PUBLIC
SAP Asset Manager
Document Version: 4.0 1911 – 2020-04-24

SAP Asset Manager User Guide

THE BEST RUN SAP

Content

Document History

Before you begin reading this guide, be sure that you have the latest version. Find the latest version at https://help.sap.com/viewer/product/SAP_ASSET_MANAGER/p/en-US.

The following table provides an overview of the most important document changes.

Document Version	Date	Description of Changes
1.0	NOV 2019	Original release of the *SAP Asset Manager User Guide*, version 1911
1.1	APR 2020	Removed Equipment and Funcational Location bullet points from the Working with Notes [page 27] topic

1 About this Guide

The SAP Asset Manager User Guide is provided for end users of the SAP Asset Manager application.

The contents of this guide reflect the behavior and functionality of the SAP Asset Manager application as provided by SAP through the software installers for the application. SAP Asset Manager is developed and deployed on the Mobile Development Kit.

One of the benefits of the Mobile Development Kit platform is the ability to configure the behavior of the SAP Asset Manager application. Therefore, it is likely that differences will exist between the information documented in the *User Guide* and the final behavior of the application for your implementation. In some implementations, the differences between the guide and the actual configuration of the application will be significant.

2 SAP Asset Manager Overview

The SAP Asset Manager application manages work orders, notifications, condition monitoring, material consumption, time management, and failure analysis.

SAP Asset Manager is a predictive asset management application that encompasses a series of processes required to assure superior asset performance. Through using SAP Asset Manager, you can achieve operational excellence by collaborating on asset information, predictive maintenance, and procurement of spares and services.

A typical SAP Asset Manager technician process is as follows:

1. Technician downloads work orders generated through planned, predictive, or corrective processes.
2. Technician travels to location of equipment under maintenance.
3. Technician captures field data while performing equipment maintenance work.
4. Technician reports time and material consumption.
5. Technician interacts with crew, team leads, suppliers, contractors, and back office colleagues.

2.1 SAP Asset Manager Functionality

SAP Asset Manager leverages the digital core with SAP S/4HANA and as the Internet of Things (IoT) platform for managing assets.

The SAP Asset Manager application supports technicians who maintain enterprise assets. It allows them to perform their jobs using complex information and business logic that is always available whether they are connected to the network or working in offline environments.

The following are the main components of the SAP Asset Managerapplication. All of the following are discussed in more detail further on in the *User Guide*.

Work Orders

Work orders are assigned to you from the back end. A work order is assigned to you because of a customer issue or a planned repair job.

Notifications

A notification is assigned to you when there is an unplanned malfunction with objects you require to perform your planned work that you need to repair. A notification could also be assigned to you when you perform maintenance work at a site.

Maps

The map feature allows you to see where your jobs and notifications are in relation to where you are currently located.

Equipment

Equipment are used in both jobs and notifications. They are individual, physical, objects, such as tools, computers, or buildings.

Measuring Points and Readings

Measuring points are associated with meters and sensors. Meters and sensors are always associated with assets attached to a job or notification.

Time Sheets

While you are working on your jobs and notifications, they are automatically tracking your time for you. However, you can manually modify your time using the Time Sheet tab.

2.2 SAP Mobile Add-On Overview

The SAP Mobile Add-On is the back-end system that processes all of the data for the SAP Asset Manager application.

It is called a *mobile add-on* because add-on components are extra functionalities that do not come with the main SAP product. Rather, they are built in afterwards, either by external, independent businesses, or by SAP itself to fit the individual needs of customers.

The mobile add-on sits above the core and accesses the same dictionary or repository objects and performs the same required functionality.

As a user, you will notice no difference on your mobile device when working on a system that is using a mobile add-on or not. However, it is good to be aware of the terminology.

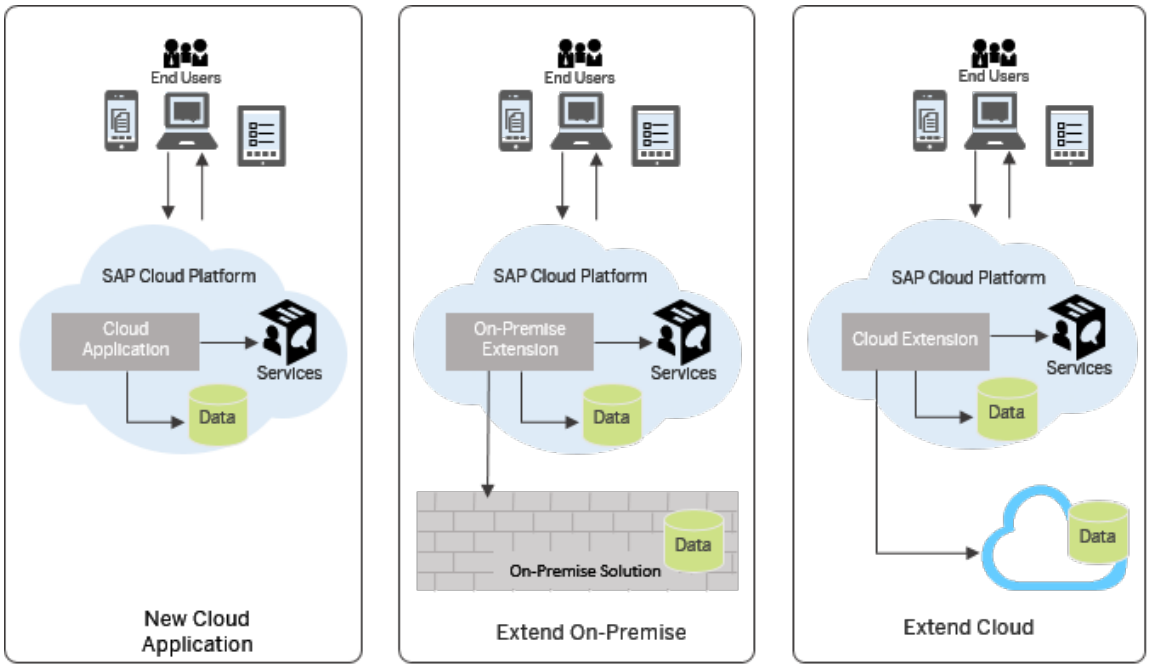
2.2.1 SAP Cloud Platform Overview

SAP Cloud Platform enables customers and partners to rapidly build, deploy, and manage cloud-based enterprise applications that complement and extend your SAP or non-SAP solutions, either on-premise or on-demand.

SAP Cloud Platform is an in-memory cloud platform based on open standards. It provides access to a feature-rich, easy-to-use development environment in the cloud. The platform includes a comprehensive set of services for integration, enterprise mobility, collaboration, and analytics. SAP Cloud Platform also leverages the real-time in-memory SAP S/4HANA database.

As a Platform-as-a-Service operated by SAP, our product frees your administrators from any infrastructure and IT costs and offers state-of-the art quality of service.

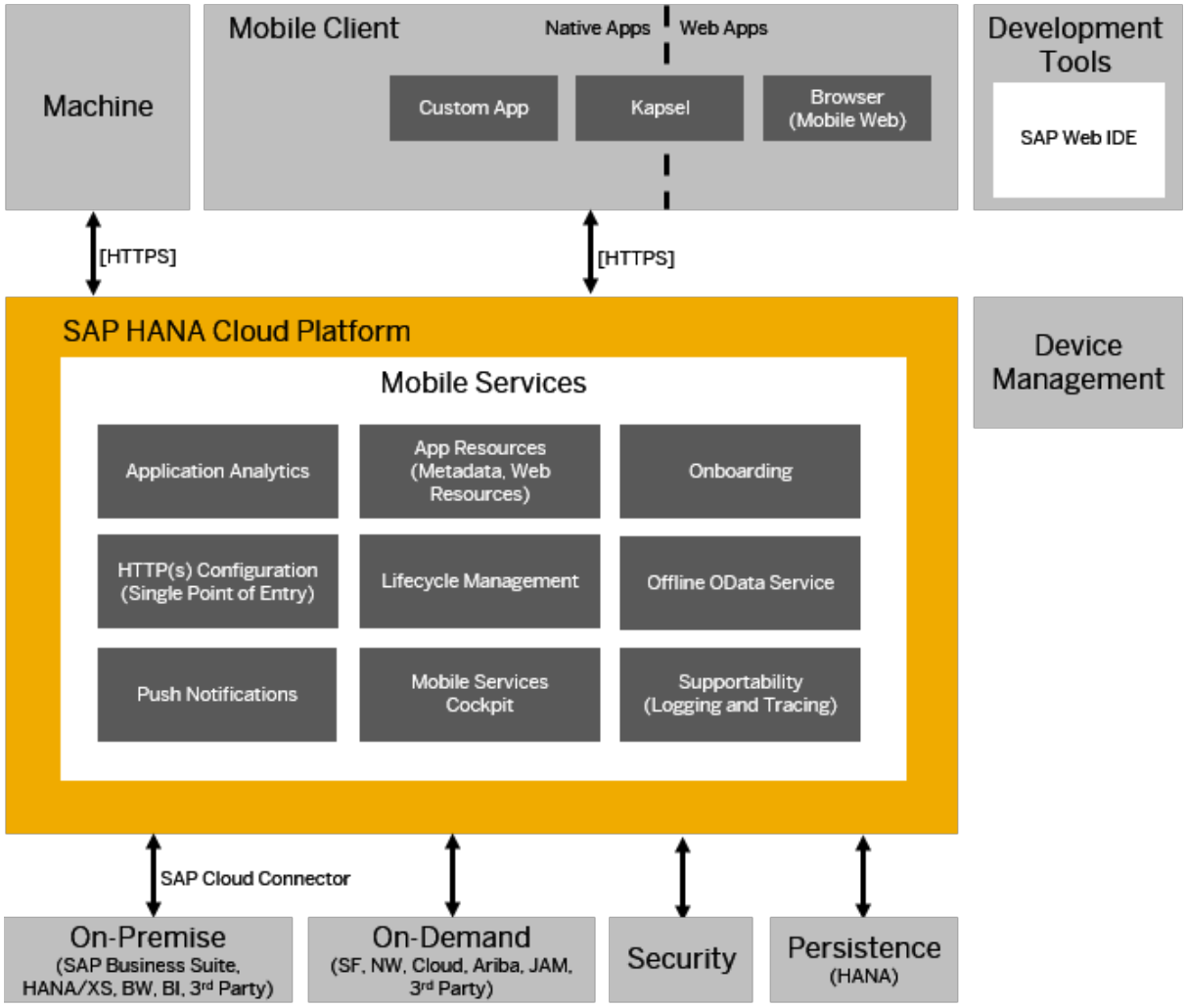
Scenarios



- Develop new cloud applications
  This scenario is suitable for companies that are developing new applications from scratch. You can create brand new cloud applications and reach your end customers easily, with a low learning curve and small capital investment in software and hardware.
- Develop on-premise extensions
  This scenario is suitable for companies that have already invested a lot in on-premise IT infrastructure. You can create the new extensions to the system on the cloud, and integrate seamlessly with the on-premise components using Connectivity Service and Cloud Connector.
- Develop cloud extensions
  At SAP Cloud Platform, you can also develop extensions to other cloud products, such as SuccessFactors.

2.2.2 SAP Cloud Platform mobile services Overview

SAP Cloud Platform mobile services provides services to mobile applications, such as application analytics, app resources, onboarding, and HTTP/HTTPS configuration.



