task (for example, passed or failed) in a round by selecting the values from the drop-down or Segment Control field.

When the task in the round is unfinished or in the open state, it automatically moves to the next round based on the background job till the task is completed. For example, if the weekly task in Round 1 is not completed then it moves to the next round and if the task is pending for more than seven days then the task status changes to Overdue.

To execute a round assigned to you from the My Rounds screen:

1. In the Home screen, tap **Operator Rounds**.
2. In the **Operator Rounds** list screen, tap the **My Rounds** tab.

Figure 6-14 Operator Rounds – My Rounds

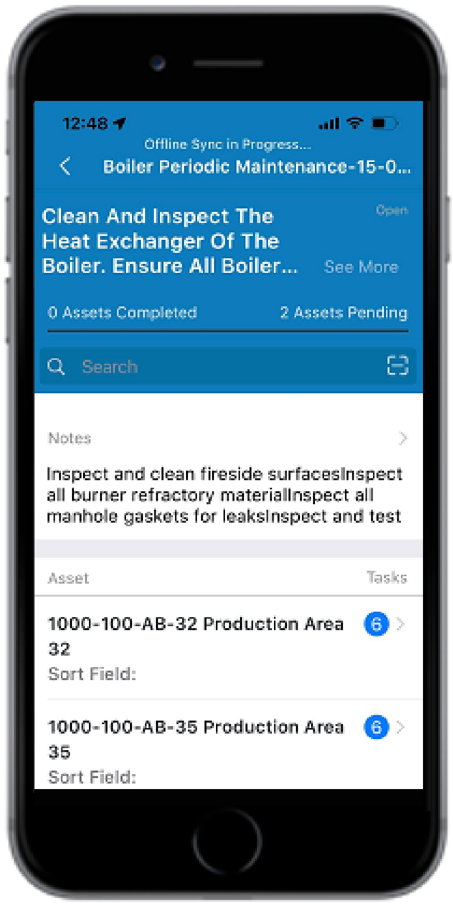


> **Note:**
> In the screen, you can:

- Sort and filter the rounds or assets assigned to you.
- Tap the Search field to search the round.
- Tap the Scan icon to scan the round.

3. Select the Round ID assigned to you with OPEN status.
   Asset details are displayed along with completed or pending tasks.

Figure 6-15 Operator Rounds – Round Details



In the Round Details screen, you can view the:

- Status of your rounds or assets on the progress bar with the count in the header section.
- Reference attachments for the round.

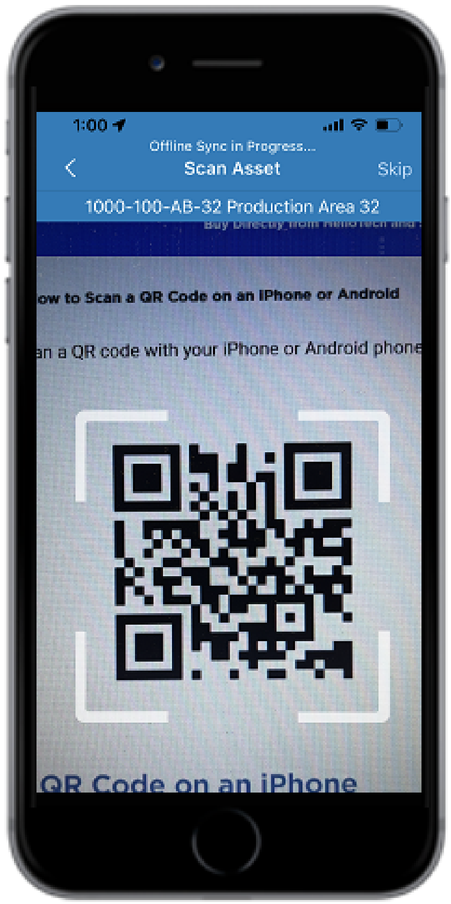
Table 6-3 Round Details screen UI parameters

UI	Description
Progress Bar	Progress of the assets and tasks.

Search	Search assets.
Notes	Special instruction or miscellaneous information related to the task.
Attachment	Attachments related to the asset.
Asset	Assets to work on for a round.
Tasks	Count of task(s) completed.

4. Tap the asset (Equipment or Functional Location).

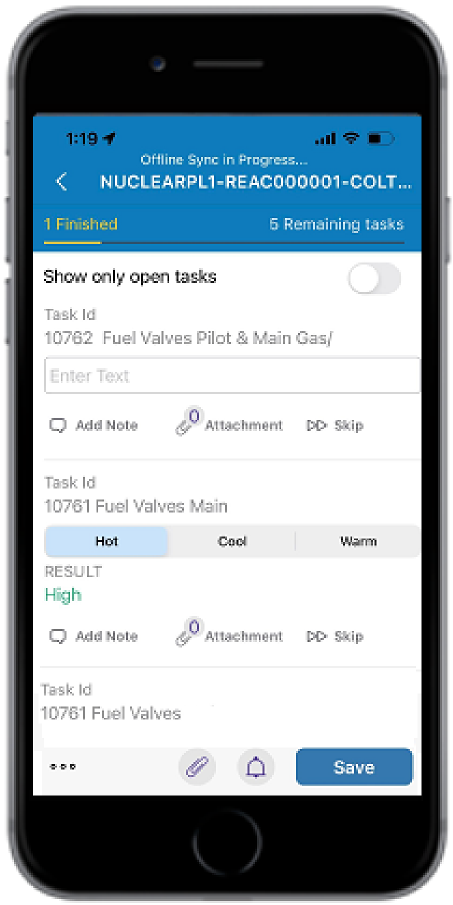
Figure 6-16 Scanning Asset



5. In the **Scan Asset** screen, verify the tagged asset by scanning the QR code/barcode.

> **Note:**
> You can enter the code manually if the barcode of the asset is damaged. You can skip the asset scanning process by tapping the **Skip** on top right and selecting the relevant reason such as Damaged Barcode, Missed Barcode, and Incorrect.

Figure 6-17 Operator Rounds – Task Details



6. In the **Task Details** screen, enter the required data and complete the checks.
   In the Task Details screen, you can:

  - View the status of your tasks with the count on the progress bar in the header section. Color of the fields (tasks) that you complete is set to green.
  - Select the toggle button to hide or display the completed tasks.
  - Select the relevant values from the drop-down or Segment Control field (for example, Yes or No or Maybe from the drop-down field and Complete or Incomplete or Partially from the Segment Control field.) then the Pass or Fail value in the **RESULT** field is displayed automatically.
  - Add relevant text for the task by tapping the **Add Note** option and entering the text in the **NOTE** field. Delete the note by tapping the **Delete Note** option.
  - Add attachments such as documents and images using the **Attachments** option and tap **Save**. Add manuals that help the operator to refer to the content and complete the task quickly and easily.
  - Skip the task by tapping the **Skip** option and selecting the relevant reason then the label **Skipped** is displayed for the skipped task. Undo the task skipping process by tapping the **Unskip** option.
  - Skip all open tasks and close the round using the **Skip All Open Tasks** option.

    Tap more options icon at the bottom of the screen to see the Skip All Open Tasks option.
  - Tap notifications icon to create a notification from here.
  - Scroll to view and complete the tasks.

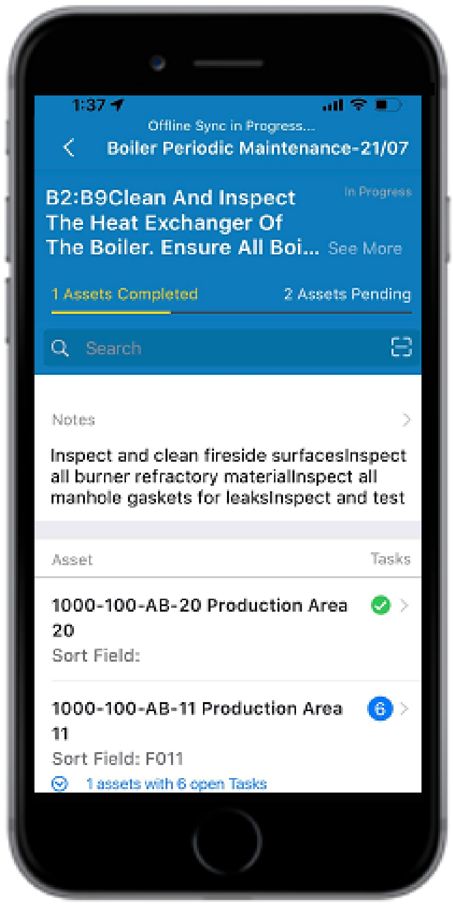
7. Tap **Save**.

A message appears confirming that the Tasks are Updated Successfully.

8. Tap **OK**.

Round along with the assigned tasks is executed or submitted for the asset.

Figure 6-18 Operator Rounds – Task Complete



6.3.3.1. Move Partially Completed Rounds

As a supervisor, you can unassign or handover the partially completed round from My Rounds and move it to Open Rounds without any data loss. Once the round is moved, the status is changed to Open.

This feature helps to handover the round to the new user with ease and the user in the next shift can take the round and complete it on priority.

To unassign partially completed rounds:

1. In the Home screen, tap **Operator Rounds**.
2. In the **Operator Rounds** list screen, tap the **My Rounds** tab.
3. Select the Round ID assigned to you with OPEN status.

   Asset details are displayed along with completed or pending tasks.
4. Click **Unassign** to unassign the round from the current user.

   Selected round is unassigned from My Rounds and is moved to the Open Rounds.

Assign Partially Completed Rounds and Execute

You can assign the partially completed round from Open Rounds and start executing it. Once the round is assigned then it is moved to My Rounds and the status is changed to In progress. For more information, see Execute the Rounds Assigned to You *(on page 160)*.

6.3.4. Create a Notification from Rounds Screen

When you are executing operator rounds tasks and you find an issue, you can immediately raise a notification from the Rounds Screen itself. Before you can create, you can also view the history of notifications that were created for an equipment or a functional location.

To create a notification:

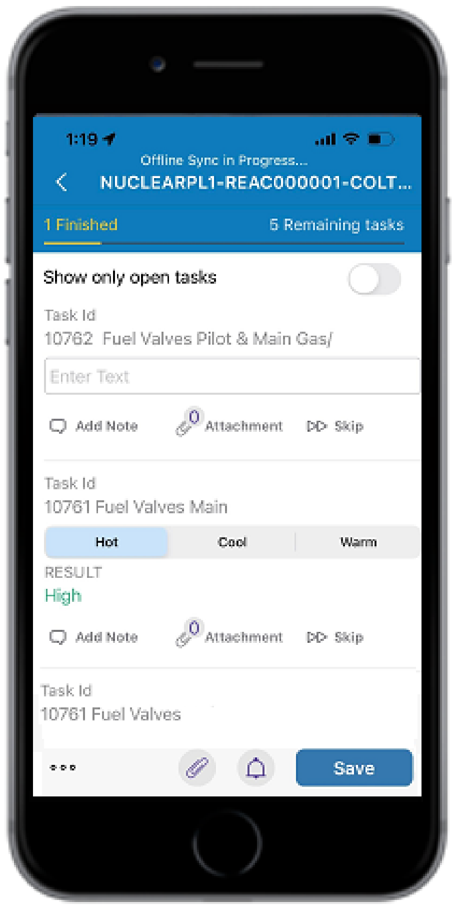
1. In the Home screen, tap **Operator Rounds**.
2. In the **Operator Rounds** list screen, tap **My Rounds** tab.

   > **Note:**
   > In the list screen, you can:

   - Sort and filter the rounds assigned to you.
   - Tap the Search field to search the round.
3. Select the Round ID assigned to you.
   Asset details are displayed along with completed or pending tasks.
   In the **Round Details** screen, you can view the:
   - Status of your rounds or assets on the progress bar with the count in the header section.
   - Reference attachments for the round.
4. Tap the asset (Equipment or Functional Location).
5. In the **Scan Asset** screen, verify the tagged asset by scanning the QR code/barcode.

> **Note:**
> You can enter the code manually if the barcode of the asset is damaged. You can skip the asset scanning process by tapping the **Skip** on top right and selecting the relevant reason.

Figure 6-19 Operator Rounds – Task Details



6. In the **Task Details** screen, tap the Notifications  icon to create a notification at the task level.

Figure 6-20 Operator Rounds - Notifications

In the **Notifications** screen, you can:

- View the history of notifications that are related to operator rounds.
- Select the notification to view the notification details in the My Notifications screen.

> **Note:**
> You are redirected to the Create Notification screen when you tap the notifications icon on the task detail screen if there are no notifications.

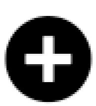
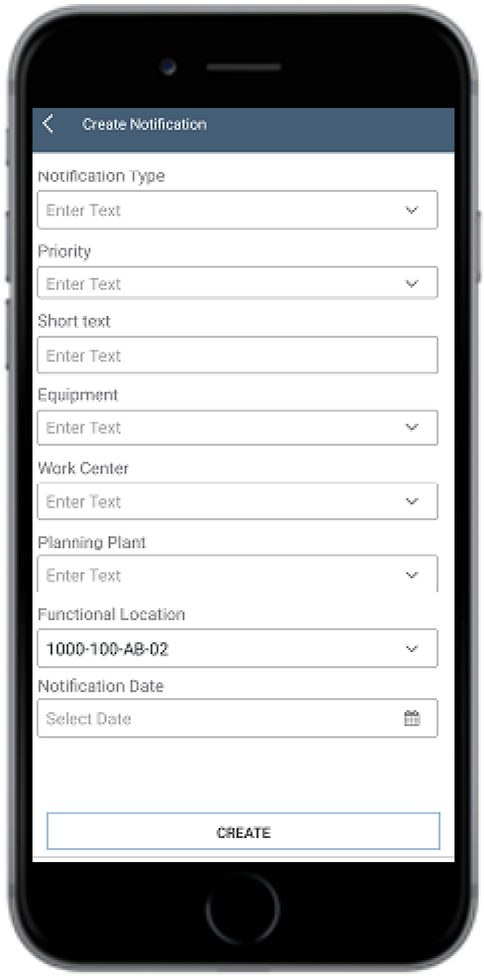
7. Tap the  icon at the bottom.

Figure 6-21 Operator Rounds - Create Notification



8. In the **Create Notification** screen, Maintenance Plant and Functional Location fileds are auto populated.
9. Enter the required data.
10. Tap **Create** to create the notification.

    A message appears confirming that the notification is created successfully.
11. Tap **OK**.

    The notification is created and you can see the newly created notification in the Notifications screen.

> **Note:**
> You can view the created notifications in the offline mode.

7. Create Notifications when Equipment needs Repair / Inspection

When an equipment needs repair or inspection, you as a technician or supervisor can create a notification using the **Notifications** module requesting an inspection. After inspection of the equipment, the technician concerned creates a work order, if required or closes the notification if no anomaly is found.

7.1. Overview of Notifications area in home screen

You can view notifications by priority, status, and notification type in the mWorkOrder application home screen.

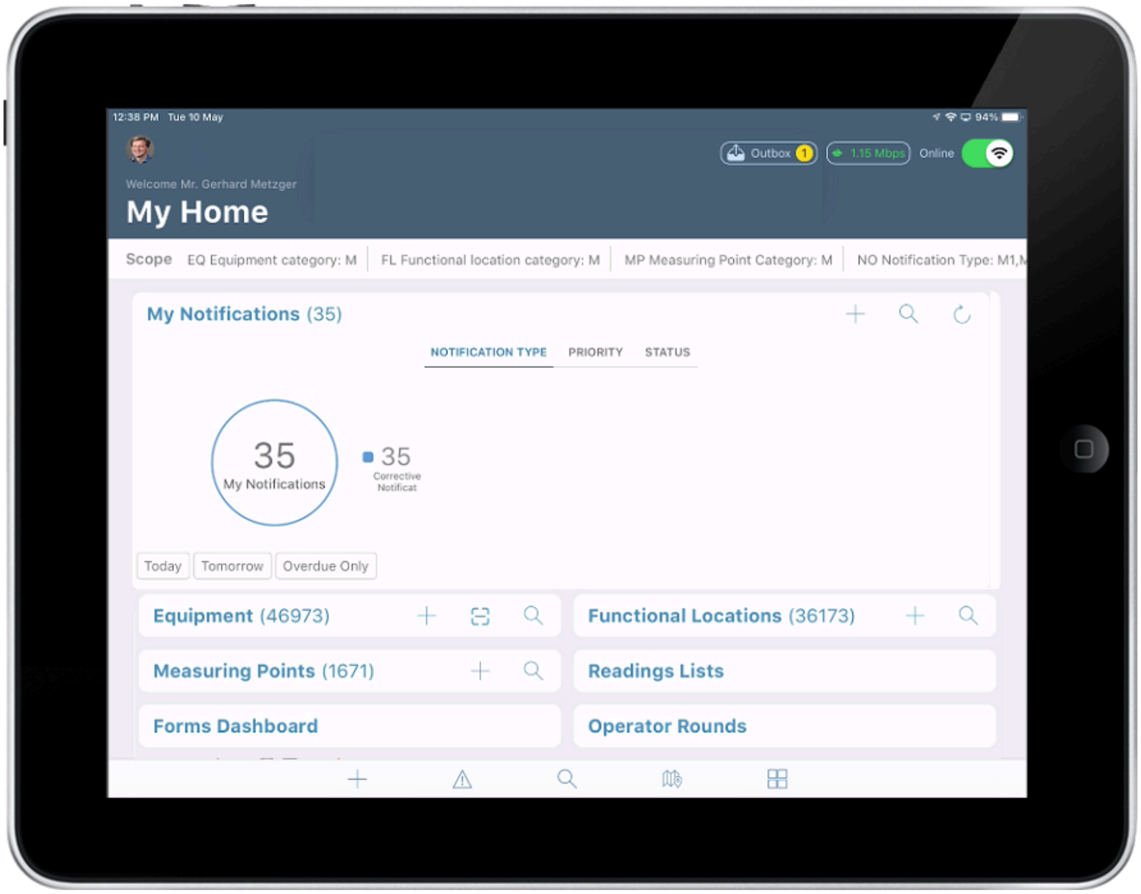
From the home screen, you can view the Notification by:

- **Priority**: Emergency, Very High, High, Medium, Low, and No Priority.
- **Status**: Outstanding Notifications, Notifications Completed, and Notification in Process.
- **Notification Type**: Breakdown Notifications, Corrective Notification, and so on.

You can view the total notifications and the graphical representation by date, by week or by month. You can configure the following through **RACE**:

- Configure work orders, work center, planner group, maintenance plant subsections.
- Dashboard for Bar Chart, Line Chart, Metrics, and List views of data.
- Views for Monthly, Weekly, and Daily mode.
- Change the sequence of sub-section using the **Position** field.

Figure 7-1 Notifications Dashboard

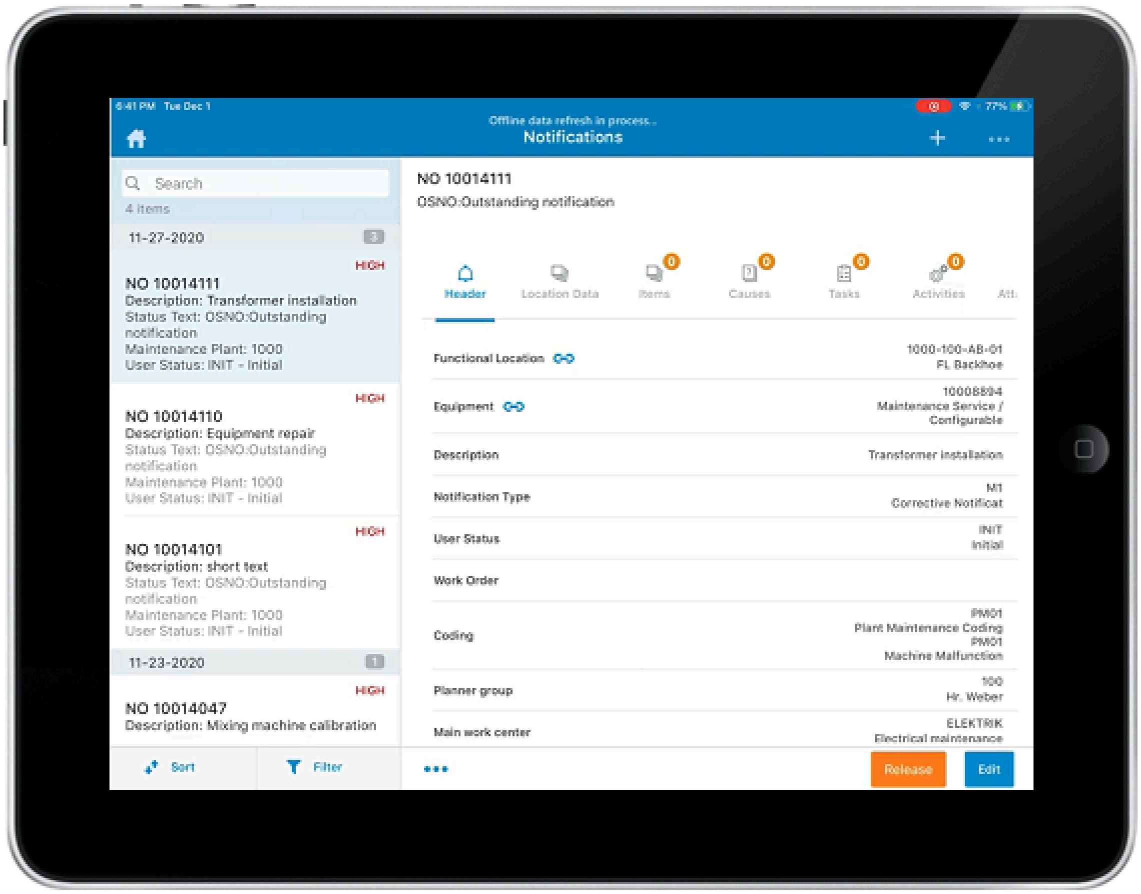


7.2. Notifications Screen Overview

This topic helps you understand how the Notifications screen is structured in the mWorkOrder application.

Tap on My Notifications in the Home screen to access the Notifications screen. Notification screen has two columns:

Figure 7-2 Notifications Screen



The left side column contains:

- **Notifications** sorted by dates along with descriptions
- **Search** box to search notification. For more information, see Search Items and Tasks in Modules *(on page 111)*
- **Sort** button to sort out the notifications. For more information, see Sort Records *(on page 120)*
- **Filter** button to filter the notifications. For more information, see Filter Records *(on page 118)*

The right-side column displays the information related to the notifications that you selected in the left side column. The column contains multiple tabs for each tab you see the following information:

- **Notification**: View details like Functional Location, Equipment, Description, Notification Type, Priority, Notification Date, Notification Time, and so on.
    - To view the Functional Location, Equipment, and Work Order details, tap icon next to the respective fields.
- **Items**: View the line items associated with the notification.
- **Causes**: View the possible scenarios for a failure of a component.
- **Tasks**: View the task that needs to be done for completing a work order.
- **Activities**: View the activities that need to be performed for completing a task related to a specific work order.
- **History**: View the history of updates done to the notification.
- **Attachments** *(on page 113)*: View the files associated with the notification.
- **Embedded Form**: Name of the form is shown as a tab and when you click the tab, you can view the fields defined for the form. Embedded form is displayed with other associated forms related to the notification.

> **Note:**
> The screen sequence for all these tabs can be configured through **RACE**.

- **Release** *(on page 193)*: Once you finish creating a notification, release it so that the technician can view it and create a work order based on this notification
- **Edit** *(on page 121)*: You can edit the notification the same way you create which is modifying the data in the fields and screens that you have added while creating a notification. For information, see Create a Notification *(on page 175)*

7.3. Create a notification using an existing notification

You can copy details of an existing notification and create a new notification quickly. This powerful feature eliminates the need for entering recurrent information and saves precious time. When you copy an existing notification to create a new one, the entire data is copied except attachments, history, and user status.

> **Note:**
> When you copy a notification to create a new notification, notification type, priority, and description are not captured. Enter these details manually for the copied notification.

To create a new notification by copying data a notification:

1. In the left section of the **My Notifications** screen, search and tap the **Notification** that you want to copy.
2. In the right section of the **My Notifications** screen, under the **Notifications** tab, tap ••• and then tap **Copy Notification**.
3. In the **New Notification** screen:
    a. Review and modify the data, wherever required and tap **Save**.

    > **Note:**
    > Copy field values of your choice from the existing Notification. For this, you must define the fields that must be copied to the new Notification, in RACE Defaults menu. Create a new field with **UI Field type** as WNC in RACE Defaults and select or enter the fields (ECC field names like EQUNR, TPLNR) in the **Default Value** field.

    b. Tap **Yes** in the notification creation confirmation screen.

    A message notifies that the Notification <number> has been created successfully.

7.4. Create a Notification

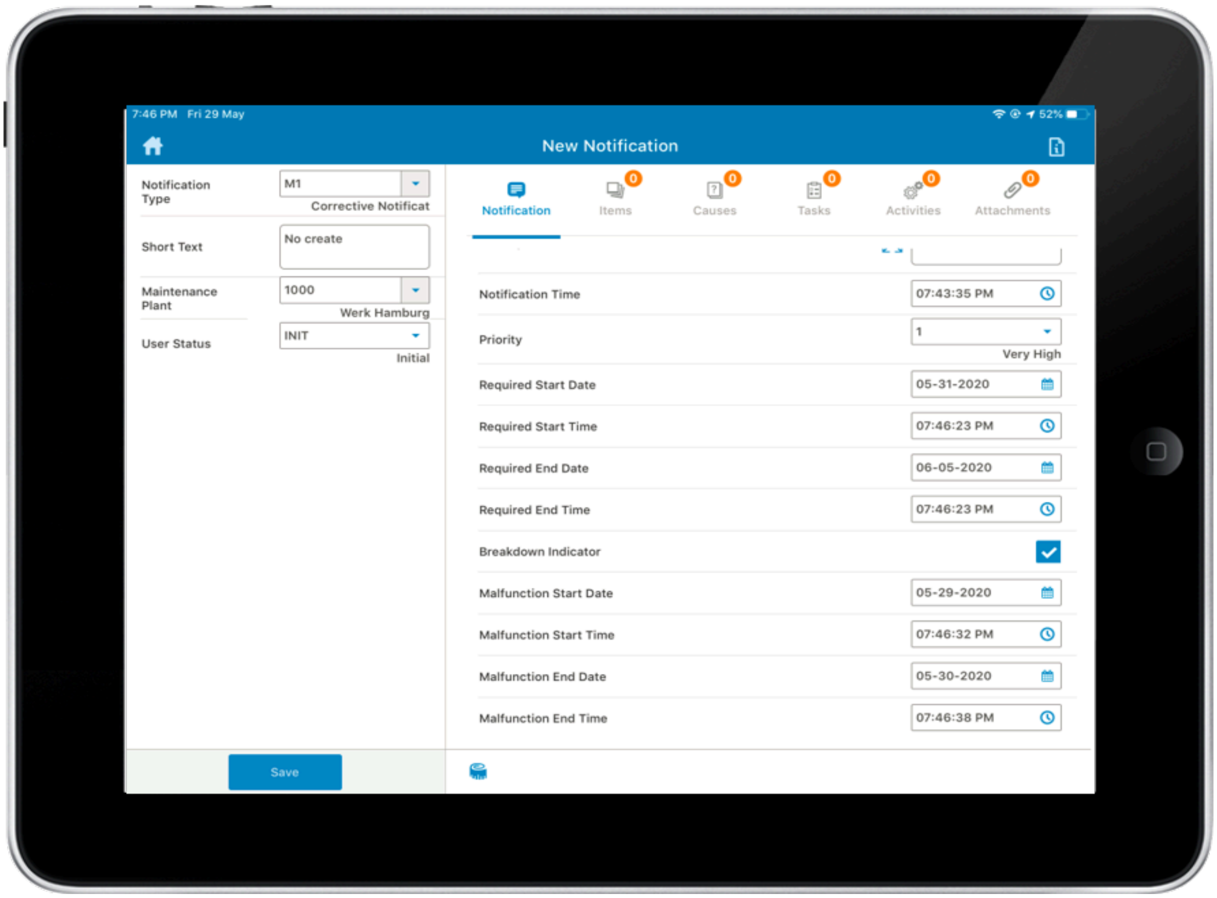
During asset maintenance tasks, if you find any anomaly that requires inspection from the technician, create a notification with the details of the equipment and the anomaly that you noticed.

To create a **Notification** when an equipment needs maintenance or repair:

1. In the **Home** screen, tap **Create** icon in the **My Notifications** area.

> **Note:**
>
> You can also tap the **Create** icon in the **Notifications** screen.

Figure 7-3 Notification Create



2. In the left side of the **New Notification** screen, do the following:
   - **Notification Type**: Select the Notification Type from the list.
   - **Short Text**: Enter short description.
   - **Maintenance Plant**: Select the Maintenance Plant from the list. The Equipment list, Functional Location, and Material/Assembly available for the Maintenance Plant is updated in the respective drop-down lists.
   - **User Status**: Auto populates based on configured default settings.
   - **Planning Plant**: Select the Planning Plant from the list.

> **Note:**
> When you enter or select values for a few fields while creating or editing notifications, the values in the dependent drop-down fields can be filtered. For example, the Work Center drop-down values are auto filtered based on values selected for Notification Type and Priority. This feature helps you select relevant data faster from the smaller list of options.

3. In the right side of the **New Notification** screen under the **Notification** tab, do the following:

> **Note:**
> Fields that are displayed depend on the UI validations configured in the RACE. For example, if the UI validation is configured to hide **Functional Location** field based on **Notification Type** like *M1* then the **Functional Location** field is not displayed when you select *M1* in **Notification Type** field.
>
> Familiar extensions for Equipment and Functional Location hierarchy such as Technical ID that help you identify assets easily can be configured through RACE. When done, you can also search assets using the extension field data.

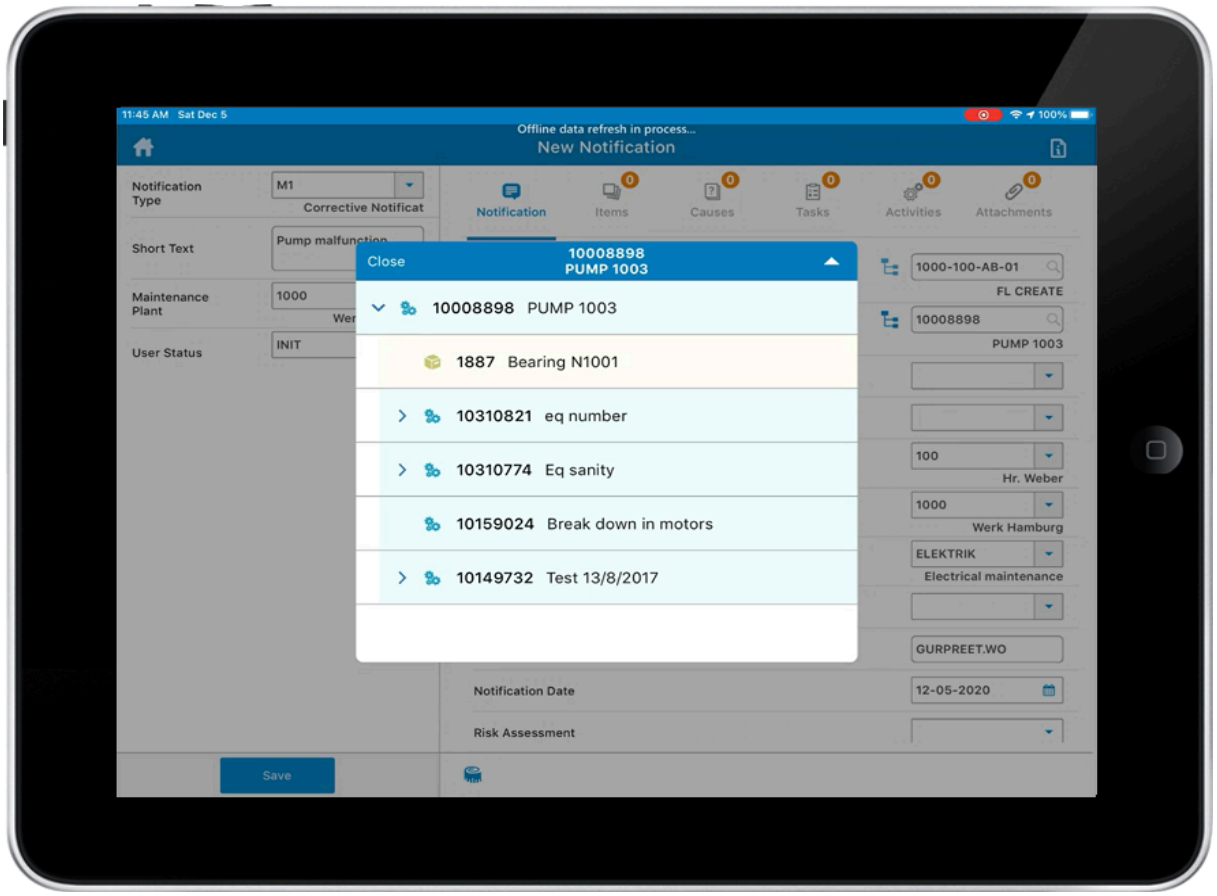
- **Functional Location**: Select Functional Location from the list. After selecting the functional location, tap the **Hierarchy** icon against **Functional Location** field and from the pop-up screen select a sub functional location or an equipment.

Note:

- If you tap the Functional Location Hierarchy icon without selecting any Functional Location, the application shows an error.
- mWorkOrder supports 30 characters for the Functional Location ID. You can configure SAP for Alternate Labeling to support 40 characters ID.
- While creating a notification, the technical object values and warranty details (Customer and Vendor) are auto populated when you select an assembly value from the Functional Location or an Equipment hierarchy. A pop-up message appears and displays warranty details (with Start Date and End Date Warranty Type, Warranty Duration remaining). After closing the pop-up, the warranty details can be viewed by selecting the icon beside the equipment number. This reduces the effort to remember and enter the Technical Objects values.

- **Equipment No:** Select Equipment for the functional location from the list or, tap the **Hierarchy** icon against the **Equipment** field and select the equipment.

Figure 7-4 Equipment No. Hierarchical View



- **Reference Notification:** When creating a subsequent notification by copying an existing one, the reference notification number from the original appears in the new notification. This allows you to identify the parent notification and quickly access its details with a click.
- **Planner Group:** Select Planner Group from the list.
- **Planning Plant**: Select Planning Plant from the list.
- **Work Center:** Select Work Center from the list.
- **Crew ID**: Select Crew ID from the list.
- **Reported By**: This field is auto-populated. Tap the field to enter a different name.
- **Notification Date**: This field is auto-populated. Tap the **Calendar** icon to select a different Notification Date.
- **Coding**: Select Coding from the list.
- **Description**: Tap the **Maximize** icon to enter the description or select the predefined template. On the pop-up screen tap **Templates** to select the template.

- **Priority**: Select Priority from the list.
- **Required Start Date**: This field is auto-populated. Tap the **Calendar** icon to set a different Required Start Date.
- **Required Start Time**: This field is auto-populated. Tap the **Clock** icon to set a different Required Start Time.
- **Required End Date**: Tap the **Calendar** icon to select the Required End Date.
- **Required End Time**: Tap the **Clock** icon to select the Required End Time.
- **Breakdown**: Select checkbox for breakdown if any.
- **Malfunction Start Date**: Tap the **Calendar** icon to select the Malfunction Start Date.
- **Malfunction Start Time**: Tap the **Clock** icon to select the Malfunction Start Time.
- **Malfunction End Date**: Tap the **Calendar** icon to select the Malfunction End Date.
- **Malfunction End Time**: Tap the **Clock** icon to select the Malfunction End Time.
- **Risk Assessment:** Tap the drop-down to assess the overall risk level. The **Risk Assessment** window appears.

  In the **Risk Assessment** window, select the scenario for the category and the probability of occurrence of the scenario. The **Overall Risk Level** is calculated based on the **Risk Level** identified for these categories:

  a. **Consequence to People**: Helps you analyze the impact of the incident on people.
     i. **People**: Select the scenario that defines the impact on people.
     ii. **Likelihood**: Select the probable occurrence of the scenario.
     iii. **Risk Level**: Risk level is auto-populated based on the scenario and probability of occurrence of the scenario.

  b. **Consequence to Asset**: Helps you analyze the impact of the incident on the asset.
     i. **Asset**: Select the scenario that defines the impact on the asset.
     ii. **Likelihood**: Select the probable occurrence of the scenario.
     iii. **Risk Level**: Risk level is auto-populated based on the scenario and probability of occurrence of the scenario.

  c. **Consequence to Environmental**: Helps you analyze the impact of the incident on the environment.

   i. **Environmental**: Select the scenario that defines the impact on the environment.
   ii. **Likelihood**: Select the probable occurrence of the scenario.
   iii. **Risk Level**: The risk level is auto-populated based on the scenario and probability of occurrence of the scenario.
d. **Consequence to Reputation**: Helps you analyze the impact of the incident on the stature and fame of the organization.

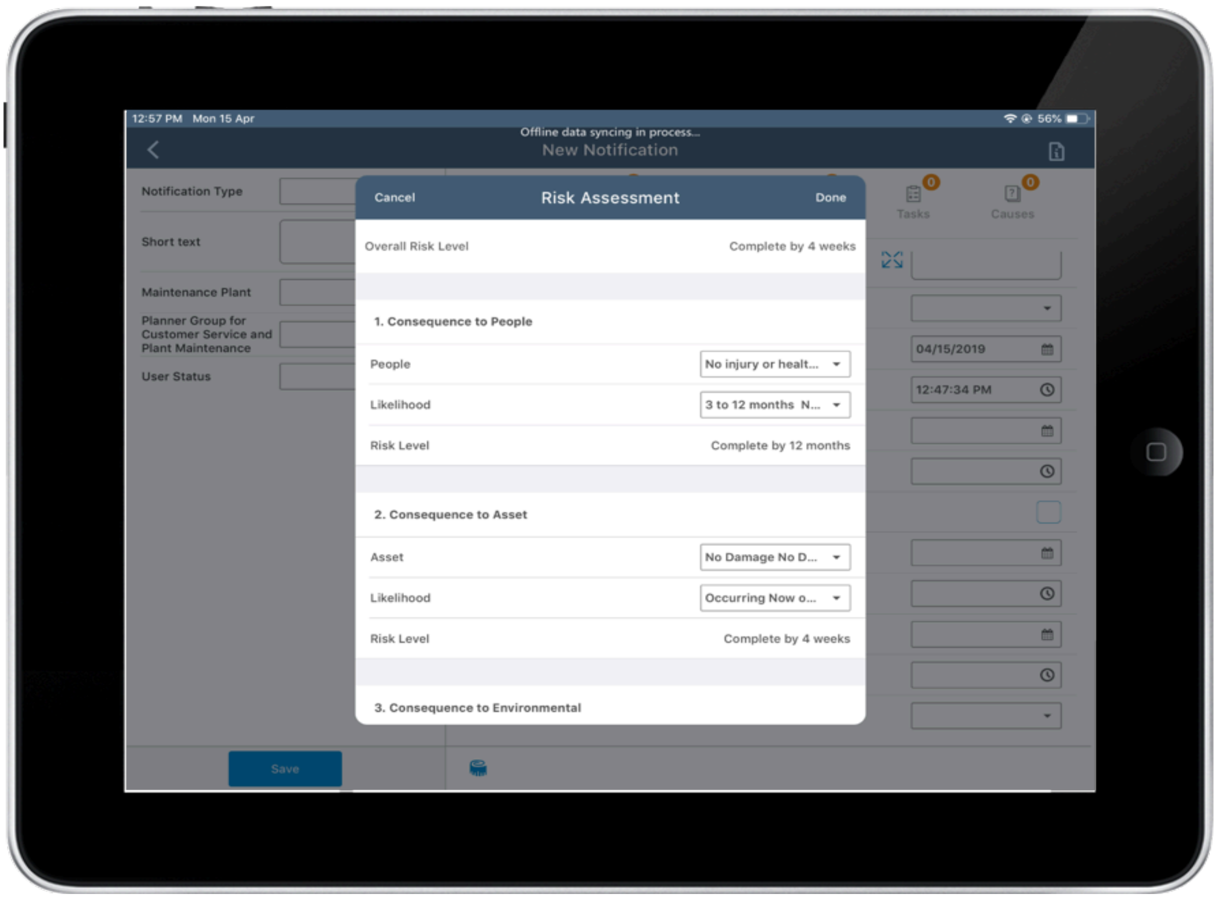
i. **Reputation**: Select the scenario that defines the impact on the reputation because of the incident.

ii. **Likelihood**: Select the probable occurrence of the scenario.

iii. **Risk Level**: The risk level is auto-populated based on the scenario and probability of occurrence of the scenario.

> **Note:**
> You can configure the values for **Consequence** and **Likelihood** fields using RACE to determine the Risk Level for the category.

Figure 7-5 Risk Assessment



4. Tap the icon to create a measurement document for the Equipment that is entered in the Notification. (Optional).
5. Tap **Save**.

6. Tap **Yes** in the notification creation confirmation screen.

   A message appears confirming that the Notification <number> is created successfully.

> **Note:**
> - In the pop-up screen, tap **View NO List** to navigate to the record that is created.
> - You can edit the notification details at any point before the notification is marked complete from the same screen by clicking the **Edit** button.

7.4.1. Add Causes, Activities, and Tasks within an Item

You can now add causes, activities and tasks to an item all at one single tab.

To add causes, activities, and tasks to an item, follow these steps:

1. In the right side section of the New Notification screen, click the "Reliability" tab.
2. Click the **Add Item** button.

   A window appears with add Items, Causes, Activities and Tasks tabs.

Add Items

1. In the **Item Code Group** field, select the code group to which the item belongs. The Item Part Code will be pre-filled and then, enter the **Item Part Code Text**.
2. In the **Damage Group** field, select the relevant damage group code. The **Damage Code** will be pre-filled and then enter the **Damage Text** field.
3. Click **Save**.

   The line item is added and displayed with its description under the "Item Details" section.

4. To delete an added item, you can click the **Delete** icon.

Add Causes

1. Click the Causes tab and click **Add Causes**.
2. Select the Cause Code Group. The **Cause Code** field will be pre-filled.
3. Fill the **Cause Code Text** and **Cause Text** fields.
4. The cause text field supports more than 40 characters.
5. Click **Save**.

   The cause is added and displayed under the Causes tab, along with the associated description. You can click the **Add New Cause** button to add additional causes.

6. To delete an added item, you can click **Delete** icon.

Add Activities

1. Select the Activity tab and click **Add Activity**.
2. Select the Activity Code Group. The **Activity Code** field will be pre-filled.
3. Fill in the **Activity Code Text** and **Short text** fields.
4. Click **Save**.

   The activity is created and displayed under the **Activities** section, along with the associated description. To delete an added activity, you can click the **Delete** icon. You can also use the **Add New Activity** button to add more activities.

7.4.2. Add Items to a Notification

To add items to a Notification, do the following tasks:

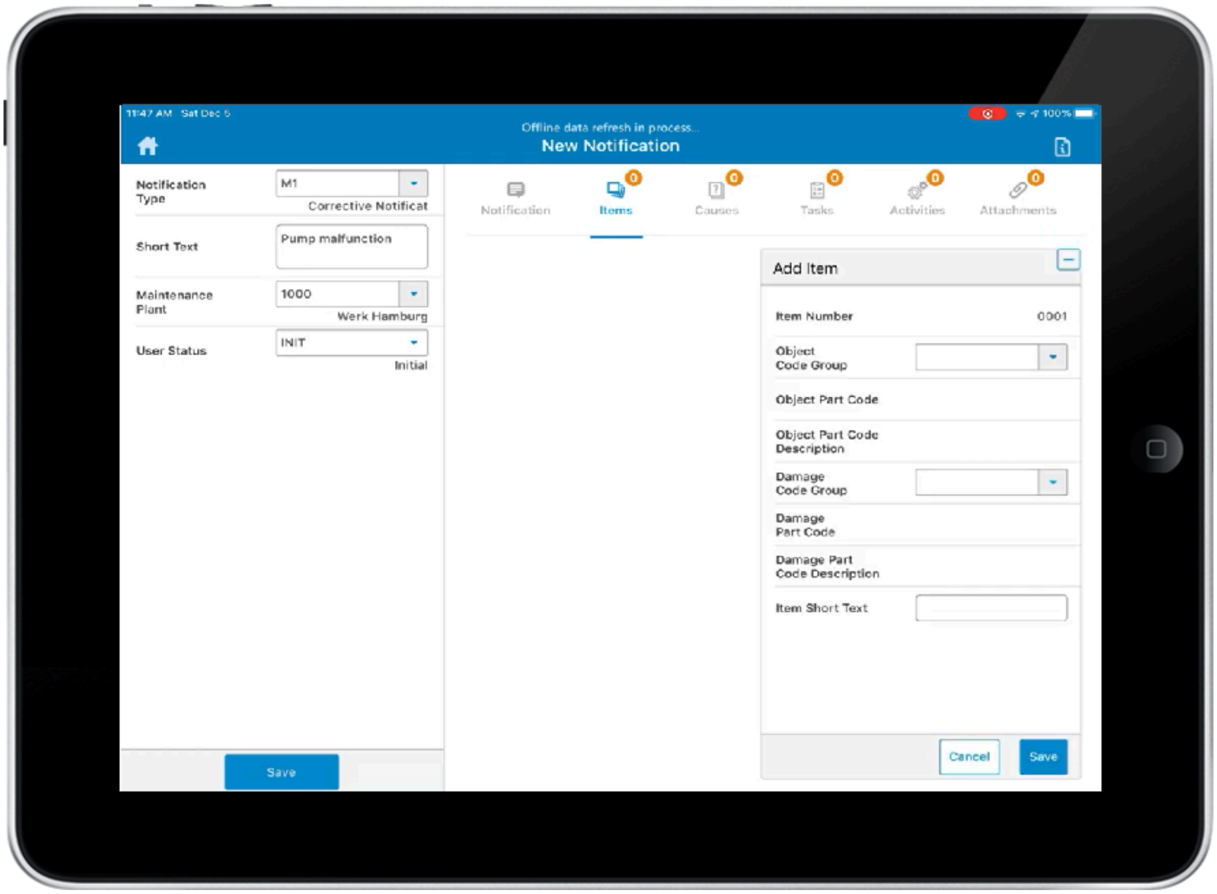
1. In the right side section of the **New Notification** screen, tap **Items** and then tap .
2. Under **Add Item:**
   a. In the **Item Code Group** field, select the code group that this item belongs to.