Mobile application services consist of the following:

- **Application analytics:** Usage statistics that are displayed graphically in the Mobile Services Cockpit
- **App resources:** Containers of dynamic configurations, styles, or content that are downloaded by native applications
- **Onboarding:** Authentication of users who are registering through SAP Mobile Place
- **HTTP/HTTPS configuration:** Open standards for client communications
- **Life cycle management:** Managing and deploying multiple versions of an application
- **Offline oData service:** Optimizes data transport between the back end and the client offline store
- **Push notifications:** Native notifications sent from back-end systems to the server, which forwards them on to the clients
- **Mobile Services Cockpit:** Deploys, manages, and monitors applications
- **Supportability:** Logs for monitoring system health and troubleshooting

SAP Cloud Platform mobile services can expose on-premise back end services through SAP Cloud Connector, and on-demand back end services directly.

SAP Cloud Platform mobile services security enables you to use an on-premise identity management system for on-demand applications. You can use basic authentication using LDAP, or form-based application authentication using SAML.

All configuration and runtime data is persisted in an SAP S/4HANA database.

2.3 How SAP Applications Work on Your Mobile Device

A client application runs on your mobile device. The application tracks your work, time spent on your work, as well as other measurements, depending on the application.

When you enter new measurements into the SAP Asset Manager client application, the client saves that information on the mobile device. To update the SAP database with those new measurements, you perform a sync, or transmit to the back end.

A sync is a connection between the mobile device and a component of SAP Asset Manager called the SAP Cloud Platform. The SAP Cloud Platform connects to the SAP database and updates it with the new information entered on your mobile device. The SAP Cloud Platform also downloads any new information from the SAP Mobile Add-On database and passes it back to your mobile device.

When the client application and SAP Cloud Platform connect, the client sends the SAP Cloud Platform any changes you made on the application since the last sync. The SAP Cloud Platform updates these changes to the SAP Mobile Add-On database. The SAP Cloud Platform also retrieves any new information related to your work, including work orders, locations, or equipment since the last time you performed a sync. Once the transmit is complete, you will see the new information displayed on your client.

During a sync, the SAP Cloud Platform can add or change functionality on your mobile client application. The changes can alter the appearance of the client, such as adding a new button or a new screen. These changes are possible, as the client application is easily modified by developers to keep the application up to date with your current needs and responsibilities. No special actions are required when you receive application changes during a sync. For example, you do not need to restart the client on your mobile device. Your job site should notify you ahead of time when application changes occur, and provide training on these changes.

Your mobile device does need access to your work network when performing a sync. Be sure you can access your work network through a modem connection, a network card and cable, or a wireless connection when you sync. How to transmit is discussed in the Syncing to the SAP Back End [page 18] topic.

3 Installing the SAP Asset Manager Client

When you first install and start the SAP Asset Manager application, a demo version is loaded, complete with demo data. Use the demo version to acclimate yourself to the app before connecting to the SAP Cloud Platform.

Prerequisites

A connection to the internet is required so you can download the SAP Asset Manager application.

Context

Download the SAP Asset Manager application to your mobile device from the App Store (iOS) or SAP Software Download Center (Android). A demo version is initially loaded. When you are ready to begin working with the true application, exit the demo, log in, and begin working.

> **i** Note
>
> Your iOS mobile device version must be 12.4.3 or higher. Your Android mobile device version must be 8x (Oreo) or 9x (Pie).

Procedure

1. In the App Store Search box, type **`SAP Asset Manager`** and tap *Search*.

   The application description opens.
2. Tap *Free* and then tap *Install*.

   The SAP Asset Manager client application is downloaded from the store. After the download, an SAP Asset Manager application icon appears on the mobile device.
3. Tap the icon to open the application.

Results

The SAP Asset Manager client is installed on your mobile device. See the Initial Log In to SAP Asset Manager [page 13] procedure for information on how to access the application and begin work.

> **i Note**
>
> To check the version of the client software, tap the *Information* icon on the *Module* screen of the mobile device.

3.1 Initial Log In to SAP Asset Manager

During the initial logon process, set a numerical passcode to unlock the application without having to enter your user name and password each time the application or the mobile device is locked.

Context

To work with the SAP Asset Manager application, first log in with a corporate user name and password. Then, set a secondary personal passcode known only to you to easily unlock the application when it is locked on your device. You do not need to enter your user name and password after the initial log on, only the passcode.

Touch ID is supported on both iOS and Android models with the capability and with users who choose to implement the Touch ID feature.

Procedure

1. Tap on the SAP Asset Manager icon.

   The SAP Asset Manager splash screen appears.

   You can try out the app in demo mode before using it porductively with your business data. To launch the app in demo mode, tap on *Try the Demo*, and ignore the steps below.
2. Tap the *Sign In* link and enter your logon credentials. If your administrator has preset your connection settings, tap the *Start* button to start the actual application and continue to *Step 3*. If the *Start* button is not visible, continue to the substeps.
   a. If the *Start* button is not visible after you install the SAP Asset Manager application, your administrator has sent you an e-mail with either a URL (iOS) or a QR code (Android) that provides a link to the client. Depending on your mobile platform, perform one of the following actions:
      - **iOS device:** Open that e-mail from the same device where you have installed, and copy and paste the URL into a Safari browser.
      - **Android device:** Download a QR code scanner application to your Android device and scan the QR code.

      Depending on your mobile platform, one of the following actions takes place:

      iOS device: The URL opens in Safari and provides the SAP Asset Manager client with additional settings needed. Once the settings are provided, the application opens again and the *Start* button is enabled.

Android device: The SAP Asset Manager client is launched with additional settings needed. Once the settings are provided, the application opens again and the *Start* button is enabled.

b. Continue to *Step 3* of the procedure.

3. Tap the *Start* button to start the application.

   The Log On screen displays.

4. **NOTE: Follow this step only if you did not follow the substeps in** *Step 2***.** Enter your e-mail, ID, or user name in the top field. If you are unsure of what to enter, ask your administrator. Enter your `<Password>` in the bottom field. Check the `<Remember me>` box so that you do not need to keep entering your user name and password between application uses. Tap the *Log On* button.

   The Authorize Client screen displays.

5. Tap the *Authorize* button to authorize your mobile device.

   The End User License Agreement (EULA) displays.

6. Tap *Agree* to accept the EULA.

   The Set Passcode screen displays.

7. Choose a personal passcode and type it into the passcode field, following the directions given to you on the screen. Use this passcode to unlock the SAP Asset Manager application when it times out after a period of inactivity, or after you lock your device and unlock it again. Be sure to remember your passcode.

8. After the passcode guidelines are met, the *Next* button is active and you can select it. When you are satisfied with your passcode, tap *Next*.

   The Set Passcode screen appears again so you can confirm your passcode.

9. Type in the same passcode into the `<Passcode>` field to confirm your passcode and tap the *Done* button.

Results

The SAP Asset Manager application performs an initial transmit to bring down all of your jobs, notifications, assets, equipment, and other objects. Depending on the size of your application, the transmit could take several minutes. When finished, the main *Overview* screen is shown and you are ready to begin to work with the application.

4 Common Functions for SAP Asset Manager

4.1 Logging in to SAP Asset Manager

To perform any work on the SAP Asset Manager application, log in with your passcode.

Tap on the SAP Asset Manager icon on your mobile device to start the mobile application.

> **i** Note
>
> If this is your first time logging on to the application, see the Initial Log In to SAP Asset Manager [page 13] procedure for more details.

4.2 SAP Asset Manager Overview Screen

After you log into SAP Asset Manager, the application takes you to your personalized Overview screen.

If extra components are installed (Customer Service, Meter Management, Crew Management and Field Operations Worker), and depending on which objects are included in the service or work orders assigned to you, you may not see all of the sections described in this topic on your Overview screen.

At the top left of the screen is a small circle with your selected profile picture. Tap the circle to access your profile settings. See Profile Settings Overview [page 17] and the subtopics for more information.

Next, you see a map of your immediate surroundings. You can view your assigned work orders and notifications on the map. Tap on an icon to view more details about the work order or notification. See Maps Overview and Settings Options [page 95] and associated topics for more information.

Below the map is your *High Priority Work Orders*. Here, you find a list of all of your high and very high priority work orders. Unless your administrator has configured the SAP Asset Manager application differently out of the box, you see the priority, due date, and order ID of the work order.

> **i** Note
>
> If the Customer Service component is used, the section is labeled *High Priority Orders*.

Following the *Time Sheets* section are multiple subsections. Tapping on a subsection takes you to the detail screen for the object. For example, tap on *Notifications* to access the Notifications Detail screen. If your assignments do not contain any of the objects, the subsection does not appear on your device. That is, until a work order contains a note, you do not see the *Notes* subsection on your Overview screen.

- **Work Orders:** See the *Working with Work Orders* chapter
- **Operations:** See the How to Work with an Operation or Suboperation Maintenance Activity [page 36] topic and subtopics

- **Notifications:** See the *Working with Notifications* chapter
- **Equipment:** See the *Working with Equipment* chapter
- **Reminders:** See the Adding and Editing Reminders [page 16] topic
- **Functional Locations:** See the Working with Functional Locations [page 27] topic

4.2.1 Adding and Editing Reminders

Use the *Reminders* section on the SAP Asset Manager Overview screen much like you would a To Do list or a PostIt note to yourself.

Access your main Reminders list from the SAP Asset Manager Overview screen. Here, you can add additional reminders or edit the current reminders. You can also add or edit reminders from any job or notification detail screen.

Adding a Reminder

You can add a reminder from the main SAP Asset Manager Overview screen, an individual work order details screen, or an individual notification details screen:

- From the main SAP Asset Manager Overview screen, tap in the *Reminders* section to access the main Reminders screen. Then tap the + icon to add a new reminder.
- From the main Work Order detail screen, tap on a single work order to access the details screen for the work order. Then tap the + icon and select *Add Reminder*.
- From the main Notifications detail screen, tap on a single notification to access the details screen for the notification. Then tap the + icon and select *Add Reminder*.

No matter which path you take to add your reminders, they all are saved to one main list; the Reminders list, which is located on the main SAP Asset Manager Overview screen. Unlike notes, your reminders are not saved to a particular work order or notification, though you may start the process of adding your reminder from a work order or notification.

Once you reach the Add Reminder screen, type a *Name* for your reminder in the `<Name>` field. If you are working within a notification or a work order, you may consider adding the work order or notification number in the name. Then, add your description in the `<Description>` field and tap *Save*.

Your reminder is saved to the Reminders list, viewable on the main SAP Asset Manager Overview screen.

Editing a Reminder

You can edit any reminder on your Reminder list. To edit a reminder, navigate to the main SAP Asset Manager Overview screen and tap on the Reminder list to access the full list of reminders. Find the reminder you wish to edit and tap on it. Tap *Edit*. Make your changes, then tap *Save* to save your changes.

Discarding a Reminder

To discard a reminder, tap the desired reminder you wish to discard, then tap *Edit* to enter edit mode. Tap *Discard* at the bottom of the screen to discard the reminder. Tap *OK* in the confirmation window to confirm the discard. The reminder is no longer in your list of reminders.

4.2.2 Profile Settings Overview

4.2.2.1 Changing Your Passcode

If you feel your SAP Asset Manager was compromised, you can change your passcode.

Context

At times, you may want to change the passcode you use to access the SAP Asset Manager application. Or, your company may have a policy requiring you to change your passcode at regular intervals.

Procedure

1. From the main SAP Asset Manager Overview screen, tap on your profile icon on the top left of the header bar.

   The Profile Settings screen displays.
2. Tap the `<Touch ID & Passcode>` field.

   The Change Passcode screen displays.
3. Enter your current passcode in the field and tap either *Next* or *Done* to continue.
4. Choose a new passcode with a minimum of four digits and type it into the passcode field. Tap *Next* to continue.
5. Confirm your passcode by typing the same four digits you just typed in the previous step into the passcode field. Tap *Done* to complete changing your passcode.

Results

A popup message displays confirming that the passcode change is successful. You are returned to the main Profile Settings screen.

4.2.2.2 Getting Support for SAP Asset Manager

If you need additional help with the application, user assistance for SAP Asset Manager is a quick phone call, e-mail, or a FaceTime chat away.

At times, you may sync to the back end and SAP returns an error message to your device that is difficult to troubleshoot. Or, you might need some additional information that this *User Guide* does not cover, perhaps due to customizations on the application for the specific needs of your work orders. In these cases, SAP has provided you with a way to easily access customer support, in the way that you find most helpful. To access customer support:

From the main SAP Asset Manager Overview screen, tap on your profile icon on the top left of the header bar. The Profile Settings screen displays. Tap the *Support* field. The Support screen displays.

The *Contact Us* field has three icons: A phone icon (), a video camera icon (), and an e-mail icon (). Tap on the phone icon to call customer support. Tap on the video camera icon to start a FaceTime call with customer support. Tap on the e-mail icon to begin an e-mail to customer support. When you tap an icon, the call, FaceTime call, or e-mail begins automatically, so be alert to the fact in case you are not in a good area or ready to call.

4.2.2.3 Syncing to the SAP Back End

Sync to the back end after you finish your work day, or after you have created local objects on your client and want to transmit them.

Context

You can sync anytime you're online and a network connection is available. A sync is needed when you see the following symbol next to an object: 

When Sync Is Disabled

If a sync is already in progress, if you tap the *Sync* icon, a banner at the top of the screen appears stating that *Sync is already in progress*. A second sync doesn't occur and the original sync continues. Once the original sync finishes, you can start a new sync if desired.

If a sync is in progress, and you select to download a document, a message appears stating *Sync is in progress, will download after sync is complete*. After the sync finishes, your selected document download automatically starts.

Procedure

1. From the SAP Asset Manager Overview screen, tap on your profile icon on the top left of the header bar.

The Profile Settings screen displays.

2. Click the *Sync* field. Notice the time and date stamp below the sync field. This stamp tells you the last time you performed a sync.

   The application syncs with the back end. If any errors occur during the synchronization process, you can view them by tapping on the *Sync Errors* field.

Next Steps

If errors occur during the sync, continue to the topic Error Handling [page 21]. If you can't resolve the errors yourself, see the topic Getting Support for SAP Asset Manager [page 18].

4.2.2.4 Resetting the SAP Asset Manager Application

The SAP Asset Manager mobile application stores application data in its local databases on the client device. In the unlikely event your local database becomes corrupted, you can completely reset your application.

Context

> **i** Note
>
> Resetting the device is the only way to completely log out of the SAP Asset Manager application. Ensure that you want to completely log out of the application before performing a reset, as all nontransmitted data is lost after the reset occurs.

Procedure

1. From the main SAP Asset Manager Overview screen, tap on your profile icon on the top left of the header bar.

   The Profile Settings screen displays.

2. Tap the *Reset* field.

   A Confirm Reset dialog window displays.

3. Tap *OK* to confirm the application reset, or *Cancel* to cancel out of the reset.

   If you tapped OK, the application resets and you are returned to the original SAP Asset Manager Start screen.

4. See Initial Log In to SAP Asset Manager [page 13] for further instructions on how to continue with an initial logon.

4.2.2.5 Working with Activity Logs

Context

At times, if you are working with customer support, they may want you to enable activity logging and to set the log levels while you are using and transmitting with SAP Asset Manager. That way, they can look at the logs to help diagnose the underlying issues.

You can enable logging at multiple levels, or not enable it at all. If you set it at too high a level, it uses numerous resources, which does not help the functionality of the SAP Asset Manager. Therefore, when you are finished troubleshooting any issues on your device, best practices suggest returning logging levels to what they were at the time of the original SAP Asset Manager installation on your device.

To change or set a log level for customer support:

Procedure

1. From the main SAP Asset Manager Overview screen, tap on your profile icon on the top left of the header bar.

   The Profile Settings screen displays.
2. Tap the `<Support>` field, then tap the `<Activity Log>` field.

   The Support screen displays.
3. Tap the *Enable Logging* radio button so that logging is enabled.
4. Tap the `<Log Level>` field.

   The Log Level screen displays.
5. Select and tap the log level that customer support requested you record on your client device.

   A checkmark appears by the log level you selected.
6. Tap *Support* to return to the main Support screen.

Next Steps

After working on your client device for some time, or performing tasks that customer support requests, depending on your issue, tap the *Send Activity Log* link to send your activity logs to the back end for further investigation.

4.2.2.6 Error Handling

Sometimes, after a transmit, you're alerted by the application that errors in object transactions are preventing the sync of those objects. You can dismiss the errors or attempt to fix the objects before transmitting again.

Error Alerts

At times, when working with objects in SAP Asset Manager, you can introduce errors to an object or a transaction. If errors occur after you sync, an alert icon (⚠) appears on your profile picture on the main *Overview* screen. To fix or discard these errors, tap on your profile picture to access the *Profile* screen. To view the errors, tap on *Sync Errors*.

Fixing Errors

Often, when you read an error message, the issue with the erroneous object is apparent. You can fix these errors by editing the object. Tap *Fix* to fix the error.

The mobile device navigates to the object to which the error message is referring. Here, you can edit the object so that it doesn't return an error during transmit. Perform a sync. If the error message doesn't appear on the *Sync Error* screen, the error is resolved. If no other errors remain, the alert icon on your profile picture is removed. If other errors aren't resolved, the alert icon remains. You can attempt to fix the remaining errors or discard them.

If an error can't be fixed from the device, a pop-up message appears to let you know the error cannot be fixed through editing. Tap *OK* to discard the error and return the object to its original state.

Discarding Individual Errors

Deleting a selected error deletes all changes made to that object that includes the error and returns the object state to the state it was in at the last transmit. To discard an individual error, tap on *Sync Errors*. Tap on an individual error to view the error details. Tap *Discard* to discard that individual error.

If you don't discard all errors on the device, the alert icon remains on your profile picture on the main *Overview* page. If you tap on an error message where you've already discarded the transaction, a pop-up displays to alert you the transaction has been disarded and is no longer available.

Discarding All Errors

Once you tap on *Sync Errors*, tap on *Discard All* to discard all errors on the client.

Discarding all errors deletes all changes to the edited objects with errors. An example of a scenario where you would delete all errors on the client is meter installation. To discard the install, delete all errors. Deleting all

errors deletes the local entities created as well as the update transaction, and returns the objects to the state they were in at the last transmit. You can then attempt to install the meter again.

When you delete all errors, the alert icon is removed from your profile picture. If you tap on an error message where you've already discarded the transaction, a pop-up displays to alert you the transaction has been disarded and is no longer available.

4.3 Filtering Objects

Use a filter to view only objects you want to work with. Filters sort objects by various values that you select, depending on the type of object.

Many of the main objects you work with in SAP Asset Manager, such as work orders, notifications, and equipment, have a *Filter* option in the header bar. At times, object lists can get long, and scrolling or searching for objects in the lists becomes time consuming or even almost impossible. Use the *Filter* function to cut the list down to only the objects that meet the specifications you require at the moment.

> **i** Note
>
> Setting up a filter is not the same as creating favorite work orders. To learn more about creating favorite work orders, see Creating and Filtering Favorite Work Orders [page 23].

Creating an Object Filter

To set an object filter, tap the *Filter* option in the header bar to access the filter choices for that object. The values available for the object determine the sections for the object and the variables you can choose to filter within the sections.

Choose and tap a variable to filter at least one section. You do not need to select a variable in every section. You can select only one variable per section. When you are satisfied with your filter choices, tap *Done*.

Your object list is filtered according to your filter selections.

Removing an Object Filter

To remove an object filter, tap the *Filter* option in the header bar to access the filter choices for that object. Your filter options that you have selected for the object are highlighted in each section. Tap each option you want to remove so that it is not highlighted.

To completely remove a filter for an object, ensure that nothing is highlighted under the *Filter* option.

When you are finished, tap *Done*. Notice that the filter for the object is removed and your object list displays all objects again.

4.3.1 Creating and Filtering Favorite Work Orders

Use a Favorites filter to create your custom list of high and very high priority work orders.

Context

Procedure

1. From the main *Overview* screen, tap the *Work Orders* tab.

   The *Work Orders* detail screen displays.
2. Choose a *High Priority* or *Very High Priority* work order you wish to make a favorite and tap on it. The work order can have any status.

   The individual *Work Order* detail screen displays.
3. Tap the *Edit* icon () at the top right of the screen.

   The *Edit Work Order* screen displays.
4. If the work order is not marked as a favorite, tap the radio button next to the `<Favorite>` field to mark it as a favorite. If the work order is marked as a favorite and you want to remove it, tap the radio button to unmark it. Press *Done* when finished.

   A star icon () appears to the left of the work order description, denoting that you have marked it as a favorite. You can now filter this work order into a Favorites list.
5. If you are not already at the *Work Orders* detail screen, navigate to that screen and tap *Filter*.

   The Filter window displays.
6. Tap the *Favorite* button in the *Filter By* section. You can optionally select other choices in the other sections if desired. To set the filter, tap *Done*.

Results

Your *Work Orders* detail screen is now filtered according to your selected favorite work orders. To see all of your work orders again, remove the filter.

4.4 Searching for Objects

Use

If you see a *Search* bar at the top of the screen, you can perform a search for any object in SAP Asset Manager. For example, in SAP Asset Manager, release 3.0, you can perform a search for functional locations with assigned work orders or notifications.

How to Search for Objects

The search function is available on an object detail screen if the search icon () appears, and you see the *Search* bar at the top of the screen. For example, when you tap *Work Orders* from the *Overview* screen to access the *Work Orders* detail screen, the *Search* bar appears at the top of the screen.

When you perform a search, you are only searching the objects listed on the object detail screen you have displayed, and therefore only objects currently on your mobile device. If you do not locate the object you are looking for through a search, contact your administrator, as the object may not be located on your mobile device.

To perform a search:

1. Tap in the *Search* bar to start your search.
2. When the keyboard appears, type the name of the object you want to display. The more letters in the object name you type, the closer predictive text filters the object list to a match to your desired object. Type in as much of the name of the object as you want. You can stop when the list of objects reaches a short enough length for you to scroll through and find your object, or your object has been found through the search.
3. You can add more than one search term to filter the list further if necessary.
4. To start a new search or remove a search term, tap the *x* to the right of the search term or terms. The search term is removed. You can then add a search term or start a new search entirely on the same object list.
5. To return to the unfiltered list of objects, before you performed the search, tap *Cancel* in the *Search* bar. The search is canceled and the entire list of objects appears on the detail screen.

Performing a search is different than using a filter on an object list. To learn how to use filters, see the Filtering Objects [page 22] topic.

4.5 Editing an Object

You can edit any object on the SAP Asset Manager application, as long as you see an *Edit* action menu item.

Procedure

1. Tap on an object to access the detail screen of the object.

   The object detail screen displays.
2. Tap the *Action* menu icon (+) at the top of the screen and select *Edit [Object]*. With some objects, the word *Edit* appears at the top of the screen.