      The item part code is pre-filled.

   b. In the **Damage Group** field, select the relevant damage group code.

      The damage code is pre-filled.

Figure 7-6 Add Items to a Notification



c. Tap **Save**.

d. Tap **Yes** in the confirmation window.

The line item is added and is displayed along with description under **Items**.

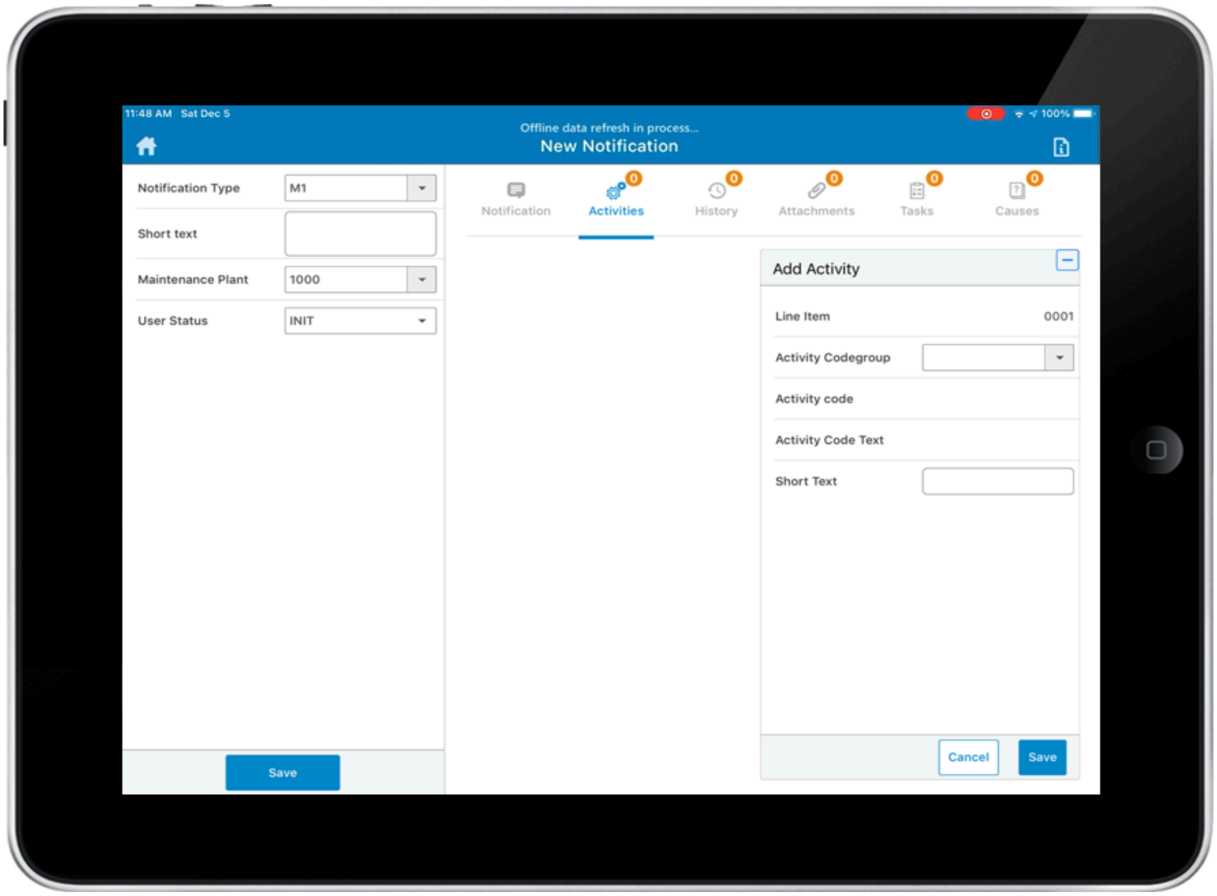
7.4.3. Add an Activity

To add an activity to a notification, do the following tasks:

1. In the right side section of the **New Notification** screen, tap the **Activities** tab and then tap .
2. Under **Add Activity**:
    a. Select the code group from the **Activity Code Group** field.

    The Activity Code is pre-filled.

    Figure 7-7 Add Activity to Notification



    b. Tap **Save**.
    c. Tap **Yes** in the confirmation window.

    The activity is created and is displayed under **Activities.** The description associated with the selected value is also displayed. For example, the description of the **Activity Code Group** is displayed along with the code group that is selected.

3. Tap the Line Item drop-down and choose a value to link the activity with the Item. These options are from the Items tab. After selecting the Item and saving the notification, the activity gets associated with the Line Item.

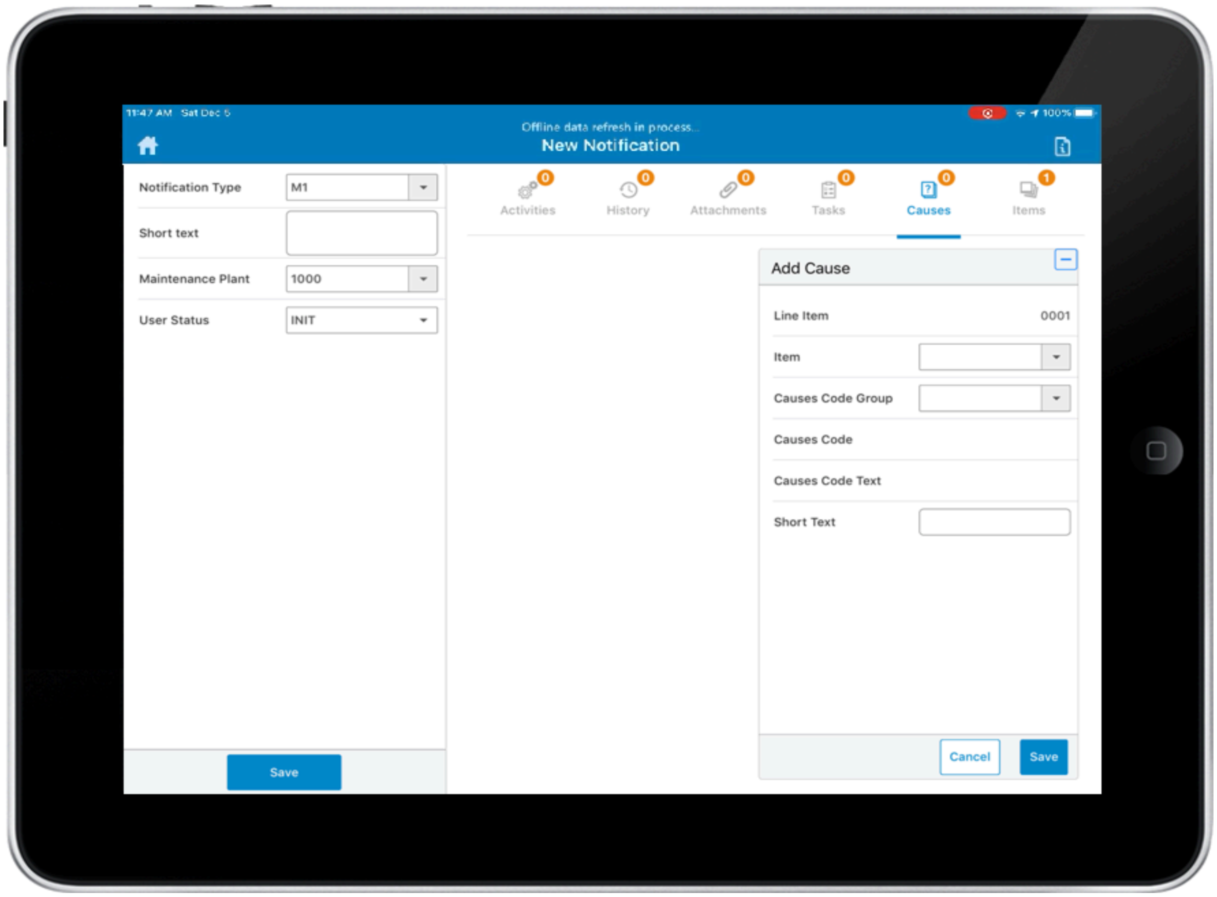
4. If you do not enter anything in the Line Item field, the activity gets connected to the notification.

7.4.4. Add a Cause

To add a root cause to a notification, do the following tasks:

1. In the right section of the **New Notification** screen, tap the **Causes** tab and then tap .
2. Under **Add Cause**:
    a. In the **Item** field, select the item code.
    b. In the **Causes Code Group** field, select the cause group code.

Figure 7-8 Add Cause to a Notification



    c. Tap **Save**.
    d. Tap **Yes** in the confirmation window.

    The cause gets added and is displayed under **Causes.** The description associated with the selected value is also displayed. For example, the description of the **Causes Code Group** is displayed along with the code group that is selected.

7.4.5. Add Attachments to Notifications

You can add an image, video, PDF attachments, and external URL links to the notification to provide additional information related to the maintenance or repair.

You can convert notification forms to PDF, add them under attachments, and download converted PDFs to send them through email from both mobile and Desktop applications.

For information on adding attachments and working with them see, Add Attachments to Records *(on page 113)*

7.4.6. View Item, and Cause, Activity and Task at One Place (Reliability Tab)

When there is a one-to-one relationship between an Item, Cause, and Activity, you can access all the sets of information in a single location, with a tab labeled 'Reliability' configured using RACE.

To view the Reliability tab, do the following,

1. Navigate to the Notification screen, search, and select the required notification from the list.

   A screen appears with notification details in the Header tab.
2. The field FunctFailure is the mandatory field.
3. When you add details in the field, you are navigated to the Reliability tab.

   In this tab, all Causes, Tasks, and Activities linked to a specific Item are displayed in a clear and organized manner on one screen.

7.4.7. Copy Causes, Tasks, and Activities

You can copy existing Causes, Tasks, and Activities and use them to create new ones.

This feature saves time and effort by avoiding repetitive data entry for similar Causes, Tasks, or Activities.

7.4.8. View Measurement Documents

If a measurement document is added to a notification, you view the details from the **Notifications** screen.

To view the measurement documents that are added to a notification, do the following:

1. Tap at the bottom of the right side section of the **Notifications** screen
2. Tap **Measurement Documents**.

7.4.9. View Notifications Created for Equipment or Functional Location

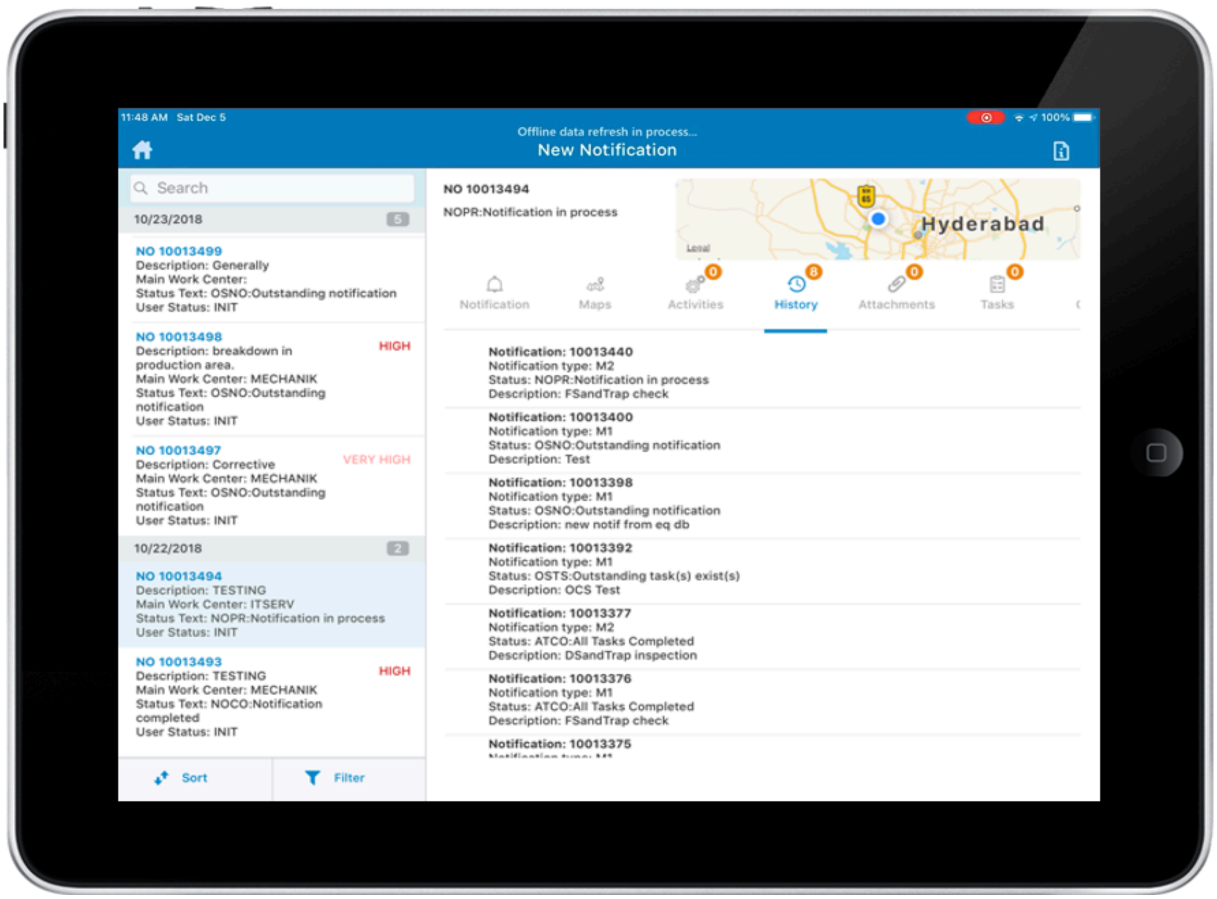
You can view the history of notifications that were created for an equipment or a functional location.

To view history of notifications that were created for Equipment or Functional Location:

1. From the left side section of the **Notifications** screen, search and tap the Notification.
2. Tap the **History** tab in the right-side section of the notification.

   The list of previously created notifications for the equipment or functional location appears.
3. The Notification lists displays Description, Maintenance Plant, User Status, Catalog Profile and Multiple active Status (NOPR, NOCO, etc.) details.

Figure 7-9 Notification History



7.4.10. Add embedded forms to a Notification

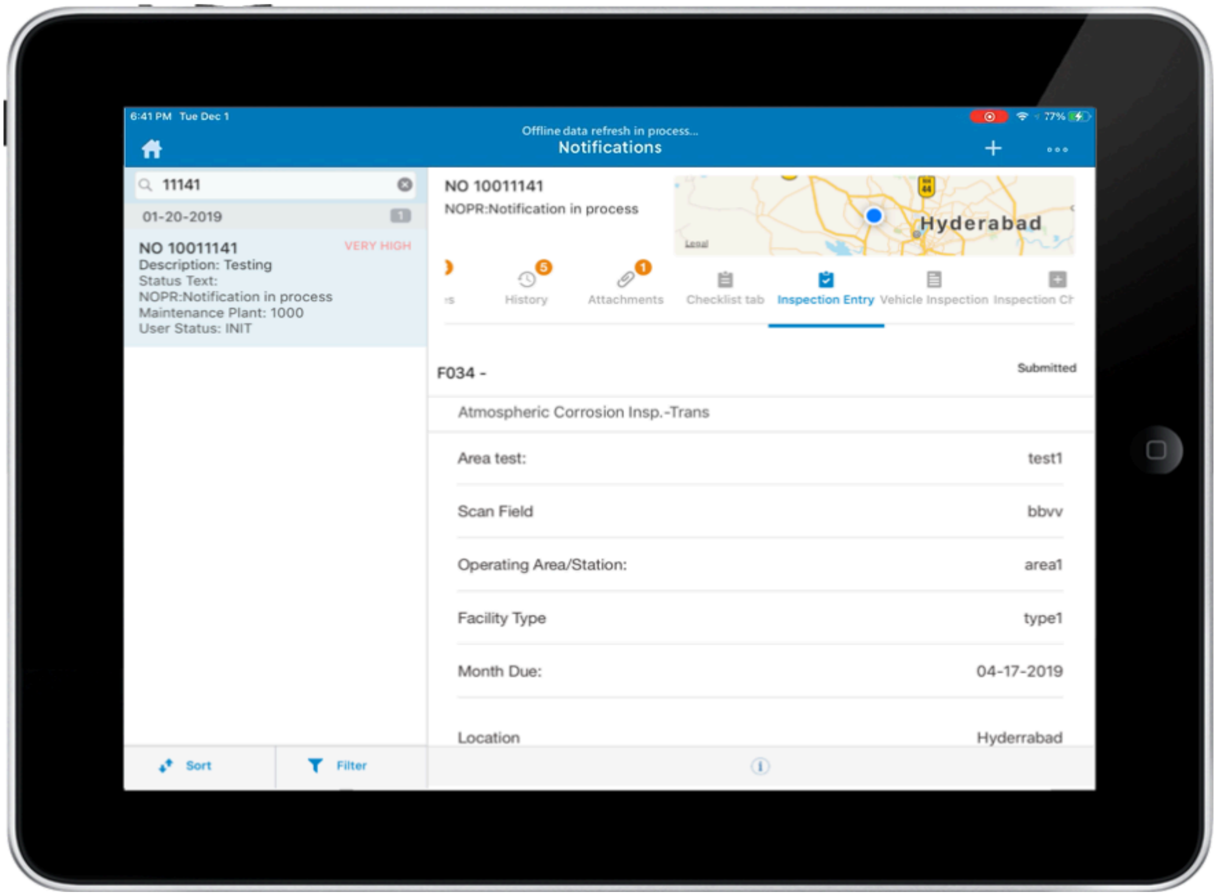
Add embedded forms to a notification so that the technician captures additional details of the task(s) related to the Notification. For example, filling in a checklist and inspection entry form.

You can assign multiple embedded forms to a Notification based on the notification type. Each form is displayed as a separate tab and consists of custom fields that represent the tasks related to the Notification. Embedded form is displayed along with other forms on Notification. This eliminates the need to switch to a different module/screen.

Using embedded forms, you (technician) can do the following:

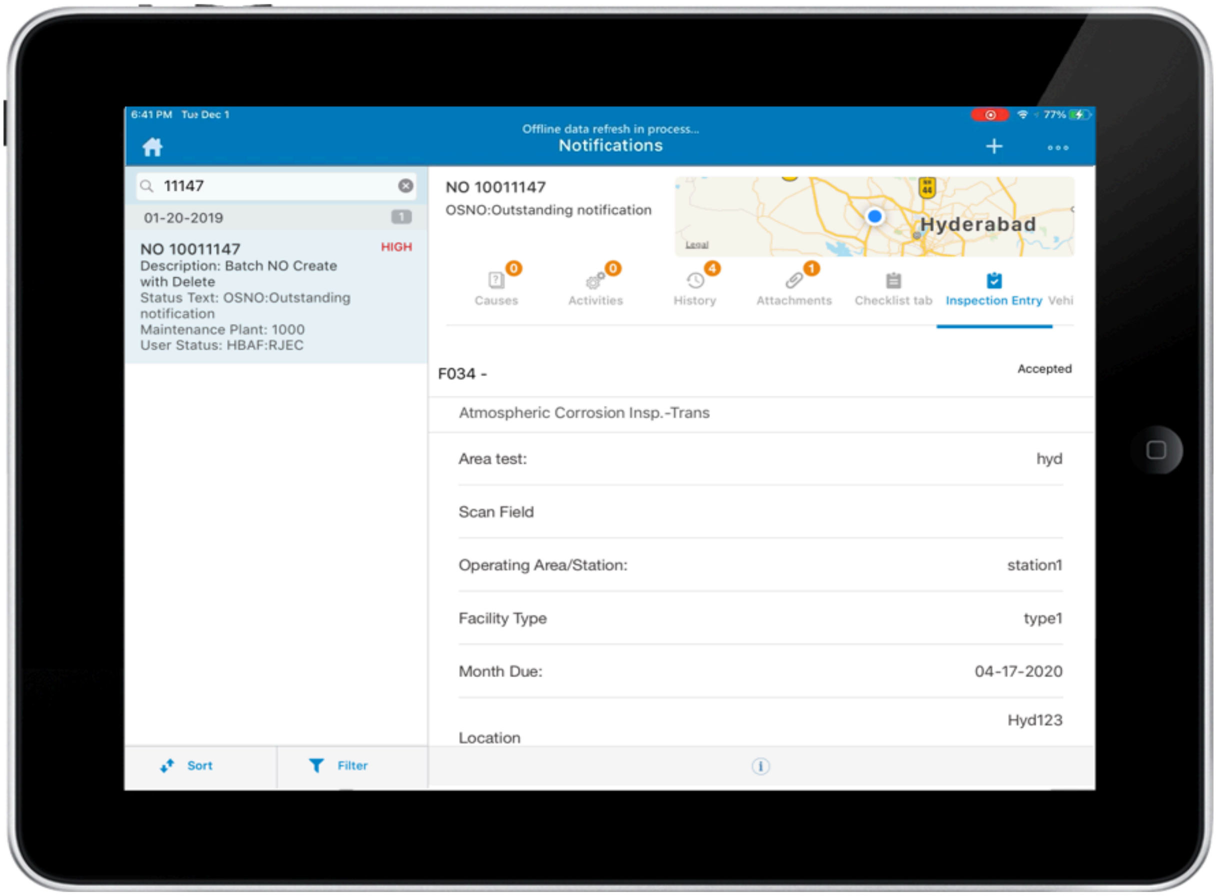
- Modify the form multiple times.
- Save the form using the **Save Draft** option. A revision is created each time. Tap the **History** button to view the form versions.
- Tap **Submit Form** to post the form to your supervisor. The status of the form is set to **Submitted** and you cannot modify the form.
- You can convert submitted form to PDF in the submission screen.

Figure 7-10 Embedded Forms Submitted Form



Note:
A supervisor with appropriate role can modify the form multiple times using the **Save Form** and use the **Accept Form** option to accept the form.

Figure 7-11 Embedded Form Accepted Form



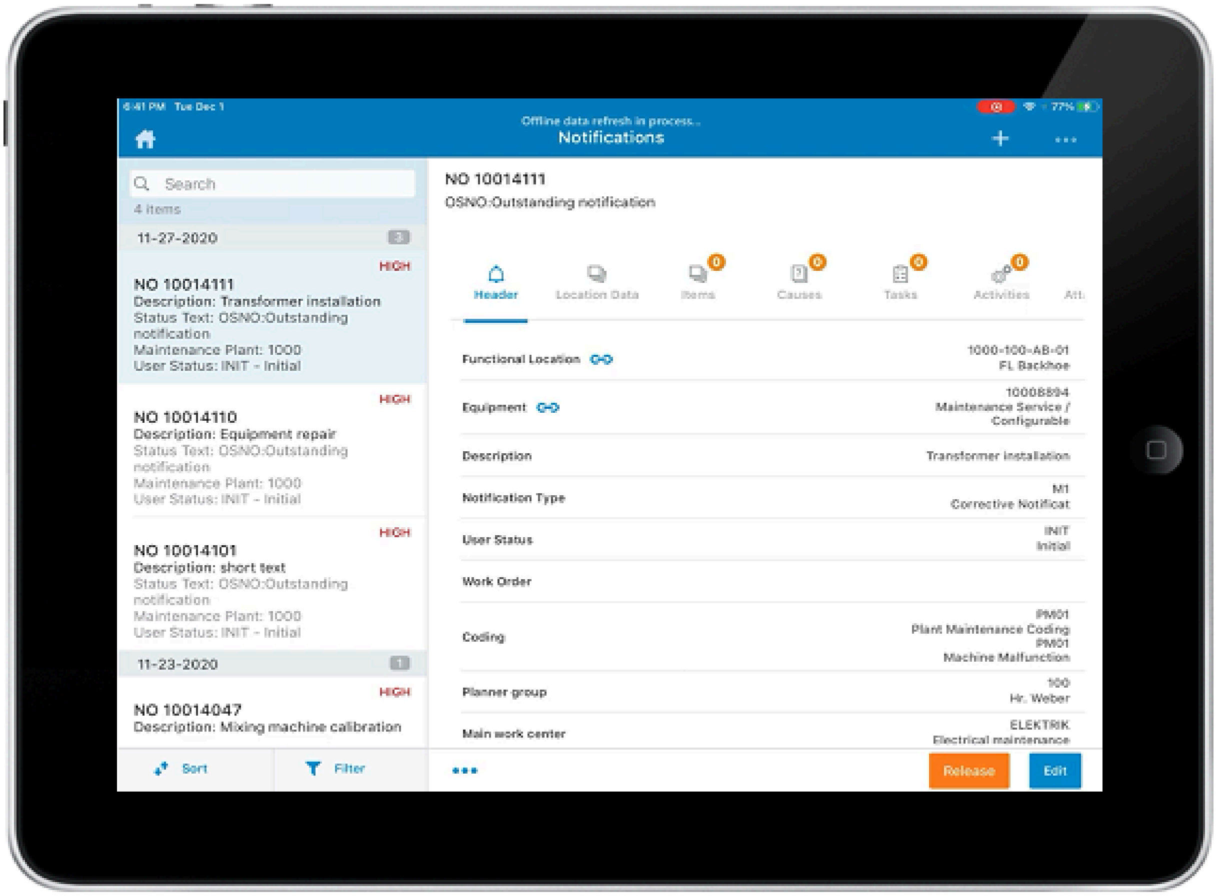
7.5. Release a Notification

Once you finish creating a notification, you must release it so that the technician can view the notification and create a work order for the same.

To release a notification:

1. Tap on the notification from the search results on the left side section of **Notifications** screen.

Figure 7-12 Notifications Screen



2. In the right side section of the **Notifications** screen, tap **Release**.
3. Tap **Yes** in the confirmation window.

> **Note:**
> The Notification automatically moves to the Released state once you create a work order based on it.

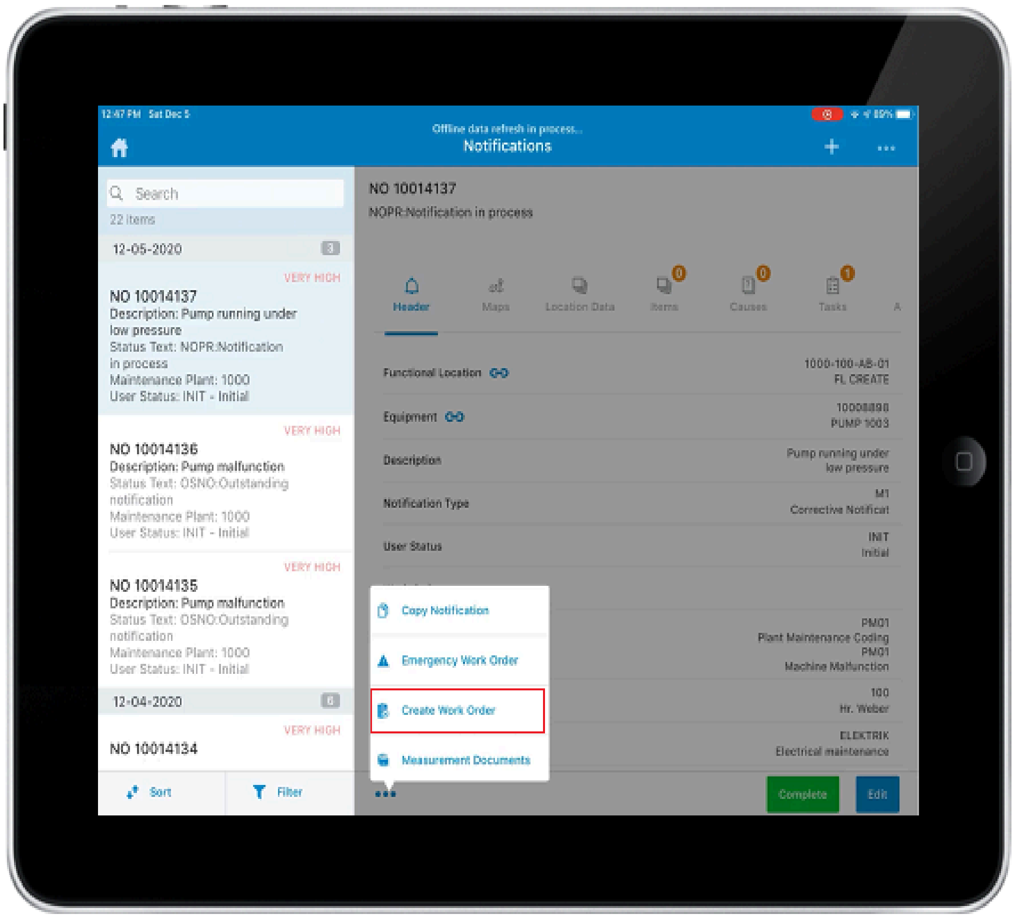
7.6. Convert Notification into a Work Order

If there is an emergency regarding the asset, you can convert the notification into a work order without completing the notification. So that the asset gets the right attention on time.

To convert notification into a work order:

1. In the left section of the **Notifications** screen, search and tap the **Notification** that you want to convert to work order.
2. In the right section of the **Notifications** screen, under the **Header** tab, tap ••• and then tap **Create Work Order**.

Figure 7-13 Convert to Work Order



Once you convert the notification to a work order, you copy most details from the notification.

3. In the **New Work Order** screen, provide the necessary information where required.
4. Tap **Save** under the **Header** tab.
5. Tap **Yes** in the confirmation screen.

   A message appears confirming that the Work Order <number> is successfully created.

7.7. Complete a Notification

A technician inspects the equipment based on the notification and creates a work order if the equipment needs repair or maintenance. However, if the technician finds that the equipment does not require repair, the technician can close the notifications after inspection.

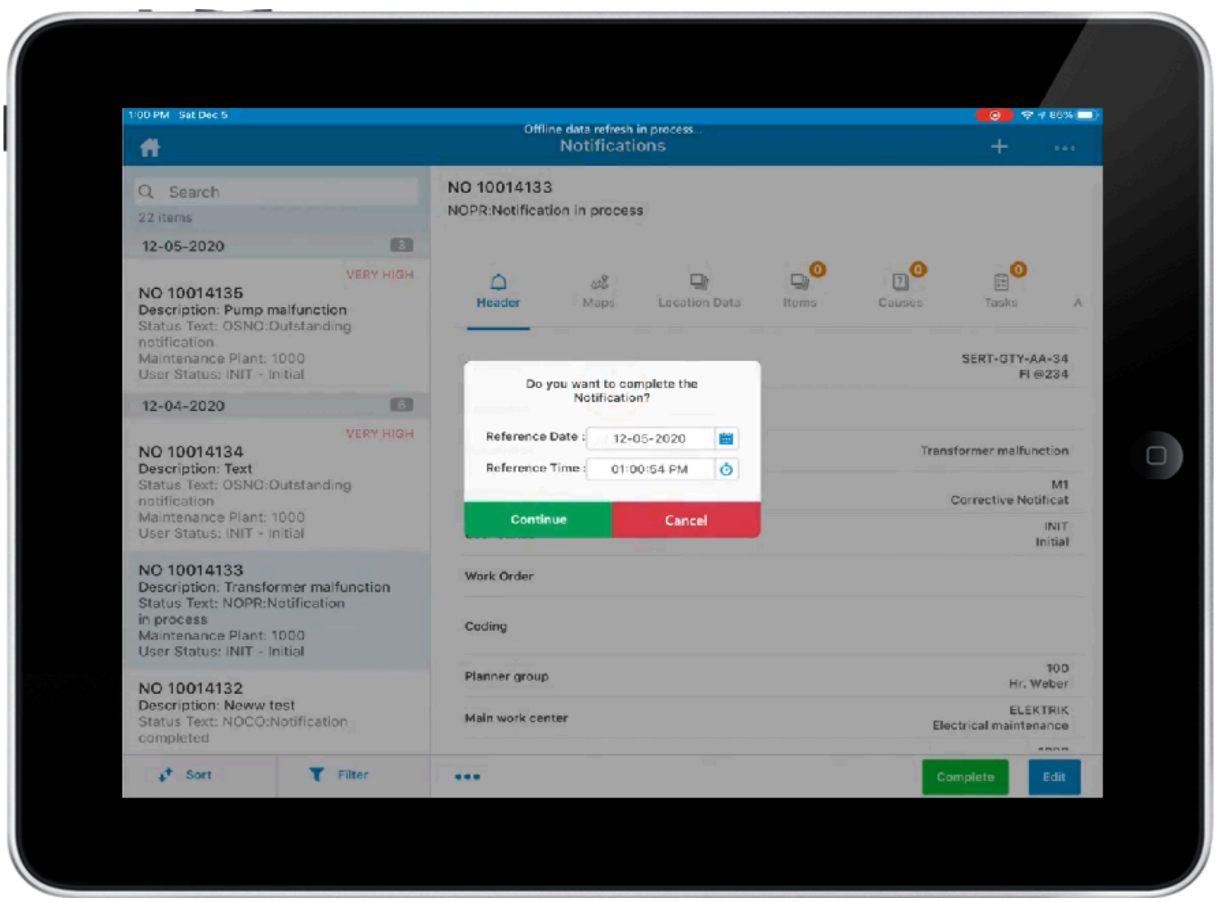
To complete a notification, do the following tasks:

1. In the left section of the **Notifications** screen, search and tap the Notification that is in progress.

   The details of the Notification are displayed in the right section of the **Notifications** screen.

2. In the right section of the **Notifications** screen, tap **Complete.**
3. In the alert message that is pre-filled with **Reference Date** and **Reference Time**, tap **Continue**.

Figure 7-14 Complete a Notification



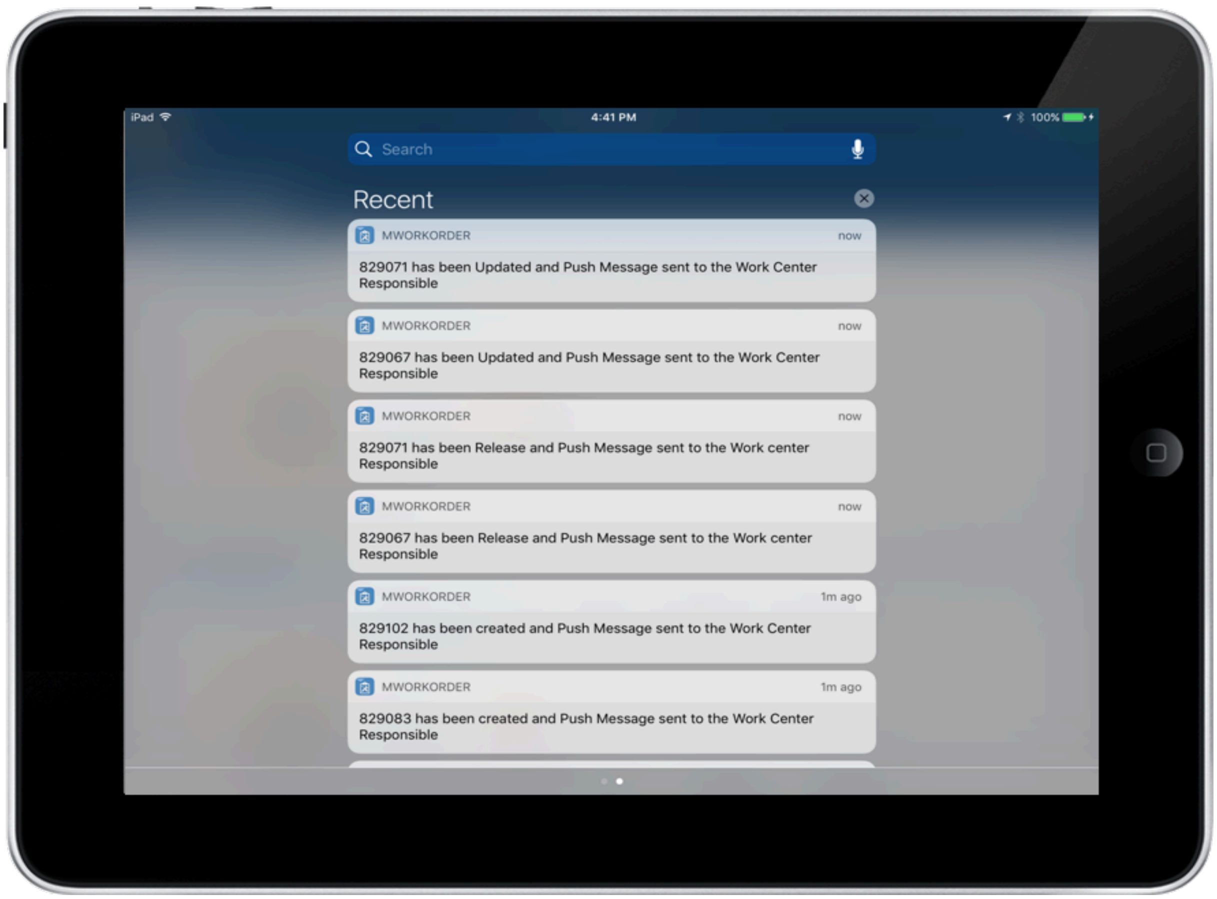
7.8. View Push Notification for Notifications

Push notification is an instant message that notifies users about any action taken or changes made to the notification.

This feature is configured through **RACE** for the following conditions:

- Notification Created
- Notification Updated
- Notification Released
- Notification Confirmed
- Notification Completed

Figure 7-15 Push Notifications



7.8.1. Delete Notification Records in the offline mode

To delete a notification record in the offline mode.

1. Select the Notification from the list and locate the record that you want to delete.
2. Swipe left on the record to reveal additional options or actions.
    a. Tap the copy button to copy the record.
    b. Tap on the trash button to delete the record.

> **Note:**
> You can also copy/delete the records in the offline mode in the Items, Causes, Tasks, and Activities tab.

8. Create, Assign and Execute Jobs / Work Orders

A Work Order refers to a job order created by a quality inspector for maintenance or repair of an equipment. The work order, once raised, is sent to plant personnel.

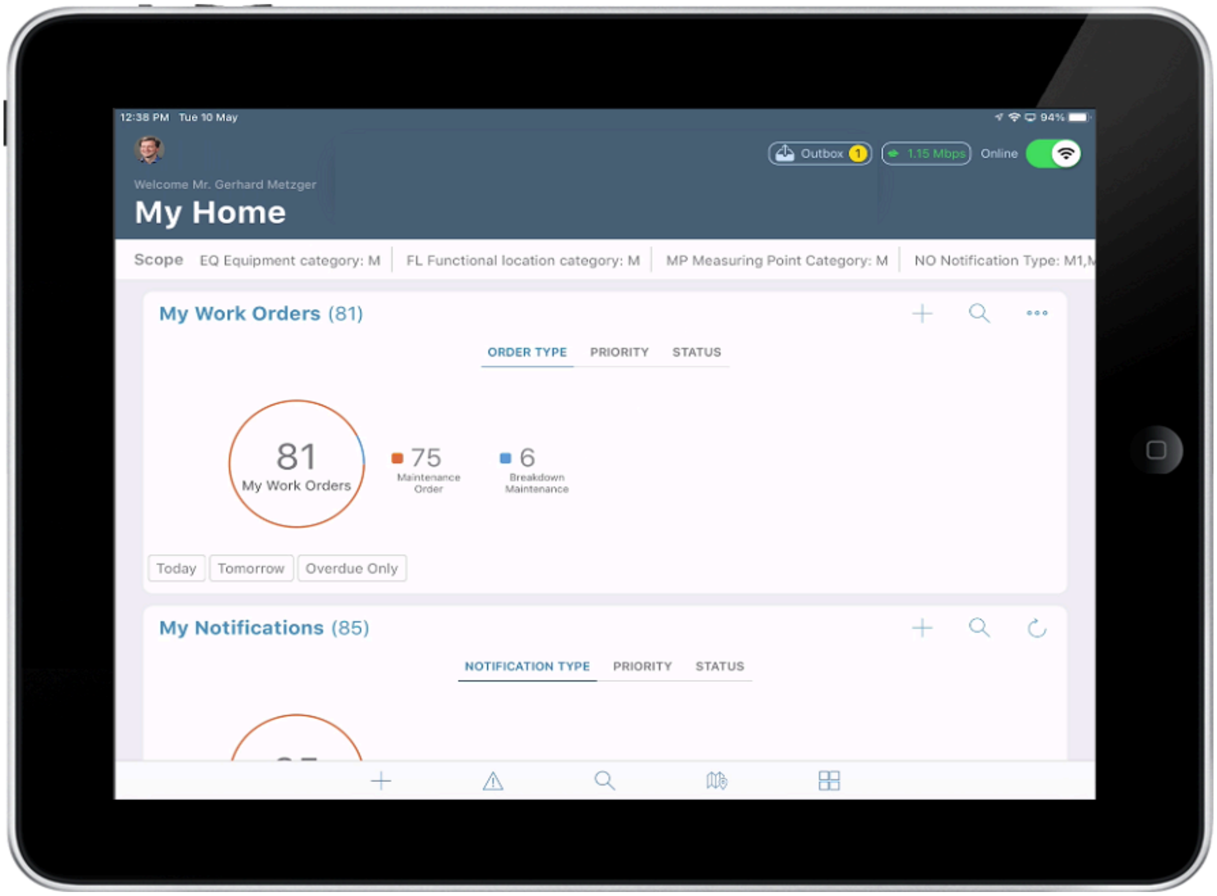
In a typical scenario, when a quality inspector gets a Notification, he/she inspects the equipment that needs maintenance and raises a Work Order for the Notification. A quality inspector can create a Work Order without a Notification too. You can do the following in the Work Orders module:

- Search Work Orders by Work Center order type, Work Order, start date, and finish date.
- Further filter the searched orders based on priority (high/medium/low), date, and status.
- View or edit the Work Order under various tabs, such as Header (default), Operations, Components, and Attachments.
- Refresh the Work Orders once the sync is completed.

8.1. Overview of Work Orders Area in Home screen

The Work Orders area in the home screen of the mWorkOrder application provides you the following details.

Figure 8-1 Work Orders area of mWorkOrder Application Home Screen



You can view the total number of your work orders and the graphical representation by date, by week or by month. You can configure the following features through **RACE**:

- Sub-section in dashboard for Work Orders.
- Dashboard for Bar Chart, Line Chart, Metrics, and List views of data.
- Views for Monthly, Weekly, and Daily mode.
- Change the sequence of sub-section using the **Position** field.

Work Orders are categorized based on the following:

- **Priority**: Very High, High, Medium, Low, and No Priority.
- **Status**: Released, Created, Technically Completed, and so on.
- **Order Type**: Breakdown Maintenance, Maintenance Order, and so on.
- **Maintenance Plan**: Weekly Preventive Maintenance Plan, Monthly Maintenance Plan, and so on.

You can also configure the following sub-sections in dashboards through **RACE**:

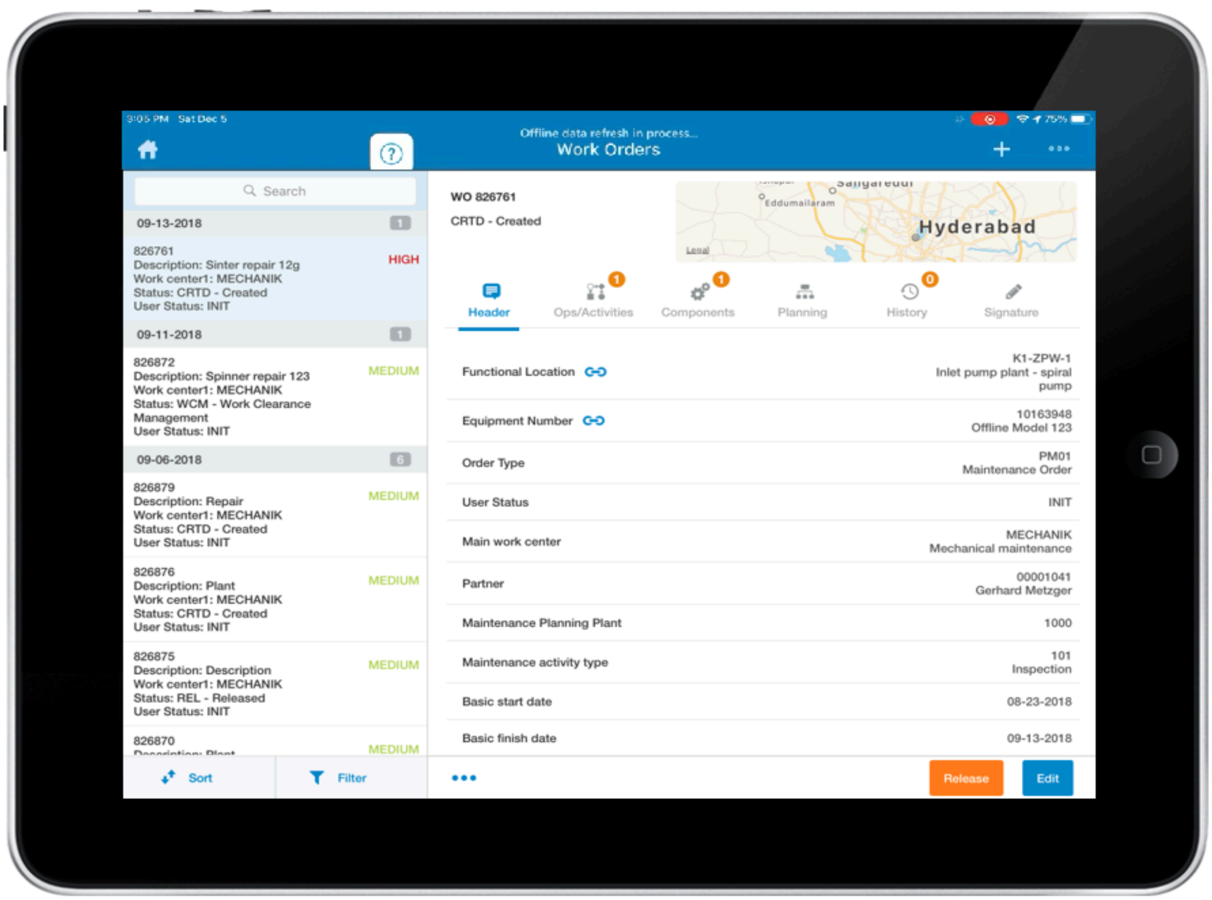
- User Status
- Document Type
- Work Center
- Maintenance Plan
- Planning Plant
- Maintenance Plant

8.2. Work Orders Screen Overview

This topic helps you understand how the work orders screen is structured in the mWorkOrder application.