   The Edit [Object] screen displays.
3. Tap in the fields you wish to edit and edit those fields. You may not be able to edit some fields; those fields do not respond when you tap on them. Objects that are not locally created may have very few editable fields. Objects that you have created yourself will have more editable fields.
4. When finished with your edits, tap *Save*.

   Your changes are saved to the object.

Results

Remember to sync your device with the back end after making your edits so that your edits are transmitted to the back-end system. After you transmit a locally created object to the back end, many of its fields will no longer be editable if that object is reset back down to your client device.

If your sync results in an error or errors, see the Getting Support for SAP Asset Manager [page 18] topic, specifically the *Working with Activity Logs* section.

4.6 Working with Attachments

SAP Asset Manager supports viewing of attachments, or documents, on the mobile device. You can also add an attachment to a local object.

Attachments include Microsoft Office documents, PDF files, and other commonly used business documents including videos, pictures, and audio files. When you select *Attachments*, the details screen displays the attachments that are available for download.

If objects have attachments associated with them, only limited information about them is fetched during the sync with the back end. The actual documents are only downloaded to your device at your request through a push process.

Downloading and uploading documents are supported for the following objects:

- Work orders and associated subobjects
- Notifications and associated subobjects
- Equipment and associated subobjects
- Functional locations
- Tools

Downloading an Attachment to an Object

On your first initial sync between SAP Asset Manager on your client device and the back end, the only attachment, information downloaded to your device is the title of the attachment, the type of document it is, and the file size it will be after it is fully downloaded.

If the attachment has never been downloaded to your device, it displays a download icon (similar to the following: ) beside the attachment information. If the attachment was downloaded previously, the text beside the attachment information displays *Open*.

To download an attachment, tap on the attachment icon..A progress indicator displays, indicating that the document is being pushed to your device. When complete, the document displays on your mobile device.

To exit out of the document, tap *Documents*. To reopen any attachment, tap that document row. You do not need to redownload any previously downloaded attachment, even after a sync.

Attaching a Document to an Object

If you are in the *Edit* screen of an object and you see the + icon in the *Attachments* section, you can add a local document to that object.

Tap the + icon to start the process of adding an attachment to an object. A menu appears with the following options:

- **Take Photo**: Take a photo using the mobile device camera. Follow the popups to add a title and then add a description to your photo.
- **Choose From Library**: Select a photo or other type of document from the library on the mobile device. Follow the popups to add a title and then add a description to your photo or document that you selected from the library.

The photo or other type of document is successfully saved to the *Attachments* list as a local document. Be sure to sync to the back end to permanently save it to the attachments list.

4.7 Working with Notes

You can add or edit notes to many of the objects in the SAP Asset Manager application.

You can create or edit notes on the following objects:

- Work Order details screen
- Operations details screen
- An operations substep
- Follow-up work order
- Follow-up operations substep
- Measuring point reading

Adding a Note

To add a note to an object, tap the + icon and select *Add Note* from the menu. If the *Add Note* menu option isn't available, you can't add a note to the particular object.

The Add Note screen displays. Type your desired note into the `<Note>` field. When finished, tap *Save*. If a note already exists on the object, it's appended to the end of the already existing note.

4.8 Working with Classifications

Classifications identify and characterize similar objects. A building, computer, and centrifugal pump are types of classifications.A classification can also describe an event such as a broken water valve or an elevator door failure. Classifications are assigned to both equipment and functional locations in SAP Asset Manager.

If either an equipment or a functional location has classifications associated with it, a *Classifications* section displays on the main detail screen. Tap the section to view the Classifications Detail screen.

Tap any individual classification to view the detail screen for that classification. Here, you can see all the characteristic values of the object you selected. Tap an individual value to access the Edit Characteristic screen for the value. If needed, edit the value.

4.9 Working with Functional Locations

Functional locations, or FLOC, are elements of a technical structure. Think of FLOC as functional units within a system.

Functional location master data that are not related to work orders or notifications are vital for the service technician. Technicians can create work orders and notifications for functional locations that are physically nearby, even if they are not assigned to the technician.

If you have a long list of functional locations on your Functional Locations Detail screen, you can either perform a search for a specific functional location or use the filter function. See the following topics for information on how to use the filter and search features:

- Filtering Objects [page 22]
  You can filter based on the *Mobile Status* of the functional location. You can also *Sort by* ID, Description, Plant, Work Center, and Location. Other filtering options may become available to select depending on your *Mobile Status* and *Sort by* choices.
- Searching for Objects [page 24]
  Search for a specific functional location based on the displayed properties of the functional locations on your mobile device.

Access your functional locations list from the Overview screen.

You can perform the following actions on existing functional locations in SAP Asset Manager:

- Add work orders to a functional location. See Adding a Local Work Order [page 33].
- Add notifications to existing functional locations. See Adding a Local Notification [page 61]
- Add documents to a current functional location. See Working with Attachments [page 25]
- Add or dismantle equipment to a current functional location. See the following topics:
  - Installing Equipment [page 51]
  - Dismantling Equipment [page 52]
- Take readings of measuring points associated with functional locations. See the Measuring Points and Readings Overview [page 53] topic and subtopics.
- View and complete checklists, if any are associated with the functional location. See the Checklists [page 48] topic for more information.
- View related work orders, equipment, classifications, notifications, and business parters associated with the functional location
- View a functional location using hierarchal control. See the Hierarchy Control [page 50] for more information.

4.9.1 Hierarchy Control

When navigating using hierarchical node structures, you can tap on a parent to expand the node and view the children of the parent. You can also navigate up or down from that node location, opening or closing nodes as you go.

Hierarchy control is used to navigate both equipment and functional location lists. The hierarchical control views are used in the following locations and ways:

- Viewing an equipment hierarchy from the Equipment detail screen
- Viewing a functional location hierarchy from the Functional Location detail screen
- Viewing a functional location hierarchy from within a work order
- Viewing a functional location hierarchy from a notification
- Viewing an equipment hierarchy from the main Map view
- Viewing an equipment hierarchy from a notification
- Viewing an equipment hierarchy from an operation or a suboperation
- Viewing an equipment hierarchy from within a work order

- Viewing a bill of materials (BOM) hierarchy from an equipment

Viewing Lists Using Hierarchy Control

1. Tap on your selected object (equipment, functional location, or BOM) from the main object screen.
   The *Detail* screen for the selected object displays.
2. Tap the *Hierarchy Control* section for your selected object.
   The *Hierarchy Control* screen displays the selected object as the parent object, the child object of the parent object, and any children objects of the child object up to three levels deep in three columns. If the selected object is not the root oject, its parent object(s) display in the left overflow column.
3. Navigate through the hierarchy control by tapping on any parent or child object. Tapping on an object displays the detail screen of the object.

Selecting Items Using Hierarchy Control

When you use the add wizard to add either an equipment object or a functional location object that is part of a hierarchy, with a parent object and children objects, you use hierarchy control to select the desired object.

1. Tap on the + icon from the main object screen (either *Equipment*, *Functional Location*, or *Bill or Materials*) and select *Installation*.
   The *Install <Object>* window appears.
2. When you tap on an object to install that is part of a parent-child hierarchy, you'll see a small icon to the right of the object, indicating a hierarchy and the ability to select children objects under the parent. Under the icon is a numeral, indicating how many children are under the parent object.
3. To navigate back and forth between a parent and its children objects, tap the appropriate hierarchy control icon.

4.10 Working with Business Partners

Service orders, functional locations, and equipment can be linked to a business partner. Business partners are parties in which your company has a business interest. A business partner can be a customer, a prospect, a supplier, a competitor, or even an employee of your own company.

Most business partner information in the application is not editable. However, you can edit the business partner address and other location information to update it if necessary.

For an equipment or a functional location, tap on the main *Equipment* or *Functional Location* screen to access the *Business Partners* detail screen. Here, a list of the available business partners appears, with each business partner name and ID listed, as well as the partner type. For a service order, tap the *Business Partners* section on the main *Service Order* detail screen to access the *Business Partners* detail screen. Again, a list of the available business partners appears, with each business partner name and ID listed, as well as the partner type.

Tap a business partner to access the individual details for the partner. Individual details include contact details such as an address or a location for the partner, a phone number, or GPS coordinates, if available.

If you see the icons available, you can contact your business partner in the following ways: A phone icon (), a text icon (), and an e-mail icon (). Tap on the phone icon to call your business partner. Tap on the text icon to start a text message. Tap on the e-mail icon to begin an e-mail to your business partner. When you tap an icon, the call, text, or e-mail begins automatically, so be alert to the fact in case you are not in a good area or ready to call.

5 Working with Work Orders

5.1 Work Order Detail Screen

Use

A work order is a task that is assigned to you. Work orders are based on customer requests or they are created internally within the organization.

General Overview

The Work Order detail screen gives you a brief description of the work order, the work order location, and the steps to perform the work order. After you tap on a work order listing from the main Overview screen, or a map icon, you are taken to the Work Order Detail screen for the specific work order.

The work order header lets you know the work order status, priority, and due date. The work order header also gives you a brief description of the work order and the work required to perform the job. If analytics for the work order are available, they are displayed here, to assist you in diagnosing the issue.

The *Location* is displayed underneath the work order header. Depending on your site, the location could be a factory, a building campus, or in a city. If your site has maps enabled, you can use the maps functionality and GPS to help you locate your site.

After reaching your site location, use the *Operations* section to help you perform and complete your job. You can tap on any individual work order operation for more information, such as documents or more people to contact, if needed, for that operation, or step.

If there is any equipment associated with your work order, they are listed in the *Equipment* section underneath the operations. To see all of the equipment details for the equipment, tap on an equipment, or asset. Equipment details vary depending on the asset, but can include measuring points, the history of the asset, and any documents associated with the equipment.

The *Functional Location* section also displays equipment, but in this case, the equipment is tied to a specific place where you perform a maintenance-based task. Tap on the equipment in the Functional Location section to view the Functional Location detail screen and to perform maintenance duties on the equipment. For more information, see the Working with Functional Locations [page 27] topic.

Underneath the Functional Location section, there are sections for *Parts*, *Documents*, *Notes*, *Meters*, and *Related Notifications*. A number to the right of the section name lets you know how many objects are associated with that section, if any. For example, if two notes are associated with the job you tapped, you see a *2* to the right of the *Notes* field. Tap on any section to see that detail screen.

You can add the following to a work order by tapping the + icon at the top of the screen and selecting the appropriate menu item:

- Add Follow-up Work Order: See Adding a Follow-Up Work Order [page 35]
- Add Operation: See How to Work with an Operation or Suboperation Maintenance Activity [page 36]
- Add Part: See Issuing a Part [page 38]
- Add Note: See Working with Notes [page 27]
- Add Notifications: See Adding a Local Notification [page 61]
- Add Reminder: See Adding and Editing Reminders [page 16]

Tap the *Edit* menu item to edit the current work order displayed on the Work Order detail screen. To learn how to edit any object in the SAP Asset Manager, including a work order, see the Editing an Object [page 25] topic.

5.2 Changing the Status of a Work Order

Work orders in SAP Asset Manager can have statuses of Start, On Hold, and Completed. You can also Transfer a work order initially assigned to you.

Prerequisites

Before you can *Complete* a work order, perform any or all of the following procedures, if necessary. After you complete a work order, you cannot perform any more actions to the work order or objects within the work order.

- Issuing a Part [page 38]
- Adding a Part [page 40]
- Adding a Follow-Up Work Order [page 35]
- Adding a Local Notification [page 61]
- Taking a Single Measuring Point Reading [page 56] or Taking All Measuring Point Readings [page 55]

Context

You can both view and change the status of a work order in the work order detail screen. The current work order status is visible in a gray bubble directly underneath the work order title.

You cannot change a work order to a status of *Complete* until all the operations and suboperations are set to *Complete*. See How to Work with an Operation or Suboperation Maintenance Activity [page 36] for more information.

To change a work order status:

Procedure

1. Click to a work order detail screen, either from the main overscreen or from the map view.

   The *Work Order Detail* screen displays.
2. Tap the current status at the bottom of the screen and select one of the other statuses from the menu options.

Results

The status is changed on the work order details screen but is not updated in the back end until the next sync.

5.3 Adding a Local Work Order

Add a new work order to perform a specific task and record the details. Create a follow-up work order to an existing work order to complete additional work that wasn't specified on the original job.

Context

The steps to create either a new work order or a follow-up work order is the same. The only difference is that you create a follow-up work order on an existing work order, and you create a new work order as a standalone work order. Work orders are used for invoicing and billing purposes.

If you discover an issue that requires a repair, add a notification. See the topic Adding a Local Notification [page 61] for more information. If you determine that you must add a new maintenance activity, you can add a new operation. See the topic Adding a Local Operation [page 37] for more information.

You can add a work order to the following objects and views in SAP Asset Manager:

- Map module view
- Work order detail screen (see Adding a Follow-Up Work Order [page 35])
- Notification detail screen
- Functional location detail screen
- Equipment detail screen

Once you add a local work order, work with it as you would a work order that is sent to your device from the SAP back end. You can change the status and log time against it. You're allowed to discard a locally created work order no matter its status. If sync errors occur, you're allowed to fix them. When you sync to the back end, the work order is automatically assigned to you and appears on your device if the work isn't completed and you didn't transfer it to another person.

Procedure

1. Select *Add Work Order* from the + icon on the *Work Orders* detail screen if you're adding a new work order. Select *Add Follow-Up Work Order* from a specific work order detail screen using the + icon if you're adding a follow-up work order.

   The Add Work Order screen displays.
2. If you're creating a follow-up work order, many of the fields are already filled with the current work order information. Tap on the fields and change the information if they need editing. If you're creating a new work order, all fields are empty and the following fields are required:
   - Description
   - Planning Plant
   - Type
   - Priority
   - Business Area
   - Work Center Plant
   - Main Center Plant
3. Tap on any of these fields and fill in if needed, as they're optional:
   - Functional Location
   - Equipment
   - Note
4. Add an optional photo to the work order by tapping on the + icon in the *Attached Photos* section. Choose to add the photo either from the *Photo Library* or to *Take Photo*.
5. Tap *Done* when satisfied. Tap *Cancel* at any time to discard your changes and return to the *Work Order* detail screen.

Results

Your new local work order is created and added to the Work Order detail screen. The work order is sent to the back end the next time you transmit. Continue working with the work order, though note that you can't discard a work order once you've synced to the back end.

5.4 Working with Related Work Orders

The related work orders and pending work orders detail screen associated with an equipment shows you which work orders are relevant to that equipment, both currently and in the future.

The *Related Work Orders* detail screen in the SAP Asset Manager application displays both historical work orders completed for the current job and pending work orders that are still ongoing for the current job. Previous work orders are past work orders that are completed, and show both a start date and end date. Pending work orders work orders display a start date only.

Find the *Related Work Orders* section on the *Equipment* detail screen. If you do not see a *Related Work Orders* section, there are no work orders currently associated with the equipment. This section can appear on the *Equipment* detail screen whenever a work order is assigned to the equipment.

Tap the *Related Work Orders* section to access the *Related Work Orders* detail screen. The screen is split into two subscreens:

- **Previous Work Orders:** Past work orders assigned to the work order or the equipment
- **Pending Work Orders:** Current or future work orders assigned to the work order or the equipment

Tap on *See All* on either subscreen to view the complete list of work orders, if the list extends past the first page of the *Related Work Orders* detail screen. Tap on any work order row to view the details of that work order. All work order details are read only.

5.5 Adding a Follow-Up Work Order

If you discover that the site needs additional repairs while you are performing your current work order, you can add a follow-up work order using SAP Asset Manager.

Procedure

1. Click to a work order detail screen, either from the main SAP Asset Manager Overview screen or from the Map view.

   The work order detail screen displays.
2. Tap the + icon and select *Add Follow-up Work Order* from the menu.

   The Add Follow-up Work Order screen displays.
3. Fill in all fields. When done, tap *Next*.

   The Add Work Order Step screen displays.
4. Type a description in the `<Description>` field. Fill all other fields. When complete, tap *Save*.

Results

The follow-up work order is created. Sync to send the follow-up work order to the back end.

5.6 How to Work with an Operation or Suboperation Maintenance Activity

Operations and suboperations describe a sequence of maintenance activities.

Context

An operation includes the time, work center, and other controlling information for an individual maintenance task. In the operation text, or steps, the maintenance activity is described. To complete the maintenance activity, follow the steps in the operation text.

A suboperation represents an additional level of detail for an operation and is situated hierarchially below an operation. Multiple suboperations can exist under an operation. Suboperations are often used when multiple work centers are required. Suboperations are also used when employees with varying qualifications and skills are working simultaneously on the same operation.

You can access an *Operation* detail screen multiple ways:

- Tap the *Operations* section on the *Main* overview screen of the SAP Asset Manager application. The *Operations* detail screen displays. Select your desired operation from the list to display its *Operation* detail screen.
- Tap the *Operations* section on the *Work Orders* main screen. The *Operations* detail screen displays. Select your desired operation from the list to display its *Operation* detail screen.

Procedure

1. Click to your selected *Operation* detail screen using the navigational path of your choosing. For more information, read the *Context* section of this procedure.

   The *Operation* detail screen displays.
2. To ensure that you understand the directions before you start work, review all operation information and any suboperations.
3. Tap on the *Parts* tab and ensure that you have all parts available before you start work. If you do not have all parts available, put the work order on hold, and issue more parts to complete the work order successfully.

   For more information, see Changing the Status of a Work Order [page 32] and Adding a Part [page 40].
4. If any documents are available in the *Documents* tab, tap on them to download them. View them before starting the work order.
5. Begin at *Step 2*. Tap on each operation and suboperation and follow the instructions.
6. If the operation or suboperation contains equipment, perform a reading on the equipment. See Taking a Single Measuring Point Reading [page 56] for details.
7. Once each operation or suboperation is finished, tap *Complete* at the bottom of the screen.

Results

All operations and suboperations are marked as Complete.

Next Steps

Issue the parts that you used when working through the work order operations and suboperations. See Issuing a Part [page 38] for more details.

Once all operations and suboperations are completed, and you have issued all necessary parts, you can end the work order. See Changing the Status of a Work Order [page 32] for more information.

5.6.1 Adding a Local Operation

Operations describe a sequence of maintenance activities. You can add an operation to an existing work order.

Context

If you discover an issue that requires a repair, add a notification. See the topic Adding a Local Notification [page 61] for more information. Add a work order to perform a specific task and record the details. Create a follow-up work order to an existing work order to complete more work that wasn't specified on the original job. If you determine that you must add a maintenance activity, you can create an operation. See the topic Adding a Local Work Order [page 33] for more information.

Once you add a local operation, work with it as you would an operation that is sent to your device from the SAP back end. You can change the status and log time against it. You're allowed to discard a locally created operation no matter its status. If sync errors occur, you're allowed to fix them. When you sync to the back end, the operation is automatically assigned to you and appears on your device if the work isn't completed and you didn't transfer it to another person.

Procedure

1. Select *Add Operation* from the + icon on the *Work Orders* detail screen.

   The Add Operation screen displays.
2. Many of the fields are already filled with the current work order information. Edit these fields if desired by tapping on them and changing the information.
3. Tap *Save* when satisfied with your additions. To exit out of the *Add Operation* screen without saving, tap *Cancel* at any time to return to the *Work Orders* detail screen.

Results

Your new local operation is created and added to the *Operations* detail screen, available from the *Work Orders* detail screen. The operation is sent to the back end the next time you transmit. The operation is sent to the back end the next time you transmit. Continue working with the operation, though note that you can't discard an operation once you've synced to the back end.

5.6.2 Working with Parts

Parts, or components, are materials needed for a work order. Examples of parts are screws, computer monitors, or oil pumps.

To access the *Parts* detail screen, tap on the *Parts* section in the *Operation* detail screen of your selected work order. The *Parts* detail screen lists all parts required to complete the operation. To open the *Part* detail page, tap on a part on the list.

See the following procedures for information on how to work with parts:

- Issuing a Part [page 38]
- Adding a Part [page 40]
- Returning a Part [page 41]

5.6.2.1 Issuing a Part

Parts, or components, are materials needed for a work order. Examples of parts are screws, computer monitors, or oil pumps.

Context

After you finish your operations and suboperations, issue the parts you used to perform the work order. Spare parts, or service parts, are issued when they are used in production and plant maintenance. Keeping careful track of these parts helps your organization maintain a precise inventory and ensures that parts are available to all team members when they need them.

> **i Note**
>
> If the work order is set to *Complete*, you cannot perform any more actions to the work order, including issuing or adding parts.

Procedure

1. Click to a work order detail screen, either from the mainSAP Asset Manager Overview screen or from the *Maps* view.

   The work order detail screen displays.
2. Tap the *Parts* tab.

   The Parts detail screen displays.
3. Tap the part on the list that you wish to issue.

   The specific part detail screen displays.
4. Tap the + icon and select *Issue Part*.

   The Issue Part screen displays.
5. The *Plant* and the *Part* fields are automatically filled in for you. Tap in the `<Quantity>` field and type in how many parts were used. Then tap in the `<Storage Location>` field and select the storage location where you obtained the part.
6. When finished, tap*Save*

   The part is issued.
7. Continue to issue parts, following *Steps 1 - 6*, until all parts are issued for the work order.

Results

You have issued all parts for your work order. If you have used a part that was not on your parts list, see the Adding a Part [page 40] procedure.

Next Steps

Once all operations and suboperations are complete and all parts are issued, you can complete the work order itself. See Changing the Status of a Work Order [page 32]. To return unused parts after finishing the work order, see Returning a Part [page 41].

5.6.2.2 Adding a Part

Parts, or components, are materials needed for a work order. Some examples of parts are screws, computer monitors, or oil pumps.

Context

Most of the time, when you're working through your task list, all of the parts are already listed and waiting for you to issue after you finish your operations list. If all parts weren't originally listed on your parts list, you can add a part or parts to your work order to account for all of the parts used on the work order.

You can add a part from a work order, a piece of equipment, or from a part listed on a bill of materials.

> **i** Note
>
> If the work order is set to *Complete*, you can't perform any more actions to the work order, including issuing or adding parts.

Procedure

1. Click to a detail screen of a work order, either from the main SAP Asset Manager Overview screen or from the *Maps* view.

   The *Work Order* detail screen displays.
2. Tap the *Parts* tab.

   The Parts detail screen displays.
3. Tap the + icon.

   The Add Part screen displays.
4. To perform more than a local search on your mobile device for parts, ensure that your device is online and toggle the *Online Search* button to *On*. Note that if you aren't online, your search defaults to your local parts list.
5. Fill in all of the fields to add your desired part by tapping in the fields and selecting from the various options presented to you, or by typing in selections in the fields.
   a. You can manually add a part that isn't available in your plant by selecting *Text Item* and then filling out the *Description* field that appears. You can't issue manually entered parts, however.
   b. You can either search by serial number or physically scan a part to add it to the operation if serial numbers are available on the part. After you either scan or select apart by serial number, the part is added with a default quantity of 1.
6. When all fields are entered, tap *Save* to save and complete the part addition. Once you choose *Online Search*, some additional fields are available for you to fill out for your search.
   a. The unrestricted quantity available displays as a field during online parts search. You can add one or more of the selected part, up to the number listed as the available unrestricted quantity.

b. If you select a quantity of your chosen part that is greater than the available unrestricted quantity, a warning displays. Tap *OK* to exit the warning. Then correct the quantity.