The Work Order screen is divided into two sections/columns:

Figure 8-2 Work Orders Screen



The Left side column contains:

- **Work Orders** sorted by dates along with descriptions.
- **Search** box to search notification.
- **Sort** button to sort out the notifications.
- **Filter** button to filter the notifications.

Each Work Order has a unique number. You can configure color coding for each Work Order number based on the conditions defined in **RACE**. This helps you easily identify the Work Orders based on the color coding. This feature is available in both Online and Offline modes.

You can also view multiple active statuses of work orders and operations along with Key and Description when there are multiple technicians working on the same work order / operation. For example, if two technicians are using the same work order and the operation is scheduled, and partially confirmed by one technician but not started by the other technician. The app displays both SCHD and PCNF statuses.

This feature helps you quickly track the status flow and identify the current condition of individual work orders.

The right side column contains:

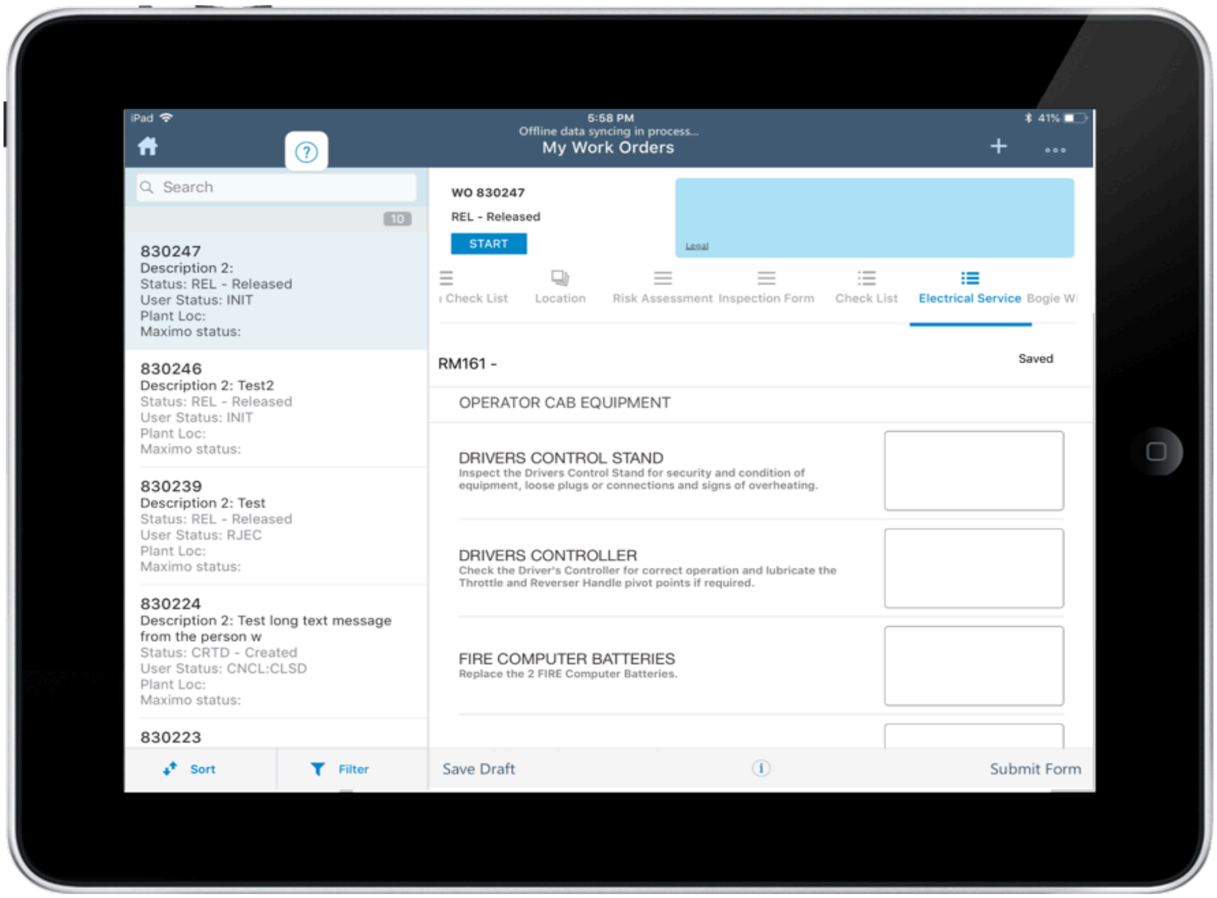
- **Header**: View Functional Location, Equipment, Description, Maintenance Activity Type, Priority, Notification, Start Date, End Date, and User Status.
- **Operations**: View operations and activities that need to be done. Also, helps you add and edit operations, create sub-operations, create a General Task List and Task List based on Equipment and Functional Location.
- **Components**: View spare parts that need replacement, repair, and that need to be included in the Equipment. You can search components based on Equipment BOM (Bill of Material), cross-location availability, or even simple material number and description.
- **Attachments**: View and add documents, images, or videos to the work order.
- **History**: When you can create a work order using information from a completed work order, mWorkOrder allows you to link the work orders based on the asset or equipment. You can view the issues that are recurrent in nature and plan maintenance.

> **Note:**
> When you tap on any of the work order records, a screen appears, the WO Header, Operations, Components, Forms, and Attachment tabs.

> When you access the hyperlink, you are navigated to the notification details screen.

- **Embedded Forms**: Helps you assign multiple forms to a work order.

Figure 8-3 Embedded Forms



- **Objects:** Helps you assign multiple technical objects such as Equipment, Functional Location or Notification in case you have to do maintenance for similar equipment. This can be configured using RACE.

The screen sequence for all these tabs can be configured through **RACE**.

> **Note:**
> By default, **Header** tab should always be first and cannot be configured. It is recommended to configure the **Ops/Activities** tab before **Components** for better user experience.

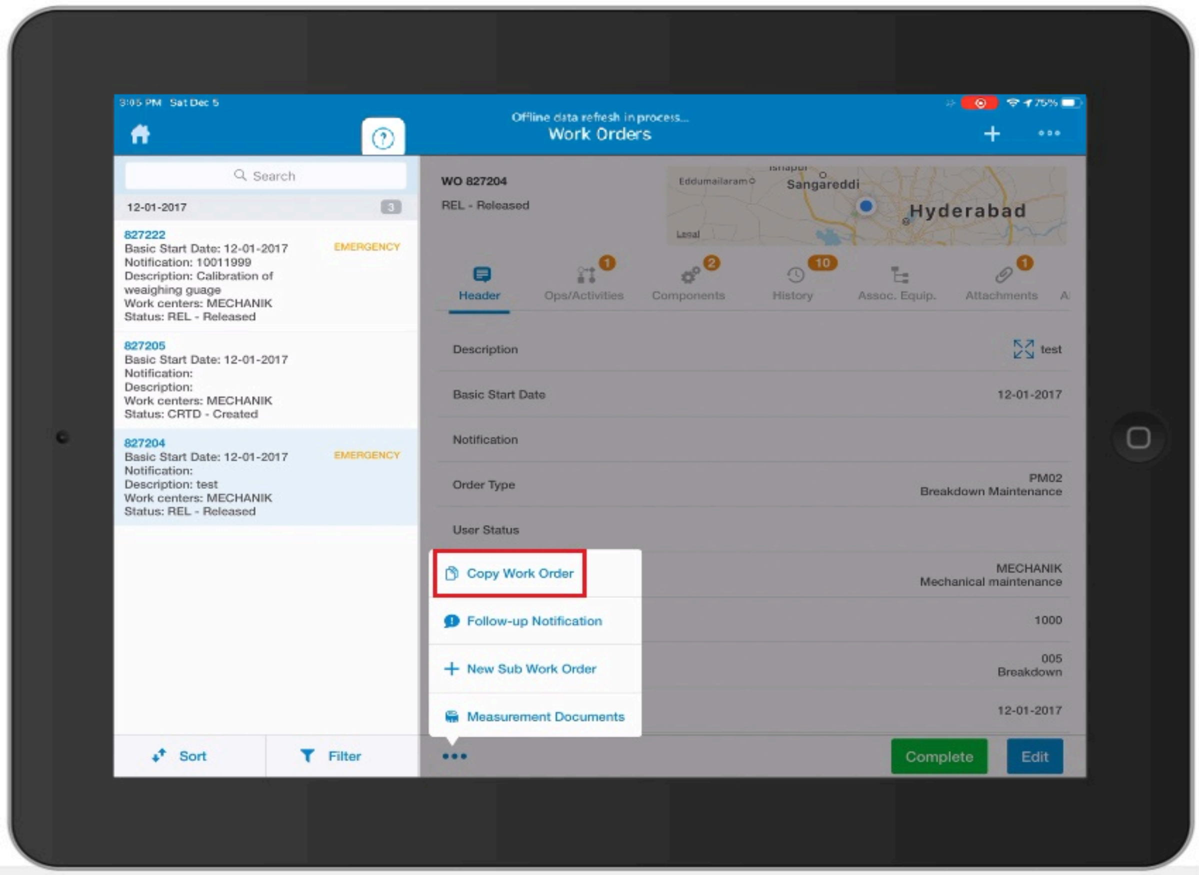
8.3. Copy a Work Order to create a new Work Order

When you create a work order using an existing work order, attachments, information in the History section, and user status are not copied. Only the details in the Header are copied.

To create a work order from an existing work order:

1. In the left section of the **Work Orders** screen, tap the Work Order.
2. In the right section of the **Work Orders** screen, under the **Header** tab, tap and then tap **Copy Work Order.**

   Figure 8-4 Copy Work Orders

   In the right section of the **Work Orders** screen, under the **Header** tab, tap and then tap **Copy Work Order.**
3. In the **Create Work Order** screen:

a. Review and modify the data as required in any of the editable fields like **Maintenance activity type**, **Basic Start Date**, **Basic Finish Date**, **Work Center**, and **Functional location**.

> **Note:**
> Copy field values of your choice from the existing Work Order. For this, you must define the fields that must be copied to the new Work Order, in the RACE Defaults menu. Create a new field with **UI Field type** as WNC in RACE Defaults and select or enter the fields (ECC field names like EQUNR, TPLNR) in the **Default Value** field.

b. Tap **Save**.

A message appears asking whether you want to save the data.

c. Tap **Yes**.

8.4. Create a Work Order

Work order consists of the following information.

- Functional Location, Equipment, Description, Maintenance Activity Type, Priority, Notification, Start Date, End Date.
- Operations, sub operations, activities, task lists, and User Status.
- Spare parts that need replacement, repair, and that need to be included in the Equipment.
- Supporting documents, images and videos.

To create a work order:

1. In the **Home** screen, tap **My Work Orders**.

   You can also tap the **Create** + icon directly in the **Work Order** module.

2. Tap the **Create** + icon on top-right of the **Work Orders** screen.
3. In the left section of the **New Work Order** screen, enter the following:

- **Order Type**: Select the Order Type from the list.
- **Priority**: Select the Priority from the list.
- **Planning Plant**: Select the Planning Plant from the list.
- **Description**: Enter description.
- **User Status**: Auto populates based on configured default settings.

> **Note:**
> When you enter or select values for a few fields while creating or editing notifications, the values in the dependent drop-down fields can be filtered. For example, the Work Center drop-down values are auto filtered based on values selected for Order Type and Priority. This feature helps you select relevant data faster from the smaller list of options.

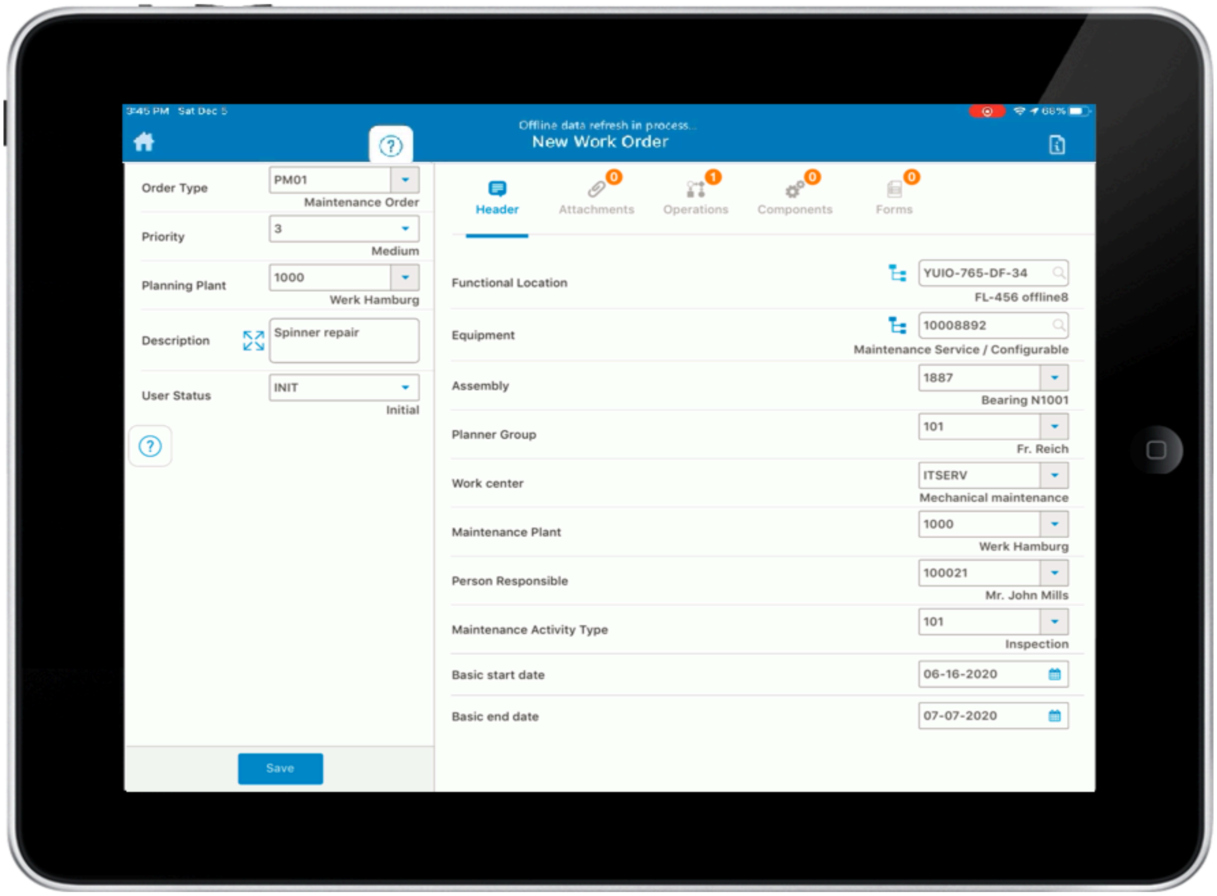
4. Tap **Save**.
   A message appears confirming that the Work Order <number> is successfully created.

> **Note:**
> In the pop-up screen, tap **View WO List** to navigate to the work order that you created and add additional details

8.4.1. Add Header to Work Order

To add header information to work order:

Figure 8-5 Work Order Header



1. In the right section of the **New Work Orders** screen, enter the following under the **Header** tab:

   > **Note:**
   > Fields that are displayed depend on the UI validations configured in RACE. For example, if the UI validation is configured to hide the **Functional Location** field based on **Order Type** like *PM01*, the **Functional Location** field is not displayed when you select *PM01* in the **Order Type** field.
   >
   > Familiar extensions for Equipment and Functional Location hierarchy such as Technical ID that help you identify assets easily can be configured through RACE. When done, you can also search assets using the extension field data.

   - **Functional Location:** Select Functional Location from the list.
   - Tap the **Hierarchy** icon against *Functional Location* field and select a sub functional location or an equipment from the pop-up screen.

     > **Note:**
     > mWorkOrder usually supports 30 characters for the Functional Location ID. You can configure SAP for Alternate Labeling to support 40 characters ID in Functional Location field throughout the application.

     If you tap the Functional Location **Hierarchy** icon before selecting a Functional Location, the application shows an error message “Please fill Functional location.”

     While creating a work order, the technical object values are auto populated when you select an assembly value from the Functional Location or an Equipment hierarchy. This reduces the effort to remember and enter the Technical Objects values.

     You can change the **Functional Location** field type to Scan Input through **RACE** and capture the Functional Location by scanning the bar code using your device camera. Once scanned, fields such as, **Planner Group**, **Work Center**, and **Maintenance Plant** get auto populated.

   - **Equipment No.:** Select Equipment from the list or tap the **Hierarchy** icon against **Equipment** field and select the equipment from the pop-up screen.

> **Note:**
>
> If you tap the Equipment Hierarchy icon before selecting any Functional Location, the application shows an error message "Please fill Equipment No./Functional location.

You can change the **Equipment No**. field type to Scan Input through **RACE** and capture the **Equipment No.** by scanning the bar code using your device camera. Once scanned, fields such as, **Functional location, Planner Group, Work Center,** and **Maintenance Plant** get auto populated.

- **Planner Group:** Select Planner Group from the list.
- **Work Center:** Select Work Center from the list.
- **Person Responsible:** Select Partners from the list.

  This field displays personal name and personal number.
- **Maintenance Plant:** Select Maintenance Plant from the list. When you select the Maintenance Plant, Equipment, Functional Location, and Material/Assembly options are updated in the drop-down list.
- **Maintenance Activity Type: S**elect Maintenance Activity Type from the list.
- **Basic Start Date:** This field is auto-populated. To change, tap the **Calendar** icon and select the Basic Start Date.
- **Basic Finish Date:** Tap the **Calendar** icon to select the Basic Finish Date.

2. Tap **Save**.

> **Note:**
> You can edit the details of the header in the same screen. You can edit the details only when it is in the created and released state; not when the work order is completed.

8.4.2. Add Operations and Assign them to Technicians

Create multiple operations and assign each operation in a work order to separate technicians based on their expertise. Dividing a work order (operations) among multiple technicians based on assigned operations on split-level to get work done quicker.

You can reassign operations to other technicians, if case of emergencies, based on the availability of other technicians.

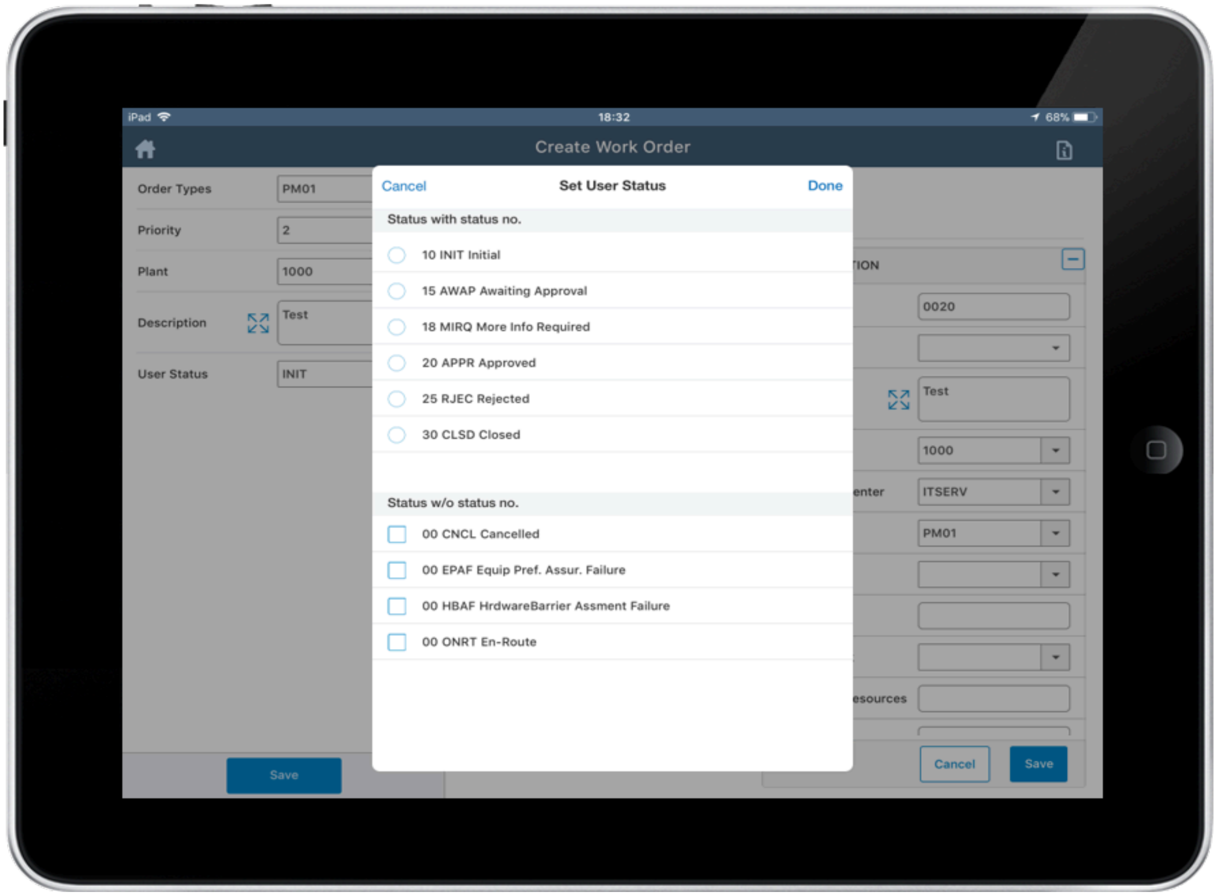
To add operations and activities to a work order:

1. In the right side of the **My Work Orders** screen under the **Operations** tab, tap the **Add** + icon.
2. The **ADD OPERATION** screen is populated with a few pre-filled values. You can change the pre-filled values of the operation code, work center, and plant.
3. Enter the required information in other fields, such as **Std text key** and **Unit of Work** and **Operation Recipient**.

> **Note:**
> - In the work field, if you enter a value less than or equal to 1, then select **H** in the **Unit of Work** field and for a higher value, enter **HR**.
> - Once you enter the amounts in the **Work** and the **Number of Resources** fields, the **Duration** field is automatically updated.

4. Under **Operations**, tap the **User Status** and select the user status of the operation.
   The **Set User Status** screen appears with both the sequential and non-sequential user statuses.

Figure 8-6 Work Order User Status

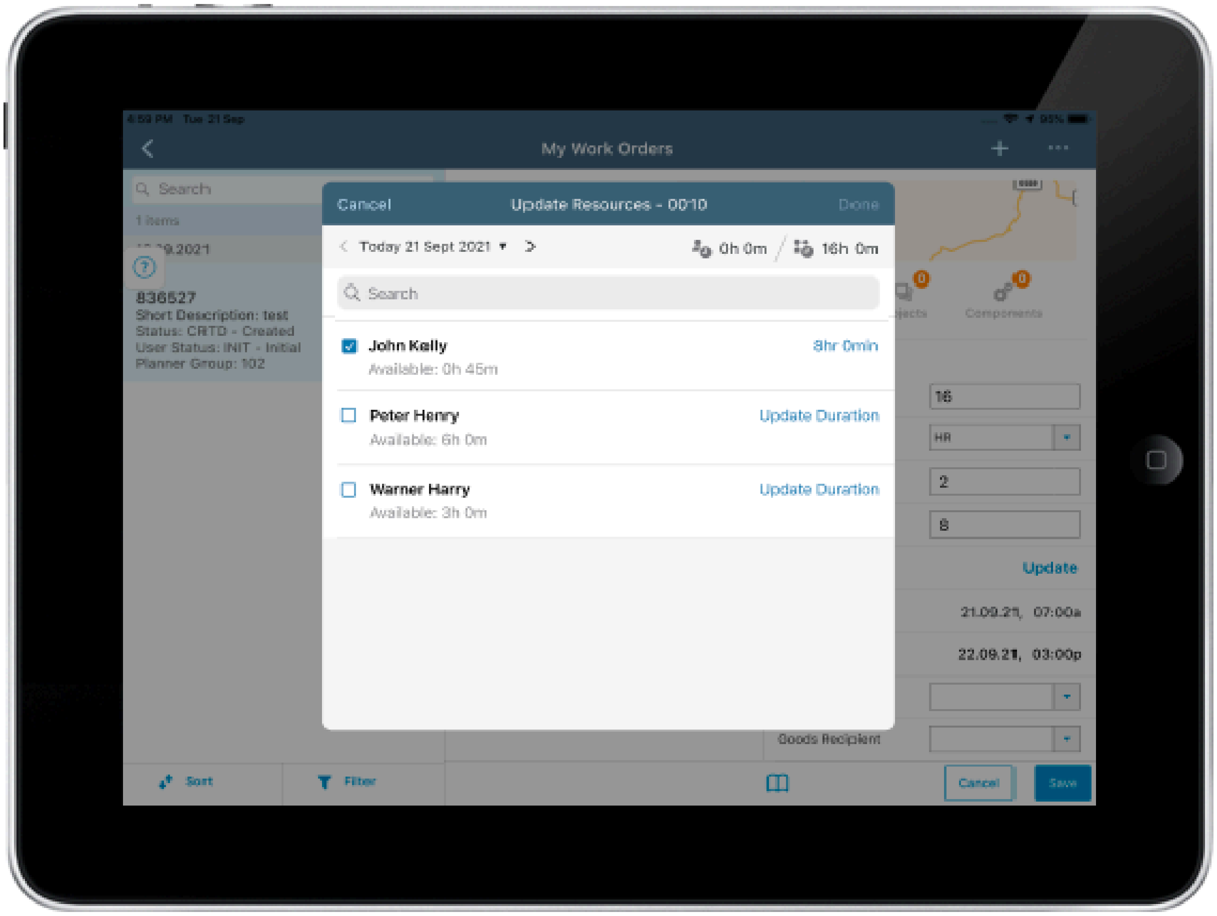


5. Select the **User Status** for Operation from the list.

> **Note:**
> Users can select single sequential status and/or multiple non-sequential statuses.

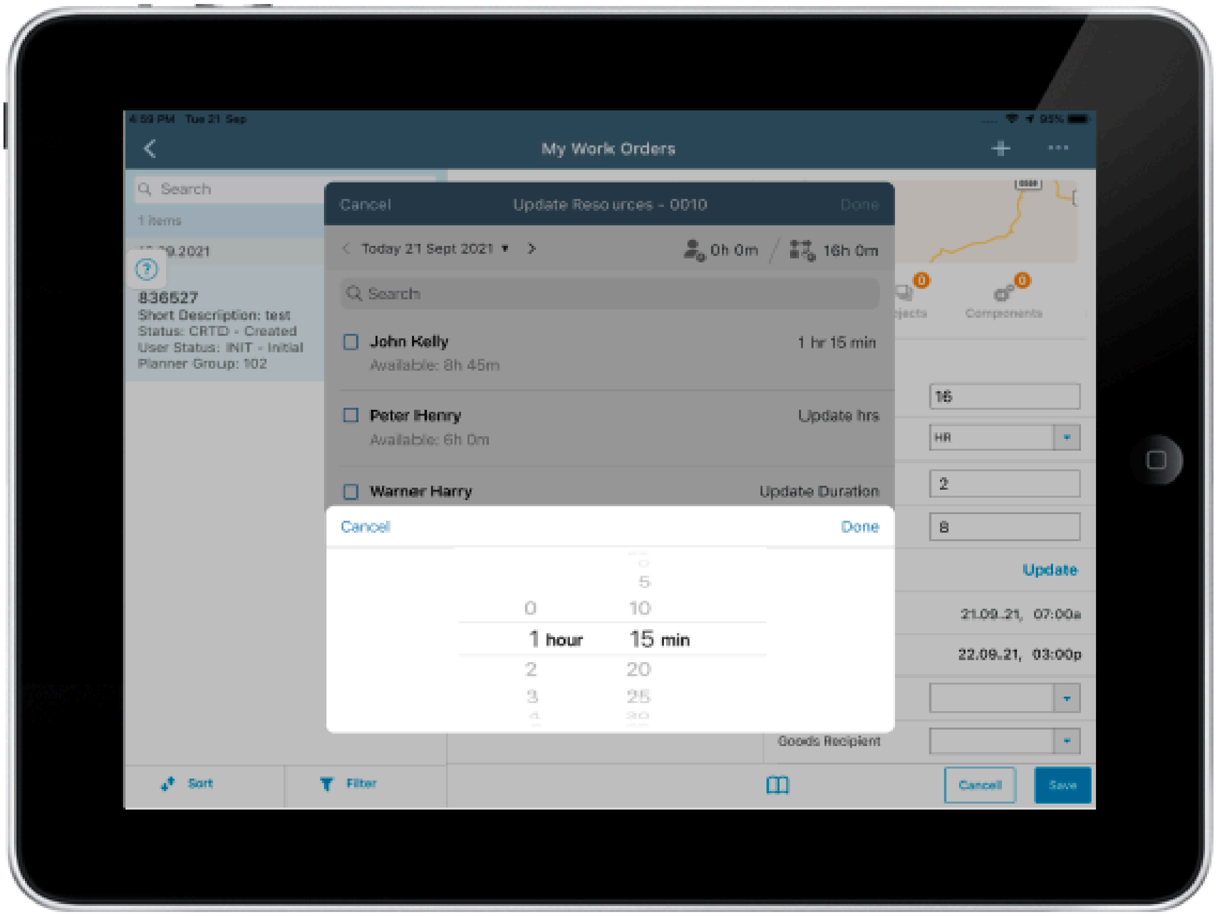
6. Tap **Done**.
7. Tap the **Update** link in the **Resources** field to assign the operation to the crew/ technicians.

Figure 8-7 Assign Resources



8. In the Update Resources window, tap **Update Duration** next to the selected resource.
9. Enter the start and end dates fields using a timer and tap **Done**.

Figure 8-8 Add Duration



10. Tap **Done** in the Update Resources window.
11. Tap **Save**.

Note:

- You can also add operations from the Task Lists. For details, see Add Task List Based Operations *(on page 218)*.
- You can edit the details of operation in the same screen. You can edit the details only when it is in created and released state; not when the work order is completed.
- You can create, copy, edit, and delete operations. To delete an operation that is created in the offline mode, access the offline outbox and swipe to delete.

8.4.3. Add a Sub-Operation

You can add a sub operation to an operation while creating and modifying a Work Order. If you delete the main operation, sub-operations associated with that operation are deleted.

To add a sub-operation within an existing operation:

1. In the left section of the **My Work Orders** screen, tap the Work Order.
2. In the right section of the **My Work Orders** screen, tap **Operations** tab.
3. Tap an operation and then tap **Add Sub-Operation.**

   Fields such as **Operation/Activity, Work Center, Work Code,** and **Unit of Work** are auto filled.

   > **Note:**
   > A sub-operation code is generated.

4. Make changes in the fields as required and then tap **Add.**
5. Fill in the details like control key and plant code,
6. Tap **Save.**

   A sub-operation is created and is displayed under the main operation.

   > **Note:**
   > Tap **Tasks** next to the + icon to add a new operation. You can either delete an existing operation and add a new one or add another operation keeping the existing one.

8.4.4. Add Components to work order

To add components:

1. Tap the **Components** tab and then tap ＋.
2. Enter the required data of the component that includes the **material number** of the component (corresponding **material description** is displayed), **category**, **required quantity**, **unit of measure, storage location** (corresponding **Available Quantity** is displayed), and **Operation/Activity code.**

   When you add a Material Number/Component to a work order, the Reservation Number and Line Item are displayed in the form of Reservation/Item.

   You can search for a component in the BOM hierarchy, and the search results display items even if they exist at different levels. This helps you locate and add the required item quickly and efficiently.

   > **Note:**
   > - You can change the **Material Number** and **Storage Location** field types to Scan Input through **RACE** and capture the **Material Number** and **Storage Location** respectively by scanning the bar code using your device camera.
   > - You can enter the material name manually in the **Component** field by selecting the **Category** as **T**. When the **Category** is selected as **T** from the drop-down, the component field changes to the text field and it enables you to enter the material name manually.

3. Tap **Save**.

   > **Note:**
   > You can edit the details of a component in the same screen. You can edit the details only when it is in the created and released state; not when the work order is completed.

8.4.5. Add Attachments to Work Orders

You can add an image, video, PDF attachments, and external URL links to the work order to provide additional information related to the maintenance or repair.

You can convert work order forms to PDF, add them under Objects attachments, and download converted PDFs to send them through email from both mobile and Desktop applications.

For information on adding attachments and working with them see, Add Attachments to Records *(on page 113)*

8.4.6. Add Permits to Work Orders

Permits in asset management and maintenance provide crucial information about safety measures that need to be taken before starting the work. They help maintenance staff understand and implement necessary precautions during maintenance works.

For example, when an operator is performing maintenance checks on equipment like a compressor, which requires isolation before work, a safety permit is necessary. The permit mandates isolating the compressor, which involves shutting it down, disconnecting power sources, and implementing lockout/tagout procedures. This eliminates potential hazards.

To add permits to the work order, do the following:

1. Tap on the Permits tab.
2. Choose one of the following options,
    - Add Permit Manually: Manually enter the permit details and add it to the work order.
    - Search and Add Permits: Search using permit name, description, or category, and select the permits
    - Add Permits from Assets: Look up permits associated with the asset and select the relevant ones.

8.4.6.1. Add Permit Manually

To add permit manually,

1. Select Add Permit Manually.
2. Fill the permit details.
    - Permit Category: Permits are grouped into categories such as safety or compliance and so on.
    - Order Release: This property determines the action that must trigger like a warning or error if a permit is not issued before work begins.
    - Order Completion: This property defines the action that must trigger like a warning or error if a permit is not obtained when work is complete.
    - Restricted Use: This property specifies the permitted use of a permit, whether it can only be used for classification purposes, has free use, or is limited to use within the Work Clearance Management (WCM) system.
    - Print: Permits can be printed for documentation and compliance purposes.
    - Not Modifiable: The properties of a permit associated with a work order are typically not editable, ensuring the integrity and consistency of the permit data within the system.
3. Once a permit is added to the work order, all corresponding fields are populated from the master data.
4. Tap Save.
5. The added permits are displayed in a list format. The list will include the following fields for each permit:
    - Permit number/name
    - Non-relevant status
    - Issued status
    - Highlight proposed permits over free permits.
6. Proposed permits are auto-populated and listed based on permit data parameters. These permits cannot be deleted.

8.4.6.2. Search and Add Permits

You can search permits by name, description, or category, and select the desired permits to add to the work order.

8.4.6.2.1. View Bitmap Images against Permits

You can view the bitmap images for work order, Equipment and Functional Locations permits.

Follow the steps to view the bitmap images,

1. Access the Work Orders module and navigate to the Permits tab.
2. Choose the Work Order Permit.
3. The permits are displayed with bitmap images, and thumbnails for each image.
4. Click on the thumbnail of a bitmap image to view a larger version of it.
5. You can zoom in, pan, and analyze the image in detail.

   The functionality to view bitmap images with thumbnails is available in both online and offline modes.

8.4.7. Add Task List Based Operations

Add operations from the Task list in a work order. This helps technicians to do asset maintenance using the items in the task list as checklist.

This powerful feature helps the technician perform maintenance of Equipment, Functional Location, Assembly, or do any other General Maintenance effectively eliminating the scope for accidentally missing any important steps.

Task list helps you to

- Add Operation based on Assembly, Equipment, Functional Location, or from general task list.
- Add Sub operation.
- Add Components associated with the operations from the task list automatically.
- Access Production Resource Tools (PRT) documents and measuring points associated with the operations.

> **Note:**
> You cannot create operations for task lists that have **Deleted** or **Creation Phase** status.

To add task list based operations:

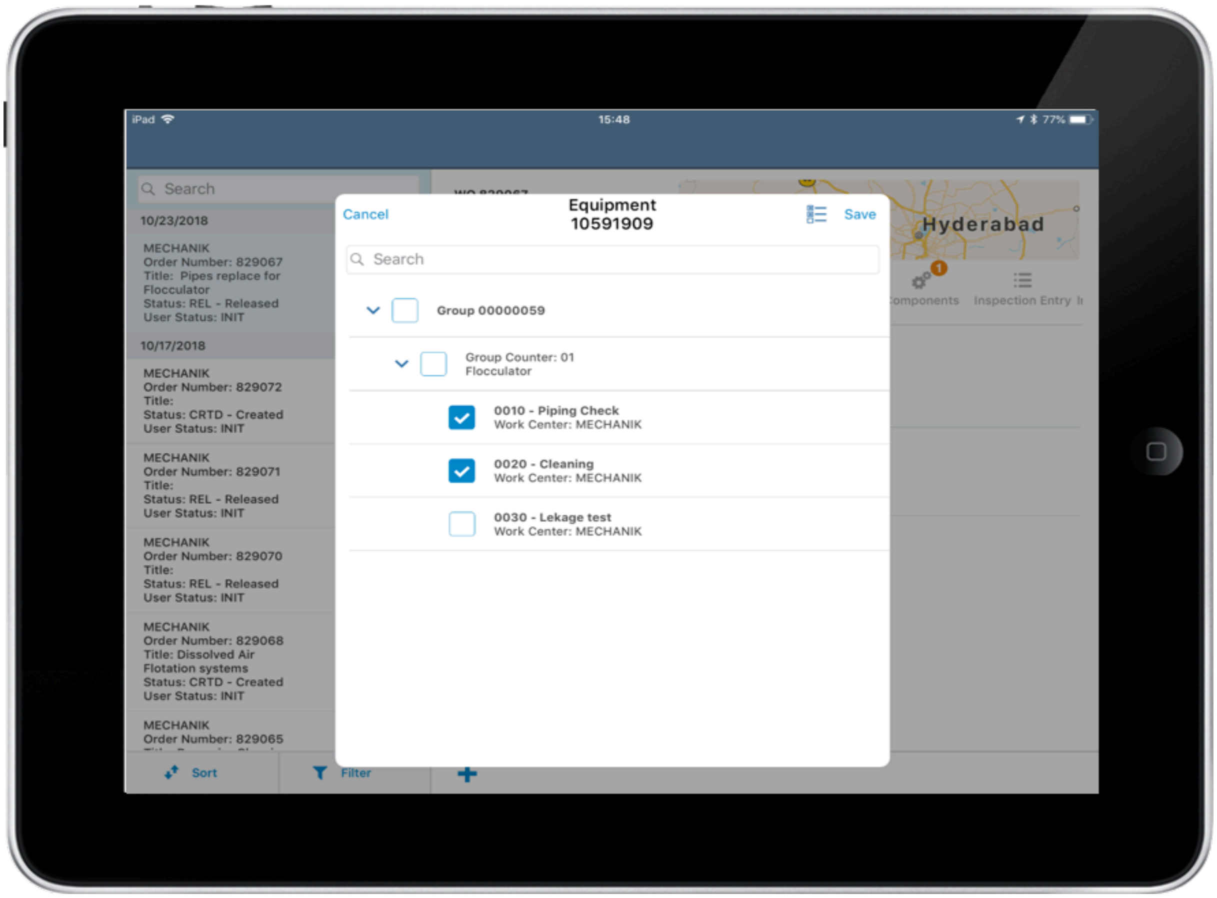
1. In the **Home** screen, tap **My Work Orders**.
2. In the left section of the **Work Orders** screen, tap the Work Order.
3. Tap the **Operations** tab.
4. At the bottom of the screen, tap the **Add** + icon and tap Task List.
5. Tap the task list that you want to add based on **Assembly**, **Equipment**, **Functional Location,** or **General Maintenance**.

Note:

- Equipment and Functional Location based task lists are available only if **Equipment** and **Functional Location** are selected in the **Header** tab.
- If the **Assembly** value is not selected in the **Header** tab, the task list for Assembly is retrieved based on the **Construction Type** value in the **Equipment** and **Functional Location** screen.

6. From the pop-up screen, select the desired task list or the list of operations from the task list.

Figure 8-9 Task List Based Operations



7. Tap **Save**.

   Operation is listed in the Operations tab with a link to the associated Production Resource Tools. Add and view the PRT Documents and Measuring Points (Measuring Points tab) in the **PRT Data** screen.

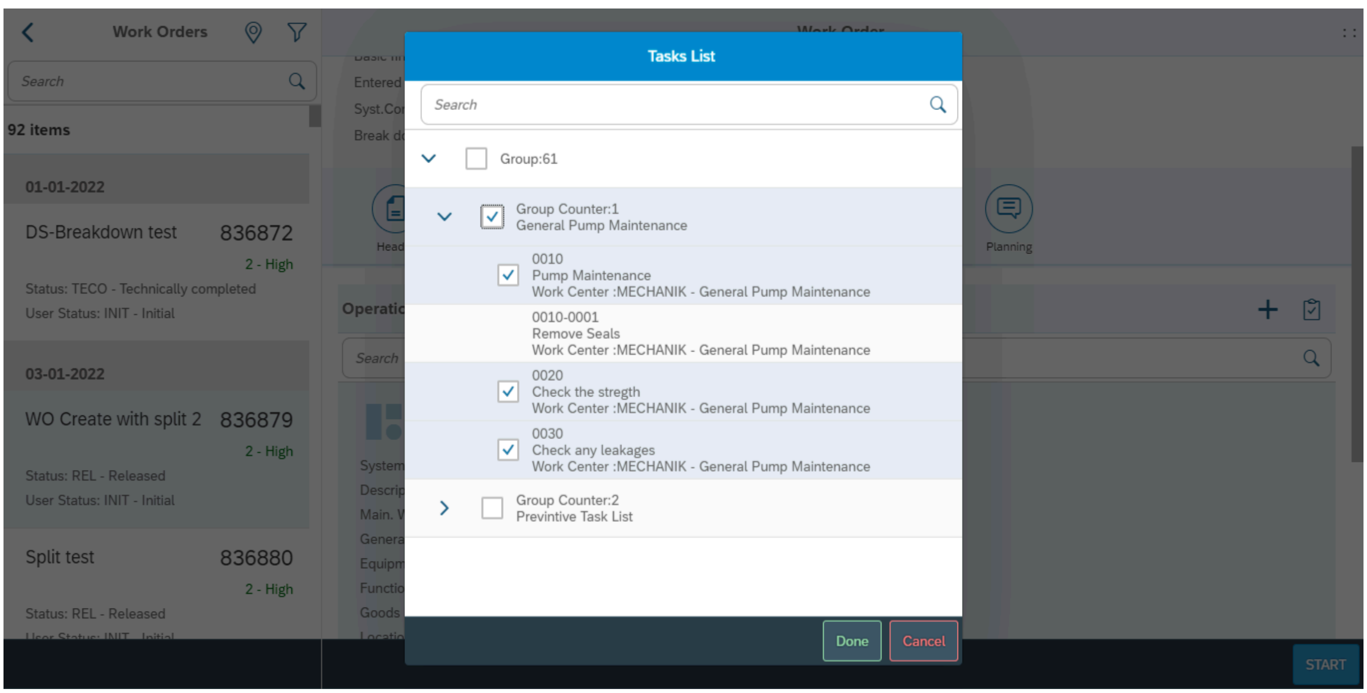
8.4.7.1. Add Task List Based Operations from Desktop Application

You can add operations from the Task list in a Work Order using Desktop Application.

To add operations from task list:

1. Login to Desktop application.
2. In the Dashboard, click **My Jobs** in My Jobs section.
3. Select a work order on the left side pane.
4. Click the **Operations** tab on the right side.
5. Click the Task List  icon on the right side.
6. In the **Select Task List Type** window, select the task list type and click **Done**.
7. In the **Tasks List** window, select the desired task list or the list of operations from the task list.

Figure 8-10 Add Task List from Desktop Application



8. Click **Done**.

   Task list is added to the operation.

8.5. View work orders on a Calendar

You can view the work orders and related information along with navigations to the respective objectives from the calendar view.

The calendar displays data based on Day, Week and Monthly and also helps you to identify the priority of the work order.

When you select the calendar view of the work order, the following data is displayed,

- Work order number
- Work order color coded by technician.
- If there is a work order with two operations scheduled on the same day and the WO assignment is at the operation level, then two line items with the same work order number are displayed on the calendar view.

When you select the work order, the following data is displayed,

- Work number / description
- Operation work center
- Equipment / description
- Address
- Map view CTA

  All the data that displayed has a navigation option to go to the respective data, wherever applicable. For example, WO number, EQ number should have hyperlinks. Similarly for other data where applicable (FL).

You can also drag and drop the work orders on the calendar view from one date to another. This access is controlled by user groups (Supervisor, Technician, etc.)

8.6. Release a Work Order

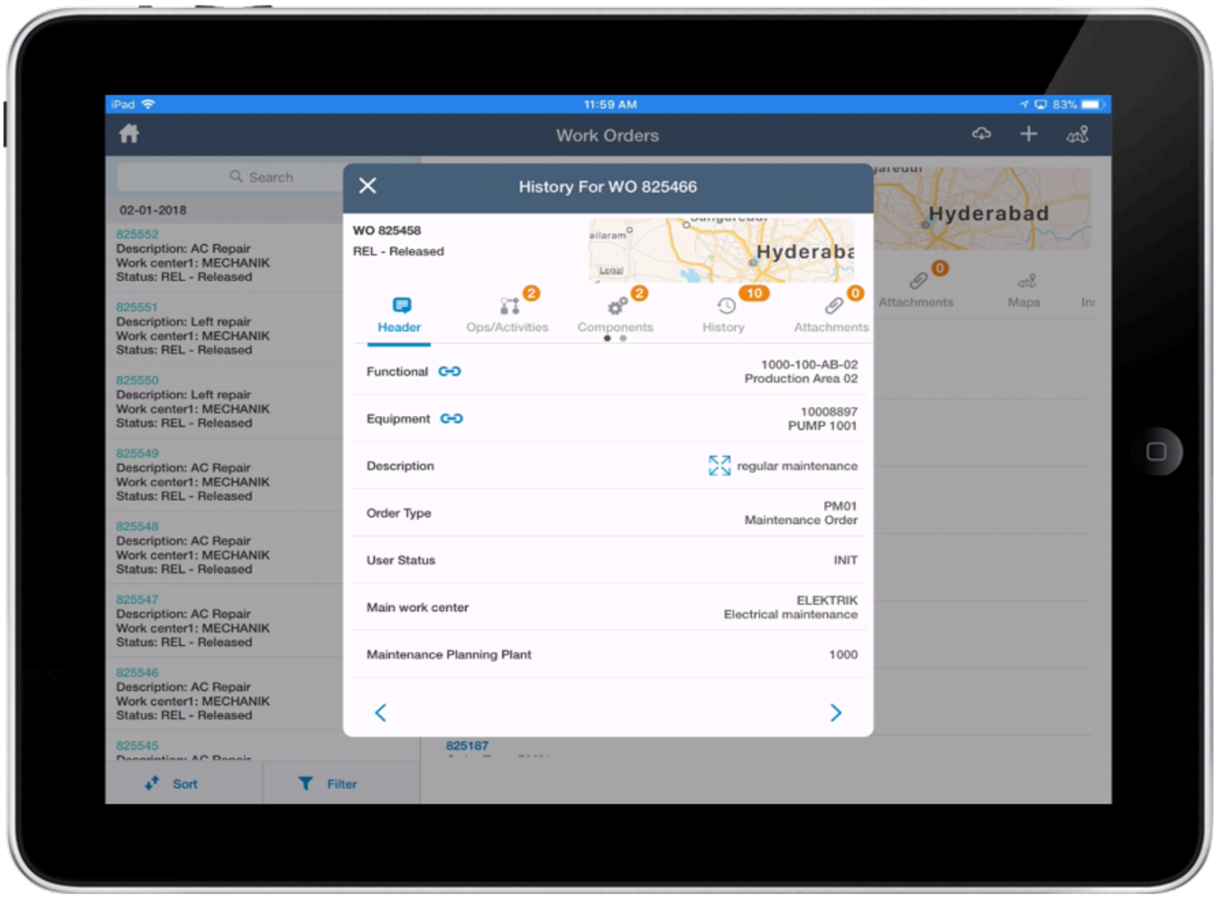
Once a Work Order is created, it is assigned to a person/group/team. The person/group/team must then acknowledge their acceptance by releasing the Work Order. Work orders must be released before they are processed by the field technicians. Before you release a work order, check the history of work orders for the equipment or functional location.

The **History** tab in Work Orders displays the list of previous Work Orders created for the equipment or functional location.

To view the history of Work Orders for Equipment or Functional Location:

1. From the left section of the **Work Orders** screen, search and tap the Work Order for which you want to view the history.
2. Tap the **History** tab in the right side section of the work orders screen.
   The list of previously created work orders for the equipment or functional location appears.

Figure 8-11 Work Order History

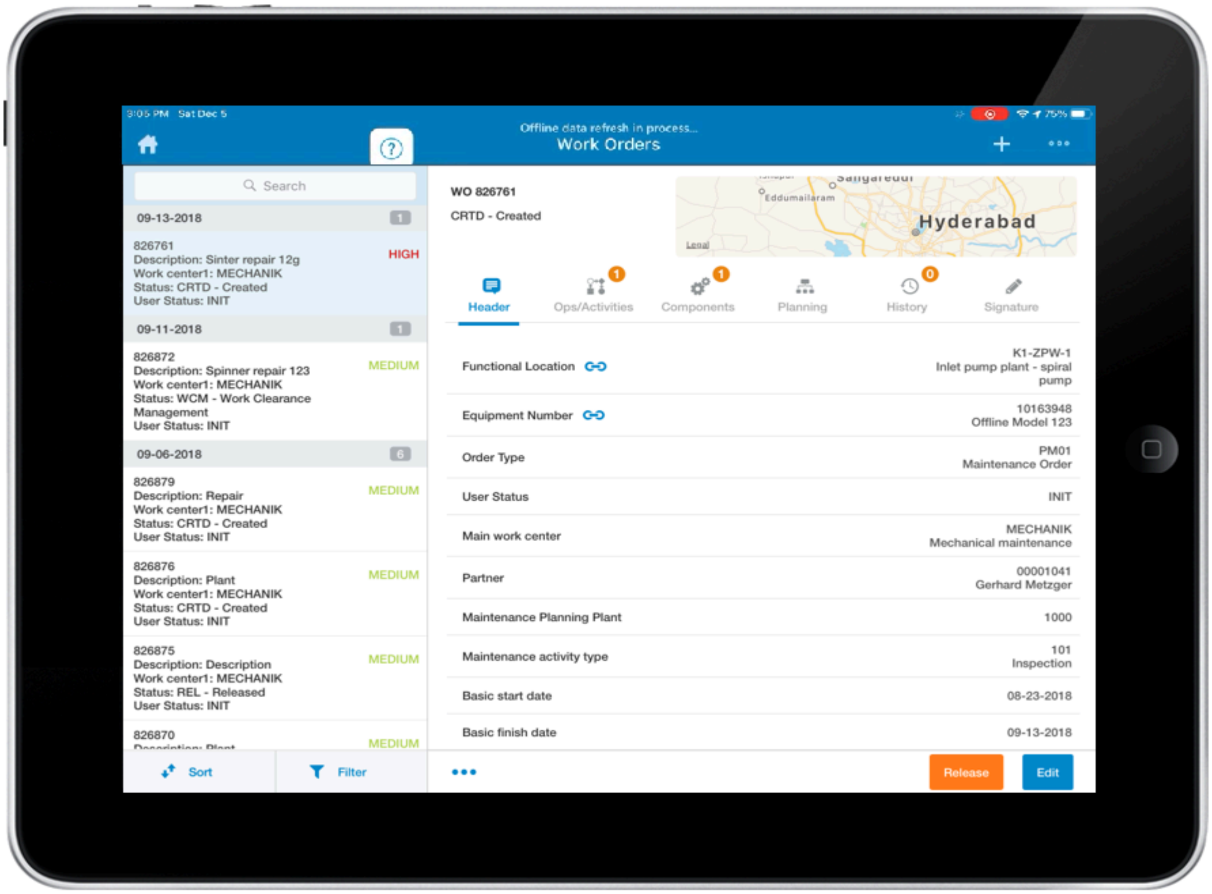


3. The list of previously created work orders for the equipment or functional location appears.
4. Select any of the records from the list, to view Header, Operations, Components, Attachments and Forms tabs.
5. Once you confirm no existing work order for an equipment or functional location, tap **Release** in the Work Orders screen.
   When a Work Order is released, ensure that all necessary parts, operations and documents are available for the maintenance technician to start work, and all required parts are in stock.

If there is an insufficient quantity of spare parts, the application displays a warning message, saying: "Required quantity for Material xxxxxxx is not available in stock. Do you want to proceed?" with options for Yes and No.

> **Note:**
> This warning message appears in two scenarios:
> a. While releasing the work order.
> b. While adding a component to a released work order.

Figure 8-12 Work Order History



8.7. Add Crew to Work Center and Assign Jobs

As a supervisor, you must add a team to a work center. When a work order is created, assign the Work Orders or Operations, to the crew depending on their availability and skills.

The Application supports the splits in operations in the intervals of 0.5 hours and the units of measure in HR and H. For example, a split can be 0.5 HR, 1.5 HR and so on.

8.7.1. Add Crew to Work Center

Use the **Crew Management** module of the UI5 application to assign crew members to the Work Center.

As a supervisor, you can assign the new personnel / resources to the respective department or work center.

To assign personnel to Work Center:

1. Login to Desktop application.
2. In the Home screen, click **Crew Management**.
3. Select **Plant** and click **Search**.
4. In the right side of the **Crew Management** screen, click the **Add** icon.
   In this screen, you can view:
   - Work center team members using the **Work Center** field.
   - Work centers to which the resource / personnel is assigned using the **Personnel number** field.

   > **Note:**
   > To delete the resource / personnel when no longer required,
   > - Select the record in the **Crew Management** screen and then click the **Delete** icon.

5. In the **Crew Assignment** window, select the checkbox next to Personnel Number and enter the Start Date and End Date.
6. Click **Add**.
7. In the **Work Center** pop-up, select the work center where the resource is required.
8. Click **Add**.
   Person is associated with the Work Center.

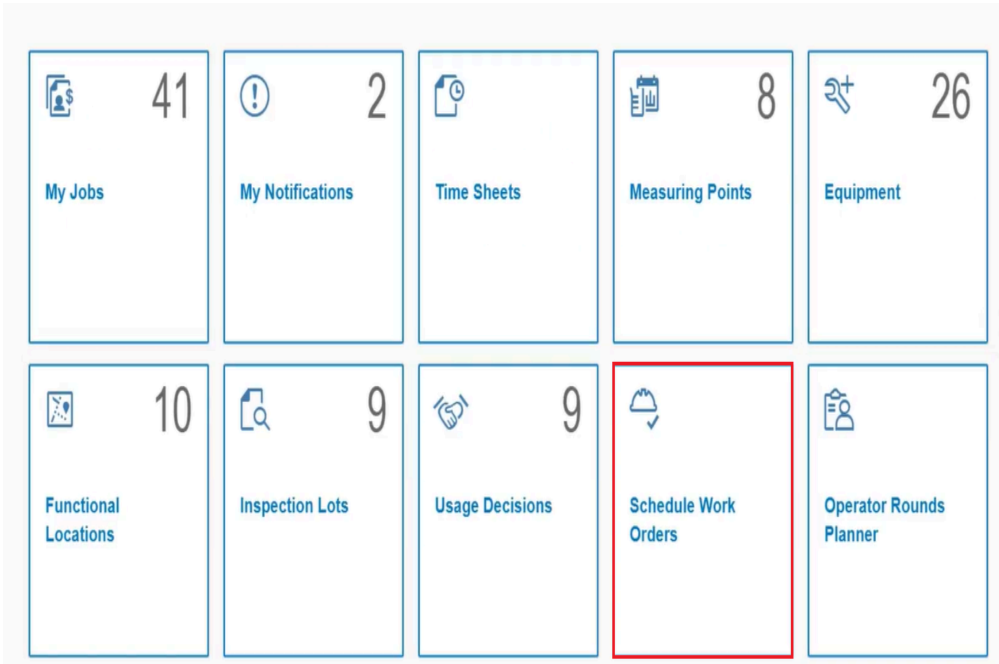
8.7.2. Assign Jobs to Work Center Crew

Use the **Schedule Work Orders** module of the UI5 application to assign work center personnel to jobs (Work Order or Work Order operations).

To assign jobs to personnel:

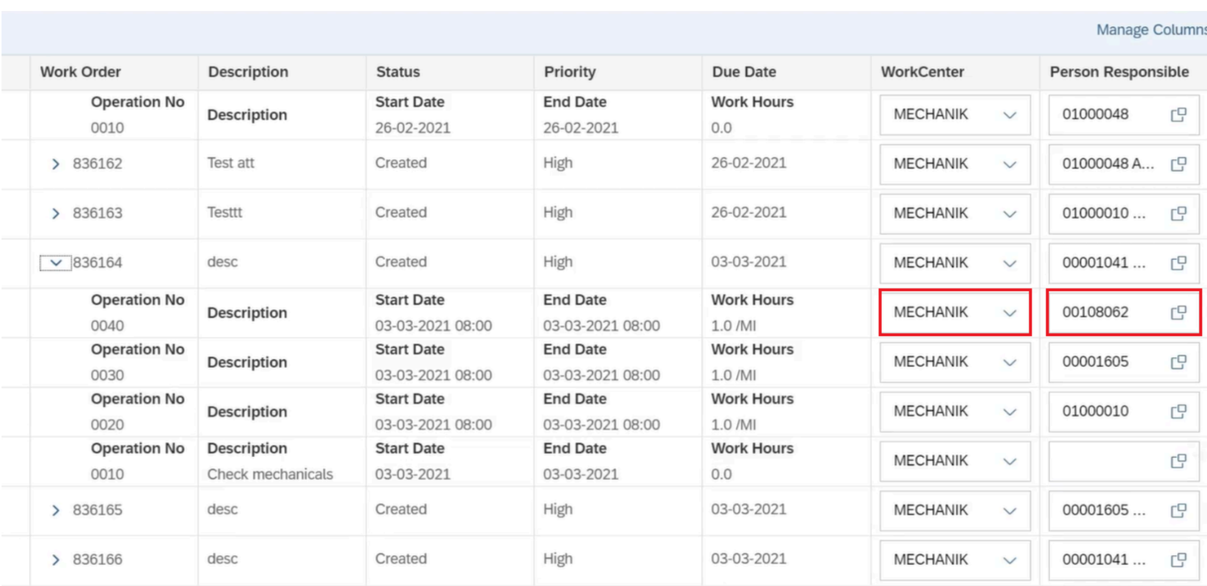
1. Login to Desktop application.
2. In the Home screen, click **Schedule Work Orders**.

Figure 8-13 Select Schedule Work Orders



3. Click the **Expand Node** > icon next to the Work Order to view the Operations.

Figure 8-14 Select Work Center and Person Responsible



Manage Columns

Work Order	Description	Status	Priority	Due Date	WorkCenter	Person Responsible
Operation No 0010	Description	Start Date 26-02-2021	End Date 26-02-2021	Work Hours 0.0	MECHANIK	01000048
> 836162	Test att	Created	High	26-02-2021	MECHANIK	01000048 A...
> 836163	Testtt	Created	High	26-02-2021	MECHANIK	01000010 ...
836164	desc	Created	High	03-03-2021	MECHANIK	00001041 ...
Operation No 0040	Description	Start Date 03-03-2021 08:00	End Date 03-03-2021 08:00	Work Hours 1.0 /MI	MECHANIK	00108062
Operation No 0030	Description	Start Date 03-03-2021 08:00	End Date 03-03-2021 08:00	Work Hours 1.0 /MI	MECHANIK	00001605
Operation No 0020	Description	Start Date 03-03-2021 08:00	End Date 03-03-2021 08:00	Work Hours 1.0 /MI	MECHANIK	01000010
Operation No 0010	Description Check mechanicals	Start Date 03-03-2021	End Date 03-03-2021	Work Hours 0.0	MECHANIK	
> 836165	desc	Created	High	03-03-2021	MECHANIK	00001605 ...
> 836166	desc	Created	High	03-03-2021	MECHANIK	00001041 ...

4. Select the **Work Center** and **Person Responsible**.

Work Order or Operation is assigned to the selected personnel.

8.8. Execute a Work Order

Once a Work Order is released and assigned to a technician, the technician executes the work order. Execution of a work order could require all or a few of these tasks.

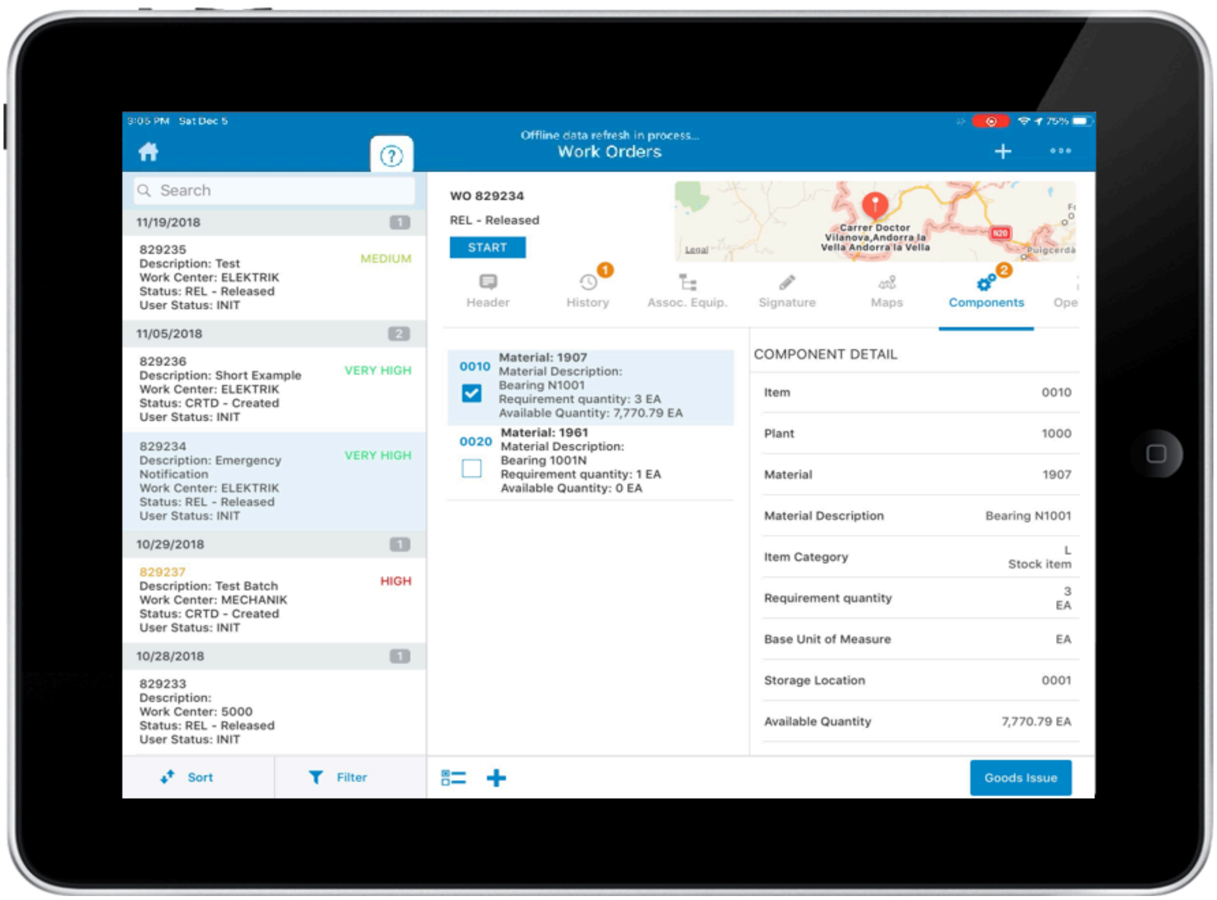
8.8.1. Issue Materials / Goods for Maintenance / Repair

When a work order is released and assigned, a material document is generated for the materials that are required for repair or maintenance. The stores personnel, based on the material document, issue the required materials.

To issues materials for maintenance / repair, do the following tasks:

1. In the right side section of the **Work Orders** screen, tap the **Components** tab.
   A list of components including the associated material documents gets displayed.
2. Tap to select the Bill of Materials (BOM) record and then tap **Goods Issue**.

Figure 8-15 Posting Goods Issue



A message appears asking whether you want to issue the goods.

3. Tap **Yes**.

   Goods are now issued for maintenance or repair work based on this activity.

> **Note:**
> You can select multiple components within a Bill of Materials (BOM) and choose operations for each selected component individually before adding them to the Work Order.

8.8.1.1. Return Excess Material to Warehouse

Once the Goods Issue is posted, the warehouse supplies the required quantity of items to the manufacturing plant. However, the manufacturing technician may not require the supplied quantity and want to return the excess items.

To return excess material to warehouse:

1. In the left section of the **Work Orders** screen, tap the Work Order.
2. In the right section of the **Work Orders** screen, tap **Components**.

   A list of components including the associated material document and Goods Issue records is displayed.
3. Tap the Bill of Materials (BOM) record and then tap **Material Doc.**
4. In the **Material Doc.** screen, select a component and then tap **Reversal.**

8.8.1.2. Return Unused Spares

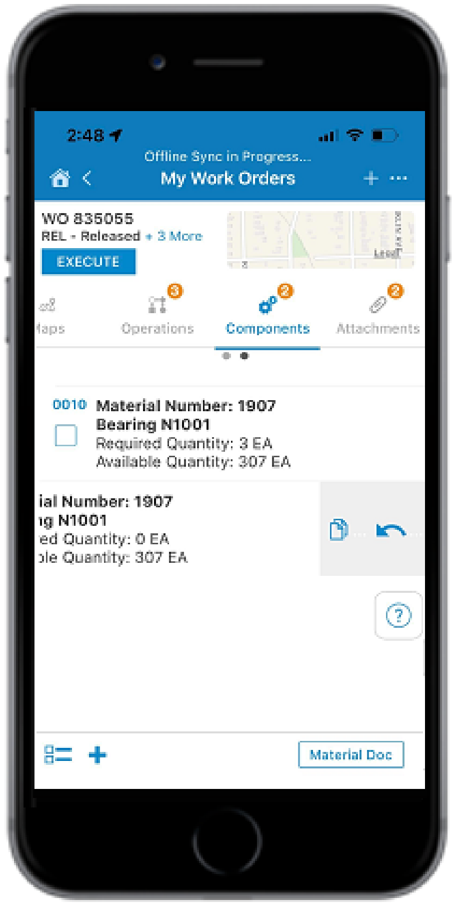
You can return unused spares using mWorkOrder mobile application and update inventory in real-time. This helps to maintain accurate inventory.

To return unused spares:

1. In the left section of the **Work Orders** screen, tap the Work Order.
2. In the right section of the **Work Orders** screen, tap **Components**.

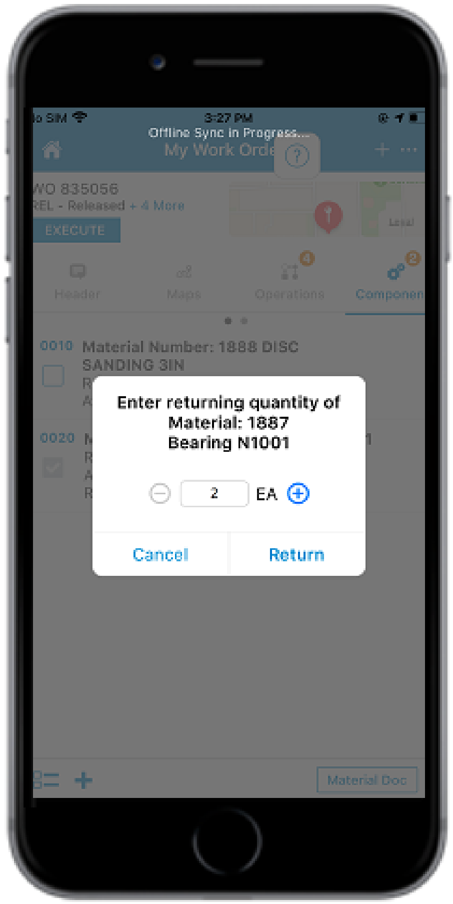
   A list of materials is displayed.
3. Swipe left on the material which you want to return.

Figure 8-16 Select Material to Reverse



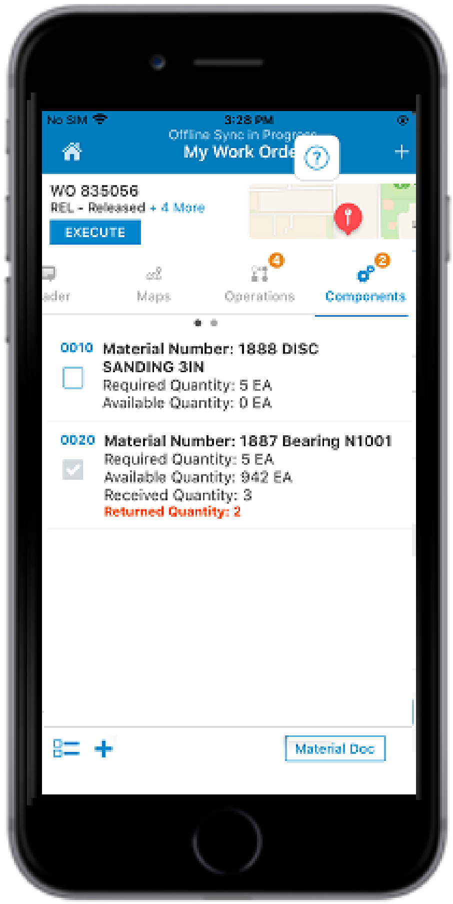
4. Tap the Reversal  icon.
5. Enter the quantity of spares that you want to return.

Figure 8-17 Enter Material Quantity



6. Tap **Return**.
   The selected quantity of unconsumed or unused spares are returned and are displayed in the Returned Quantity field.

Figure 8-18 Material Returned



8.8.2. Confirm an Operation Manually

Once you finish an operation for the work order, you can close it by confirming the action done on it. You can enter the details of the work done with details like start time and end time, ID of the crew who completed the operation and so on either manually or configure to take values automatically.

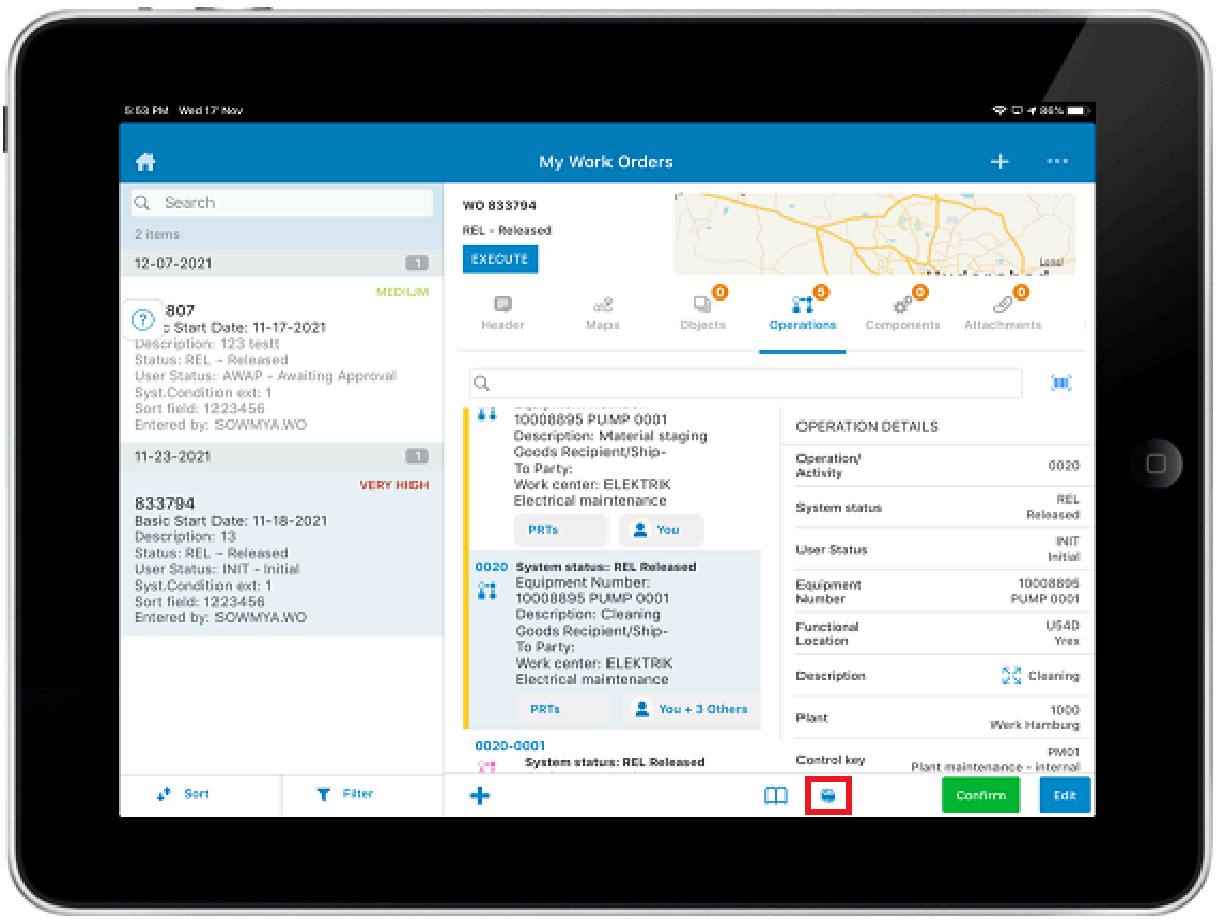
Once the Operation is partially or fully confirmed, tap  icon on the Operation details screen and navigate to the Time Sheets create screen using the **Create Time Sheet** option. To learn how to create a time sheet, see Create a Time Sheet *(on page 279)*.

To confirm an operation manually:

1. In the left section of the **My Work Orders** screen, tap the Work Order.
2. In the right section of the **My Work Orders** screen, tap the **Operations** tab.
3. In the Operations list, select the operation which is assigned to you.

Note:
- You can see the assigned operations which are highlighted in yellow color in the list along with the count of assignees.
- You can tap the Assignee link to check the assigned crew/technician details.
- You can tap the PRTs link to view the attachments and measurement points.
- You can only edit the operations which are assigned to you.

Figure 8-19 Selecting Operation



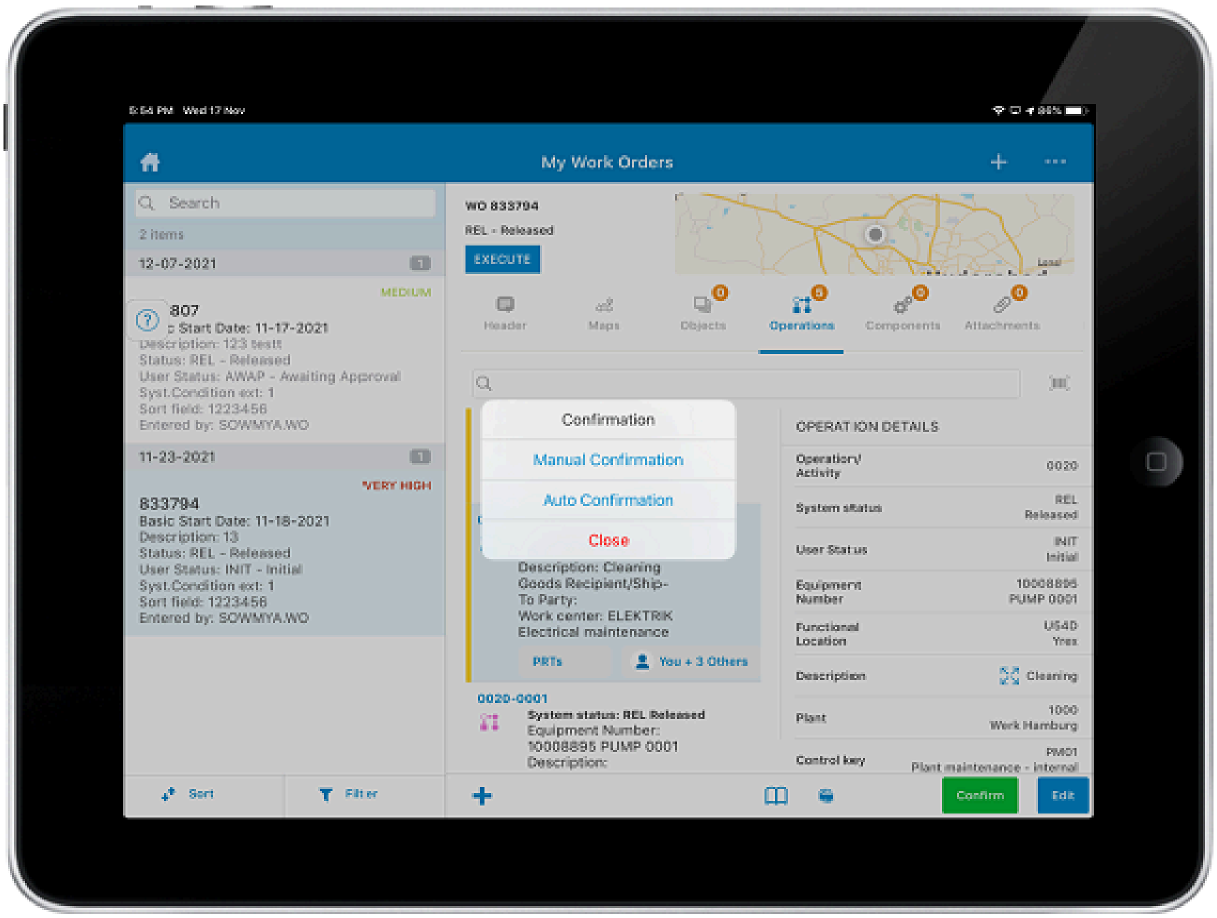
4. Tap the **Measuring Document**

icon to select the measuring points to create the measurement document.
Measuring Points are displayed on the following tabs:

- **Objects:** Shows measuring points associated with Objects like Functional location and Equipment.
- **Operations**: Shows measuring points associated with operations as Production Resource Tools (PRTs).

5. Select the measuring points and tap **Submit**. For more information about adding measuring points, Create a Measurement Document *(on page 249)*.
6. Tap **Confirm** in the Operation Details.
7. In the **Confirmation** window, tap **Manual Confirmation**.

Figure 8-20 Selecting Manual Confirmation or Automatic Confirmation

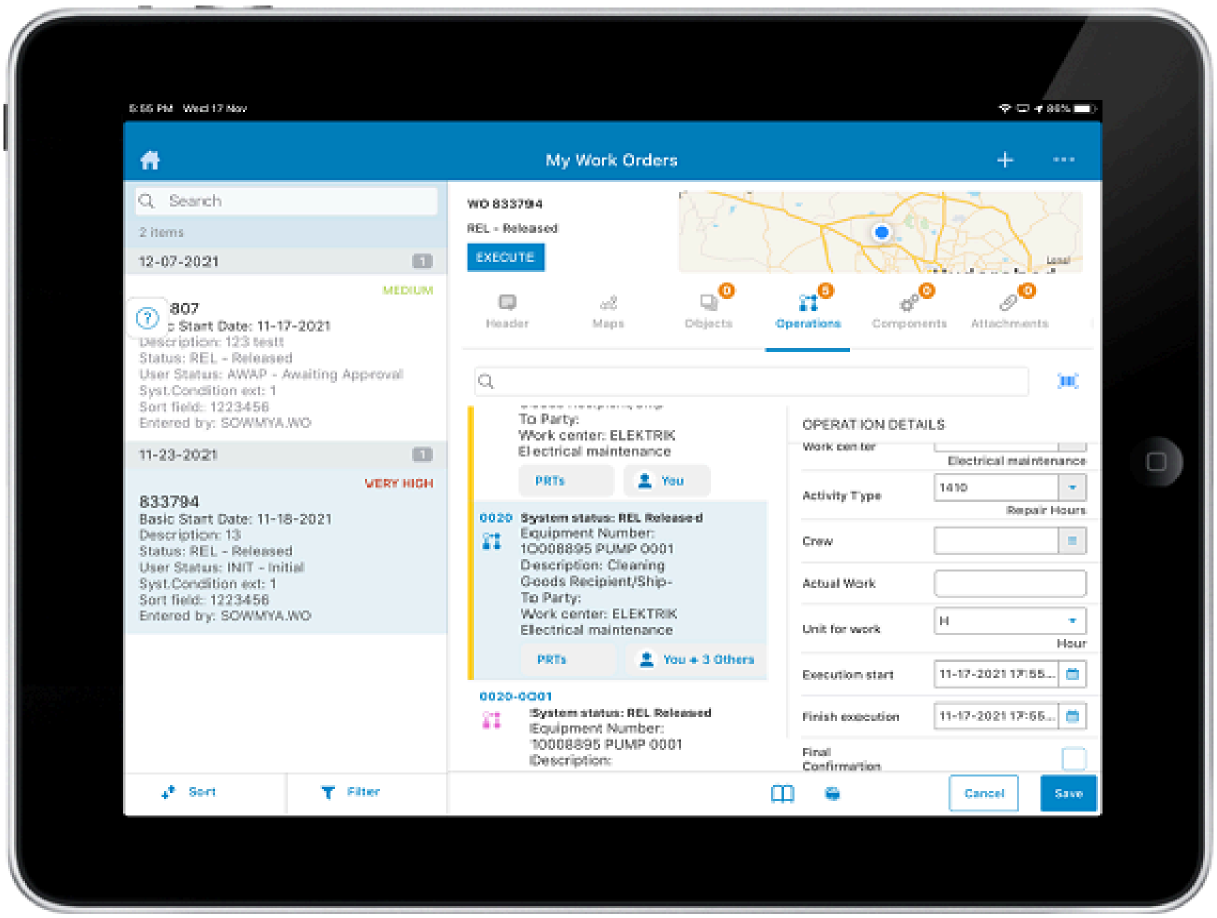


8. Under **Operation Details**, enter the following:

- **Execution Start**: Tap the **Calendar** icon to select the date and time for start of execution.
- **Crew ID**: Tap the **Crew ID** icon to select the Crew IDs from the list. When there are multiple fields to select, you can tap the icon to select or deselect all. This feature is available in both Online and Offline modes.
- **Finish Execution**: Tap the **Calendar** icon to select the date and time for finishing execution.
- **Actual Work**: This field is non-editable.
- **Unit for work**: This field is non-editable.

- **Final Confirmation**: Select the checkbox for Final Confirmation.
- **No Remaining Work**: Select the checkbox to confirm that there is no pending work for the operation selected.
- **Reason for Variance**: Select the Reason for Variance from the list.
- **Confirmation text**: Enter the Confirmation text.

Figure 8-21 Entering Confirmation Details Manually



9. Tap **Save**.

   Operation confirmed successfully message appears.

8.8.2.1. Confirm an Operation Automatically

To confirm an operation automatically:

1. In the left section of the **My Work Orders** screen, tap the Work Order.
2. In the right section of the **My Work Orders** screen, tap the **Operations** tab.
3. In the Operations list, select the operation which is assigned to you.
4. Tap the **Measuring Document**

   icon to select the measuring points to create the measurement document.

   Measuring Points are displayed on the following tabs:
   - **Objects:** Shows measuring points associated with Objects like Functional location and Equipment.
   - **Operations**: Shows measuring points associated with operations as Production Resource Tools (PRTs).
5. Select the measuring points and tap **Submit**. For more information about adding measuring points, Create a Measurement Document *(on page 249)*.
6. Tap **Confirm** in the Operation Details.
7. In the **Confirmation** window, tap **Auto Confirmation**.
8. In the **Auto Confirmation** window, you can do the following operations:

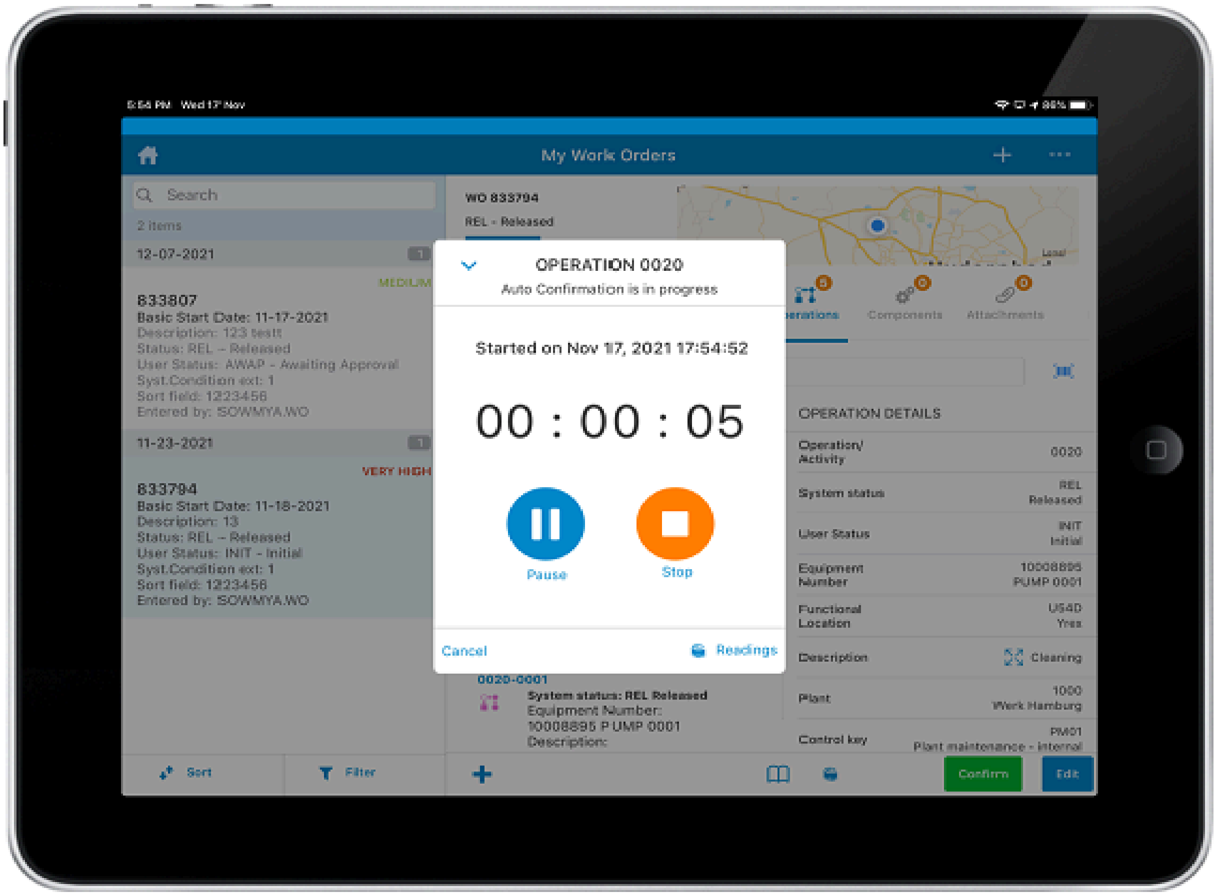
   a. **Minimize**: Tap the **Minimize** icon to minimize the **Auto Confirmation** box. The timer is minimized and is available on the top of the screen.

   While the timer is **ON** and **Auto Confirmation** box is minimized, navigate through the application and perform activities except the following:
   - Cannot start confirmation on any other Operation.
   - Cannot complete the Work Order for which the operation is under process.
   - Cannot complete the Notification assigned to the Work Order for which the operation is under process.

   b. Tap the **Pause** button to pause the operation and resume it later.

   c. **Stop button**: Tap the Stop button to complete the operation.

Figure 8-22 Auto Confirmation of Work Orders



9. Under **Operation Details**, enter the required information in the following fields:

- **Execution Start**: Tap the **Calendar** icon to select the date and time for start of execution.
- **Crew ID**: Tap the **Crew ID** icon to select the Crew IDs from the list.

  When there are multiple fields to select, you can tap the icon to select or deselect all. This feature is available in both Online and Offline modes.

- **Finish Execution**: This field is auto-filled once you tap the Stop button to complete the operation.
- **Actual Work**: This field is non-editable.
- **Unit for work**: This field is non-editable.

- **Final Confirmation**: Select the checkbox for Final Confirmation.
- **No Remaining Work**: Select the checkbox to confirm that there is no pending work.
- **Reason for Variance**: Select the Reason for Variance from the list.
- **Confirmation text**: Enter the Confirmation text.

10. Select the measuring points and tap **Done**.
11. Tap **Save**.

    The application shows the confirmation message "Operation Confirmed Successfully".

8.8.3. Perform Maintenance for Multiple Equipment Using One Work Order

Add various Objects such as Equipment, Functional Location, Material and Notification to a Work Order to perform maintenance/repair for multiple equipment of similar type or category. This eliminates creating multiple Work Orders for similar operations/tasks.

For example, if you want to do maintenance/repair like greasing of bearings and inspecting valves for around 25 motors (equipment), you can create a Work Order and create an Object for each equipment. This makes easy for the plant personnel to perform their tasks.

Note:

- You can create Objects in Online and Offline modes.
- You can configure Custom tabs using the RACE application.

To add multiple objects to a work order:

1. In the **Work Order** details screen, tap on the Custom (**Objects**) tab.
2. Tap on the **Create Object** icon.

   Tap on an existing Object line item to create a Notification. Tap **Create Notification** to navigate to **New Notification** screen.
3. In the **Object link** pop-up screen, enter information such as Equipment, Functional Location and Assembly.

   > **Note:**
   > Tap on the Equipment or Functional Location of an existing Object to view the details.
4. Tap **Save**.

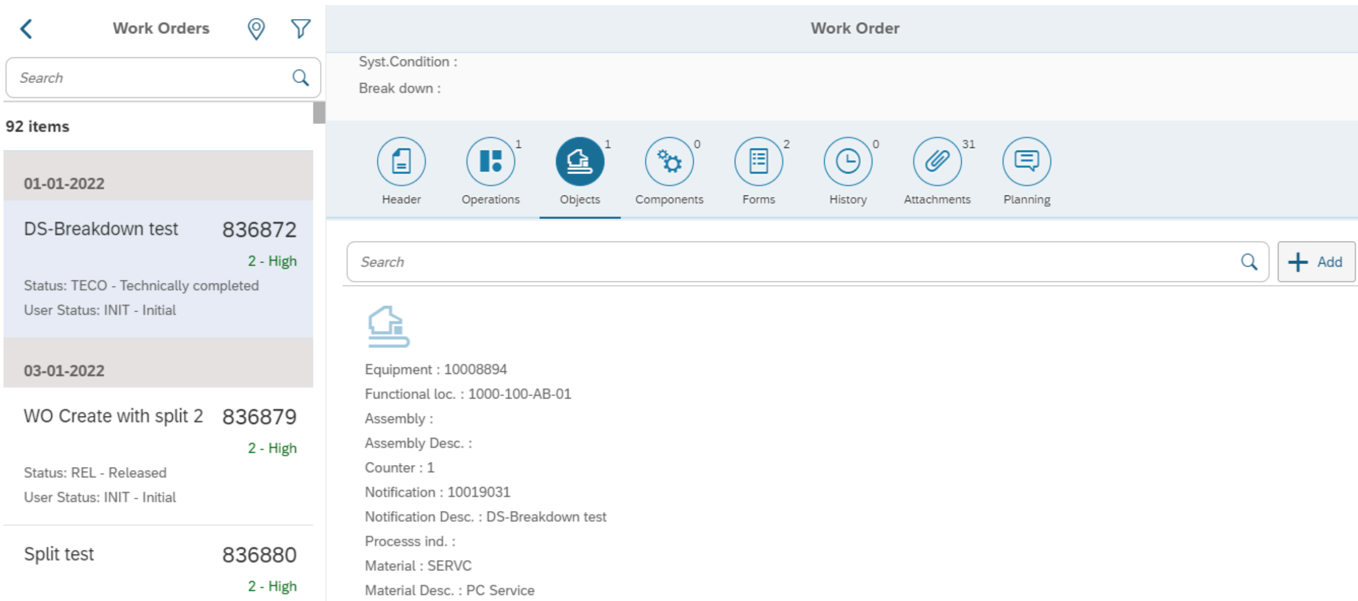
8.8.3.1. Add Objects from Desktop Application

You can view and add various objects to a Work Order using Desktop application.