Results

Your part is added to the Parts list. You can now issue the part. See Issuing a Part [page 38] for more information.

See Editing an Object [page 25] for general information on how to edit objects in SAP Asset Manager. Note that you can only edit a local part. That is, if you've added a part you searched for and added using *Online Search*, you can't edit that part.

Next Steps

Once all work order operations and suboperations are complete and all parts are issued, you can complete the work order itself. See Changing the Status of a Work Order [page 32].

5.6.2.3 Returning a Part

Parts, or components, are materials needed for a work order. Examples of parts are screws, computer monitors, or oil pumps.

Context

Once you have added parts, you can return any unused parts added to the work order.

> **i** Note
>
> If the work order is set to *Complete*, you can't perform any more actions to the work order, including issuing or adding parts.

Procedure

1. Click to a work order detail screen, either from the mainSAP Asset Manager Overview screen or from the *Maps* view.

   The Work Order detail screen displays.
2. Tap the *Parts* tab.

The Parts detail screen displays.

3. Tap an individual part you wish to return.

   The Part screen for the individual part displays.

4. Tap *Return*, found on the top right of the screen.

   The Return Part screen displays.

5. Fill out the quantity of the part you're returning in the `<Quantity>` field. Fill out other fields as needed. When finished, tap *Done*.

   A message displays saying the part is returned. If you've returned the entirety of that part, the *Return* menu option disappears.

Results

Your part is returned to its storage location. You can now add and reissue the part, unless you've manually entered a part that wasn't available in your plant. See Adding a Part [page 40] and Issuing a Part [page 38] for more information.

See Editing an Object [page 25] for general information on how to edit objects in SAP Asset Manager. Note that you can only edit a local part. That is, if you've added a part you searched for and added using *Online Search*, you can't edit that part.

Next Steps

Once all work order operations and suboperations are complete, all parts are issued, and unused parts are returned, you can complete the work order itself. See Changing the Status of a Work Order [page 32].

5.6.3 Managing PRTs

Unlike a fixed asset, production resources and tools (PRTs) are moveable (not stationary) operating resources that are required to perform an operation or suboperation and can be used repeatedly. In SAP Asset Manager, PRTs are based on equipment or material objects.

Equipment PRTs are maintained and serviced at regular intervals. You track the stock quantity of Material PRTs through the application.

You can add or edit PRT equipment details on an operation or a suboperation.

You can add a PRT resource by scanning serial numbers, if serial numbers are available.

Working with PRTs

To access the PRTs detail screen, navigate to an individual work order and tap *Operations*. From the Operations detail screen, tap the *PRTs* section to view all the details of the PRT. From the main PRT detail screen, you can see the equipment, material, and any miscellaneous items attached to the work order.

If a measuring point is associated with the PRT, a measuring point graph is displayed. Tap on the graph to show details of the measuring point. From the Measuring Point detail screen, you can take a reading of the measuring point. Tap on *Take Reading* to take a reading. See the Taking a Single Measuring Point Reading [page 56] procedure for details on how to take a reading.

Adding a PRT Resource to an Operation

You can add a production, resources, and tools resource to any operation or suboperation associated with a work order. To add a PRT:

1. From the main *Overview* screen, tap on *Work Orders*. Then tap on the individual work order that contains the operation or suboperation to which you want to add a PRT.
   The *Work Order* detail screen displays.
2. Tap on the *Operations* section. Then tap the particular operation to which you want to add a PRT.
   The *Operation* detail screen appears.
3. Tap on the *PRT* section. Then tap the + icon and select *Add Equipment*.
   The Add Equipment screen displays.
4. Navigate through the Add Equipment screens until you are through adding the new PRT equipment. When complete, tap *Done*.
   1. If serial numbers are available on the PRT resource, you can either search by serial number or physically scan a part to add it to the operation. After you either scan or select a PRT resource by serial number, the PRT is added with a default quantity of 1.

   The new PRT is added to the operation or suboperation.

Editing a PRT Resource

You can edit various fields in a PRT resource object. Select a single PRT in the *PRT* section to display the *Equipment* detail screen of the PRT. Then tap *Edit* to edit the object. For more information on editing an object, see the Editing an Object [page 25] topic.

Discarding a PRT Resource

You can discard a locally created PRT resource object. Select a single PRT in the *PRT* section to display the *Equipment* detail screen of the PRT. Then tap *Discard* at the bottom of the screen to edit the object.

6 Working with Equipment

6.1 Equipment Overview

Equipment are individual, physical objects that are maintained independently.

You can manage all types of objects as equipment. For example, an equipment can be test equipment, production resources, tools, or computers. Each equipment, or asset, has an individual maintenance history associated with it that you can contribute to and then sync your contributions to the back end.

Equipment are used in work orders, notifications, and functional locations.

> **i** Note
>
> If you are using the FOW add-on component, equipment is also used in stops on routes.

You can add work orders, notifications, equipment, notes, attachments, and readings to an equipment. See those topics in this user guide for more information:

- Adding a Local Work Order [page 33]
- Adding a Local Notification [page 61]
- Installing Equipment [page 51]
- Working with Notes [page 27]
- Working with Attachments [page 25]
- Taking a Single Measuring Point Reading [page 56]

6.1.1 Asset Central Overview

Asset Central links production systems and assets with manufacturing and maintenance business processes to reduce operational and maintenance costs and increase asset uptime.

Asset Central communicates with the Asset Intelligence Network back end. The Asset Intelligence Network is an SAP S/4HANA system.

The Asset Intelligence Network collects and tracks equipment information in a central repository. It facilitates collaborative asset management and lets you take full advantage of the Internet of Things (IoT). Organizations manage thousands of assets to keep their plants operational, which include machinery equipment. Timely maintenance is required to ensure that the equipment is working at an optimum level. Maintenance can be difficult due to heterogenous systems, missing information, or other challenges. Asset Intelligence Network can help to solve these issues.

Imagine you have three manufacturers: Manufacturer C providing a motor, and Manufacturer B providing a sensor to a larger manufacturer producing and manufacturing compressors. Once they ship those parts to Manufacturer A, they extract the data (component specifications, alerts, or indicators) from their back-end systems and send it to Manufacturer A, in a digital format. Manufacturer A, in turn, usually has a whole department receiving the data and putting it into their back-end systems, where they store all the data of their

assets and the supplied parts and components from other manufacturers. Once the compressor is manufactured, it is then shipped to the operator, along with the extracted data.

The operator has a back-end system as well, and one of those back-end systems may be a maintenance system to maintain the asset. To perform the maintenance activities, the operator usually needs data from the supplier, like data on how to maintain the asset, specifications, or alerts and indicators.

So here, in our example, the compressor, or what we call the digital twin of the compressor, resides in Asset Intelligence Network, as well as all the components of that compressor. The advantage of this is that the sub suppliers: Manufacturer C and Manufacturer B, can provide that information directly to Asset Intelligence Network. Manufacturer A only needs to provide information about that bigger asset, the compressor. The data to the two components (the sensor and the motor, or engine) is still available from Manufacturer C and Manufacturer B. And, they only need to integrate to one system.

On the side of the operator they can now connect their back-end system to only one platform. Before Asset Intelligence Network, it was hardly possible, because every manufacturer or supplier had their own manufacturer portal. Connecting to multiple manufacturer portals is not efficient. Now operating companies can connect their back-end systems to Asset Intelligence Network and fetch the data directly to their systems to get an insight into the data of an asset.

For more information on Asset Central functionality in SAP Asset Manager, see the following topics:

- PdMS Indicators [page 47]
- Checklists [page 48]

6.2 Equipment Detail Screen

The Equipment Detail screen gives you a brief description of the equipment, the equipment location, and a recent history of the equipment.

You can reach an individual equipment detail screen by tapping on the *Equipment* field on the main overview screen, then choosing your desired equipment from the list. Or, you can select your equipment by tapping on it from a work order or a notification detail screen to bring up the equipment detail view.

The equipment header lets you know the equipment name and ID. The work order header also gives you a brief summary of the issue and the priority assigned to the work order or notification.

The equipment *Location* is underneath the equipment header. Depending on the equipment site, the location could be a factory, a building campus, or in a city. If your site has maps enabled, you can use the maps functionality and GPS to help you locate the equipment site.

The *Equipment Details* section gives you details about the specific piece of equipment you selected, such as the plant location, work center, model number, inventory number, room location, or other details that your customer site determines are important for display on your device.

If the equipment has measurement points, a *Measurement Points* section is displayed. Here, you can see graphs of the measurement point readings, if available. Tap on the measurement points section to access the measurement points and to take readings of the points. Information on measurement points and readings is found further in this section, starting with the Measuring Points and Readings Overview [page 53] topic.

If additional subequipment are installed under the main equipment object, that equipment is listed in the *Equipment* section. The name of the equipment and details of the equipment are shown, and its installation

status. Tap on any equipment row to view details of the equipment and to dismantle the equipment. See Dismantling Equipment [page 52] for more information.

If attachments are associated with the equipment, they are listed in the *Documents* section. Note that by default only limited information regarding the attachments are fetched to the client. The attached content is downloaded to your device at your request through a push process. See the Working with Attachments [page 25] topic for more information.

Underneath the *Documents* section, there can be sections for *Hierarchy Control*, *Related Work Orders*, *Warranties*, *Classifications*, *Notifications*, *Business Partners*, *Indicators*, *Error Codes*, *Bill of Materials*, and *Checklists*. If no objects exist for a particular section, that section heading will not display. For example, if no notifications exist for the specific equipment, the *Notifications* section does not appear. A number to the right of the section name lets you know how many objects are associated with that section. For example, if two warranties are associated with the equipment you selected, you see a *2* to the right of the *Warranties* field. Tap on any section to see that detail screen.

Tap the *Edit* menu item to edit the equipment object displayed on the Equipment Detail screen. To learn how to edit any object in the SAP Asset Manager application, including equipment, see the Editing an Object [page 25] topic.

Tap the *Take Readings* menu item to take any readings on the measuring points associated with the equipment. See the Taking a Single Measuring Point Reading [page 56] topic for more information on how to take a reading.

6.2.1 Warranties

A warranty is a specific guarantee to vouch for defects or faults in the asset purchased or used, valid for a specific amount of time. The type and scope of the services covered, such as repairing a defect for free or taking the product back are defined in the warranty.

Tap on the main *Equipment* screen to access the *Warranties* detail screen. Two types of warranties are available in SAP Asset Manager; a customer warranty, and a supplier, or manufacturer warranty. Both types of warranties include the warranty ID number, the start date, and the end date of the warranty.

Tap on an individual warranty to access additional details for the warranty.

> **i** Note
>
> Warranties are read only.

6.2.2 Business Partners

For detailed information on business partners, see Working with Business Partners [page 29].

6.2.3 Classifications

When you are managing a large number of objects, you can group these objects according to particular and logical features. The hierarchical structure of classifications enables you to find specific objects starting from one top object, moving to multiple, lower level objects.

A classification hierarchy could look like the following example:

Pumps > *Rotary Pumps* > *Magnetically Coupled Pumps*

The classifications listed in the *Classification* section for each equipment let you know how each piece of equipment is categorized in the back end. Tap on any classification to view its characteristics, or the details of that classification.