To add various objects to a work order:

1. Log in to Desktop Application.
2. In the Dashboard, click **My Jobs** in My Jobs section.
3. Select a work order on the left side pane.
4. Click the **Objects** tab on the right side.
5. Click **Add**.
6. In the **Object Link** window, fill in the details and click **Save**.

Figure 8-23 Add Objects from Desktop Application



8.8.4. Capture details related to Work Order tasks in embedded forms

Use embedded forms to capture additional details of the task(s) related to the Work Order operations and activities.

You can assign multiple embedded forms to perform / track maintenance / repair tasks on the Work Order. All the forms are listed on the Forms tab. This eliminates the need to maintain paper-based forms to track the maintenance / repair activities.

For example, when your Supervisor assigns you a Work Order you might be required to fill up forms such as checklist and inspection entry form. Depending on the Work Order tasks, you can modify the Work Order and add relevant forms. On the Forms tab, you can:

- Add new forms to the Work Order.
- Modify the forms multiple times.
- Save the form using the **Save Form** option.

  You can maintain multiple versions of the form at a time and email, print, or convert them to PDF. Tap the **History** button to view the form versions.

- Post the form to your supervisor using the **Submit Form** option. The status of the form is set to **Submitted**. Once submitted,and you cannot modify the form.
- Delete the submitted form using the Delete option.

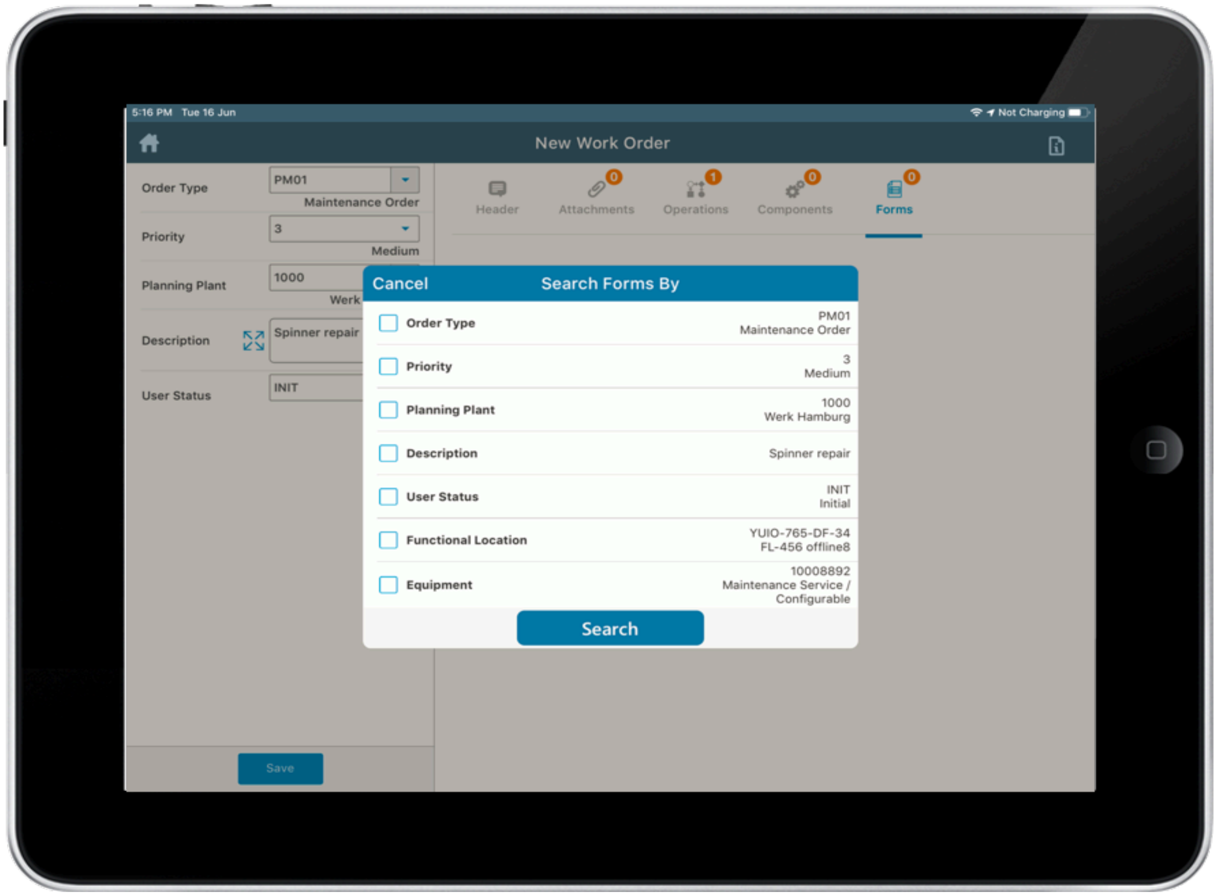
Note:

- A supervisor with appropriate role can modify the form multiple times using the **Save Form** option and use the **Accept Form** option to accept the form.
- Once you Submit or Accept a form, you can select a single form or use the **Select All** feature to convert multiple forms to PDF using the **Convert to PDF** option and attach them to the Work Order, and view or annotate them in the **Attachments** tab.

To add multiple forms to Work Order:

1. Tap **Add Form** in the **Forms** tab.
2. In the **Search Forms By** pop-up, select the criteria/ fields to fetch the forms.
   Filters are displayed based on the values specified in the left section of the **Create Work Order** screen like **Order Type**, **Priority** and **Plant**.

Figure 8-24 Add Forms to Work Order



3. Tap **Search**.
4. Select the checkbox next to the forms and tap **Add**.

> **Note:**
> - Tap on the form to view the form details.
> - Swipe the form to the left and tap **Delete** to delete the form.

8.8.5. Access Reference Documents

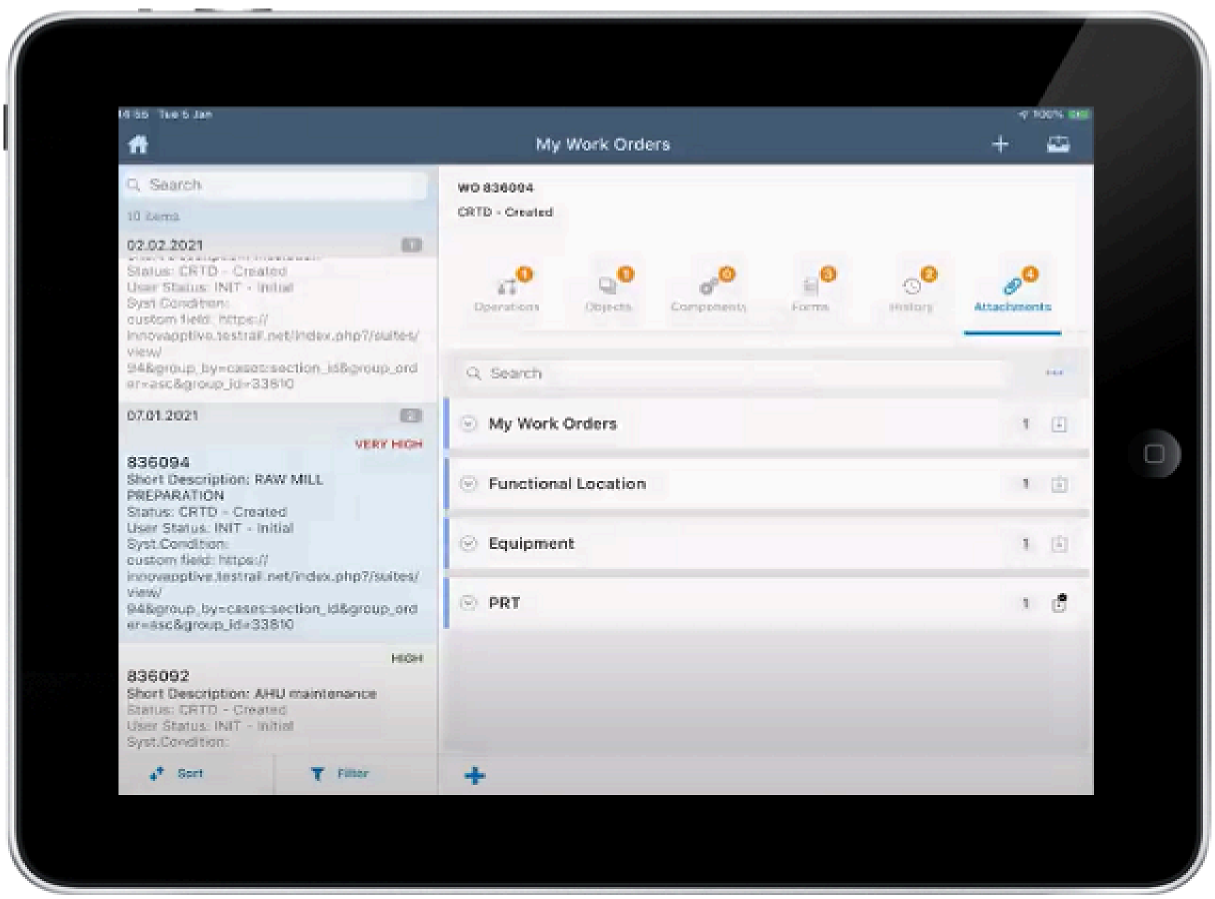
While working on a work order you can access and check important documents related to the equipment and job like reference manuals, warranty details and so on in the Attachments tab. The documents are made available to you when you are in both online and offline modes. You can even update the document and save it as a new document.

You can access all the documents that are linked to Work Orders, Functional Location, Equipment, Product Resource Tools (PRTs), and Notifications stored in DMS. You can view, edit, and re-post documents to SharePoint.

To view the documents:

1. In the Home screen, tap **My Jobs**.
2. In the **My Work Orders** screen, tap the work order.
3. Tap the **Attachments** tab.

Figure 8-25 Work Orders - Attachments



4. Expand the linked attachment and tap the Download

icon to download the document.

5. Select the document to open and view it.

> **Note:**
> Only MS SharePoint links have the download option.

8.8.5.1. Edit Reference Documents

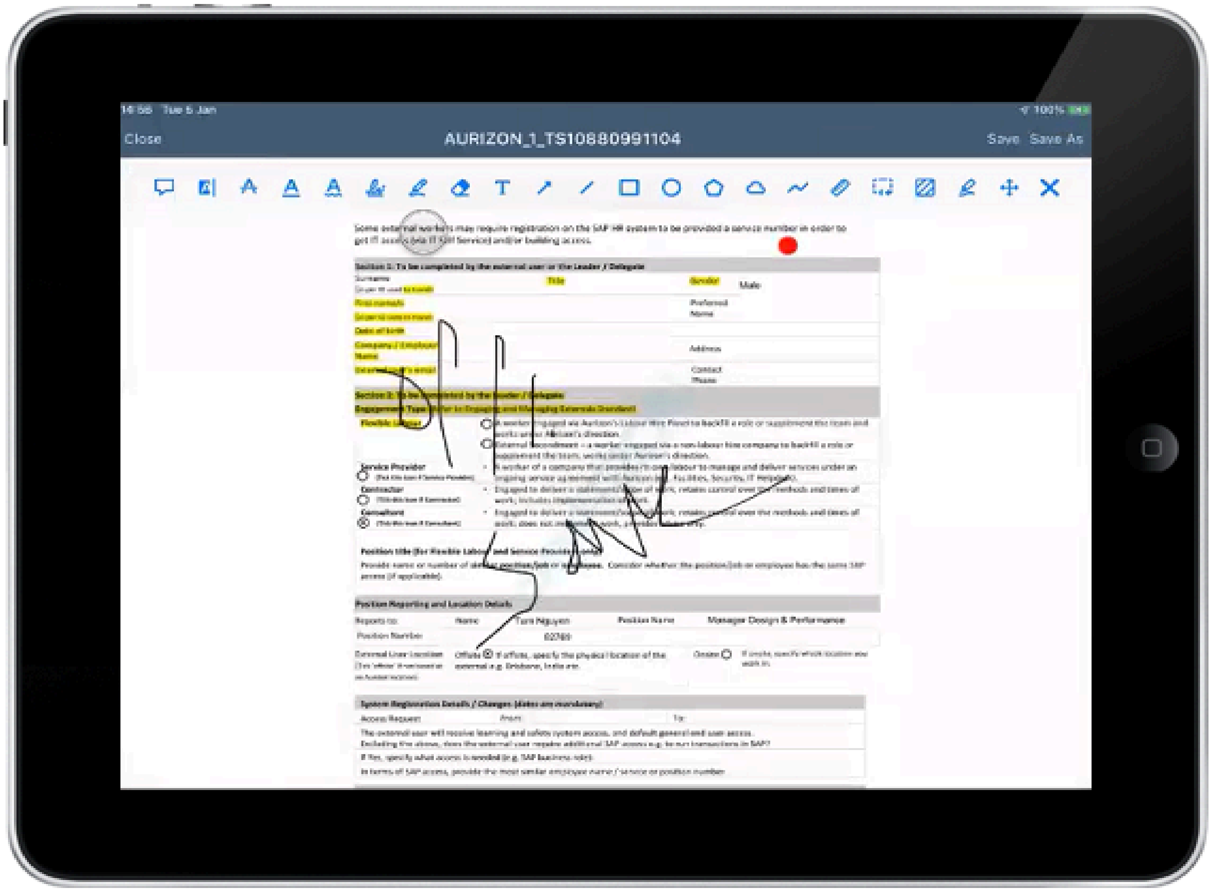
You can edit the DMS documents and save them as new documents or make changes to the original documents.

To edit the documents:

1. In the Home screen, tap **My Jobs**.
2. In the **My Work Orders** screen, tap the work order.
3. Tap the **Attachments** tab.
4. Expand the linked attachment and tap the Download

   icon to download the document.
5. Select the document to open and view it.

Figure 8-26 Work Orders – Edit Document



6. Update the document as required.
7. Tap **Save** at the top right corner to apply changes to the same document.

   or
8. Tap **Save As** to save it as a new document.
9. Select **Save as PDF** or **Share as share point Link**.
10. Change the name and tap **Done**.

    You can see status of the updated document in the Attachments tab and in SharePoint as well.

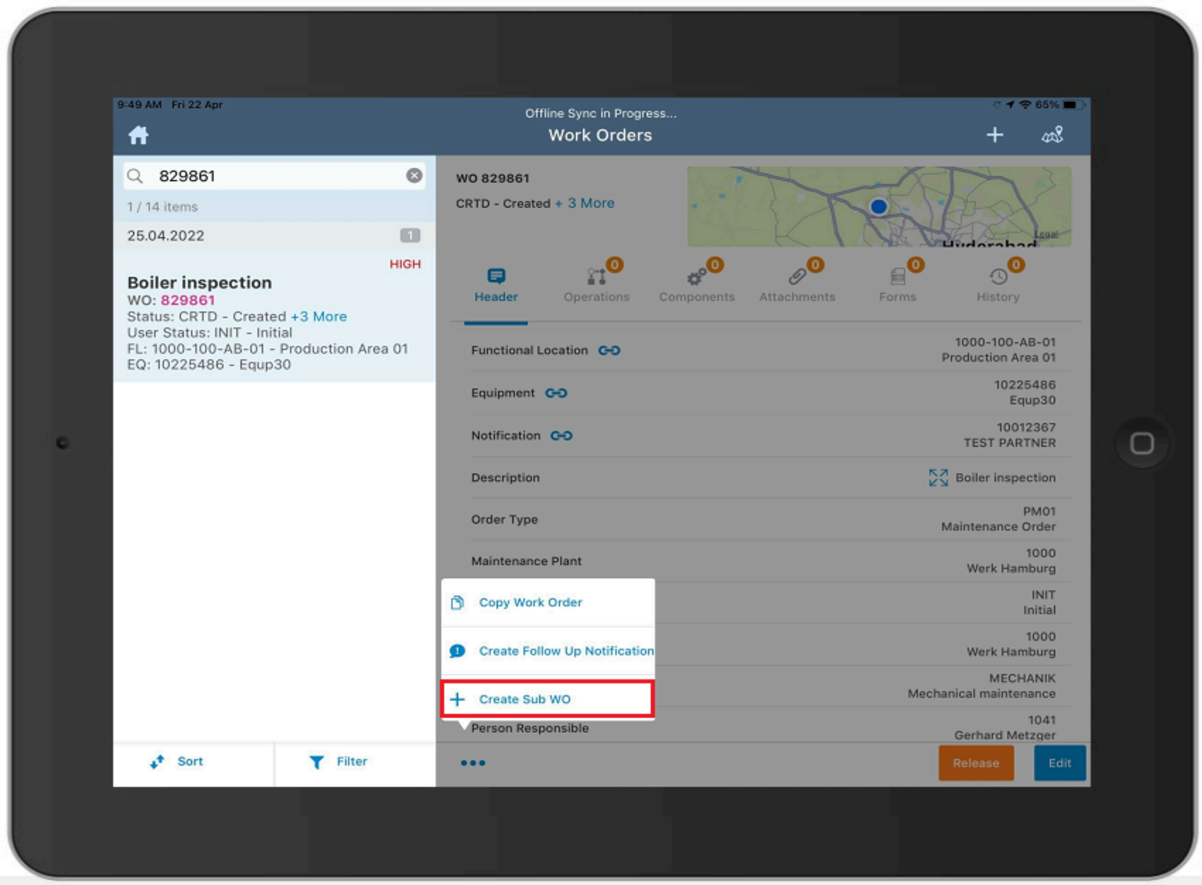
8.8.6. Create a Sub Work Order

You can create a Sub Work Orders either for corrective / preventive works found during the execution of an existing work order or to divide major tasks further. The main work order can be closed only after the sub work orders are closed.

To create a sub-Work Order:

1. Tap the **Work Orders** module in the Home screen.
2. In the left section of the **Work Orders** screen, search and tap the Work Order for which you want to add a sub-Work Order.
3. In the right section of the **Work Orders** screen, under the default **Header** tab, tap ••• and then tap **Create Sub Work Order**.

Figure 8-27 Create Sub Work Orders



The parent Work Order details like **Equipment No.**, **Planner Group, Work Center, Maintenance Plant,** and **Functional location** get auto populated in the respective fields.

4. In the right section of the **Create Work Order** screen:

a. Review and make changes to fields.
b. Tap **Save**.

A message appears confirming that the Work Order <number> has been created successfully.

> **Note:**
>
> Tap ••• and then tap **Sub Work Orders** to view the details of the workorder linked to it.

8.9. Close a Work Order

Once you finish the tasks assigned to a work order, close it.

You can close work order by tapping the Confirm button on the Work Order screen. However, if you want to review the work order before closing it, use the **Start** option in the **Released Work Order** screen. In the screen you can review and do the following:

You can also use the **Start** option in the **Released** Work Order screen to do the following:

- Confirm operations for Work Order with multiple activity types.
- Add, delete any confirmed activity.
- View posted materials, add new materials or do a reversal of posted materials.
- Add or delete the existing objects.
- Post Items, Causes, Tasks, and Activities and delete existing ones.
- Add measurement documents during confirmation
- Return excess goods
- Add Customer and Vendor Warranty information

You can also create measurement documents for measuring points from the Overall Confirmation screen if you have not added them while working on the tasks earlier.

> **Note:**
> You can see the **Measurement Documents** only when the work order has equipment and functional location.

To close a work order:

1. In the left side of the **Work Orders** screen, tap the released Work Order.
2. In the right side of the **Work Orders** screen, tap **Start.**

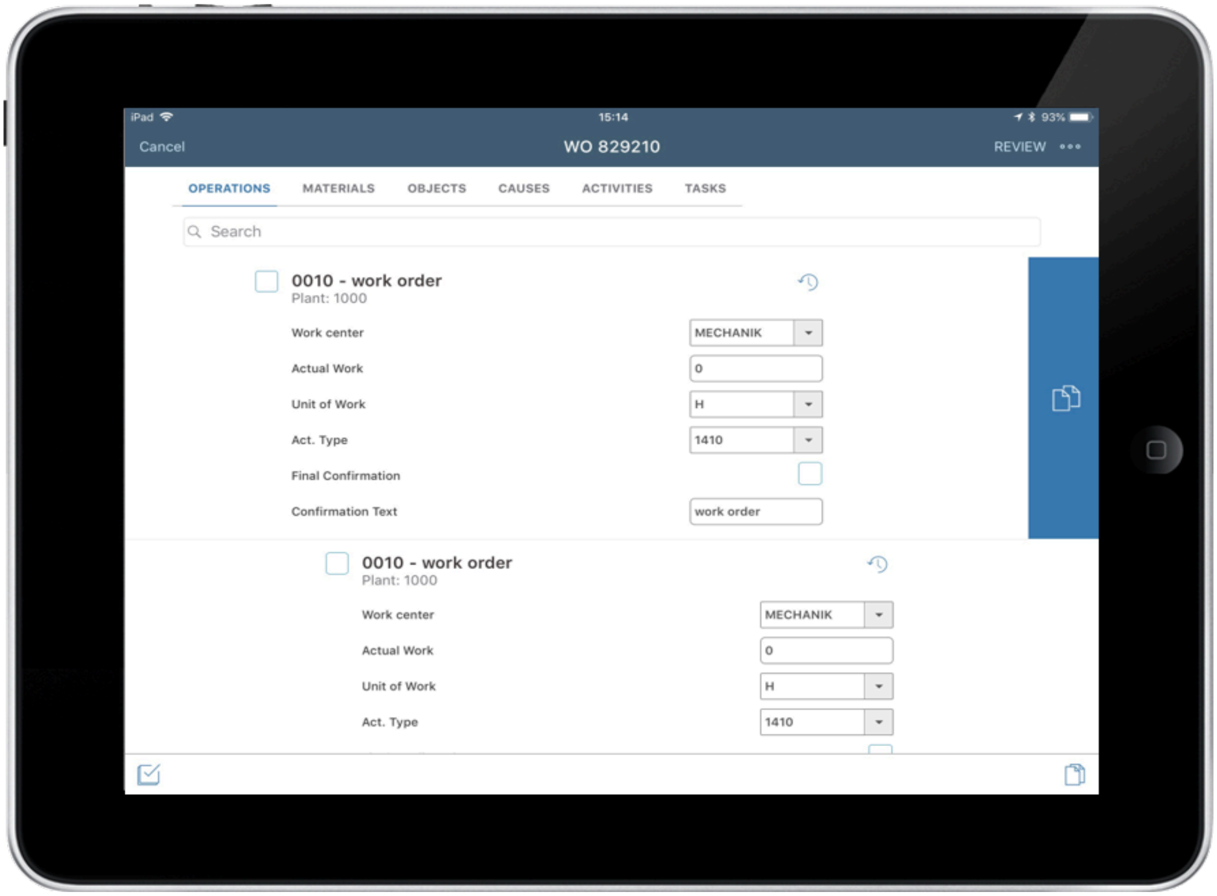
   Using the **Start** option you can modify and confirm (post) the data of the individual sections of a Work Order like **Operations, Materials, Objects, Causes, Activities,** and **Tasks**.

   > **Note:**
   > - **Objects**, **Causes**, **Activities**, and **Tasks** tabs appear only when the Work Order has a Notification with Objects, Causes, Activities, and Tasks.
   > - Do not delete the materials, objects, causes, activities, and tasks. Use the delete option only under an exception.

3. In the **Operations** tab, you can swipe any **Operation** to the left and tap the **Copy**  icon to duplicate the operation.

   > **Note:**
   > - You can copy an **Operation** when you want to confirm the same **Operation** multiple times.
   > - You can select (checkbox) multiple operations at a time and duplicate them at one go.
   > - You can select all the operations at a time by tapping the **Select All**  icon on the bottom left of the **WO** screen.

Figure 8-28 Copy Operations



4. Tap **Materials** tab.

   You can see previously **Posted Materials** and **Add Materials** tabs.

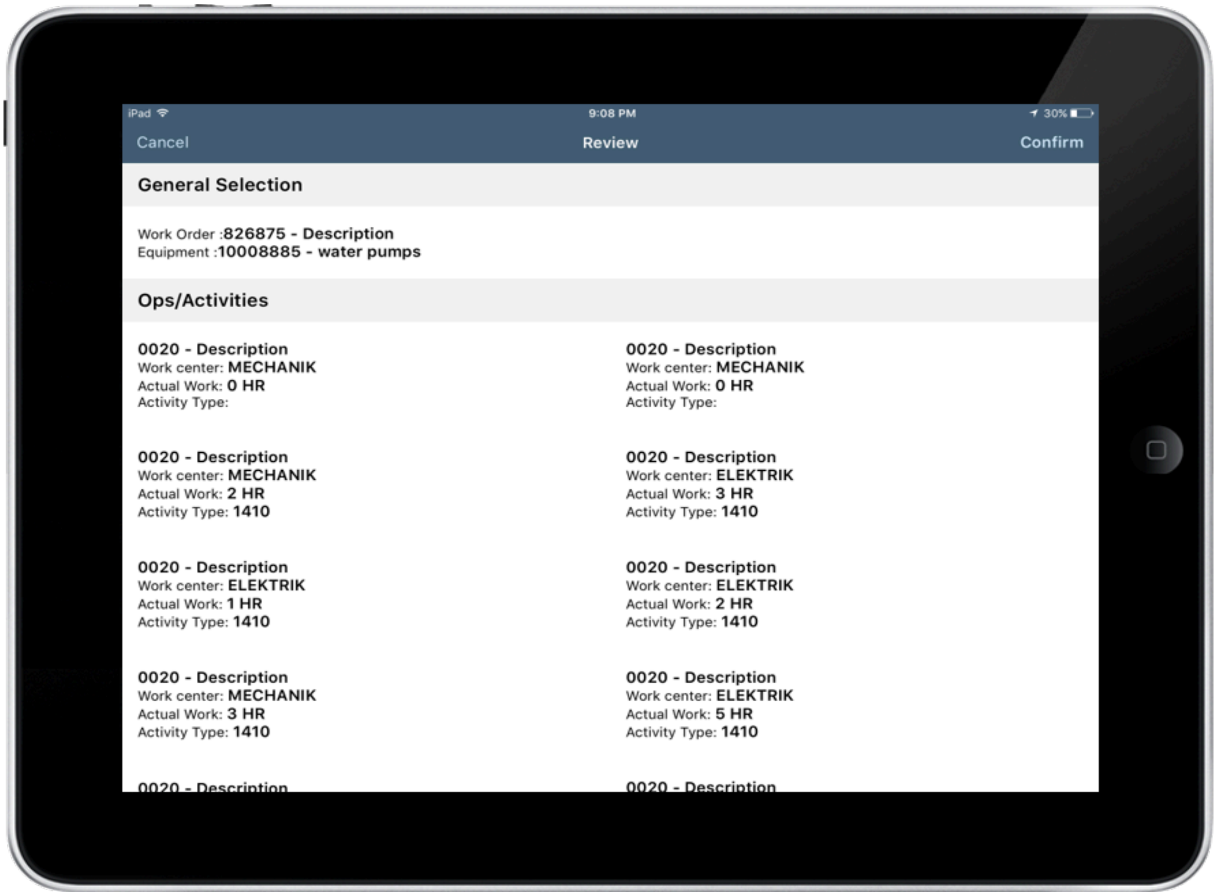
   a. Tap the **Posted Materials** tab, select the material checkbox and tap the **Reversal**  icon on the bottom right of the screen to reverse the posted material.

   b. Tap **Add Materials** tab and tap the **Add** icon on the bottom of the screen to add new materials.

5. Tap **Objects** tab and view, swipe left and delete, or add **Objects**.
6. Tap **Causes** tab and view, swipe left and delete or add **Causes**.
7. Tap **Activities** tab and view, swipe left and delete, or add activities.
8. Tap **Tasks** tab and view, swipe left and delete, or add Tasks.
9. In the top-right side of the screen, tap **Review**.

Review the activities and changes before confirming.

Figure 8-29 Review Activities Screen



10. Tap **Confirm**.
    A **Work Order Confirmed** message appears.

8.10. Create a Measurement Document

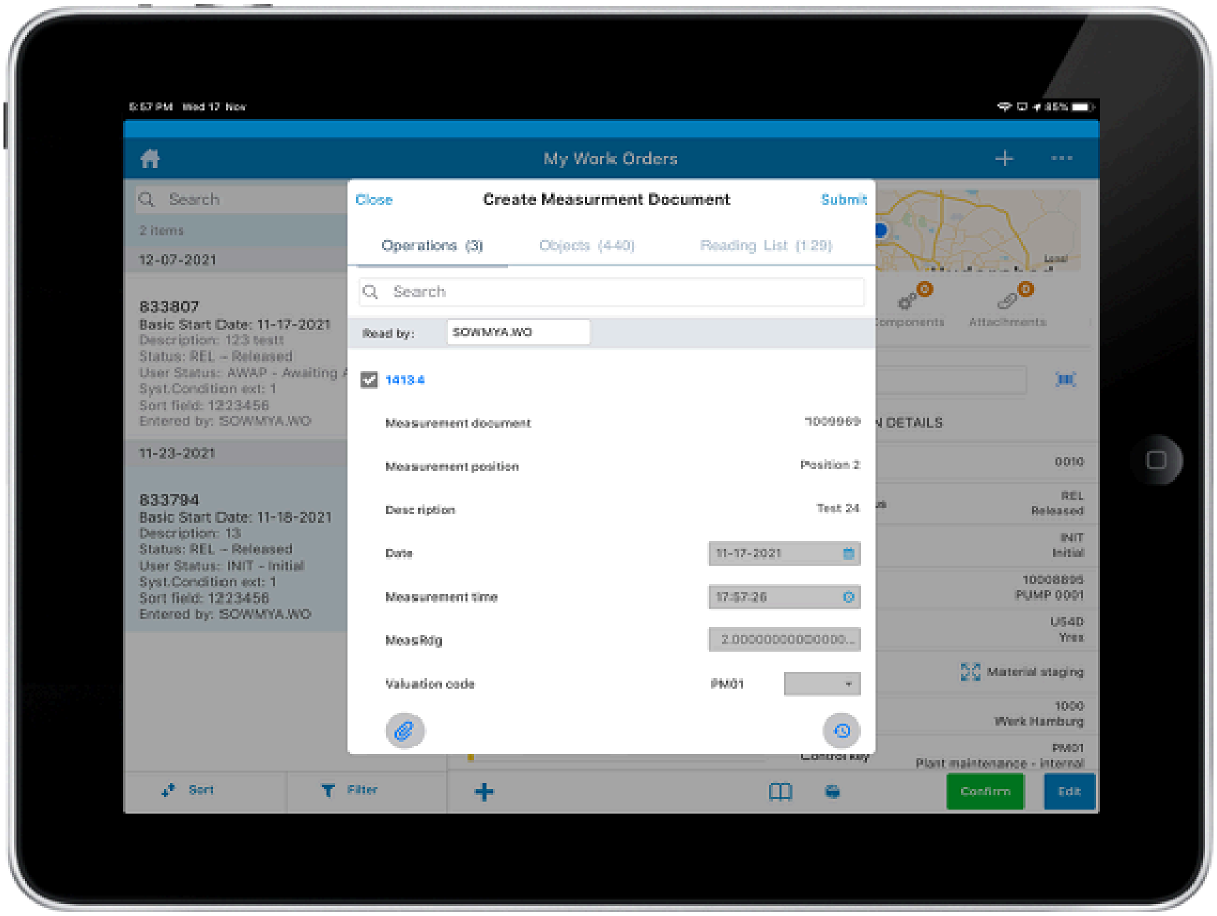
You can create a measurement document for Measuring Points in Operations, Objects, and Reading List for the work order from the operation detail screen while confirming the operation.

You can also add attachments in the measurement document and view the history of previously added measurement points.

To create a measurement document for a work order:

1. Select the operation under the **Operations** tab.
2. Tap the **Measuring Document**  icon in the Operation Details.

Figure 8-30 Measurement Document



3. In the Create Measurement Document window, tap the **Operations** tab to fill the operation related measuring points.
4. Search and select the measuring document ID that you want to create, and enter the required information in the following fields:
   - **MeasRdg**: Enter the Measurement Reading in the field.
   - **Valuation code**: Select the Valuation Code from the list.
   - **Date**: Enter the measurement date.
   - **Measurement time**: Enter the measurement time.
5. Tap the **Objects** tab to fill the object related measuring points.
6. Tap the **Reading List** tab to fill the reading list related measuring points.
7. Tap **Submit**.

Note:

- You can capture only one measurement reading for a measuring point. It depends on the configuration in RACE.
- Once the readings are captured and saved, the Measuring Points are displayed in disabled mode.
- You can add attachments against the measurement document using the **Add Attachments** icon. The Add Attachments icon is enabled only after the Measuring Document is posted.
- You can view the history of previously added measuring points using the **History** icon.

8.11. Create Follow-Up Notification

Follow-up notification is used to notify malfunction findings while executing maintenance activities of a Work Order. You can create the Follow-up Notifications for the Work Orders with statuses **Technically Completed**, **Released**, and **Created.**

Note:
Notification is automatically completesd when a related work order is technically completed.

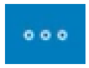
To create a Follow-up Notification:

1. In the **Home** screen, tap **My Work Orders**.
2. In the right section of the **My Work Orders** screen, tap ••• .
3. Tap **Create Follow Up Notification**.
4. Enter the required values New Notification screen to create the **Follow-up Notification**.
5. Tap **Save**.
   A confirmation message appears.

8.12. Create an Emergency Work Order

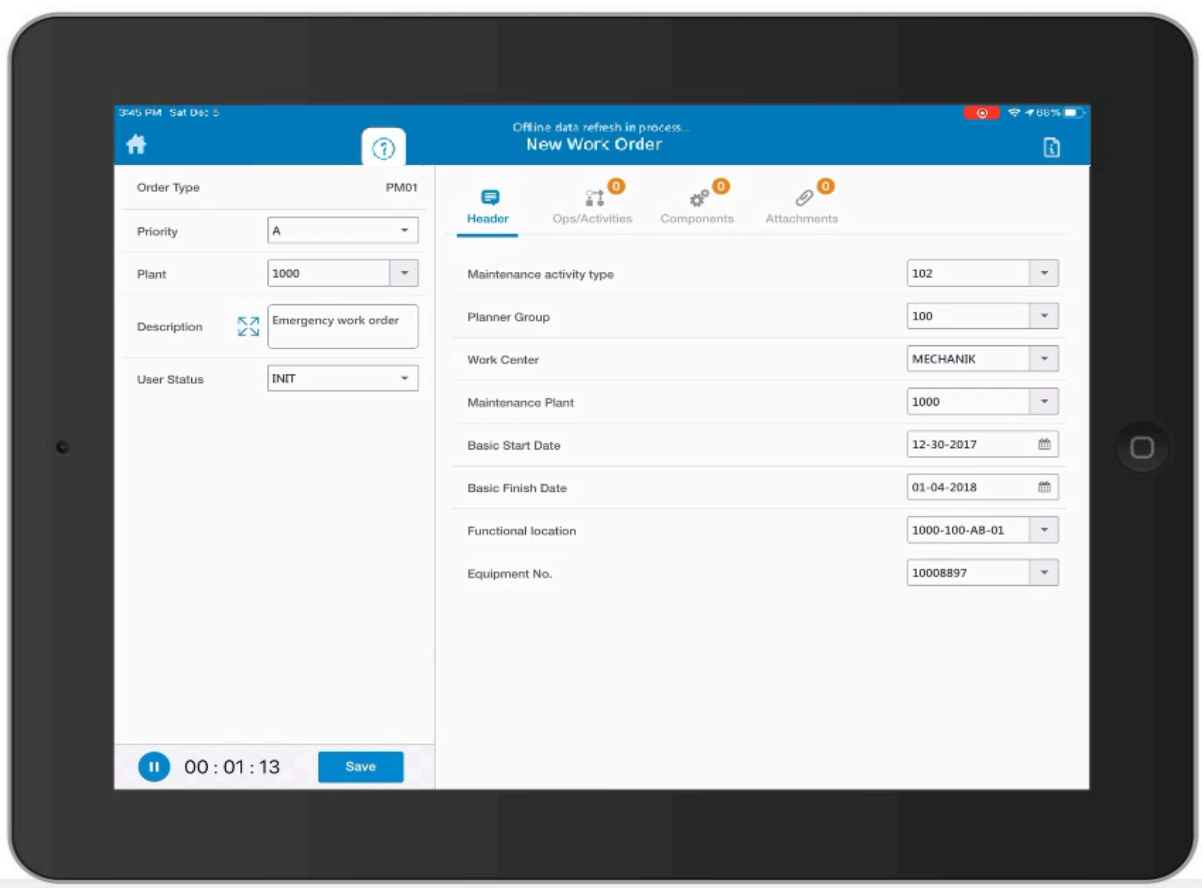
You can create an Emergency Work Order for which **Release**, **Operations Confirmation** and **Goods Issues** happen automatically.

To create an Emergency Work Order:

1. Tap the **Option Menu**  icon on the **Work Orders** module in the home screen.
2. Tap **Emergency WO.**
3. Select the Order Type in **Emergency WO** pop-up and tap **Create**.
4. In the left section of the **Create Work Order** screen, verify/enter the following:
    - **Order Type**: This value is defaulted based on your selection.
    - **Priority**: Select the Priority from the list.
    - **Plant**: Select the Plant from the list.
    - **Description**: Enter description.
    - **User Status**: Auto populates based on configured default settings.
5. Tap **Save**.

In the pop-up screen, tap **View WO List** to navigate to the work order that you created and add additional details. Work Order Timer shows the updated time even if the app is crashed or forcibly closed (terminated from background).

Figure 8-31 Create Emergency Work Order



For information on how to create a work order, see the following:

- Add Header to Work Order *(on page 206)*
- Add Operations and Assign them to Technicians *(on page 209)*
- Add a Sub-Operation *(on page 214)*
- Add Components to work order *(on page 214)*
- Add Attachments to Work Orders *(on page 215)*

After the Work Order Timer is stopped,

- Work Order Operations/Activities are fully confirmed.
- Goods Issue is processed for the Components.
- Work Order status is set to Released.

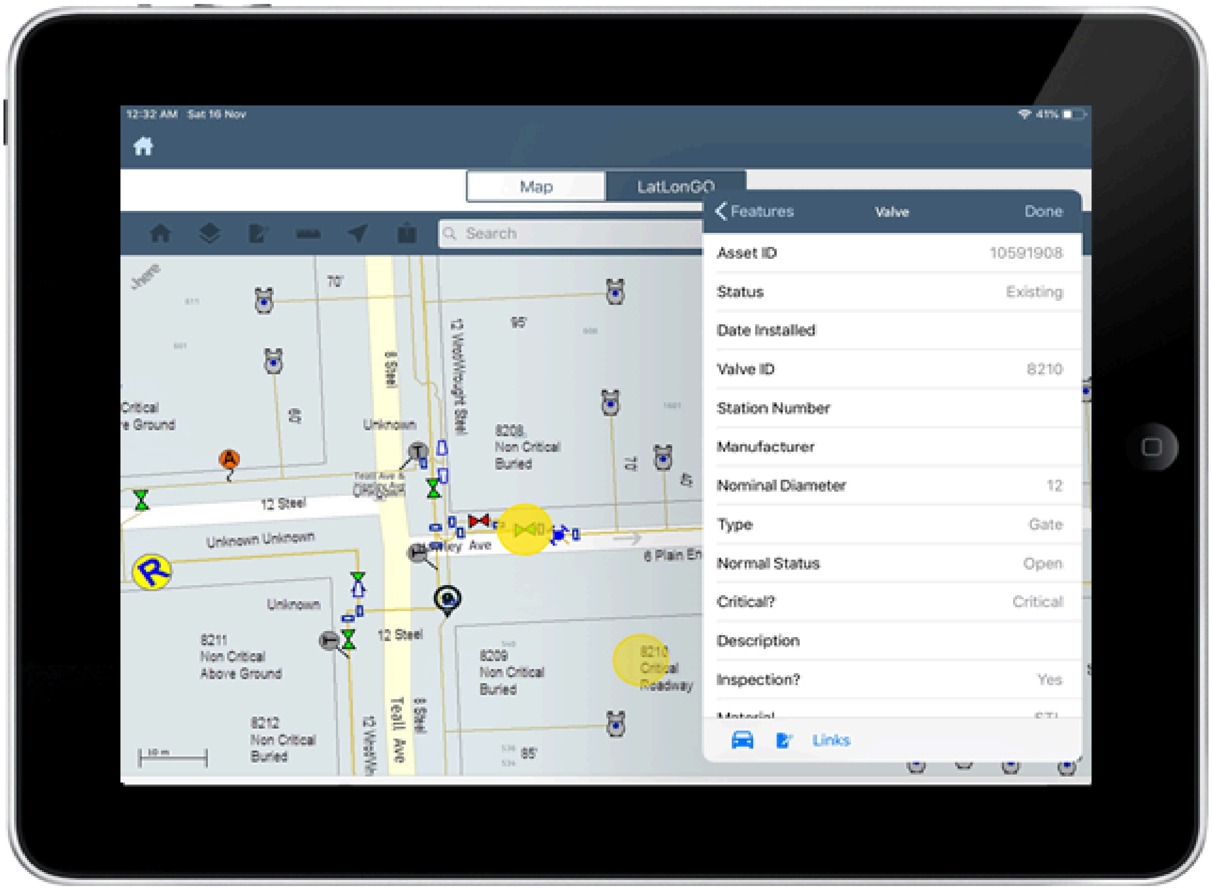
8.12.1. Create Work Order / Emergency Work Order from GIS Map

You can create Work Order / Emergency Work Order from the GIS Map (LatLonGo). Release, Operations Confirmation and Goods Issues are completed automatically once the Emergency Work Order is created.

To create Work Order from GIS Map:

1. In the GIS map, tap on the equipment (object).
2. Tap on the asset component on the **Features** pop-up.
3. Tap **Links** on the asset details pop-up.

Figure 8-32 Asset details



4. Tap **Create WorkOrder (EQ)** / **Create On demand WO**.

> **Note:**
> For Emergency Work Order, you can create a Maintenance Order or Breakdown Maintenance order.

5. Enter the details in New Work order screen. For more information, see Create a Work Order *(on page 205)* section.

Note:
In the Create Work Order screen:

- Equipment and dependency fields are populated from the map.
- Forms and form fields configured for the equipment with the LatLonGo attribute are displayed on the **Forms** tab and values are auto-populated.

Tap the **Back** button to navigate to the GIS map.

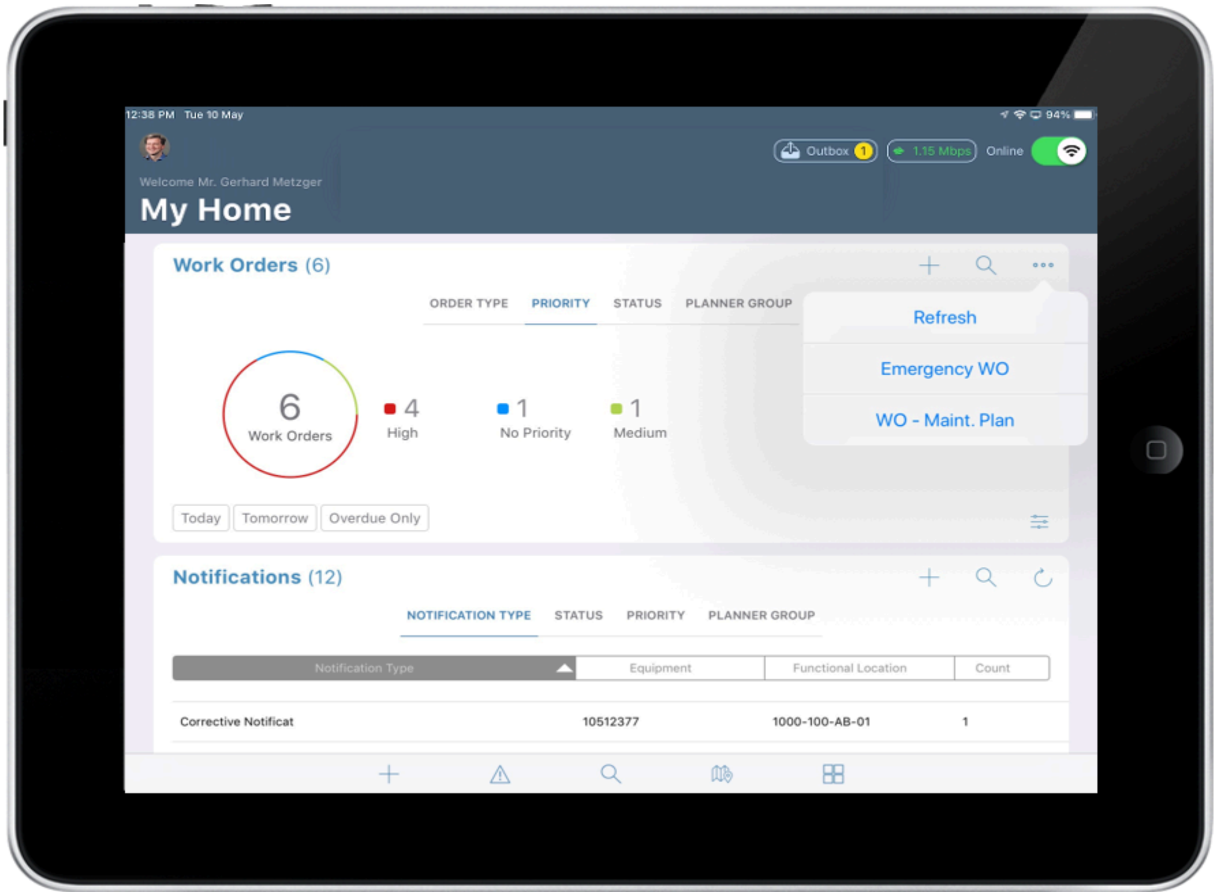
8.13. Create a Manual Work Order

You can create a work order manually against a maintenance plan during the preventive maintenance cycle.

To create a Manual Work Order:

1. Tap the ••• icon on the Work Order module in the home screen.
2. Tap **WO – Maint. Plan**.

Figure 8-33 Create Manual Work Order

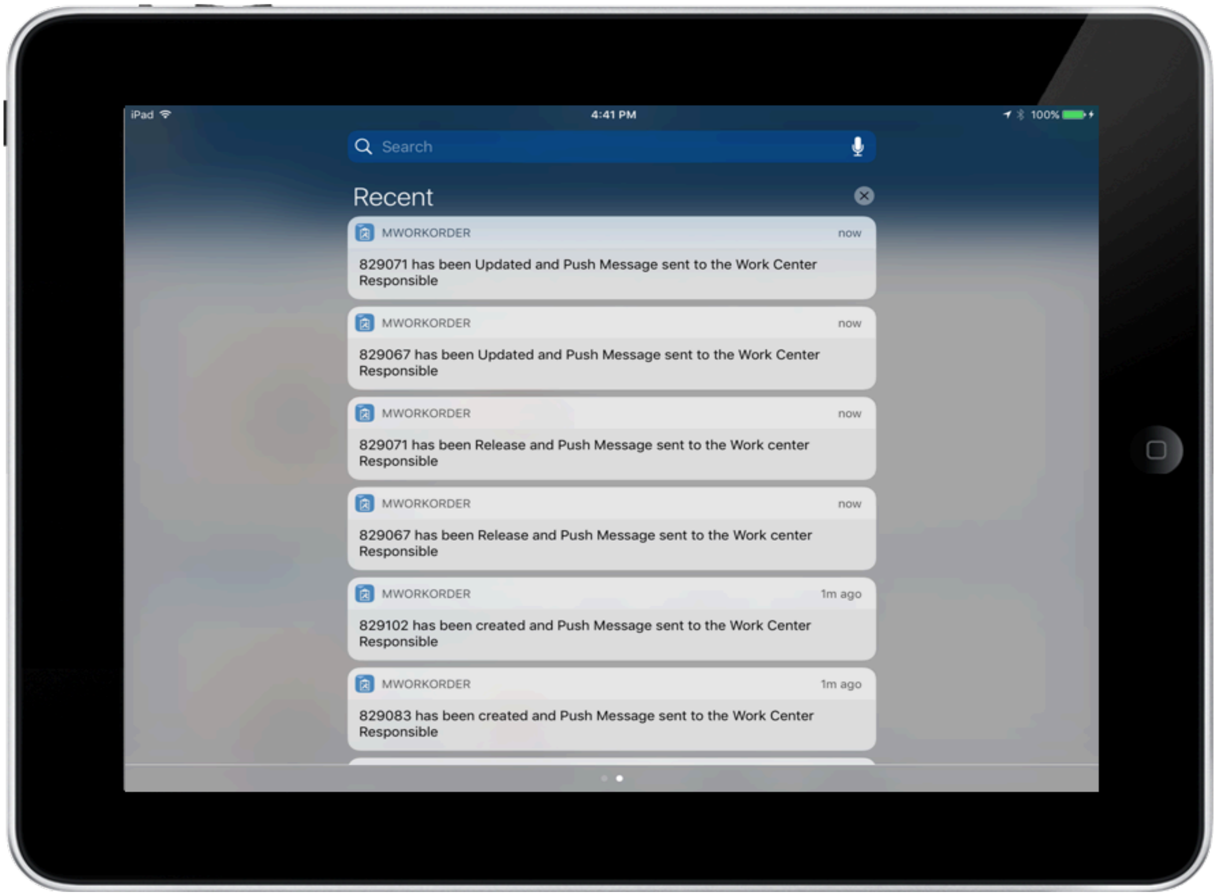


3. Search the WO - Maintenance Plan by **Maintenance Item Category**, or **Equipment**, or **Functional Location**.
4. Select a **Maintenance Plant** from the search results.
5. Select the **Start Date** from the calendar (by default, the start date will be the current date).
6. Tap **Create** and tap OK in the confirmation message screen.

8.14. View Push Notification for Work Orders

Push notification is an instant message that notifies users about any action taken or changes made to the work order. This feature is configured through **RACE** for the following conditions:

- Work Order Created
- Work Order Updated
- Work Order Released
- Work Order Confirmed
- Work Order Completed



9. Ensure Periodic Service to Equipment and Functional Locations

Create service notifications, service orders, document service completion and record all details of work done and track entire service history of equipment and functional location right within the mWorkOrder application.

Create a service notification when equipment needs service right from the mWorkOrder application and notify your supervisors instantly.

The supervisors,

- Check service notifications and raise service orders.
- Document service completion and record details of work done.

Technicians and supervisors can track entire service history of equipment and functional location and email the service notification and service order forms to personnel concerned instantly.

- Create a Service Notification *(on page 258)*
- Create a Service Order *(on page 266)*

9.1. Create a Service Notification

Create a service notification, when it is time for service of an equipment or a functional location. When you create a service notification, you select a service partner / vendor detail, select the service required dates and so on.

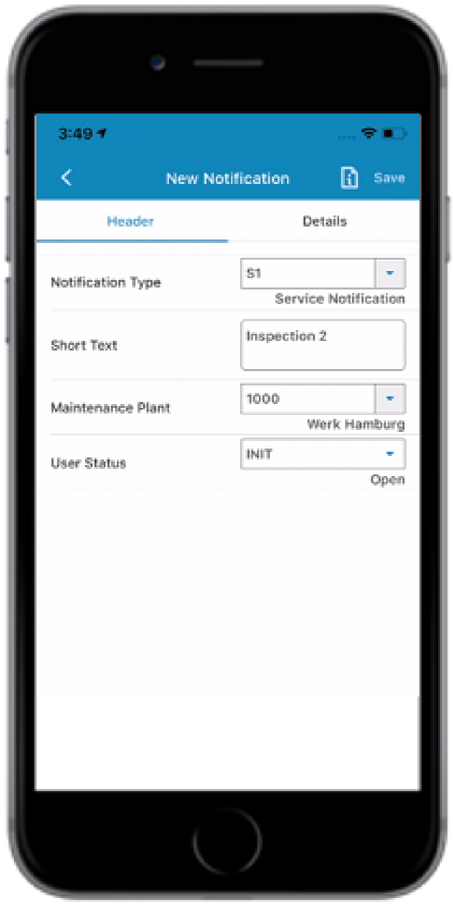
When you create the notification, your supervisor receives an alert. The supervisor reviews the type of service the equipment needs and the vendor information, makes modifications where required, and approves the notification. The external vendor cannot be notified when the service notification is created. It is only for internal reference.

To create a service notification:

1. In the **Home** screen, tap **Create** + icon in the **My Notifications** area.

> **Note:**
>
> You can also tap the **Create** + icon in the **Notifications** screen.

Figure 9-1 Create Service Notification



2. In the **New Notification** screen, do the following in the **Header** tab:
   - **Notification Type**: Select the Notification Type from the list (for example, **S1** (Service Notification)).
   - **Short Text**: Enter short description.
   - **Maintenance Plant**: Select the Maintenance Plant from the list. The Equipment list, Functional Location, and Material/Assembly available for the Maintenance Plant is updated in the respective drop-down lists.
   - **User Status**: Auto populates based on configured default settings.
3. In the **Details** tab, do the following under the **Notification** tab:

Note:
Fields that are displayed depend on the UI validations configured in RACE. For example, if the UI validation is configured to hide **Functional Location** field based on **Notification Type** like *M1* then the **Functional Location** field is not displayed when you select *M1* in **Notification Type** field.

Familiar extensions for Equipment and Functional Location hierarchy such as Technical ID that help you identify assets easily can be configured through RACE. When done, you can also search assets using the extension field data.

- **Functional Location**: Select Functional Location from the list. After selecting the functional location, tap the **Hierarchy** icon against **Functional Location** field and from the pop-up screen select a sub functional location or an equipment.

  Note:
  - If you tap the Functional Location Hierarchy icon without selecting any Functional Location, the application shows an error.
  - mWorkOrder supports 30 characters for the Functional Location ID. You can configure SAP for Alternate Labeling to support 40 characters ID.

- **Equipment No**: Select Equipment for the functional location from the list or, tap the **Hierarchy** icon against the **Equipment** field and select the equipment.
- **Planner Group**: Select Planner Group from the list.
- **Planning Plant**: Select Planning Plant from the list.
- **Work Center**: Select Work Center from the list.
- **Crew ID**: Select Crew ID from the list.
- **Reported By**: This field is auto-populated. Tap the field to enter a different name.
- **Notification Date**: This field is auto-populated. Tap the **Calendar** icon to select a different Notification Date.
- **Coding**: Select Coding from the list.
- **Description**: Tap the **Maximize** icon to enter the description or select the predefined template. On the pop-up screen tap **Templates** to select the template.

- **Priority**: Select Priority from the list.
- **Required Start Date**: This field is auto-populated. Tap the **Calendar** icon to set a different Required Start Date.
- **Required Start Time**: This field is auto-populated. Tap the **Clock** icon to set a different Required Start Time.
- **Required End Date**: Tap the **Calendar** icon to select the Required End Date.
- **Required End Time**: Tap the **Clock** icon to select the Required End Time.
- **Breakdown**: Select checkbox for breakdown if any.
- **Malfunction Start Date**: Tap the **Calendar** icon to select the Malfunction Start Date.
- **Malfunction Start Time**: Tap the **Clock** icon to select the Malfunction Start Time.
- **Malfunction End Date**: Tap the **Calendar** icon to select the Malfunction End Date.
- **Malfunction End Time**: Tap the **Clock** icon to select the Malfunction End Time.
- **Assembly UI Label**: Select Assembly UI Label.
- **Person Responsible**: Select Partners from the list.

  This field displays personal name along with the personal number.
- **Item Number**: Select the item number.
- **Risk Assessment**: Tap the drop-down to assess the overall risk level. The **Risk Assessment** window appears.

  In the **Risk Assessment** window, select the scenario for the category and the probability of occurrence of the scenario. The **Overall Risk Level** is calculated based on the **Risk Level** identified for these categories:

  a. **Consequence to People**: Helps you analyze the impact of the incident on people.
     i. **People**: Select the scenario that defines the impact on people.
     ii. **Likelihood**: Select the probable occurrence of the scenario.
     iii. **Risk Level**: Risk level is auto-populated based on the scenario and probability of occurrence of the scenario.

  b. **Consequence to Asset**: Helps you analyze the impact of the incident on the asset.

    i. **Asset**: Select the scenario that defines the impact on the asset.
    ii. **Likelihood**: Select the probable occurrence of the scenario.
    iii. **Risk Level**: Risk level is auto-populated based on the scenario and probability of occurrence of the scenario.
c. **Consequence to Environmental**: Helps you analyze the impact of the incident on the environment.
    i. **Environmental**: Select the scenario that defines the impact on the environment.
    ii. **Likelihood**: Select the probable occurrence of the scenario.
    iii. **Risk Level**: The risk level is auto-populated based on the scenario and probability of occurrence of the scenario.
d. **Consequence to Reputation**: Helps you analyze the impact of the incident on the stature and fame of the organization.
    i. **Reputation**: Select the scenario that defines the impact on the reputation because of the incident.
    ii. **Likelihood**: Select the probable occurrence of the scenario.
    iii. **Risk Level**: The risk level is auto-populated based on the scenario and probability of occurrence of the scenario.

> **Note:**
> You can configure the values for **Consequence** and **Likelihood** fields using RACE to determine the Risk Level for the category.

4. Tap the icon to create a measurement document for the Equipment that is entered in the Notification. (Optional).
5. Tap **Save**.

> **Note:**
> You can directly tap the other tabs in the **Details** tab to fill the other details and save later once all the required details are filled.

6. Tap **Yes** in the notification creation confirmation screen.

   A message appears confirming that the Notification <number> is created successfully.

> **Note:**
> - In the pop-up screen, tap **View NO List** to navigate to the record that is created.
> - You can edit the service notification details at any point before the service notification is marked complete from the same screen by tapping the **Edit** button.

9.1.1. Add Items to a Service Notification

To add items to a service notification, do the following tasks:

1. In the **Details** tab, tap **Items** tab and then tap .
2. Under **Add Item:**
   a. In the **Item Code Group** field, select the code group that this item belongs to.

      The item part code is pre-filled.

   b. In the **Damage Group** field, select the relevant damage group code.

      The damage code is pre-filled.

   c. Tap **Save**.
   d. Tap **Yes** in the confirmation window.

      The line item is added and is displayed along with description under **Items**.

9.1.2. Add an Activity

To add an activity to a service notification, do the following tasks:

1. In the **Details** tab, tap the **Activities** tab and then tap .
2. Under **Add Activity**:
    a. Select the code group from the **Activity Code Group** field.

       The Activity Code is pre-filled.

    b. Tap **Save**.
    c. Tap **Yes** in the confirmation window.

       The activity is created and is displayed under **Activities.** The description associated with the selected value is also displayed. For example, the description of the **Activity Code Group** is displayed along with the code group that is selected.

9.1.3. Add a Cause

To add a root cause to a service notification, do the following tasks:

1. In the **Details** tab, tap the **Causes** tab and then tap .
2. Under **Add Cause**:
    a. In the **Item** field, select the item code.
    b. In the **Causes Code Group** field, select the cause group code.
    c. Tap **Save**.
    d. Tap **Yes** in the confirmation window.

       The cause gets added and is displayed under **Causes.** The description associated with the selected value is also displayed. For example, the description of the **Causes Code Group** is displayed along with the code group that is selected.

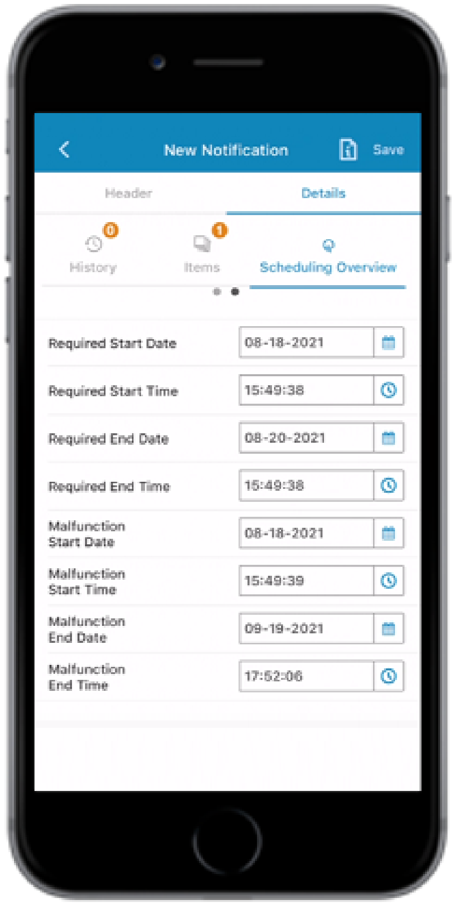
9.1.4. Verify Scheduling Details

Verify the scheduling details such as Required and Malfunction dates before creating a service notification.

To verify scheduling details:

1. In the **Details** tab, tap the **Scheduling Overview** tab.

Figure 9-2 Verify Scheduling Overview Details



2. You can see the following details:
   - Required Start Date
   - Required Start Time
   - Required End Date
   - Required End Time
   - Malfunction Start Date
   - Malfunction Start Time
   - Malfunction End Date
   - Malfunction End Time
   - Notification Number

9.1.5. Add Attachments to Service Notifications

You can add and image, video, and PDF attachments to the notification to provide additional information related to the maintenance or repair.

For information on adding attachments and working with them see, Add Attachments to Records *(on page 113)*

9.2. Create a Service Order

Manage equipment and functional locations for which services are done using Service Order. Service Order leverages SAP ECC-CS (Customer Service) module. Review service notifications, process them and use the information in the service notification to create, update, and track Service Orders with partner, contract, and item details.

When you create a service order, the partner or external service vendor is contacted and the request for the service is done manually. The external vendor is notified automatically when the service order is created. Use the service order to track all the services done for the equipment or functional location and track the service details like work done, spares replaced and so on.

Once the service is done and the external vendor is paid and the details are captured in the service order, you can close the service order marking it complete.

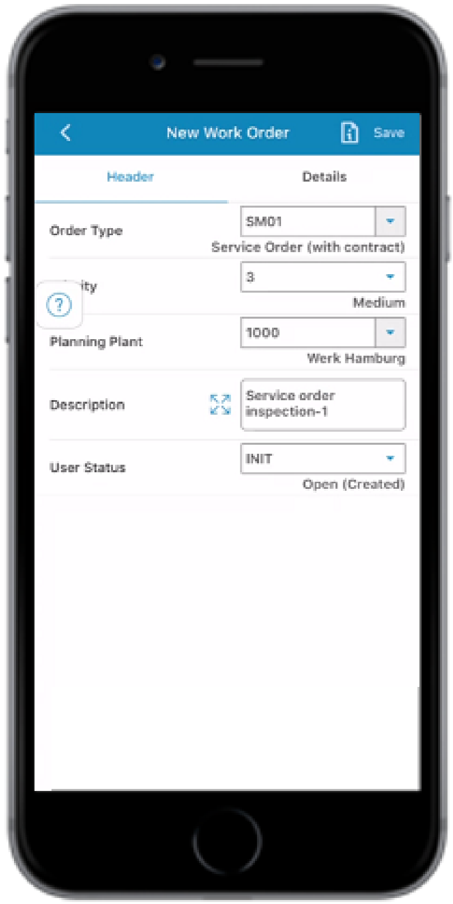
To create a service order:

1. In the **Home** screen, tap **My Jobs**.

   You can also tap the **Create** icon directly on the **My Jobs** module.

2. Tap the **Create** icon on top-right of the **Work Orders** screen.

   Figure 9-3 Create Service Order



3. In the **New Work Order** screen, enter the following details in the **Header** tab:

- **Order Type**: Select the Order Type from the list (for example, **SM01** (Service Order)).

> **Note:**
> The **Partner** tab is displayed based on Order Type configuration (for example, when you select Order Type as SM01 then the Partner tab is displayed).

- **Priority**: Select the Priority from the list.
- **Planning Plant**: Select the Plant from the list.
- **Description**: Enter description.
- **User Status**: Auto populates based on configured default settings.

4. Tap **Save**.
A message appears confirming that the Work Order <number> is successfully created.

> **Note:**
> In the pop-up screen, tap **View WO List** to navigate to the work order that you created and add additional details.

Or you can directly tap the other tabs in the **Details** tab to fill the other details and save later once all the required details are filled.

9.2.1. Add Header to Service Order

To add header information to work order:

1. In the **Details** tab, enter the following under the **Header** tab:

> **Note:**
> Fields that are displayed depend on the UI validations configured in RACE. For example, if the UI validation is configured to hide the **Functional Location** field based on **Order Type** like *PM01*, the **Functional Location** field is not displayed when you select *PM01* in the **Order Type** field.
>
> Familiar extensions for Equipment and Functional Location hierarchy such as Technical ID that help you identify assets easily can be configured through RACE. When done, you can also search assets using the extension field data.

    - **Functional Location**: Select Functional Location from the list.
    - Tap the **Hierarchy** icon against *Functional Location* field and select a sub functional location or an equipment from the pop-up screen.

    > **Note:**
    > mWorkOrder usually supports 30 characters for the Functional Location ID. You can configure SAP for Alternate Labeling to support 40 characters ID in Functional Location field throughout the application.

    If you tap the Functional Location **Hierarchy** icon before selecting a Functional Location, the application shows an error message “Please fill Functional location.”

    You can change the **Functional Location** field type to Scan Input through **RACE** and capture the Functional Location by scanning the bar code using your device camera. Once scanned, fields such as, **Planner Group**, **Work Center**, and **Maintenance Plant** get auto populated.

    - **Equipment No.**: Select Equipment from the list or tap the **Hierarchy** icon against **Equipment** field and select the equipment from the pop-up screen.

> **Note:**
>
> If you tap the Equipment Hierarchy icon before selecting any Functional Location, the application shows an error message "Please fill Equipment No./Functional location.

You can change the **Equipment No**. field type to Scan Input through **RACE** and capture the **Equipment No.** by scanning the bar code using your device camera. Once scanned, fields such as, **Functional location, Planner Group, Work Center,** and **Maintenance Plant** get auto populated.

- **Planner Group**: Select Planner Group from the list.
- **Work Center**: Select Work Center from the list.
- **Person Responsible**: Select Partners from the list.
- **Maintenance Plant**: Select Maintenance Plant from the list. When you select the Maintenance Plant, Equipment, Functional Location, and Material/Assembly options are updated in the drop down list.
- **Maintenance Activity Type**: Select Maintenance Activity Type from the list.
- **Basic Start Date**: This field is auto-populated. To change, tap the **Calendar** icon and select the Basic Start Date.
- **Basic Finish Date**: Tap the **Calendar** icon to select the Basic Finish Date.
- **Contract Number**: Enter contract number for service.
- **Item Number**: Enter item number for service.

2. Tap **Save**.

> **Note:**
> You can edit the details of the header in the same screen. When it is in the created and released state; not when the service order is completed.

9.2.2. Add Operations and Activities to service order

To add operations and activities to a service order:

1. In the **Details** tab, tap the **Operations** tab and tap the **Add** + icon.
2. The **ADD OPERATION** screen is populated with a few pre-filled values. You can change the pre-filled values of the operation code, work center, and plant.
3. Enter the required information in other fields, such as **Std text key** and **Work**.

> **Note:**
> - In the work field, if you enter a value less than or equal to 1, then select **H** in the **Unit of Work** field and for a higher value, enter **HR**.
> - Once you enter the amounts in the **Work** and the **Number of Resources** fields, the **Duration** field is automatically updated.

4. Under **Operations**, tap the **User Status** and select the user status of the operation. The **Set User Status** screen appears with both the sequential and non-sequential user statuses.
5. Select the **User Status** for Operation from the list.

> **Note:**
> Users can select single sequential status and/or multiple non-sequential statuses.

6. Tap **Done** and then tap **Save**.

> **Note:**
> - You can also add operations from the Task Lists. For details, see Add Task List Based Operations *(on page 218)*.
> - You can edit the details of the operation in the same screen. You can edit the details only when it is in the created and released state; not when the service order is completed.

9.2.3. Add a Sub-Operation

You can add a sub operation to an operation while creating and modifying a Service Order. If you delete the main operation, sub-operations associated with that operation are deleted.

To add a sub-operation within an existing operation:

1. In the **Details** tab, tap the **Operations** tab.
2. Tap an operation and then tap **Add Sub-Operation.**

   Fields such as **Operation/Activity, Work Center, Work Code,** and **Unit of Work** are auto filled.

   > **Note:**
   > A sub-operation code is generated.

3. Make changes in the fields as required and then tap **Add.**
4. Fill in the details like control key and plant code,
5. Tap **Save.**

   A sub-operation is created and is displayed under the main operation.

   > **Note:**
   > Tap **Tasks** next to the icon to add a new operation. You can either delete an existing operation and add a new one or add another operation keeping the existing one.

9.2.4. Add Components to service order

To add components:

1. Tap the **Components** tab and then tap +.
2. Enter the required data of the component that includes the **material number** of the component (corresponding **material description** is displayed), **category**, **required quantity**, **unit of measure, storage location** (corresponding **Available Quantity** is displayed), and **Operation/Activity code.**

> **Note:**
> You can change the **Material Number** and **Storage Location** field types to Scan Input through **RACE** and capture the **Material Number** and **Storage Location** respectively by scanning the bar code using your device camera.

3. Tap **Save**.

> **Note:**
> You can edit the details of a component in the same screen. You can edit the details only when it is in the created and released state; not when the service order is completed.

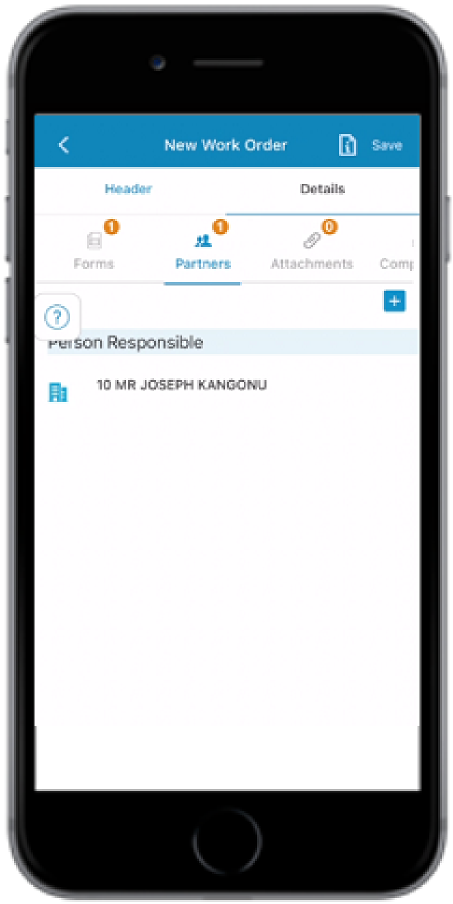
9.2.5. Add Partners to service order

You can add partner or person responsible details for the service order.

To add partners:

1. Tap the **Partners** tab and then tap + icon.

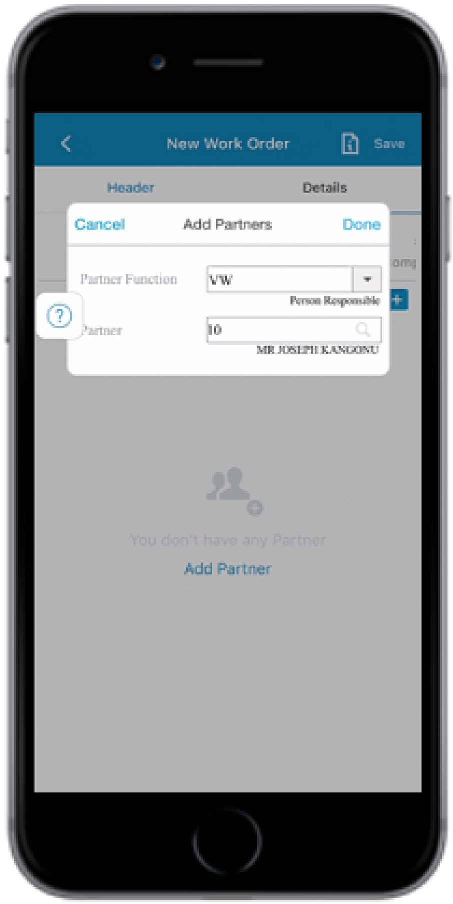
Figure 9-4 Add Partners to Service Order



2. In the **Add Partners** window, fill the required details and tap **Done**.

> **Note:**
> There are different types of Partners such as Vendor, Customer, Person Responsible, Ship to Party, or Sold to party, etc.

Figure 9-5 Add Partners Window



3. Tap **Save**.

> **Note:**
> You can edit the details of a partner in the same screen only when it is in created and released state; not when the service order is completed.

9.2.6. Add Attachments to Service Orders

You can add and image, video, and PDF attachments to the work order to provide additional information related to the maintenance or repair.

You can convert service order forms to PDF, add PDFs under Objects attachments, and send converted PDFs through email form the application.

For information on adding attachments and working with them see, Add Attachments to Records *(on page 113)*.

9.2.7. Add Task List Based Operations

You can add operations and components associated with operations based on Equipment, Functional Location, Assembly, or General Maintenance task list.

Task list helps you to

- Add Operation based on Assembly, Equipment, Functional Location, or from general task list.
- Add Sub operation.
- Add Components associated with the operations from the task list automatically.
- Access Production Resource Tools (PRT) documents and measuring points associated with the operations.

> **Note:**
> You cannot create operations for task lists that have **Deleted** or **Creation Phase** status.

To add task list based operations:

1. In the **Home** screen, tap **Work Orders**.
2. In the left section of the **Work Orders** screen, tap the Work Order.
3. Tap the **Operations** tab.
4. At the bottom of the screen, tap the **Add** + icon and tap Task List.
5. Tap the task list that you want to add based on **Assembly**, **Equipment**, **Functional Location,** or **General Maintenance**.

Note:

- Equipment and Functional Location based task lists are available only if **Equipment** and **Functional Location** are selected on the Header tab
- If the **Assembly** value is not selected on the **Header** tab, the task list for Assembly is retrieved based on the **Construction Type** value in the **Equipment** and **Functional Location** screen.

6. From the pop-up screen, select the desired task list or the list of operations from the task list.
7. Tap **Save**.
   Operation is listed on the Operations tab with a link to the associated Production Resource Tools. Tap it to view the PRT Documents and Measuring Points (Measuring Points tab) on the **PRT Data** screen.

10. Create and Use Time Sheets

Use the Time Sheets module to create time sheets for yourself and your team members.

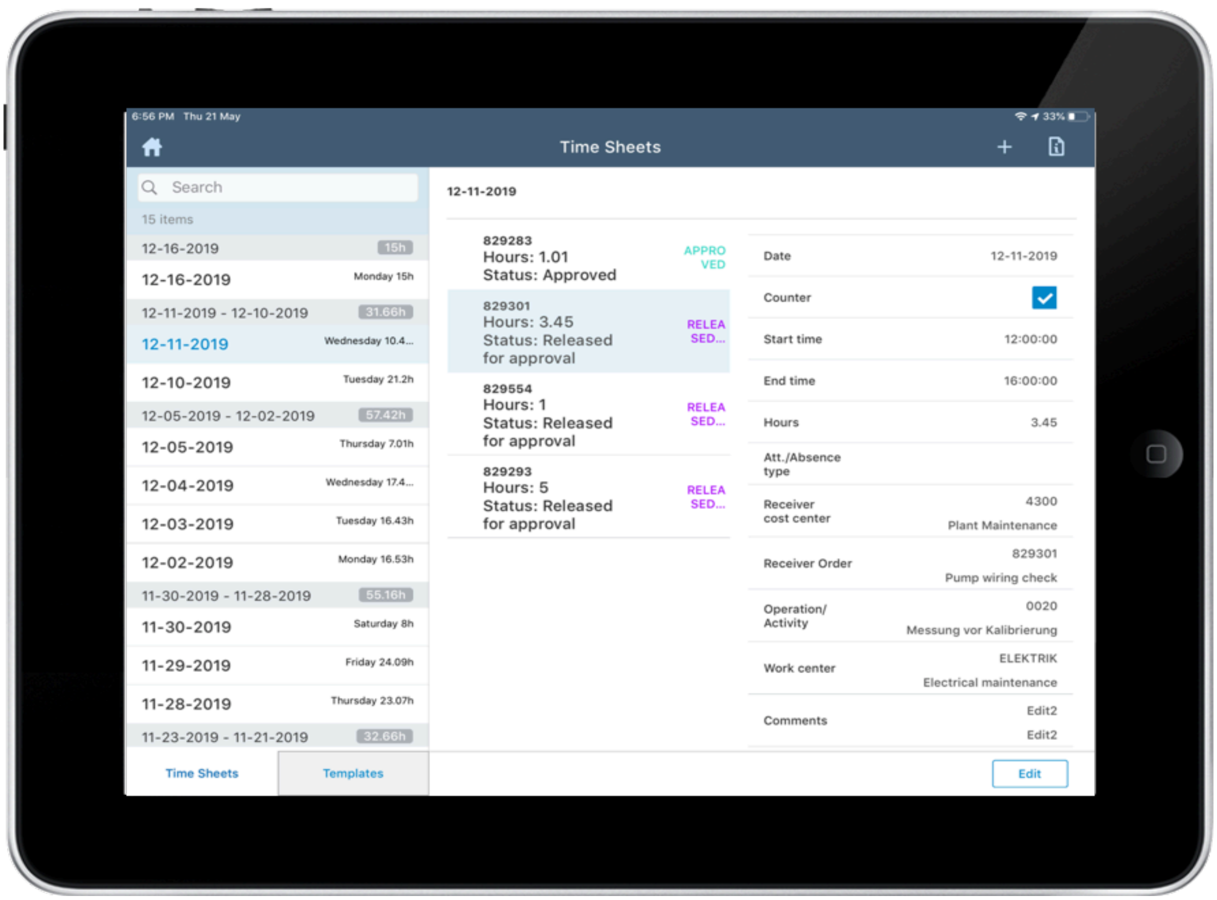
Use Time Sheets module to:

- Create a new time sheet or create one using an existing template.
- Tag your location and add comments.
- Add an employee to your time sheet and capture his/her details, such as time spent on an activity, account code, work description, and operation (nature of the activity).
- Save the time sheet as a template for later use.

10.1. Understand Time Sheets Screen

The Time Sheets screen is divided into two sections:

Figure 10-1 Time Sheets Screen



The left section of the **Time Sheets** screen sorts the time sheets by week and date includes:

- **Time sheets**: View the list of time sheets by week and date. Number of hours logged by the team for the week and per day is also displayed.
- **Template**: View the list of templates.
- **Search:** Search a Time sheet or Template by the template name or by the time sheet date

The right section of the **Time Sheets** screen includes:

- List of **Time sheets** and **Templates**
- When you tap the time sheet or a template, you can view the details and you can edit by tapping the **Edit** button.

Time sheets have the following statuses:

- **In Process**: Once the time sheet is created, it is set to In Process.
- **Released For Approval**: After you enter the time sheet details, tap Release to send it to your Manager or Supervisor for approval. You can modify the time sheet details before it is approved.
- **Approved**: If the Manager or Supervisor approves the time sheet, you can tap the Confirm button on the time sheet details pane to confirm the time sheet.
- **Approval Rejected**: If your time sheet is rejected, the Release option is enabled, and you can modify the time sheet details and resubmit it for approval.

10.2. Create a Time Sheet

This section guides you to create Time Sheet.

To create a Time Sheet:

1. In the **Home** screen, tap **Time Sheets**.
2. Tap the **Create** + icon in the Time Sheets screen.
   You can also create a Time Sheet from Work Order Operation details and Operation confirmation history.
3. In the **Create Time Sheets** screen, enter the following:

   > **Note:**
   > Fields that are displayed depend on the UI validations configured in RACE.

- **Employee**: Select the Employee Name from the list.
- **Data Entry Profile:** Select Data Entry Profile from the list.
- **Date:** Tap and select the date.
- **Start Time:** Tap and select the Start Time.
- **Required End Time:** Tap and select the End Time.
- **Hours:** Enter the total duration in this field.
- **Activity Type:** Select the Activity Type from the list.
- **Work Order:** Select the Work Order from the list.
- **Operation:** Select the Operation/Activity from the list.

> **Note:**
> This field can be selected only when the Work Order field is defined.

- **Work Center:** Select the Work Center from the list.
- **Description:** Enter any additional information in this field.

> **Note:**
> **Work Order**, **Operation** and **Work Center** values are defaulted if you navigated to the **Time Sheet** screen from Operation details or confirmation history.

4. Tap **Save**.

A new **Time Sheet** is created and is available on the left side of the screen under the current date.

If you tap **Save as Template**, the **Add Template Name** screen opens, and you can save it as a template under the **Templates** section.

10.3. Auto HR Time Sheet

This section explains about the Auto HR Time Sheets feature.

The mWorkOrder application automatically generates time sheets for users (workers) with the count of productive and non-productive hours. You can enable/disable this functionality through **RACE**. Once a user/worker confirms any operations (manually or automatically) for a released work order, a time sheet is created against that work order with the confirmation details.

The following mandatory fields must be entered during confirmation of a work order to automatically generate the Time sheet:

- Crew ID
- Wage Type

11. Create forms and capture & post data using Forms

Create forms (standalone) like checklists, emergency inspection and risk assessment forms and assign them to your team (field service technicians) to capture and post data.

Every technician or personnel is assigned a set of forms depending on their roles. Once the technician submits a form, you as a dispatcher / supervisor / manager can review and accept the form.

> **Note:**
> You can create and assign forms to the supervisors and technicians using RACE™.

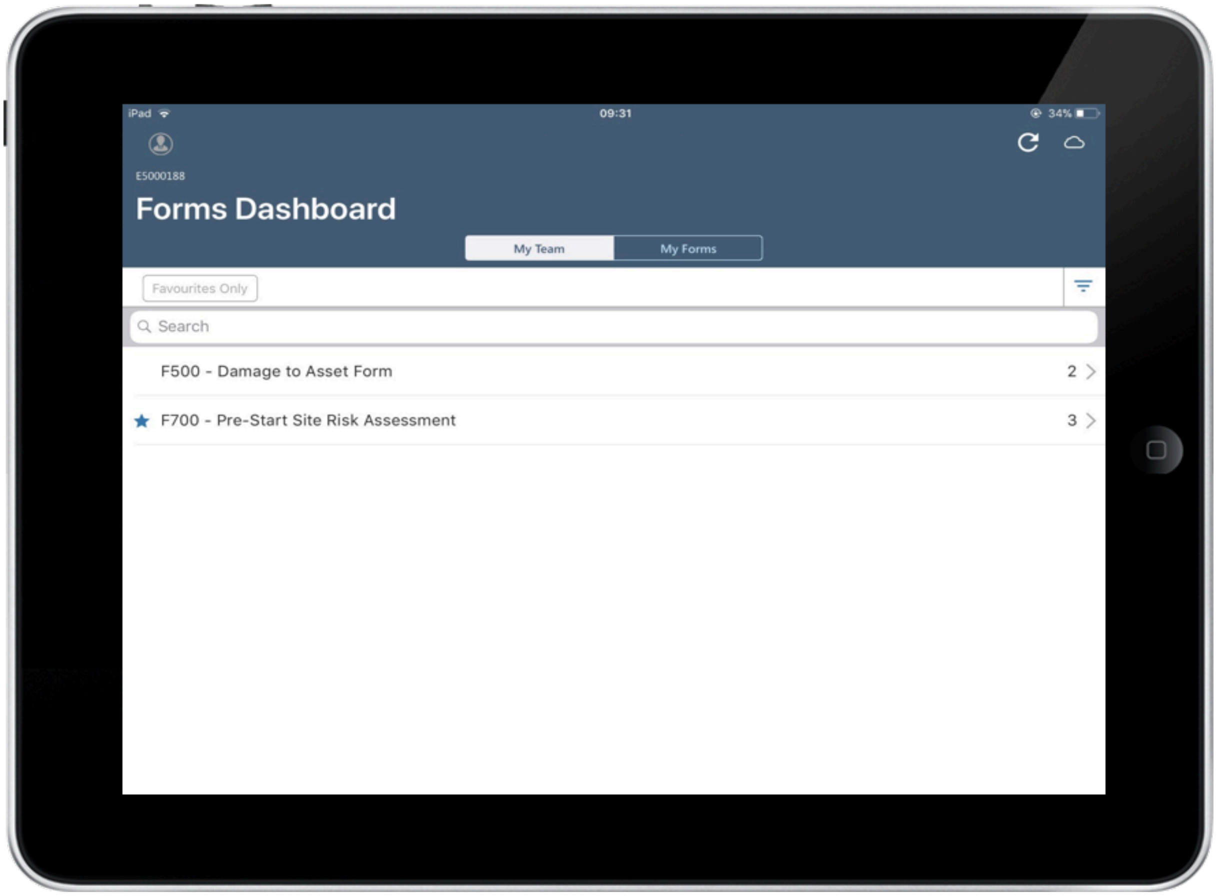
Use the Forms Dashboard module, to manage the forms assigned to you or approve the forms submitted by your team. Forms are displayed on the following tabs:

- **My Team:** Displayed only for supervisor role. Lists forms assigned to your team.
- **My Forms**: Lists the forms assigned to you.

If you are a supervisor, see Review and approve forms *(on page 286)*

If you are a technician, see Capture and post data using form *(on page 283)*

Figure 11-1 Forms Dashboard - Home Screen



11.1. Capture and post data using form

When your supervisor assigns you a form to do an inspection or collect the measurement readings, you as technician or plant personnel visit the functional location or asset, review the asset, and capture the data.

Use the Forms Dashboard module on the mobile application to capture the data in forms and post them for approval. From this module, you can do the following:

- Review the forms assigned to you
- Add new entries to the form
- Save form as draft
- Submit form

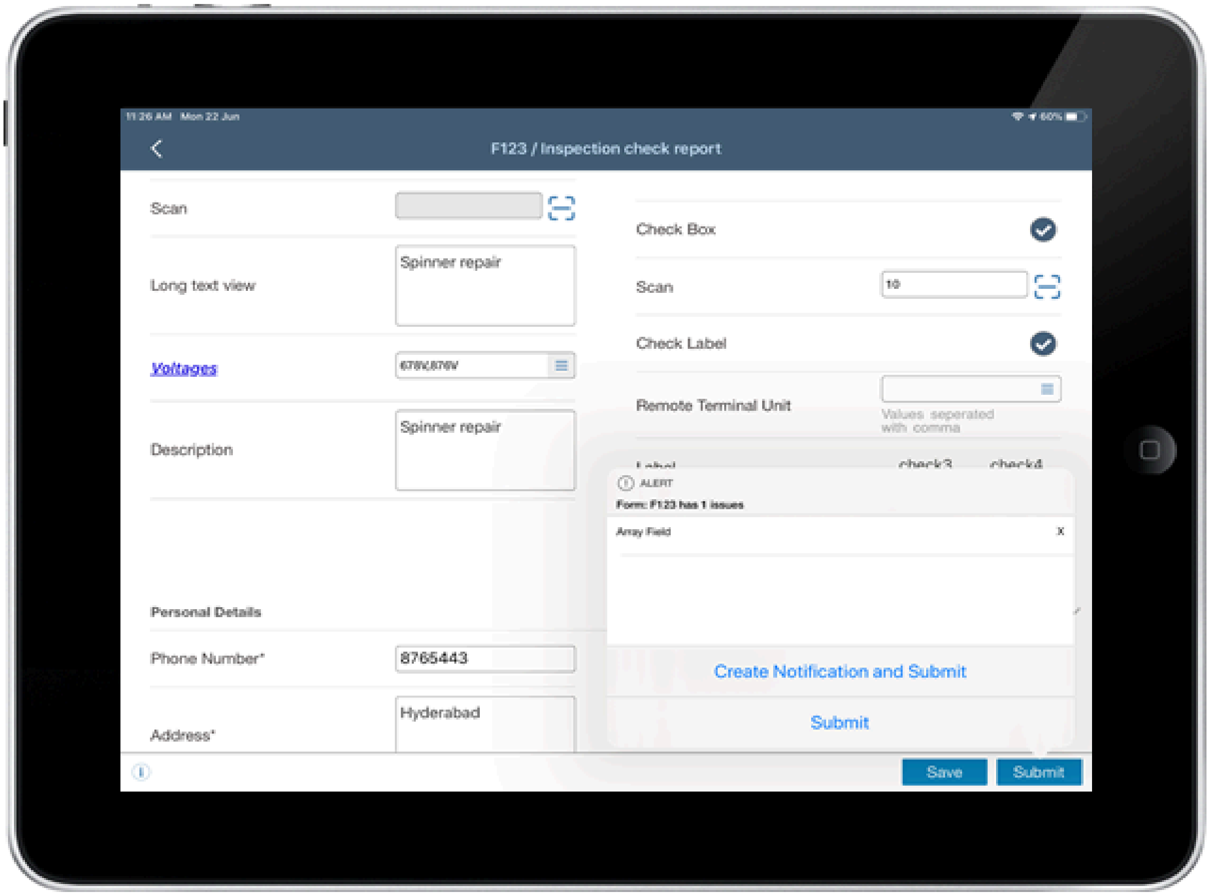
On a scheduled basis, you can create an instance (entry) of the form and post your observations. When working on your tasks if you identify an inconsistency, you can raise a Notification from the form. This feature can be enabled using RACE. See *Trigger business object from form using validations* section in the *Configure mWorkOrder using RACE* document.

To post data using forms:

1. In the Home screen, tap **Forms Dashboard**.
2. Tap the **Add** icon at the bottom of the screen.

   You can also slide the form template to the right and tap on the **Add** to create a copy of the form.
3. In the **Select Forms** pop-up window, tap the form you want to copy.
4. In the form details screen, enter the details.
   - Tap the **Instructions** icon to view the instructions associated with the form.
   - Tap the **More** icon to view the History of Notifications created from the form. This option is available only if you created Notifications for the form.

Figure 11-2 Form Details



5. Tap **Save Draft** to save the form. This is an optional step.
6. Tap **Submit Form**.

   In the pop-up that appears:
   - Tap **Create Notification and Submit** to navigate to the form to enter the notification details.
   - Tap Submit to submit the form to your supervisor.
7. Enter the **Form Description** and tap **OK**.
8. Tap **Yes**.

   A success message screen appears. On this screen,
   - Tap **Return To Dashboard** to go to the **Forms Dashboard** screen.
   - Tap **Print Form** to print the form.
   - Tap **Email Form** to email the form in PDF format.

     For the email form option, the application displays two options, the iOS native Gmail app or Google mail. The email field auto populates with the customer email address.