You can edit classification characteristics. Tap on any classification characteristic line item to access its Edit Characteristic screen. Change the characteristic value to the new desired value and tap *Done*. If you did not want to edit the characteristic, tap *Cancel* to exit out of the edit screen.

6.2.4 PdMS Indicators

PdMS, or Predictive Maintenance and Service equipment indicators allow you to easily identify the health status of your equipment. PdMS is part of the Asset Central component, which relays information to and from the SAP Asset Intelligence Network back end.

For more information on how the PdMS predicts maintenance events subsequently predict business processes for operational excellence (planning, procurement, scheduling, execution), which lowers risk and improves asset availability, see the Asset Central Overview [page 44] topic.

> **i Note**
>
> If you do not see the *Indicators*PdMS predicts maintenance events to subsequently predict business processes for operational section on your *Equipment* detail screen for any equipment, then the Asset Central component is not installed on your mobile device. Talk to your administrator if you believe you should have access to this component.

Alerts, or indicators, are calculated from sensor data or health scores to give you information about the issues your equipment or a component on the equipment is experiencing. On the basis of the alerts, you can work to resolve the issues in question.

To view indicators, from the main *Overview* screen, tap on *Equipment*, then tap on the *Indicators* section. Note that not every equipment may have indicators. If an equipment does not have indicators, the *Indicators* section is not present.

The main *Indicators* screen displays. Here, you can view all of the indicators associated with the selected equipment. Indicators can measure various things: temperature, BPM, run hours, or a general health score, for example. Each equipment can have different indicators, and a different number of indicators. Each indicator can be set to automatically monitor and update to SAP Asset Manager at different intervals. And, each indicator can have different thresholds and values for you to monitor. Your site administrator will let you know which values are critical for your site.

Tap on any indicator row to view the detail screen for the individual indicator. Details for the indicator depend on the type of indicator, but generally include the indicator name, value, type of equipment, and indicator trend (whether the indicator has been trending up or down historically).

The main *Indicators* screen and all indicator detail screens are read-only.

While you cannot currently add work orders, service orders, or notifications through the individual *Indicator* detail screen, if action is needed due to an indicator setting, see the following topics:

- Adding a Local Work Order [page 33]
- Creating a Service Order [page 90]
- Adding a Local Notification [page 61]

6.2.5 Checklists

Checklists are lists of items that require inspection by you. Answers to questions on a checklist can be a simple yes or no, or a measurement reading, which then updates indicators.

The ASPM or Asset Strategy and Performance Management checklist, or questionnaire, gives you the ability to fill out safety checklists before you complete a work order. The answers you give on each checklist assigned to an equipment helps to identify functionality failures, failure modes, and effects. The checklist feature is included in the Asset Central component, which must communicate to the Asset Intelligence Network, to the Reliability-Centered Maintenance (RCM) app specifically, to function.

Use checklists to perform regular inspections on your equipment, including updating attributes and indicators. Checklists are used for maintenance purposes and to record inspection results. Checklists are also used when you are buying a new piece of equipment from a manufacturer. The manufacturer can prepare checklists on their equipment functionality.

Opening a Checklist

Your reliability engineer, or administrator, on the back end, will assign specific equipment-specific checklists on set cycles based on equipment factors like alarm settings or maintenance schedules.

1. Tap on a piece of equipment from the main *Equipment* screen.
   The *Equipment Detail* screen displays.
2. Tap the *Checklist* section.
   The *Checklists* detail screen displays, displaying a list of available checklists for that equipment. Each checklist shows a status of *Open*, *In Progress*, or *Completed*.

   > **i Note**
   >
   > You must complete all checklists associated with an equipment that is part of your work order before you can set your work order to Completed.

3. Select a checklist in your list that is in an *Open* or *In Progress* state. An *Open* state means that you have not started work on the checklist yet. *In Progress* means that you have started work on the checklist, but all questions have not been answered. *Completed* means that all questions have been answered. To open the checklist, tap on it.

The checklist opens.

4. A checklist can have one or more screens of questions. Answer the questions on each screen. Tap *Next* to move to the next screen. When complete, tap *Save* to save your checklist.

   > **i** Note
   >
   > You can write notes in the *Notes* section, if available, for each question. Adding text in the `<Notes>` field is optional.

   Your checklist for the equipment is complete. You can now complete the work order for the equipment, as long as no other checklists are open or in progress for that equipment.

Adding a Checklist

You can add a checklist that was not originally on your assigned checklist screen for your equipment, as long as a template for that checklist exists on the back end. For example, if an indicator on a piece of equipment reaches a set threshold, it can trigger the release of a template for you to access on your device. Fill out the template to alert your team of possible equipment issues and to improve equipment performance.

1. Tap on a piece of equipment from the main *Equipment* screen.
   The *Equipment Detail* screen displays.
2. Tap the *Checklist* section.
   The *Checklists* detail screen displays, displaying a list of available checklists for that equipment. Each checklist shows a status of *Open*, *In Progress*, or *Completed*.

   > **i** Note
   >
   > You must complete all checklists associated with an equipment that is part of your work order before you can set your work order to Completed.

3. Tap the *Action* menu (+) and select *Add Checklist*.
   The *Add Checklist* window displays.
4. Choose your `<Category>` and `<Template>` from the dropdowns choices provided. When finished, tap *Done*.
   Your new checklist is added to the *Checklists* detail screen. See the *Opening a Checklist* section for information on how to fill out and work with checklists.

Editing Checklists

You can edit a checklist as long as you have not set the work order associated with the checklist to Complete. To open and edit a checklist, tap on it.

6.2.6 Hierarchy Control

When navigating using hierarchical node structures, you can tap on a parent to expand the node and view the children of the parent. You can also navigate up or down from that node location, opening or closing nodes as you go.

Hierarchy control is used to navigate both equipment and functional location lists. The hierarchical control views are used in the following locations and ways:

- Viewing an equipment hierarchy from the Equipment detail screen
- Viewing a functional location hierarchy from the Functional Location detail screen
- Viewing a functional location hierarchy from within a work order
- Viewing a functional location hierarchy from a notification
- Viewing an equipment hierarchy from the main Map view
- Viewing an equipment hierarchy from a notification
- Viewing an equipment hierarchy from an operation or a suboperation
- Viewing an equipment hierarchy from within a work order
- Viewing a bill of materials (BOM) hierarchy from an equipment

Viewing Lists Using Hierarchy Control

1. Tap on your selected object (equipment, functional location, or BOM) from the main object screen.
   The *Detail* screen for the selected object displays.
2. Tap the *Hierarchy Control* section for your selected object.
   The *Hierarchy Control* screen displays the selected object as the parent object, the child object of the parent object, and any children objects of the child object up to three levels deep in three columns. If the selected object is not the root oject, its parent object(s) display in the left overflow column.
3. Navigate through the hierarchy control by tapping on any parent or child object. Tapping on an object displays the detail screen of the object.

Selecting Items Using Hierarchy Control

When you use the add wizard to add either an equipment object or a functional location object that is part of a hierarchy, with a parent object and children objects, you use hierarchy control to select the desired object.

1. Tap on the + icon from the main object screen (either *Equipment*, *Functional Location*, or *Bill or Materials*) and select *Installation*.
   The *Install <Object>* window appears.
2. When you tap on an object to install that is part of a parent-child hierarchy, you'll see a small icon to the right of the object, indicating a hierarchy and the ability to select children objects under the parent. Under the icon is a numeral, indicating how many children are under the parent object.
3. To navigate back and forth between a parent and its children objects, tap the appropriate hierarchy control icon.

6.2.7 Bill of Materials

A bill of material, or BOM, is a formally structured list of the components that make up a product or assembly.

A BOM list contains the object number of each component, together with the quantity and unit of measure. BOMs are used in different forms for various situations where a finished product is assembled from several component parts or materials. Depending on the industry sector, BOMs can also be called recipes, or lists of ingredients.

For information on how to use hierarchy control in a *Bill of Materials* detail screen, see the Hierarchy Control [page 50] topic.

You can add a part to a work order from a specific part you select from the *Bill of Materials* detail screen. Once you tap to the individual part screen, tap the + icon and select *Add Part*. For detailed information about adding a part, see the Adding a Part [page 40]

6.3 Installing Equipment

If a parent, or superior, equipment exists, you can install a child equipment to that parent.

Context

Use the following procedure to install a child equipment onto an existing parent equipment or functional location. You can only install equipment under already existing (parent), equipment or functional locations. If there is no equipment installed on the equipment or functional location you selected, the *Action* menu does not list the *Installation* or *Dismantle* options.

Procedure

1. Tap on a piece of equipment from the main *Equipment* screen.

   The *Equipment Detail* screen displays.
2. Tap the + icon and select *Installation* from the menu choices.

   The *Install Equipment* screen displays, with many fields automatically filled out from the parent, or superior, equipment.
3. Tap the `<Equipment>` field. When the *Select Equipment* window displays, choose the equipment to install. When finished, tap *Done*.

   A message appears to say that the equipment is installed.
4. Tap *OK* to take a meter reading or *Skip* to skip the meter reading and install the meter without reading it. To learn how to take meter readings, see the topic and subtopics in Measuring Points and Readings Overview [page 53].

Next Steps

You can now take a reading for the newly installed equipment. Tap the + icon and select *Take Reading* from the menu choices. See Taking a Meter Repair Reading [page 75] for more information.

To save your changes, be sure to perform a sync with the back end.

6.4 Dismantling Equipment

Context

Use the following procedure to dismantle, or uninstall, a child equipment from an existing parent equipment or functional location. Once the equipment is dismantled, it is then available to install under other parent equipment if desired.

You can only dismantle or install equipment under already existing (parent), equipment or functional locations. If there is no equipment installed on the equipment or functional location you selected, the *Action* menu does not list the *Installation* or *Dismantle* options.

Procedure

1. Tap on a piece of equipment from the main *Equipment* screen.

   The *Equipment Detail* screen displays.
2. Tap the + icon and select *Dismantle* from the menu choices.

   The *Dismantle Equipment* screen displays, with the parent, or superior, equipment listed.
3. Tap the `<Equipment>` field. When the *Select Equipment* window displays, choose the equipment to dismantle. When finished, tap *Done*.

   A message appears to say that the equipment is dismantled.

Next Steps

You can now install the equipment to other parent equipment or FLOCs. See Installing Equipment [page 51] for more information. To save your changes, be sure to perform a sync with the back end.

6.5 Measuring Points and Readings Overview

Measuring points are associated with meters and sensors. Meters and sensors are always associated with assets attached to a work order or notification.

Use

Measuring points describe the physical or logical locations at which a condition is described. For example, the coolant temperature in a nuclear power station after the coolant has left the pressure vessel, or the number of revolutions of a rotor shaft of a wind driven power plant. Measuring points are located on assets in SAP Asset Manager.

General Information

For information on taking a reading using measuring points, see the Taking a Single Measuring Point Reading [page 56] procedure.

You take measurement readings at measurement points in particular measurement units at particular intervals. For example, the temperature in degrees Celsius of the coolant in the coolant pipe that leaves the pressure vessel at the nuclear power station. Or, the number of revolutions per minute of the rotor shaft of the wind driven power plant.