11.2. Review and approve forms

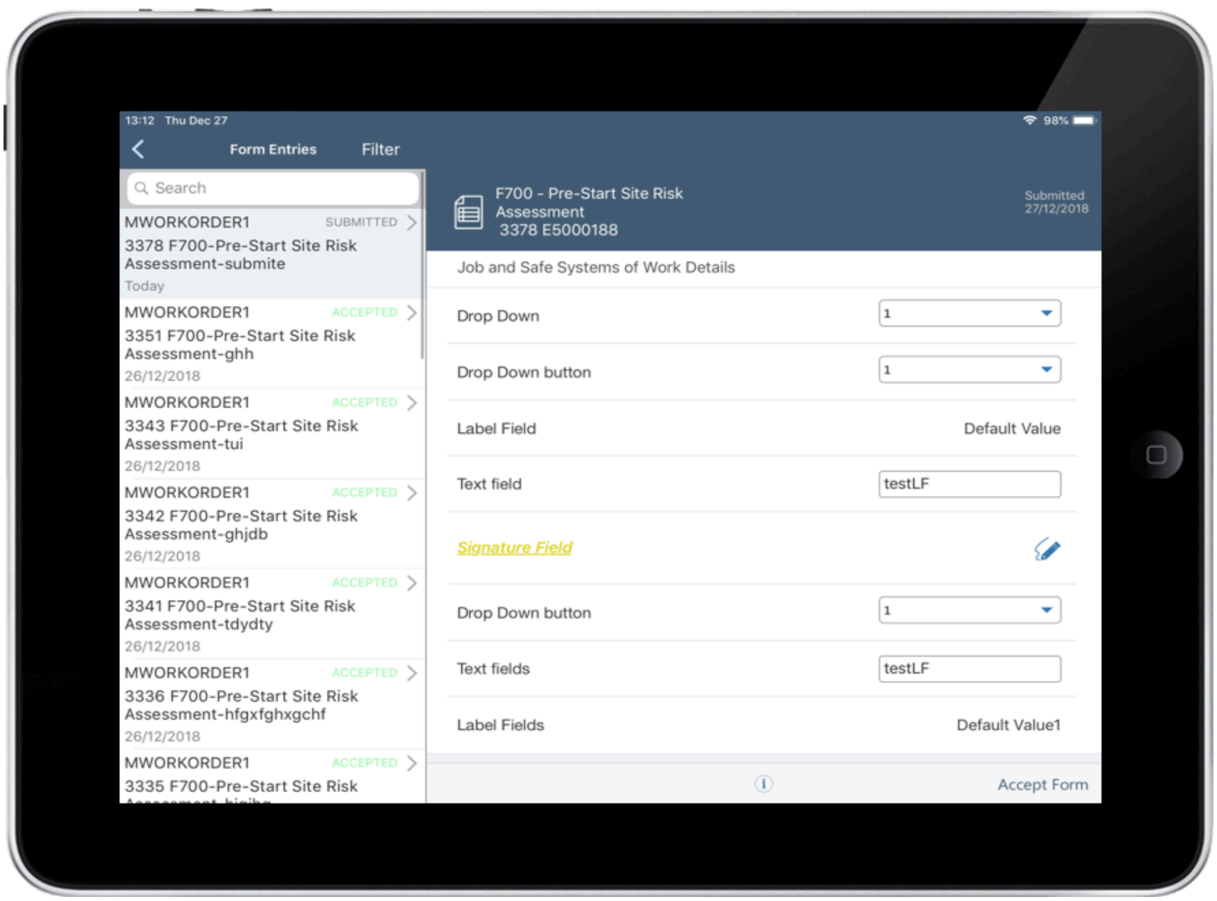
As a supervisor or manager, view the forms submitted by your team on the My Team tab. Review the forms and either Accept or Edit and Accept them.

To review and accept the forms:

1. In the home screen, tap **Forms Dashboard**.
2. In the **My Team** tab, tap on the form template.

   Entries submitted for the form are shown in the **Form Entries** screen.

   Figure 11-3 Forms List



3. Tap on the form with **Submitted** status.
4. Review and modify the form details.
5. Tap **Accept Form**.
6. Enter the **Form Description**.
7. Tap **OK**.

   Status of the form changes to **Accepted**.

12. Inspect materials at a plant

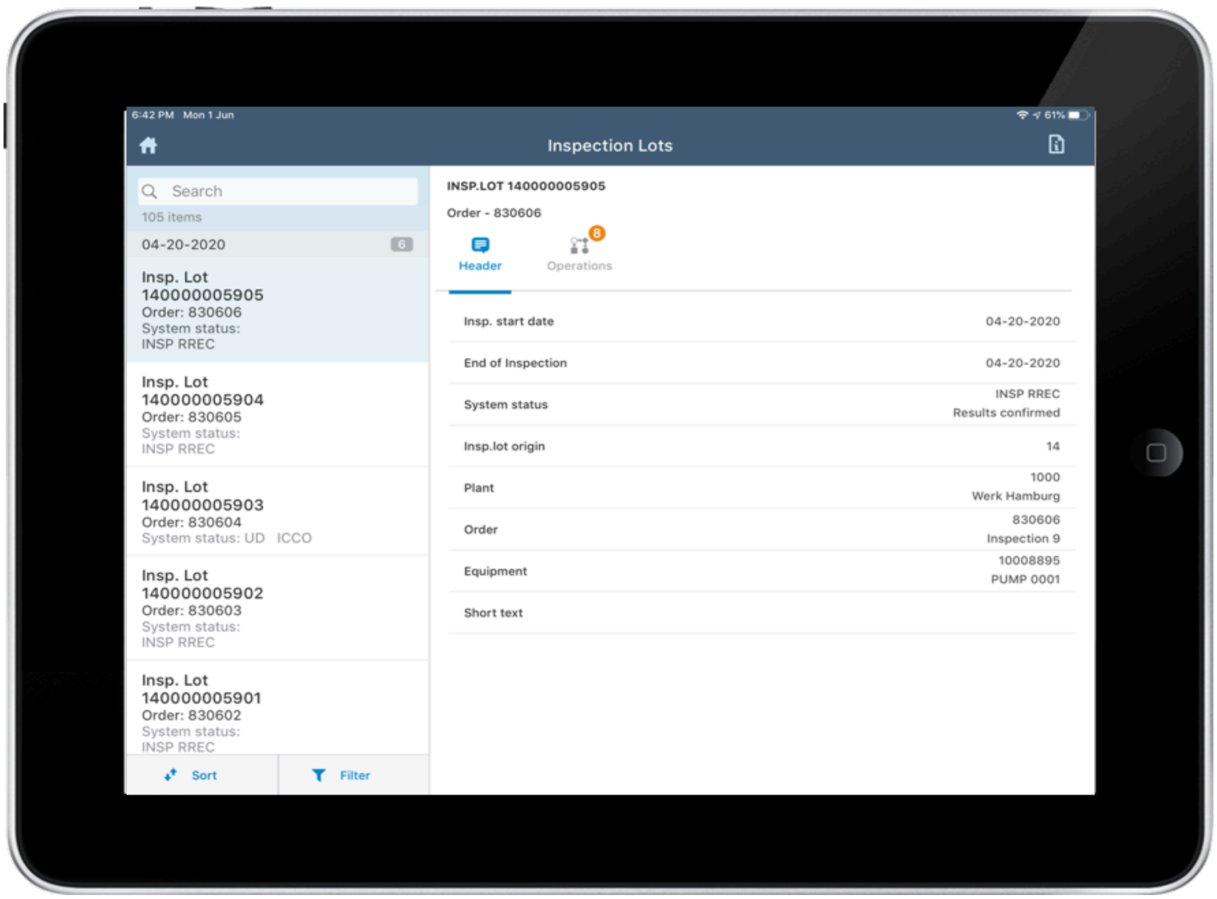
Inspection Lot is a formal request, which is sent to a plant for examining specific quantities of materials at a plant.

Information in the inspection lot record is compared against the predefined specifications for the material, which helps the quality inspector decide whether to accept or reject the goods or materials.

12.1. Understand the Inspection Lots Screen

The Inspection Lots screen is divided into two sections:

Figure 12-1 Inspection Lots Screen



The left section of the **Inspection Lots** screen includes the following:

- List of **Inspection Lot** with Order No, System Status, Inspection Type.
- **Search**: search inspection lots by inspection lot, associated plant code or the equipment code.
- **Sort**: Sort the inspection lot.
- **Filter**: Filter the inspection lot.

The right section of the **Inspection Lots** screen includes the following tabs:

- **Header**: View the details of the inspection lot, such as the inspection start date, end of inspection, system status, associated plant code, and equipment that need to be examined.
- **Operations**: view the list of operations performed for the work order. Within each operation, you can check the inspected quantity of material, system status, material attributes, specification, and additional notes.

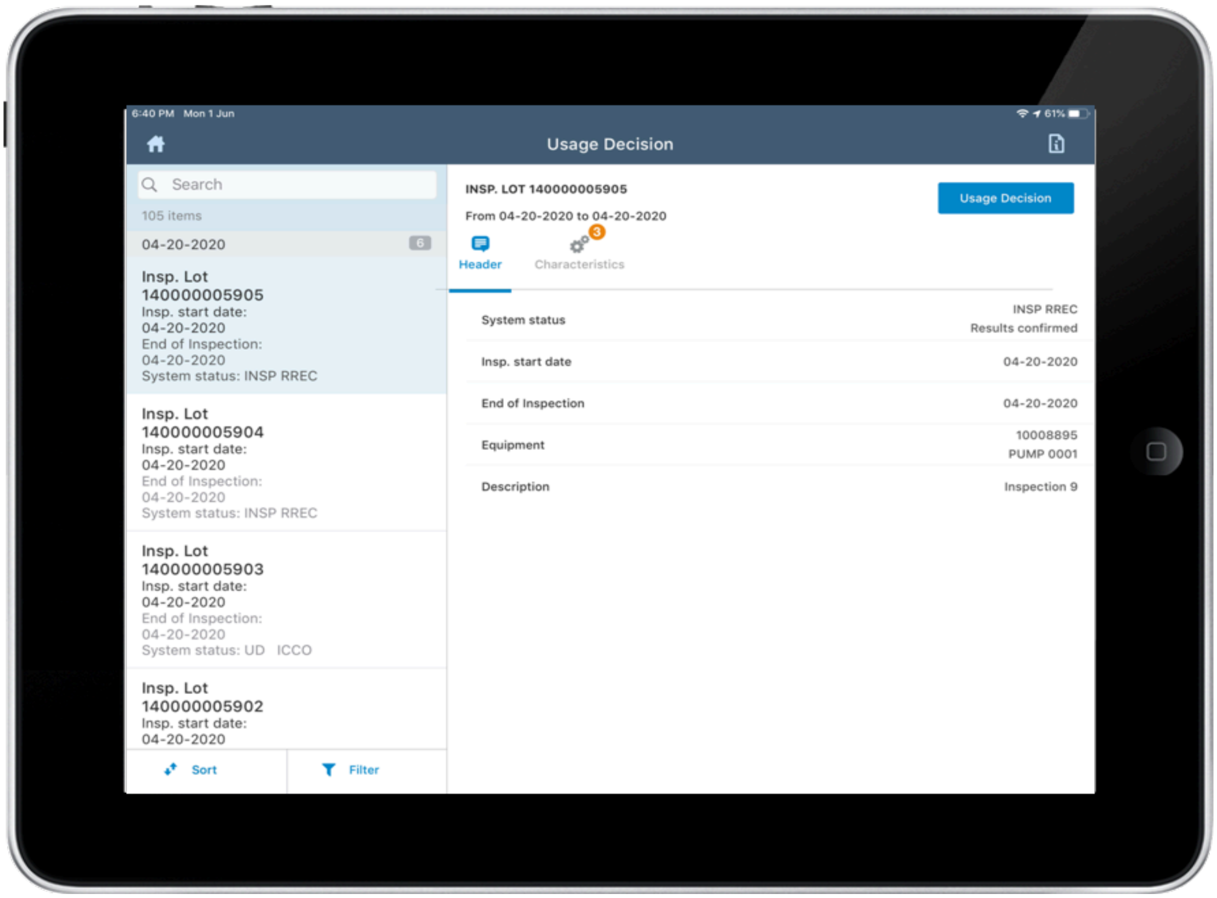
13. Confirm validation of materials at a plant

The usage decision for an Inspection lot confirms that all physical samples are validated, and the inspection is completed. It specifies if the goods in the inspection lot are accepted or rejected for use, you can make the usage decision, or the system can make the decision automatically.

13.1. Understand the Usage Decisions Module

The Usage Decision screen is divided into two sections:

Figure 13-1 Usage Decisions Screen



The left section of the **Usage Decision** screen includes the following:

- List of **Inspection Lot** with **Start Date** and **End Date, Usage Decision** status and Inspection Type.
- **Search:** Search Usage Decision status.
- **Sort:** Sort the inspection lot.
- **Filter:** Filter the inspection lot.

The right section of the **Usage Decision** screen includes the following tabs:

- **Header**: Check the basic details including system status, inspection duration, and Equipment in the respective fields.
- **Characteristics**: View the inspection lot status (Accepted/Rejected), specifications, quantity, attributes, and notes in the respective fields.
- **Defects**: View the defect details, such as inspection characteristics, problem, and additional notes for an inspection lot.
- **View Decision:** to open a **Usage Decision** field where you can fill in the decision details, such as the **UD code** (the corresponding follow-up action gets displayed) and **additional notes**.

  The screen sequence for all these tabs can be configured using **RACE**.

14. Create and Use Functional Locations

A Functional Location is the place where equipment is installed and maintained.

Functional location can be structured based on the following:

- **Spatial**: The physical location. For example, building 1, building 2 and so on.
- **Technical**: When the equipment is large it can be considered as a functional location and parts. For example, Press, Press Frame, Press Hydraulics and so on.
- **Functional (process)**: Polymerization, condensation and so on

You can search a Functional Location from the Home screen and can check the data that is created under various categories, such as General, Location, Structure, Classification, Measuring Points, and Attachments.

You can search for a Functional Location using Barcode and QR scan options too. When you scan a Functional Location, the application navigates to the list screen and then to the Header Tab of the Functional Location.

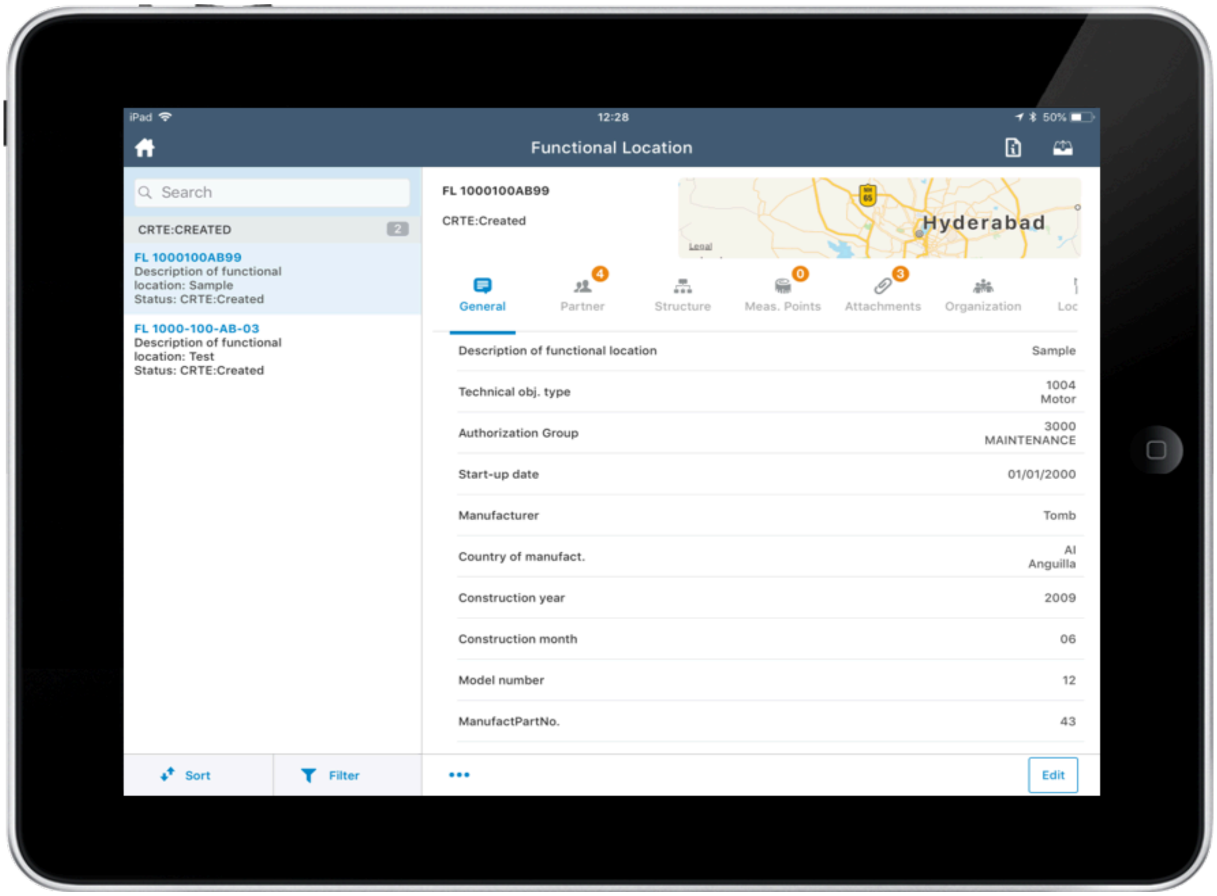
You can view the hierarchical structure of the Functional location by tapping the **Hierarchy View** button depicting the FL assigned Equipment, sub-Equipment, and material (construction type material). Additionally, you can view the material (construction Equipment) assigned to an Equipment.

14.1. Understand the Functional Locations Screen

This section gives an overview of the Functional Locations screen.

The Functional Location screen is divided into two sections:

Figure 14-1 Functional Locations Screen



The Left side column contains:

- **Functional Locations** sorted by dates along with descriptions.
- **Search** box to search notification.
- **Sort** button to sort the notifications.
- **Filter** button to filter the notifications.

The right side column contains General, Organization, Classification, Partner, Meas. Points, Hierarchy, Structure, Location, Attachments, History and you can view the details of the equipment under these tabs. The screen sequence for all these tabs can be configured through **RACE**.

> **Note:**
> By default, the **General** tab should always be in first position and cannot be configured.

14.2. Create a Functional Location

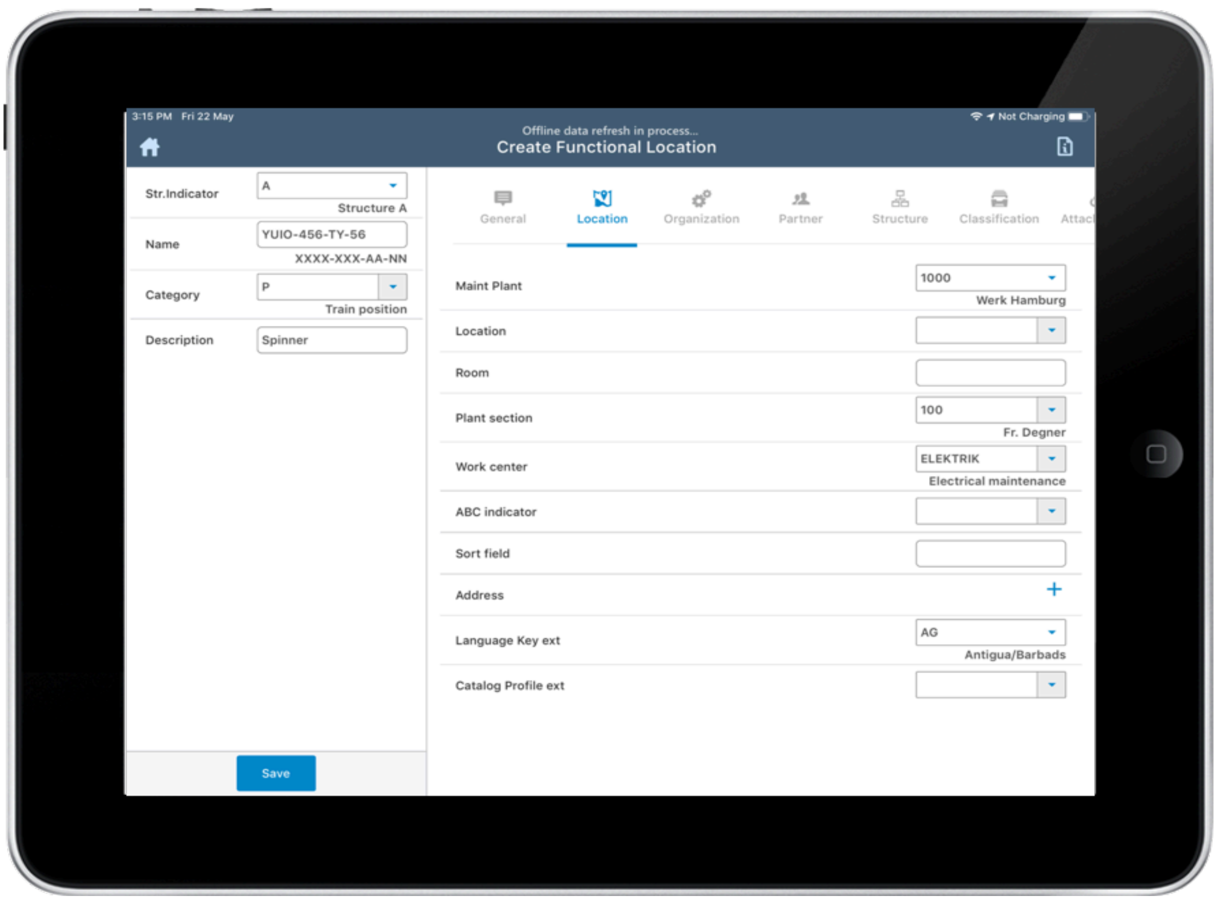
Learn how to create a functional location.

To create a Functional Location, do the following tasks:

1. In the **Functional Location** module of Home screen, tap +

   .

   Figure 14-2 Create Functional Location



2. In the left section of the **Functional Location** screen enter **Structure Indicator, Name, Description,** and **Category.**
3. In the right section of the **Functional Location** screen, enter details under the following tabs:

> **Note:**
> Fields that are displayed depend on the UI validations configured in RACE.

General:

- Select the **Object Type** from the list.
- Select the **Authorization Group** from the list
- Enter the **Inventory Number**.
- Select the **Valid on** date.
- Enter the name of the **Manufacturer** and select the country of manufacturer.
- Enter other details like model number, part number, serial number and so on.

Location: Enter Plant Code, Location, room number, plant section code, Work Center code, and address (tap **+** next to **Address)** where this Equipment is located.

Organization: Enter Company Code, the business area, asset id of the Equipment, appropriate cost center code, code group, main Work Center and so on.

> **Note:**
> **Code Group** and **Planning plant** fields get automatically pre-filled when you enter the **Maintenance Plant** in the **Location** section.

Classification: Enter the **Class Type**, **Class**, and **Characteristics**. Refer to Add a Class *(on page 294)* for more details.

Structure: Enter superior Functional Location and construction type. Tap the checkbox next to **Equi-installation allowed** if you want to confirm this attribute/specification.

Partner: Tap + to enter **partner type** and **partner name** on the **Add Partners** screen.

14.2.1. Add a Class

You can add new **Classes** and **Characteristics** for the functional location using the **Classification** tab.

To add a class:

1. Tap the **Classification** tab.
2. Tap **Add Classification**.
3. Select the Class Type from the **Class Type** list.
4. Select the Class from the **Class** list.

The **Characteristics** fields of the selected **Class** appear.

5. Select/enter the required information in the **Characteristics** fields.
6. Tap **Done**.

Note:
You can add multiple **Classes** under a Functional Location.

14.2.1.1. Add a Class from Desktop Application

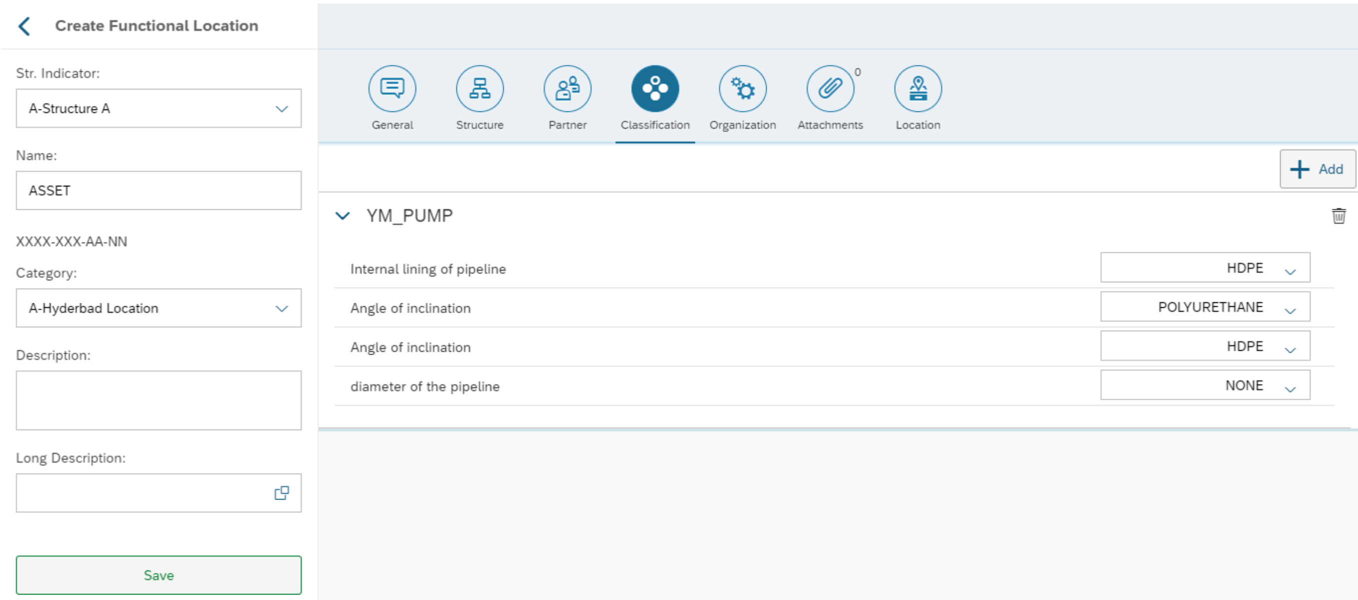
To add a class from Desktop application:

1. Login to Desktop application.
2. In the Dashboard, click **Functional Locations**.
3. Search and select a functional location on the left side pane.
4. Click the **Classification** tab.
5. Click **Add**.
6. Select the Class Type from the **Class Type** list.
7. Select the Class from the **Class** list.

The **Characteristics** fields of the selected **Class** appear.

8. Click **Save**.

Figure 14-3 Add Class details from Desktop Application



Note:
You can add multiple **Classes** under a Functional Location.

14.2.2. Add an Attachment to Functional Location

You can add an image, video, PDF attachments, and external URL links to the functional location to provide additional information related to it.

For information on adding attachments and working with them see, Add Attachments to Records *(on page 113)*

14.2.3. View Active Work Orders and Notifications

To view the list of active Work Orders and Notifications,

1. Navigate to the **History** tab.
2. Tap either the Work Orders or Notification tabs.
3. To view details for a specific Work Order or Notification, select it, and you are navigated to the Header screen with detailed information.

   You can view all work orders and notifications for a specific Functional Location or Equipment.

14.2.4. Install an Equipment from Functional Location

Installation implies adding Equipment to the functional location. When you select a functional location, you can view the equipment listed under it.

To install and Equipment:

1. Tap the **Structure** tab in the **Functional Location** module.
2. Check the **Installation allowed** checkbox.
3. Tap the **Hierarchy** tab.
4. Tap the **Install-EQ** button available on the bottom of the screen.
5. Select the **Equipment** from the list.
6. Tap the **Calendar** icon to select the installation date.
7. Tap the **Clock** icon to select the installation time.
8. Tap **Install**.

   The installed Equipment appears under the Functional Location hierarchy.

14.3. Create a Repair / Maintenance Notification for Equipment Using Functional Location

You can create a repair / maintenance notification for equipment from the Functional Locations module.

To create a repair / maintenance notification for equipment from the Functional Locations module:

1. In the right section of the **Functional Location** screen in general tab, tap at the bottom of the screen, and tap Create Notification.
2. Modify the data as required in the **New Notification** screen that is pre-filled with Functional **Location, Equipment id and Work Center**.
3. Tap **Save**.

14.4. Create a Job / Work Order for Repair / Maintenance from Functional Locations

You can create a repair / maintenance work order for equipment from the Functional Locations module.

To create a repair / maintenance work order for equipment from the Functional Locations module:

1. In the right section of the **Functional Location** screen in general tab, tap ••• at the bottom of the screen, and tap **Create Work Order**.
2. Modify the data as required in the **Create Work Order** screen that is pre-filled with **Header, Ops/Activities, Components,** and **Attachments**. See Capture details related to Work Order tasks in embedded forms *(on page 239)* to add multiple forms to work order.
3. Tap **Save**.

14.5. View Functional Location Hierarchy

Tap **Hierarchy** tab to view the hierarchical structure of that Functional Location.

From hierarchy tab you can do the following:

- **Create Notification:** Tap the **Option Menu** ••• icon and tap **Notification**.
- **Create Work Order**: Tap the **Option Menu** ••• icon and tap **Create Work Order**.
- **View Bill of Material (BOM):** Tap the **Option Menu** ••• icon and tap **BOM**.
- **Install Equipment:** Tap the **Install-EQ** button on the bottom of the **Hierarchy** tab. Refer to "Install an Equipment from Functional Location *(on page 297)*" for details.
- **Remove Equipment**: Slide / swipe the **Equipment** that you want to remove to the left and tap **Dismantle EQ** button.
    - Tap the **Calendar** icon to record the removal date.
    - Tap the **Clock** icon to record the removal time.
    - Tap **Done**.

> **Note:**
> If you remove an Equipment, all the sub-equipment assigned to it are automatically removed.

15. Check Plant and Storage Location Stock

If you are using Stock Overview module, check the following link,

https://docs.innovapptive.com/2212/minventory_user/html/topics/stockoverview_check_plant_sl_stock.html

16. Add and Use Equipment Details

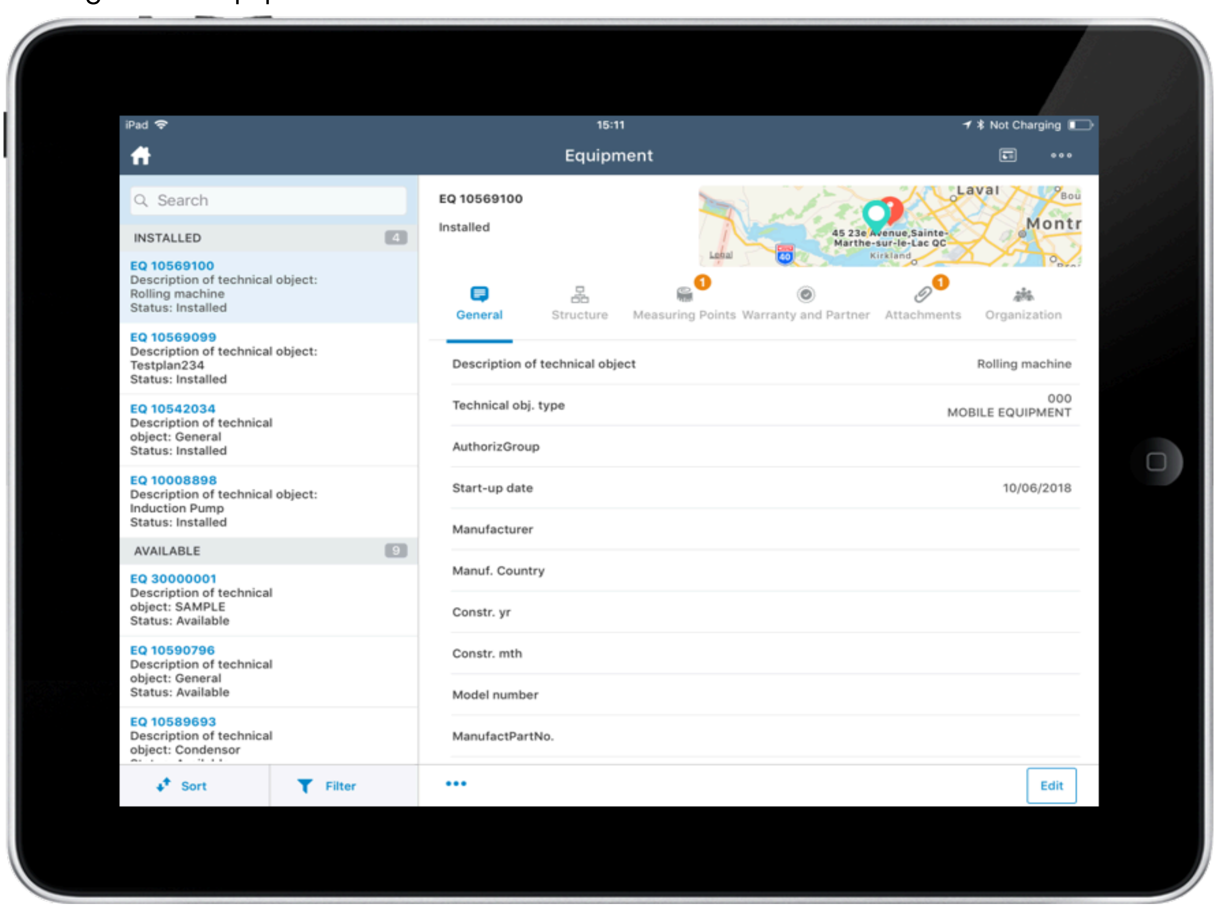
Equipment refers to the product/machine that needs to be maintained or repaired and this module helps you search the Equipment based on number, description, and location.

16.1. Understand the Equipment Screen

This section gives an overview of the Equipment screen.

The Equipment screen is divided into two sections:

Figure 16-1 Equipment Module Screen



The left side section of the **Equipment** screen includes the following:

- **Equipment** list and description, type and status.
- **Search** box to search a specific equipment.
- **Sort** button to sort out the equipment
- **Filter** button to filter the equipment

The right side section of the Equipment screen includes **General**, **Location**, **Organization**, **Structure**, **Warranty**, **Measuring Points**, **Hierarchy**, **Classification**, and **Attachments** and you can view the details of the equipment under these tabs. The screen sequence for all these tabs can be configured through **RACE**.

Note:
By default, **General** tab should always be in first position and cannot be configured.

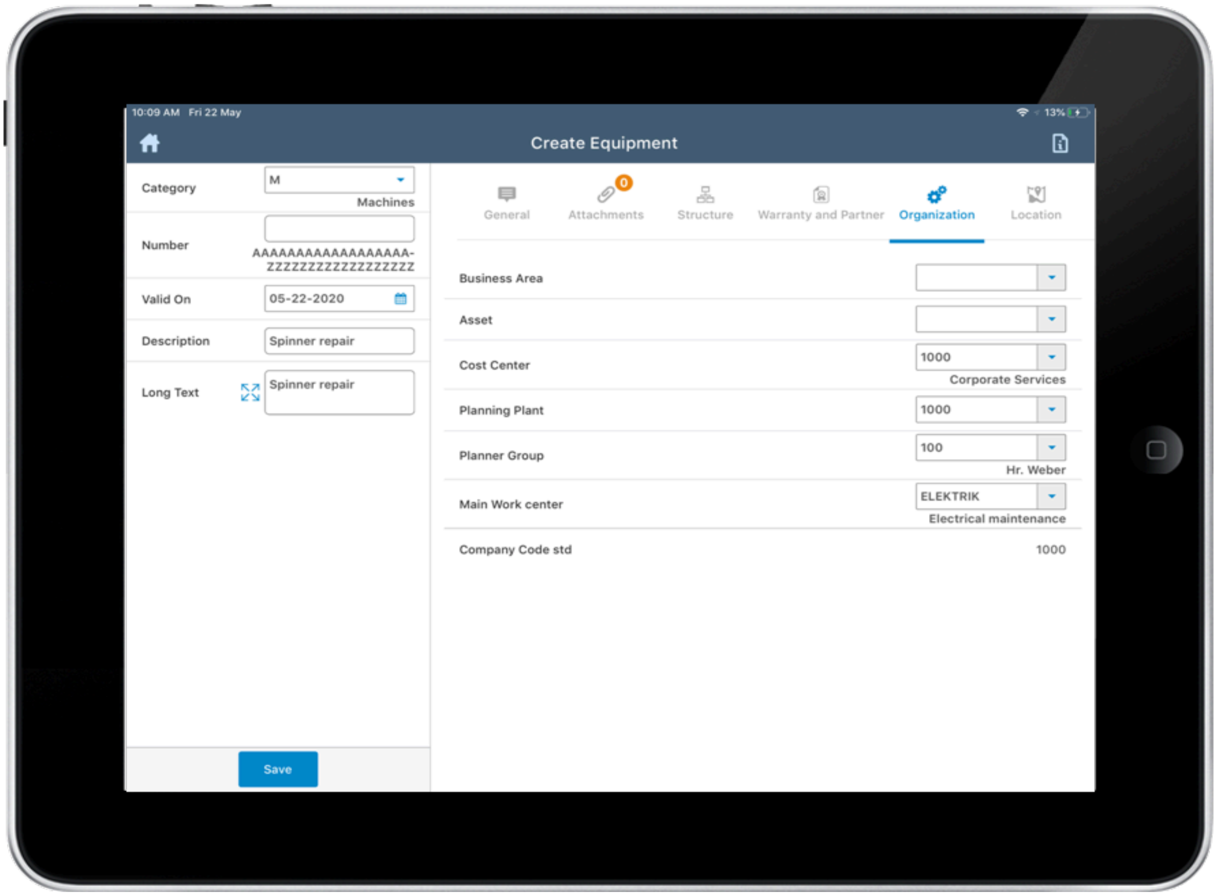
16.2. Add Equipment Details

You can add details of an Equipment under various tabs like Header (default), General, Location, Organization, Structure, Warranty and History tabs. You can add a new attachment too.

To add equipment details, do the following tasks:

1. In the **Equipment** module of the Home, tap **+**.

Figure 16-2 Equipment General



2. In the left section of the **Equipment** screen add details like Equipment Number, Equipment Category, Revision Number, WBS Element, modify default valid date, and enter short and long descriptions.
3. In the right section of the **Equipment** screen add the following information under respective tabs:

> **Note:**
> Fields that are displayed depend on the UI validations configured in RACE.

- **General**: Add Authorization Group ID, start date, object type, Inventory number and start date of inventory, authorization group id, manufacturer name, country of manufacture, construction year and month, model number and part number.
- **Location**: Add maintenance plant ID, equipment location, ABC and Scan Field indicator, room number and plant location, Work Center and address (tap + to add).
- **Organization**: Enter the business area, where this Equipment is located, asset id, cost center, Planner Group and main Work Center.

> **Note:**
> **Company Code** and **Maintenance Planning Plant** fields are filled when you select the **maintenance plant** in the **Location** section.

- The cost center field is auto populated when the work order is created from an equipment.
- **Structure**: Enter Functional Location, super order Equipment id, position, technical identification number, and construction type (material).
- **Warranty and Partner**: Enter the duration (start date & end date) of the warranty, master warranty and partner (tap + to select the type of the partner and the corresponding partner name from the Add partners box).

> **Note:**
> When the Partner Function is selected, the application displays the Part Number.

16.2.1. Add Equipment Classification

In the **Equipment** screen of the selected Equipment, tap the **Classification** tab to view the **Class**, **Class Type**, and **Characteristics** of the equipment. You can also add the classification details for an equipment.

To add classification details of an equipment:

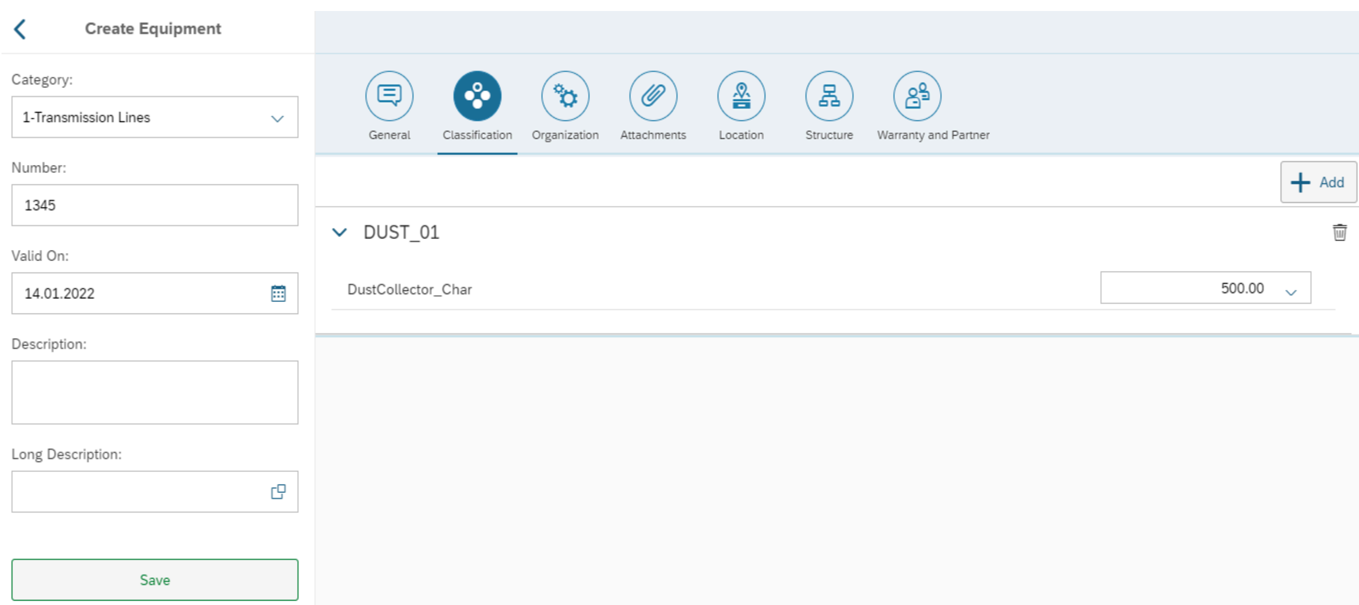
1. Tap the **Classification** tab**.**
2. Tap **Plus** icon at the bottom of the screen.
3. Select the **Class Type** from drop-down.
4. Select **Class** from drop-down.
5. Select the values for the **Characteristics** drop-down fields.
6. Tap **Done**.

16.2.1.1. Add Equipment Classification from Desktop Application

To add a classification from Desktop application:

1. Login to Desktop application.
2. In the Dashboard, click **Equipment**.
3. Search and select equipment on the left side pane.
4. Click the **Classification** tab.
5. Click **Add**.
6. Select the **Class Type** from drop-down.
7. Select the **Class** from drop-down.
8. Select the values for the **Characteristics** drop-down fields.
9. Click **Save**.

Figure 16-3 Add Classification Details From Desktop Application



16.2.2. Add an Attachment to Equipment

You can add an image, video, PDF attachments, and external URL links to the equipment to provide additional information.

For information on adding attachments and working with them see, Add Attachments to Records *(on page 113)*

16.3. Create a Repair / Maintenance Notification Using the Equipment Details

You can create a Notification from the **Equipment** screen capturing the details of the Equipment that needs maintenance / repair.

To create a repair / maintenance notification using equipment details:

1. In the left section of the **Equipment** screen, tap the record for which you want to create a Notification.
2. Under the **General** tab in the right side section, tap the **Option Menu** icon and tap **Create Notification**.
3. In the **New Notification** screen:
    a. Make changes to the pre-filled data like **Equipment number**, **Reported by**, **Notification date,** and **Notification time**.
    b. Fill other fields like **Planner Group, Planning Plant, Main Work Center, Priority, Required Start Date**, and **Required End Date**.
    c. Tap **Save**.
    d. Tap **Yes** in the confirmation screen.

    A message appears confirming that the Notification <number> has been successfully created.

16.4. Create an Emergency Work Order from Equipment

You can create an **Emergency Work Order** from an existing **Equipment** screen capturing the details of the equipment that needs maintenance / repair.

When you create an emergency work order, **Release**, **Operations Confirmation** and **Goods Issues** happen automatically

To create an Emergency Work Order from Equipment:

1. In the left section of the **Equipment** screen, tap the Equipment for which you want to create the **Emergency Work Order**.
2. Under the **General** tab, tap the **Option Menu**  icon.
   A list of options appears.
3. Tap **Emergency WO**.
   The **Emergency Work Order** pop-up appears.
4. Tap the **Work Order** type you want to create from the list:
   - Breakdown Maintenance
   - Maintenance Order

   The **Create Work Order** screen appears, and a timer automatically starts recording the total time for creating the Emergency Work Order.
5. Refer to the section “Create an Emergency Work Order *(on page 251)*” to create the Emergency Work Order. See Capture details related to Work Order tasks in embedded forms *(on page 239)* to add multiple forms to Work Order.

16.5. Install and Dismantle Equipment with Goods Movement

Using "APP16" scoping ID, you can install and dismantle the equipment in the Functional Location with Goods Movement

Equipment Installation with Goods Movement: You can install equipment and update the Goods Movement information associated with it. This means that when equipment is installed, the corresponding Goods Movement document is will be created and posted on the relevant work orders. This ensures that the inventory and stock movements are properly accounted for in the system.

Equipment Dismantling with Goods Movement: You can now dismantle equipment and update the Goods Movement details accordingly. When equipment is dismantled, the system will generates a Goods Movement document to record the removal of the equipment from its functional location. This helps maintain accurate inventory records and ensures that all equipment movements are properly tracked.

These actions provide a streamlined process for managing equipment installation and dismantling, as the Goods Movement information is now integrated with the work orders in the backend SAP system. This integration allows users to view all relevant details, such as the equipment installation history and associated Goods Movement documents, within the SAP environment.

How to Install / Dismantle the Equipment?

Select the **Equipment** module and

1. Scan the Asset,

   Install / Dismantle / Exchange tabs are displayed. Choose the appropriate tab.
2. In the **Equipment** field, enter the equipment number and search.
3. The application auto fills the data, and then selectsselect the Reason for Movement from the drop-down.
4. In the **Installation Type** section, fill the fields and tap **Save**.

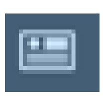
16.6. View Equipment Hierarchy

Tap the **Hierarchy** tab to view the hierarchical structure of that Equipment.

You can do the following from the hierarchy tab:

- **Create Notification:** Tap the **Option Menu** ••• icon and tap **Notification**.
- **Create Work Order**: Tap the **Option Menu** ••• icon and tap **Create Work Order**.
- **View Bill of Material (BOM):** Tap the **Option Menu** ••• icon and tap **BOM**.

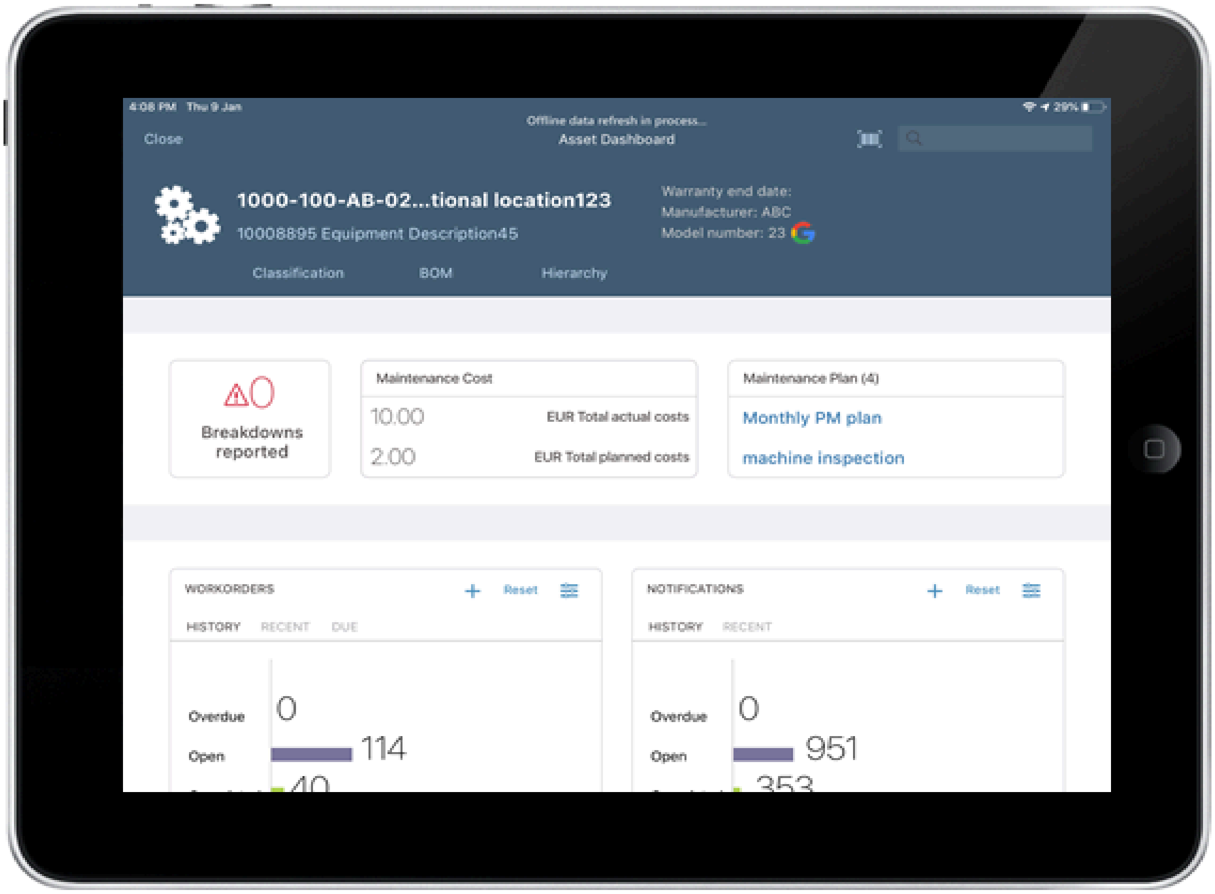
16.7. View Work Order and Notifications raised for Equipment

Using the Equipment Asset Dashboard you can view the Work Orders or Notifications raised for an equipment. Tap  icon on the Equipment details screen to navigate to Equipment Asset Dashboard.

Following information about the equipment is displayed:

- Breakdowns reported to date for the equipment.
- Maintenance Costs (planned and total) associated with the equipment
- Planned preventive maintenance schedules for the equipment like monthly, quarterly, or half-yearly.

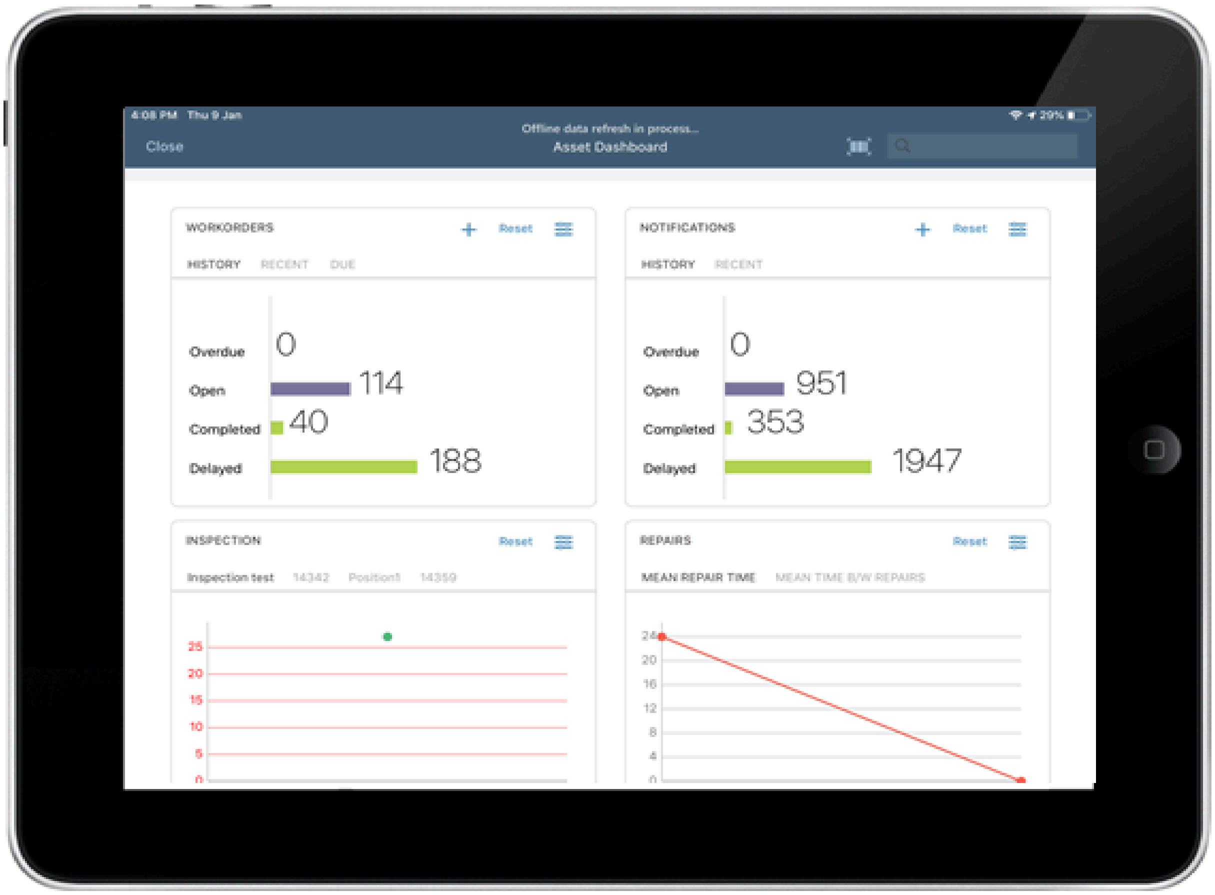
Figure 16-4 Equipment Asset Dashboard



- Location of the equipment in the map.
- Status of Work Orders or Notifications for the equipment in Bar chart format. Filter to view the status of the selected records using button. Tap to create a Work Order or Notification for the equipment.

- History of Work Orders or Notifications raised for the equipment on the **History** tab.
- Mean Repair Time graph is displayed in the Repairs section, to understand the average time taken to do the previous job(s) on the equipment.
- Mean Time Between Repairs graph indicates the life time of equipment between the breakdowns.
- Files or photos related to the equipment in the Attachments section. Tap to add an attachment.

Figure 16-5 Equipment Asset Dashboard



Enter the equipment number in Search bar or tap the Scan

icon to scan the Equipment Number, to navigate to the details screen of another equipment.

17. Search and View Technical Objects

Use the **Technical Objects** module to search and view technical objects such as Equipment and Functional Locations. This module helps you retrieve the information from both Equipment and Functional location lists based on your search.

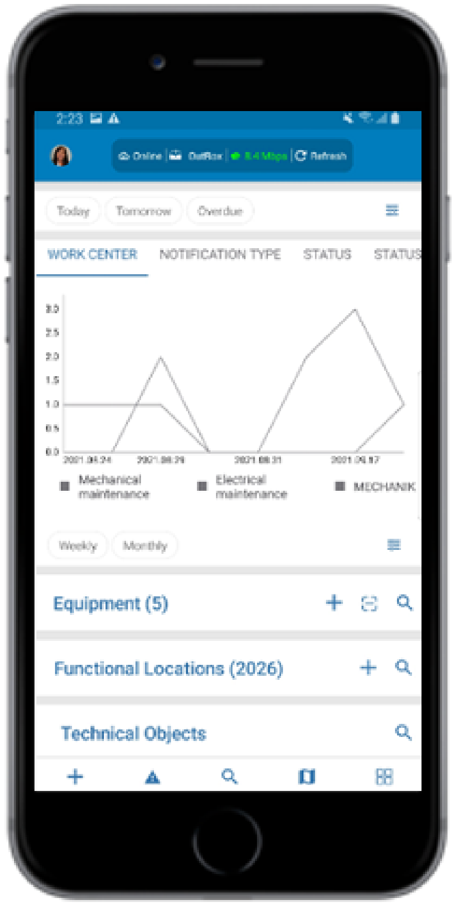
This feature helps you quickly retrieve information without having to check whether the object is a Functional Location or Equipment and displays the details.

> **Note:**
> In the online mode, this module passes the filters configured and brings the information from the SAP tables.
>
> As a best practice and to avoid confusion, ask your RACE administrator to turn OFF the Functional Locations and Equipment modules in RACE, if you are using the Technical Objects module.

To search and view technical objects:

1. In the Home screen, tap **Technical Objects**.

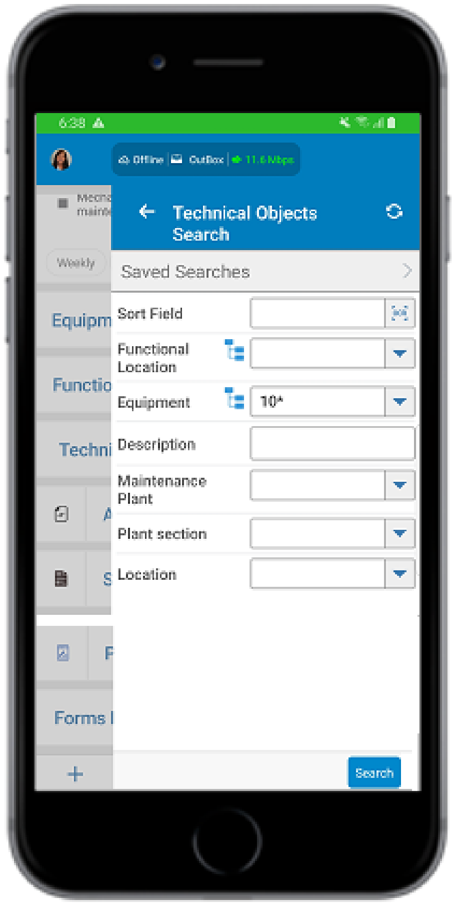
   Figure 17-1 Technical Objects module



2. In the **Technical Objects Search** screen, fill or select the mandatory details, and tap **Search**.

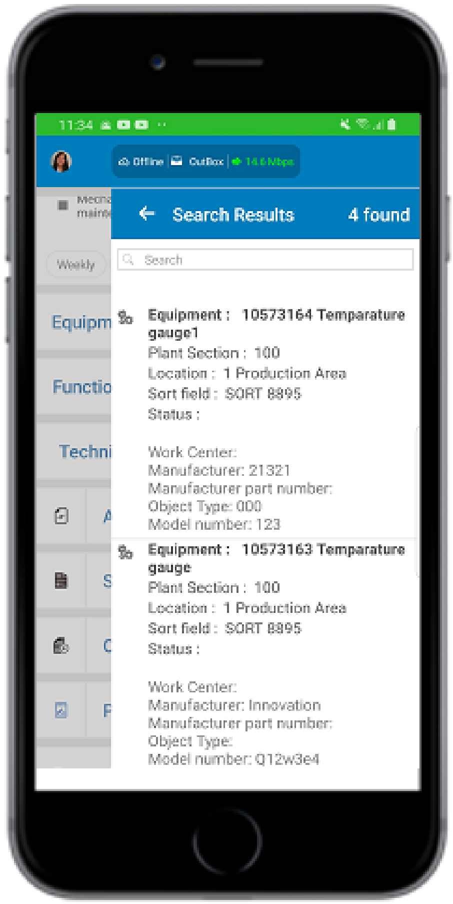
   In this screen you can,
   - Tap the **Save As** button to save the search details and access the saved search details by tapping **Saved Searches**.
   - Tap the Refresh icon to clear the values in the fields.

Figure 17-2 Searching Technical Objects



You can view the technical object details along with the description.

Figure 17-3 Technical Objects search results



3. Select the technical object in the Search Results screen to see the selected technical object details.

18. Create and Use Measuring Points

Measuring Points refer to the physical and/or logical metrics at an instance. For example, the temperature of a boiler at a specific time or the revolutions per minute (rpm) of a motor.

Measuring points are located on technical objects (Functional Locations).

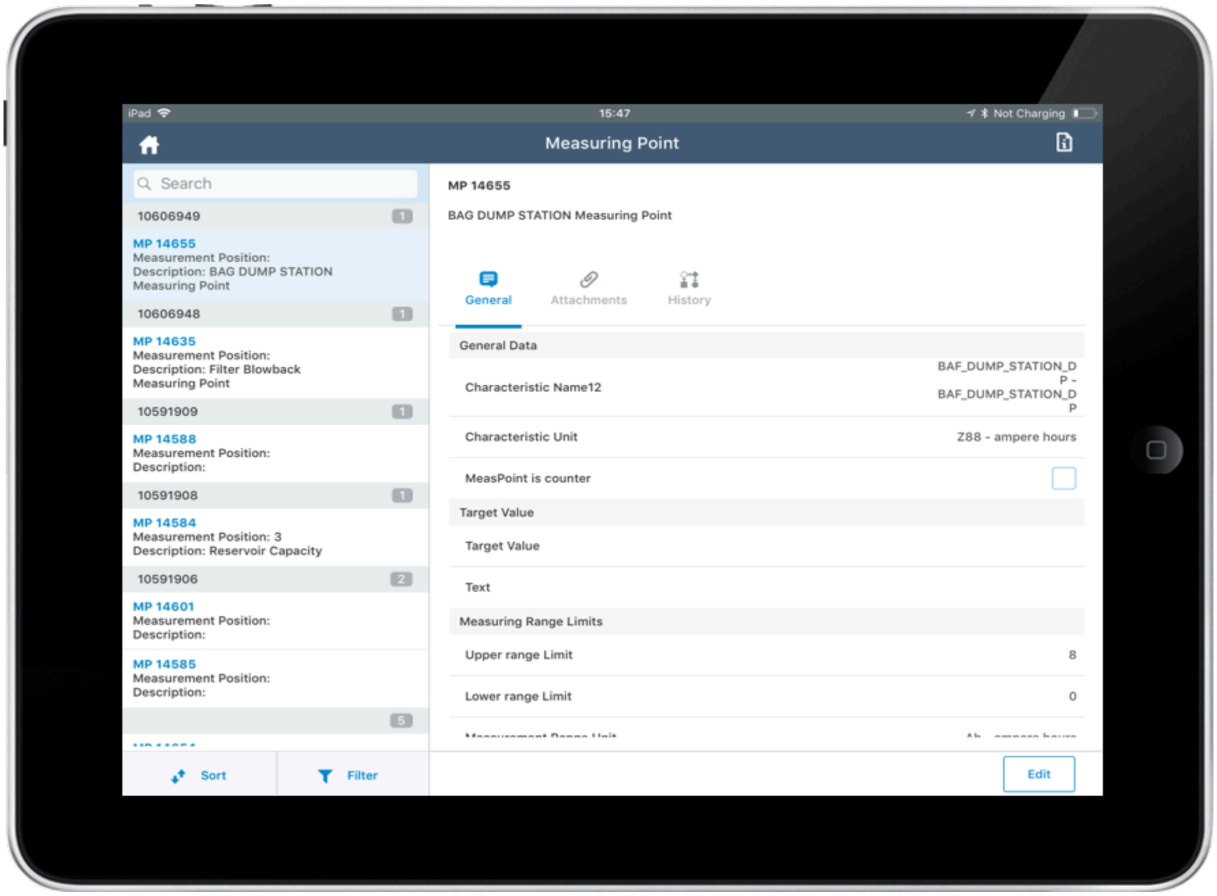
Using this module, you can do the following operations:

- Search a measuring point by tapping .
- Create a new measuring point by tapping .
- Display/view a new measuring point.
- Capture a measurement reading and generate a measurement document.
- Manage measuring point rounds with task lists.
- Display the list of measurement reading lists that can be checked or modified by tapping **Measurement Task Lists** button.
- Sort the Technical Objects, that display Equipment / FLOC information at top of the list in the MP section of RDF.

18.1. Understand Measuring Point Screen

The Measuring Point screen is divided into two sections:

Figure 18-1 Measuring Point Screen



The left side section of the **Measuring Point** screen includes the following:

- **Measuring Point** list and description, type and status.
- **Search** box to search a specific measuring point
- **Sort** button to sort the measuring point
- **Filter** button to filter the measuring point

The right-side section of the **Measuring Point** screen includes the following:

- **General:** View or edit the details of a measuring point including the characteristic of the measuring point, standard measurement unit, counter reading, annual estimate, and measuring limit range (upper & lower limit).
- **Attachments:** View the document associated with the measuring point that is being displayed. You can configure the attachment (to be retrieved) size in **RACE** that will allow the mWorkOrder application to retrieve the attachments within the configured size.
- **History:** View the history of the calibration readings that have been recorded on specific dates that includes information, such as the respective reading instances and the associated measuring document IDs. Users can also add Measuring Documents.

The screen sequence for all these tabs can be configured through **RACE**.

> **Note:**
> By default, the **General** tab should always be in first position and cannot be configured.

18.2. Create Measuring Point

Learn how to create a Measuring Point.

To create a measuring point, do the following tasks:

1. In the **Home** screen, tap the **Create** icon next to the **Measuring Points** module.
2. Tap the **Measuring Point Object** field to select **Equipment** or **Functional Location**.
3. Enter the information for **Maintenance Plant**, **Equipment**, **Functional Location**, **Characteristics**, and **Code Group.**
4. Tap "Transfer Measuring Point" to access information about the measuring point.

   The "Transfer Reading Supported" checkbox is disabled and can only be modified through the SAP backend.
5. Enter data in optional fields, such as **Measuring Point as a Counter**, **Target Value**, and **Text**.

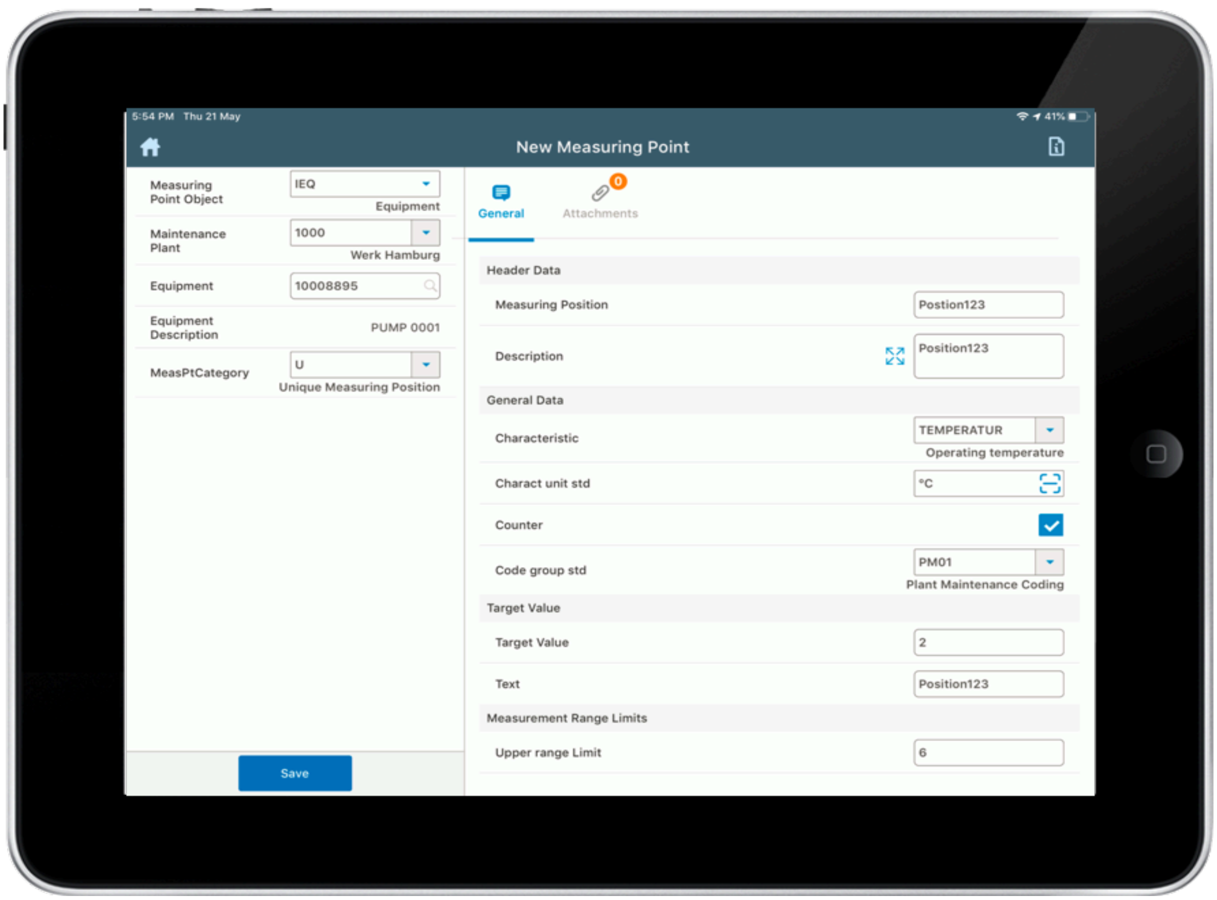
Note:

- If you select the **Measuring Point as a Counter** checkbox, you can optionally fill in the associated data like **Counter Over Reading**, **Counter Data, Annual Estimate,** and **Text**.
- While generating a measurement document for an MP (Measuring Point) with a counter, if the user enters a value greater than the counter's overflow reading, an error message is shown, preventing the user from creating the measurement document.
- Fields that are displayed depend on the UI validations configured in RACE.

6. Tap **Save**.

   In the pop-up screen, tap **View MP List** to navigate to the created record.

Figure 18-2 Create Measuring Point



18.2.1. Add Attachment to Measuring Point

This section guides you to add attachments to Measuring Point.

You can add an image, video, and PDF attachments to the measuring point to provide additional information. For more information on adding attachments and working with them see, Add Attachments to Records *(on page 113)*.

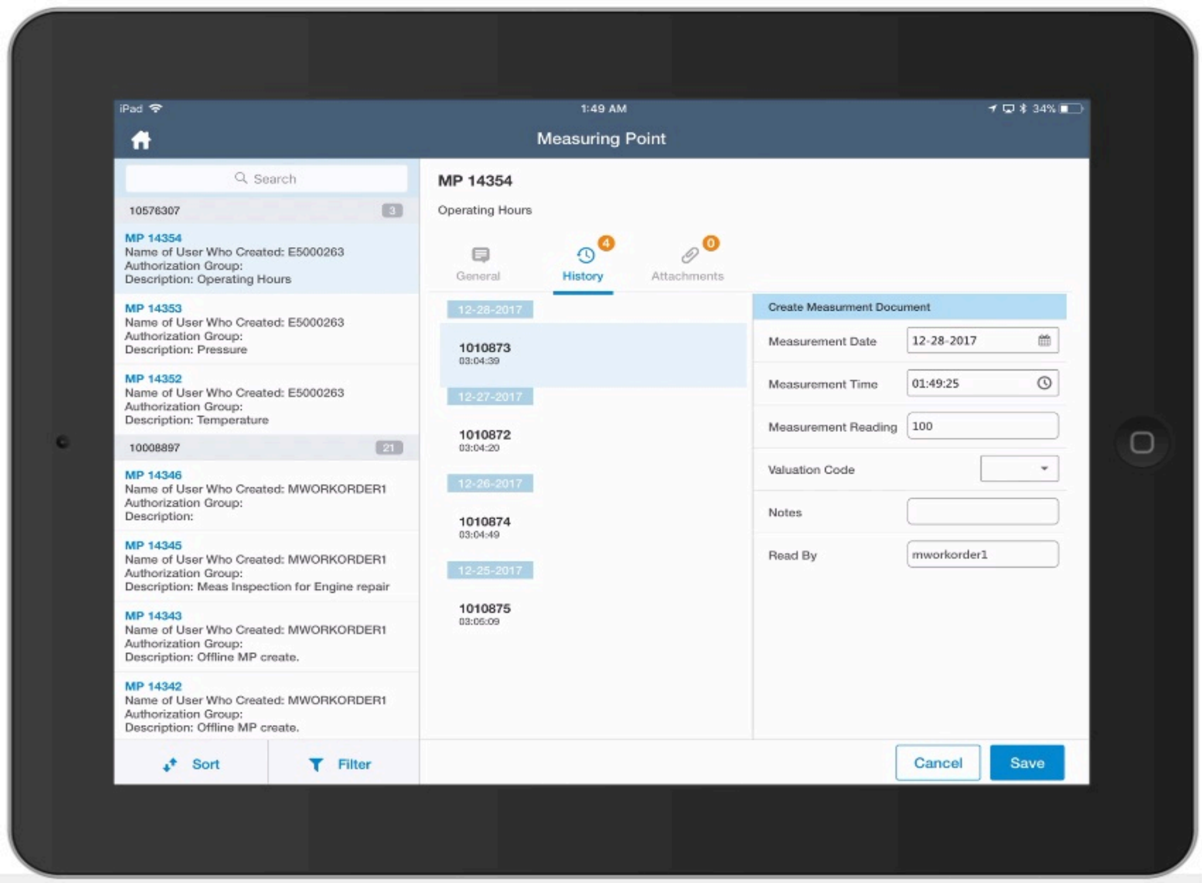
18.3. View and Add Measurement Documents

The **History** tab in the Measuring Point module shows information about the Measurement Documents and the readings taken against measuring points. You can also add Measurement Documents. Measurement Documents contain measurement readings.

To view and add Measurement Documents:

1. Search and select the **Measuring Point**.
2. Tap the **History** tab on the right side section.
3. Tap on any Measurement Documents to view the readings.

Figure 18-3 Add Measurement Document



4. Tap **Add** on the bottom right side of the **Measurement Point** screen to add more **Measurement Documents**.
5. Enter the data in the fields, such as **Counter Reading**, **Counter Difference**, **Measurement Reading** and **Valuation Code** under **Create Measurement Document**.
6. Tap **Save**.

18.4. View Measuring Documents in Graphical Mode

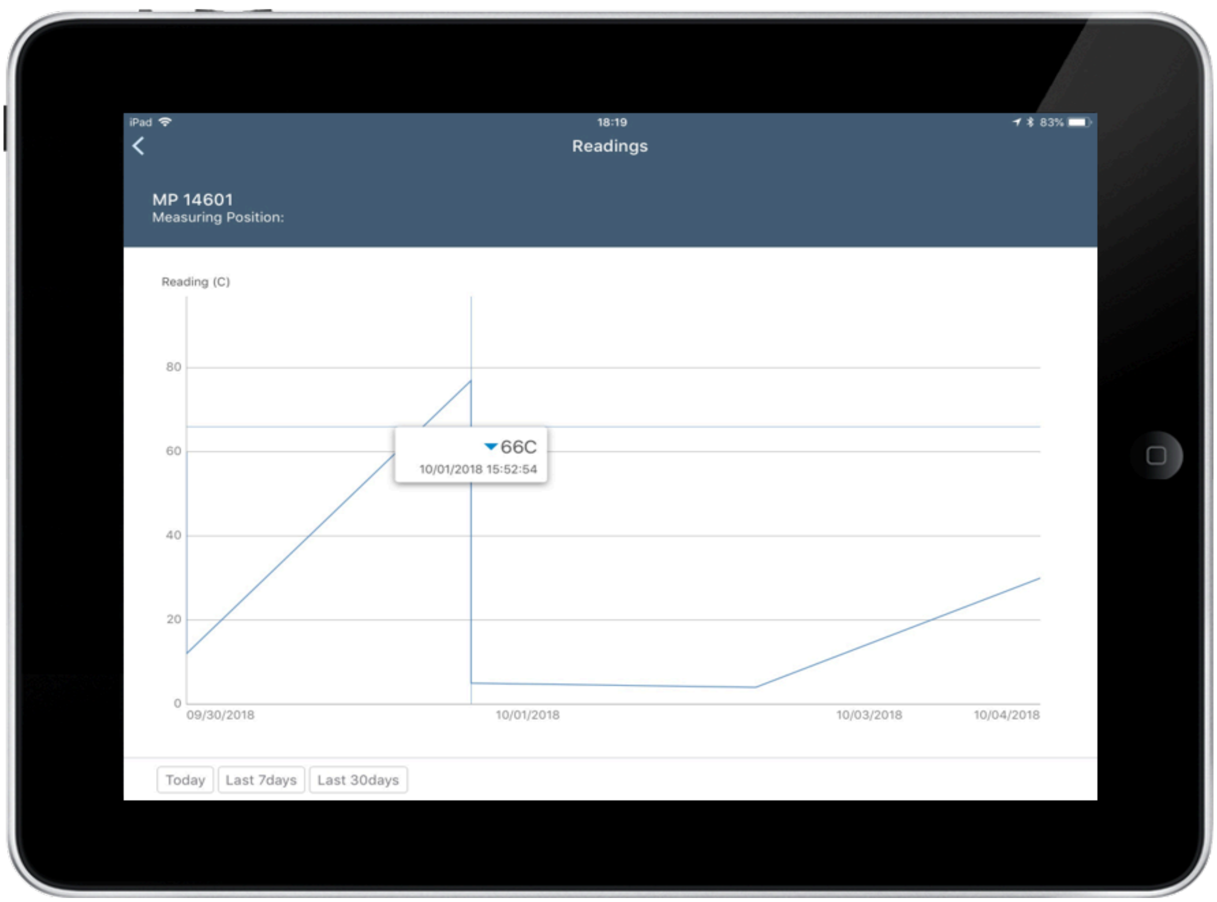
You can view the **Measuring Documents** in a graphical representation and by tapping the line chart on the graph, you can view the measurement readings at any instance.

The **X-axis** represents the Hours/Days/Month and the **Y-axis** represents the measurement readings along with units. You can also filter the measurement readings on a daily, weekly, and monthly basis.

> **Note:**
> By default, the measurement readings appear in the day view on the UI.

Graphical representation of **Measuring Documents** is available in both Online and Offline modes.

Figure 18-4 Graphical Representation of Measurement Document

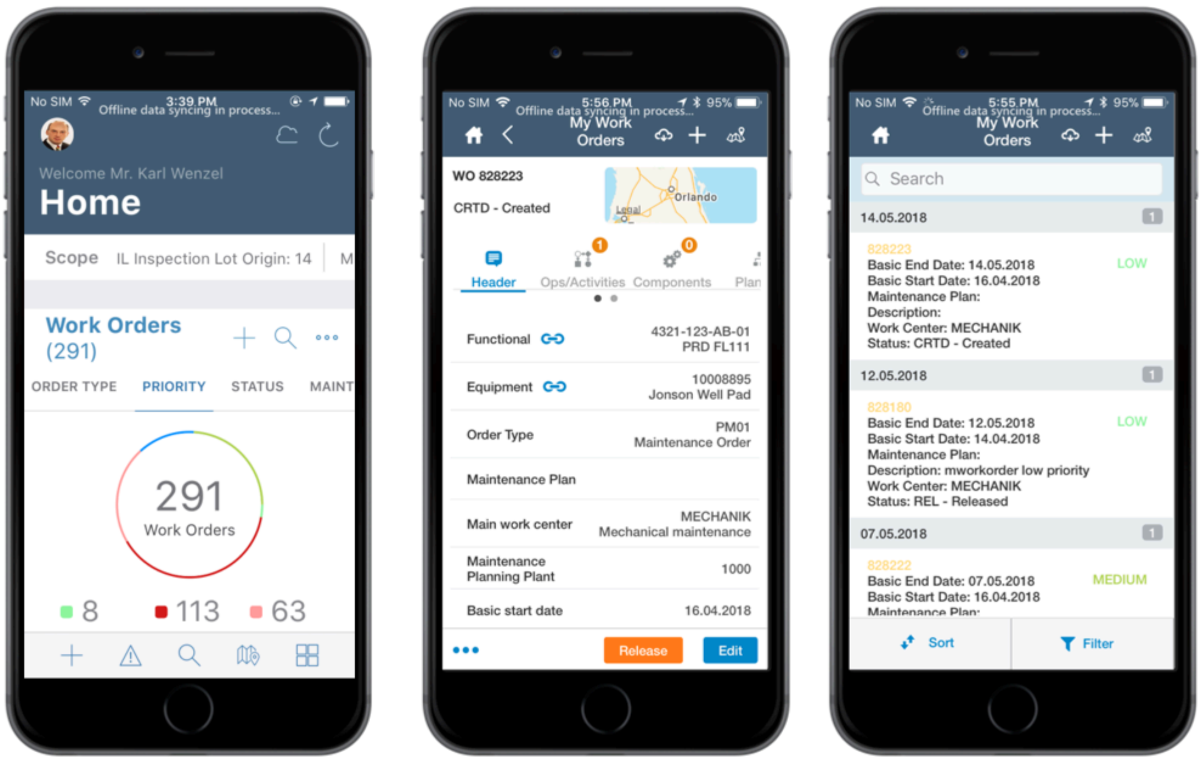


19. Application UI Across Different Platforms and Form Factors

This section showcases the UI across different form factors and platforms for this application.

Apple iOS

Figure 19-1 iOS Screen



Google Android

Figure 19-2 Android Screen 1

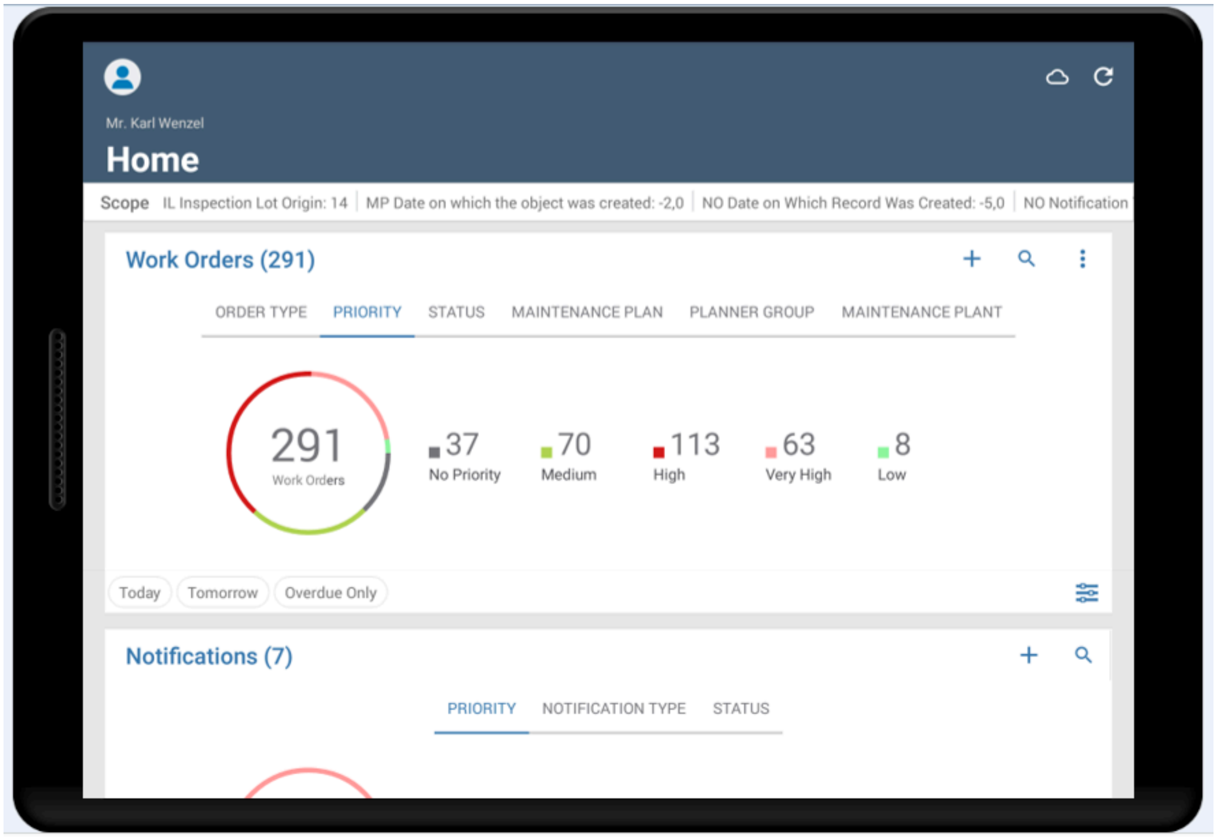
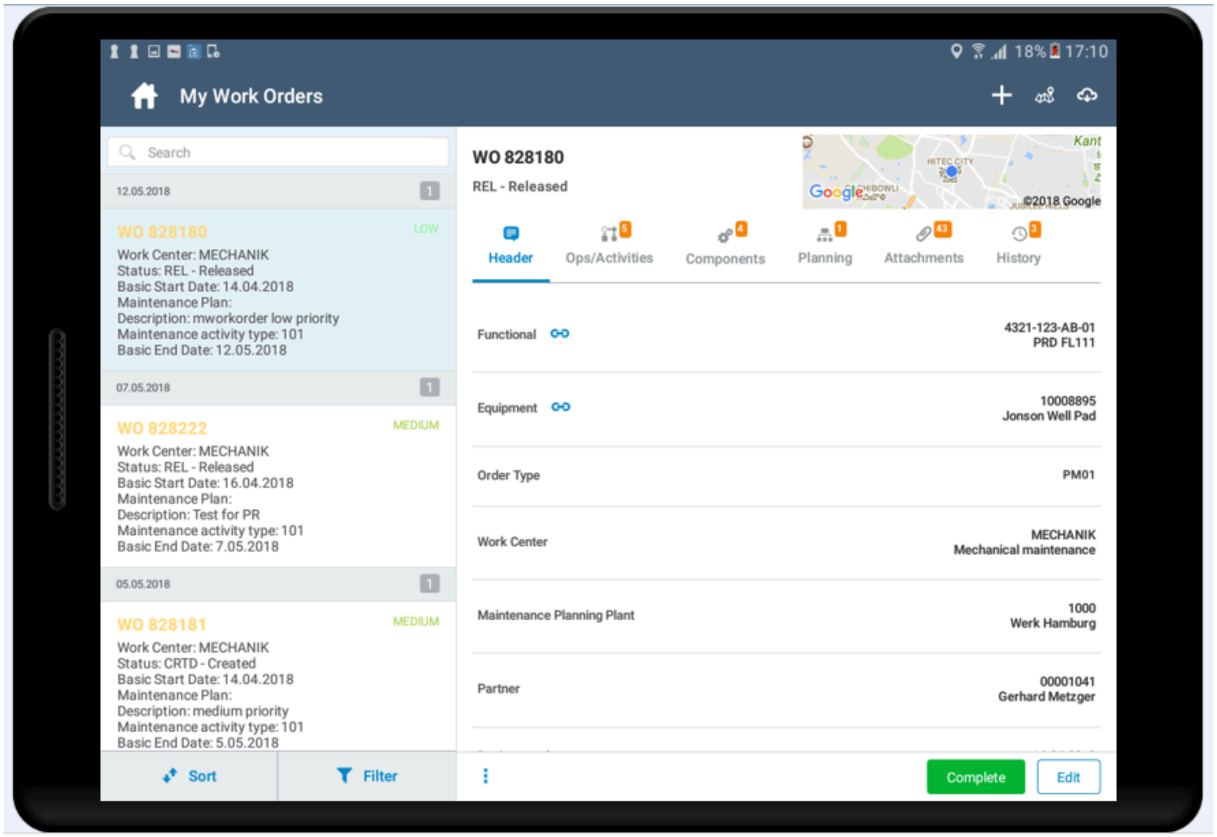


Figure 19-3 Android Screen 2



UI5

Figure 19-4 UI5 Screen 1

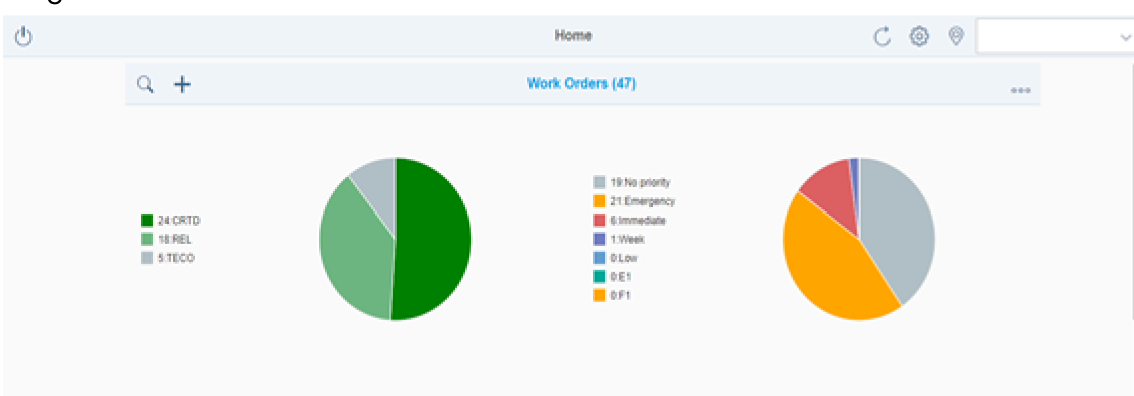
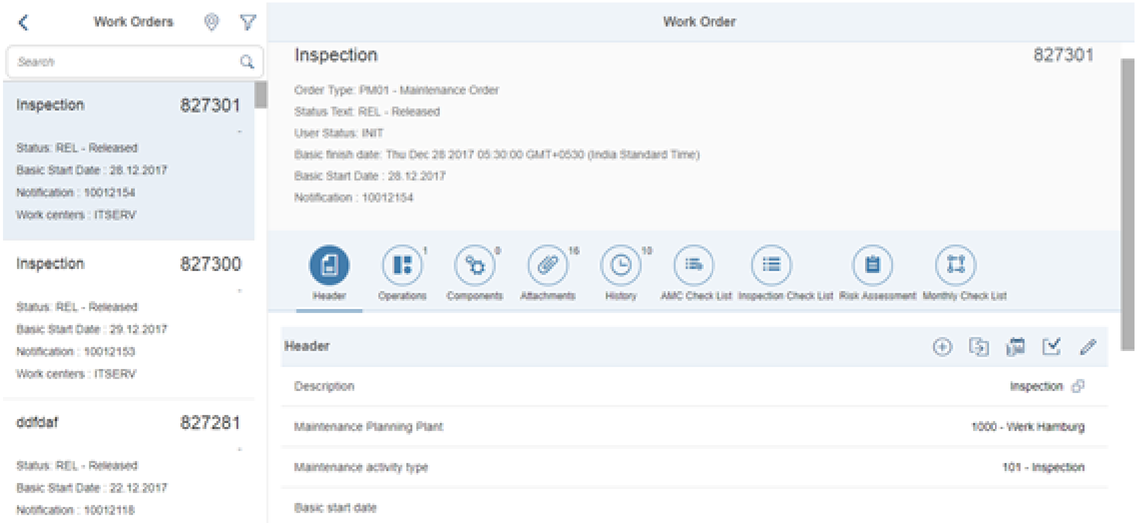


Figure 19-5 UI5 Screen 2



Microsoft Windows

Figure 19-6 Windows Screen 1

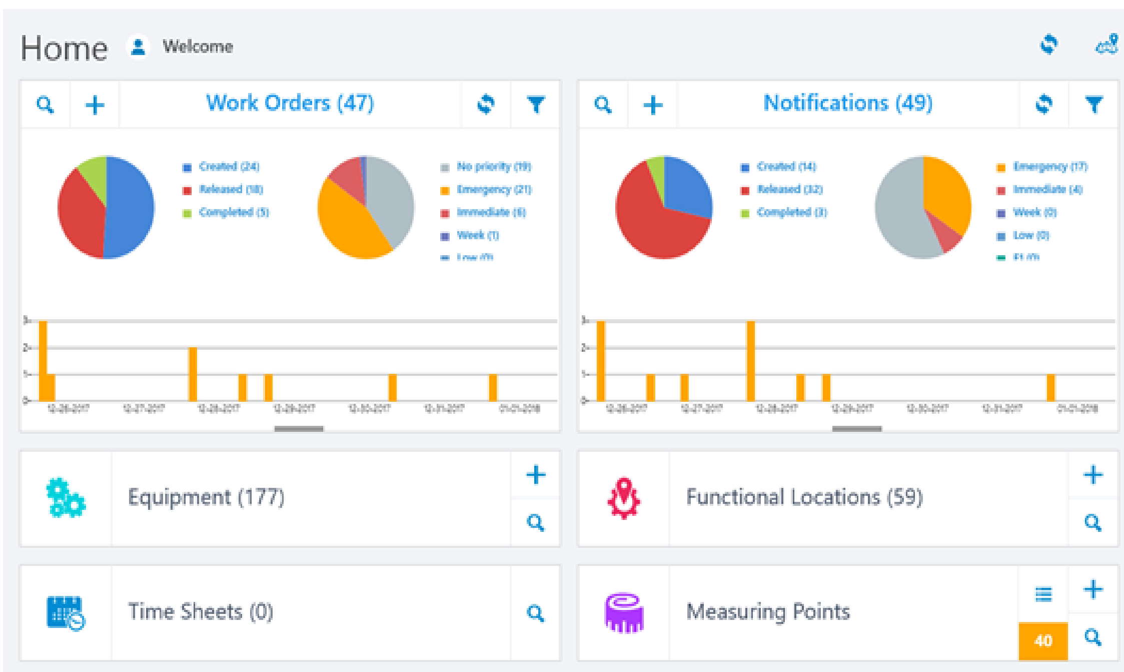


Figure 19-7 Windows Screen 2