Depending on the type of asset and the type of measuring point, enter the measuring point reading in one of three different forms:

Valuation	Use	Example
Quantitative	Enter the current reading measure into the application on your mobile device. The unit of measurement (degrees Celsius in the example) is defined by the characteristic of the master record of the measuring point.	February 2, 2017, 12:00 25°C

Valuation	Use	Example
Qualitative	Rather than a numerical type of reading, a qualitative reading is a descriptive reading for a measuring point. **i Note** You can only enter qualitative readings if your system was set up specifically for the measuring points concerned to accept qualitative readings.	February 2, 2017, 12:00 Temperature is normal
Combination of quantitative and qualitative	Enter the current measuring point reading in the system along with a valuation code	February 2, 2017, 12:00 25 degrees Celsius Temperature is normal

Measuring Point Ranges

A measurement point range represents the values that a measuring instrument or counter can display. For example, thermometers can measure temperatures in a measurement range between -20 and +45 degrees Celsius. Another example is that a tape measure can measure lengths in a measurement range between 0 and 10 meters.

6.5.1 Working with Analytics

SAP Asset Manager supports the following charts as analytical measuring tools:

- Bar charts: Compares similar groups of data
- Line charts: Shows trends or changes in data over time

If a line chart or a bar chart is not available for the measuring point, SAP Asset Manager can also use the last valuation code as a thumbnail.

When equipment contains a single measuring point or multiple points, the *Equipment* screen displays a thumbnail chart for each point. Tap on an individual thumbnail chart to access the larger, detailed, chart, and more details about the measuring point.

To take a measurement point reading, tap *Take Reading* at the bottom of any of the chart detail screens. For more information on taking a reading, see:

- Taking All Measuring Point Readings [page 55]
- Taking a Single Measuring Point Reading [page 56]

To view an *All Data* screen for a chart, tap on the *Details* section of the individual chart detail screen. The All Data screen is a running list of all of the readings taken for the measuring point. Tap on an individual reading to view a *Reading* screen with more details for selected reading.

6.5.2 Taking All Measuring Point Readings

Context

Note that not all work orders, notifications, or stops include equipment and not all equipment include measurement points. If your work order, notification, or stop does not have any equipment listed, or your Equipment Details screen does not have any measuring points listed, then you do not have to follow this procedure.

Use the single measuring point reading method if you do need detailed information about the measuring point before taking the reading, such as upper and lower limits, and characteristics of the measuring point. If you are not already aware of this information want to review it before taking your reading, follow the single measuring point reading method described in the topic Taking a Single Measuring Point Reading [page 56].

Procedure

1. Tap on the work order, notification, or stop within a route that has an equipment with a measurement point that requires a reading.

   The work order, notification detail, or stop detail screen displays.

   > **i Note**
   >
   > If you are using the Field Operations Worker component with SAP Asset Manager, you can also navigate to the equipment list directly from the Field Operations Worker Overview screen and select an equipment to see if it has a measuring point.

2. Tap the menu item *Take Readings* found at the top of the screen.

   The Take Readings screen displays.

   > **i Note**
   >
   > If you are using the Field Operations Worker component with SAP Asset Manager, you can also take readings by selecting equipment from the map on the Field Operations Worker Overview screen, and then tapping *Take Readings* found on the left of the screen.

3. For each reading, add your reading in the `<Value>` field. Add any other reading measurements in other fields (they are different for various measuring points). Optionally, type a note in the `<Note>` field. If you want to skip a specific measuring point, select *Skip*.
4. Tap *Done* to save the new measuring point readings.

   A message displays to let you know your measuring point readings were taken successfully.

Results

In the *Measuring Points* section, the reading charts are updated. If you navigate to each measuring point, the new measuring point reading information appears in the *Current Reading* section,. The previous measuring

point reading now appears in the *Previous Reading* section. Be sure to *Sync* your mobile client to send the measuring point reading information to the back end.

6.5.3 Taking a Single Measuring Point Reading

Context

Note that not all work orders, notifications, or stops include equipment and not all equipment include measurement points. If your work order, notification, or stop does not have any equipment listed, or your Equipment Details screen does not have any measuring points listed, then you do not have to follow this procedure.

Use the single measuring point reading method if you need detailed information about the measuring point before taking the reading, such as upper and lower limits, and characteristics of the measuring point. If you are already aware of this information and do not review it before taking your reading, you can use the multiple measuring point reading method described in the topic Taking All Measuring Point Readings [page 55].

Procedure

1. Tap on the work order, notification, or stop within a route that has an equipment, with a measurement point that requires a reading.

   The work order, notification detail, or stop detail screen displays.
2. Tap the specific equipment with the measuring point to read.

   The equipment detail screen displays.
3. Tap the specific measuring point to read from the *Measuring Points* section of the detail screen. If necessary, tap *See All* to display all measuring points associated with the work order or the equipment.

   The measuring point detail screen displays.
4. Tap *Take Reading*.

   The Take Reading screen displays.
5. Add your reading in the `<Reading>` field and tap *Done* when finished. Optionally, type a note in the `<Note>` field.
6. Tap *Done* to save your new measurement point reading.

   A message displays to let you know your measurement point reading was taken successfully.

Results

In the *Current Reading* section, the new measurement point reading information appears. The previous measurement point reading now appears in the *Previous Reading* section. Be sure to *Sync* your mobile client to send the measurement point reading information to the back end.

7 Working with Notifications

7.1 Notifications Overview

Notifications document maintenance tasks completely. You can use them for preliminary planning and execution of future work orders.

Use notifications to process maintenance orders and requests in the event of malfunctions of objects or equipment while you are working on a work order. You can also use notifications to document maintenance work on an object or equipment that you have performed while on a work order.

7.1.1 Notification Detail Screen

The *Notification (#)* detail screen displays a list of the notifications, a brief description of the notifications, and the due date for each notification. After you tap on a notification listing from the *Notification (#)* detail screen, or a map icon, you are taken to the individual *Notification* detail screen for the specific notification.

The notification header lets you know the notification status, priority, and due date.

The *Location* is displayed underneath the notification header. Depending on your site, the location could be a factory, a building campus, or in a city. If your site has maps enabled, you can use the maps functionality and GPS to help you locate your site.

If there is any equipment associated with your notification, they are listed in the *Equipment* section underneath the location. To see all of the equipment details for the equipment, tap on an equipment, or asset. Equipment details vary depending on the asset, but can include measuring points, the history of the asset, and any documents associated with the equipment.

The *Functional Location* section also displays equipment, but in this case, the equipment is tied to a specific place where you perform a maintenance-based task. Tap on the equipment in the Functional Location section to view the Functional Location detail screen and to perform maintenance duties on the equipment. For more information, see the Working with Functional Locations [page 27] topic.

The *Notification Items* section displays items associated with the notification. Items identify a problem, damage, or activity in greater detail than the original notification has described.

The *Notification Tasks* section shows you the tasks, or work, that is planned for you to accomplish while completing the notification.

If there are any activities, they are listed in the *Notification Activities* section. Activities are service or maintenance actions performed that are not the result of malfunction or damage.

The *Work Order* section lists any current related work orders associated with the notification. To learn more about work orders, see the *Working with Work Orders* chapter. See the Adding a Work Order [page 65] for more information on how to add a work order to a notification.

Underneath these main sections, there are sections for *Parts*, *Documents*, *Notes*, *Meters*, and *Related Work Orders*. A number to the right of the section name lets you know how many objects are associated with that

section, if any. For example, if two notes are associated with the job you tapped, you see a *2* to the right of the *Notes* field. Tap on any section to see that detail screen.

You can add the following to a work order by tapping the + icon at the top of the screen and selecting the appropriate menu item:

- Add Work Order: See Adding a Work Order [page 65]
- Add Item: See Adding an Item [page 64]
- Add Task: See Adding a Task [page 62]
- Add Note: See Working with Notes [page 27]
- Add Reminder: See Adding and Editing Reminders [page 16]

7.1.2 Making Status Changes to Notification Objects

When working with notifications, you make status changes to both the notification itself and the individual tasks within the notification.

To effectively work with a notification and to track your individual tasks within that notification,

SAP Asset Manager allows you to make status changes to both the entire notification as well as to individual tasks within that notification. That way, you know when you have started on a notification within your list but not yet started on any of the individual tasks, for example. Or, that you have started on the notification and have successfully completed two out of five of the tasks in the notification. Using the status changes is an easy way to track where you are with every notification and every task on your list.

> **i Note**
>
> You cannot reverse a status. Be sure that when you tap through to the next status change, the previous status is completed. For example, if you are not yet ready to start a notification, do not tap on *Started* if a notification is in the *Received* state. Only start a notification when you are ready to begin working on that notification.

Changing the Status of a Notification

You can change the status of a notification from *Received* to one of the following:

- Start
- On Hold
- Complete (must move to Start first)

From the main Notification list screen, tap on a notification to access the details screen for the notification. At the bottom of the screen, notice the notification status. Here, tap to change the status. At times, you may have to change the status of task items before you can continue to change the status of the entire notification. For instance, you must complete all tasks before tapping on *End Notification*.

When you have changed a status but not yet synced to the back end, the circular transmit arrow symbol appears to the left of the notification item on the main Notification list screen. When you have marked a notification as complete, the ability to change the status to any other status at the bottom disappears as well as the ability to edit the notification in any way.

When the Breakdown Box Is Checked

To complete a notification that has the *Breakdown* box checked, enter an end date into the `<Malfunction End Date>` field and an end time into the `<Malfunction End Time>` field using the *Edit Notification* screen.

Changing the Status of a Task

To change a task status, perform the same steps as you would when changing the status of the main notification. From the individual notification details screen, tap on a single task. The task details screen displays. At the bottom of the screen, notice the notification status. You can change a task status to the following, from the following order:

- Received
- Start Task
- End Task
- Task Success

Note that you can end a notification while a task is either in the *End Task* status or the *Task Success* status.

7.1.3 Related Notifications

The related notifications and pending notifications detail screen associated with an equipment shows you which notifications are relevant to that equipment, both currently and in the future.

Find the *Related Notifications* section on the *Equipment* detail screen. If you do not see a *Related Notifications* section, there are no notifications currently associated with the equipment. This section can appear on the *Equipment* detail screen whenever a notification is assigned to the equipment.

Tap the *Related Notifications* section to access the *Related Notifications* detail screen. The screen is split into two subscreens:

- **Previous Notifications:** Past notifications assigned to the equipment
- **Pending Notifications:** Current or future notifications assigned to the equipment

Tap on *See All* on either subscreen to view the complete list of notifications, if the list extends past the first page of the *Related Notifications* detail screen. Tap on any notification row to view the details of that notification. All notification details are read only.

7.2 Adding a Local Notification

Context

You can create a notification from the following detail screens in the SAP Asset Manager application:

- Main Map detail screen
- Equipment detail screen
- Functional location detail screen
- You can select an equipment or functional location from the main Map and add a notification to that equipment or functional location

Once you add a local notification, work with it as you would a notification that is sent to your device from the SAP back end. You can change the status and log time against it. You're allowed to discard a locally created notification no matter its status. If sync errors occur, you're allowed to fix them. When you sync to the back end, the notification is automatically assigned to you and appears on your device if the work isn't completed and you didn't transfer it to another person.

Procedure

1. Tap on the *Plus* icon (+) and select *Add Notification* from the menu list. You can't add a notification to this object in SAP Asset Manager unless you see the *Add Notification* menu item.

   The Add Notification screen displays.
2. Type a short description for the notification in the `<Notification Description>` field. Fill out the `<Notification Description>` field as it is mandatory.
3. Select a `<Type>` of notification, if the one automatically selected isn't the correct one.
4. Tap a `<Priority>` box if the automatically selected priority isn't the correct one.
5. Select a `<Functional Location>` from the list by tapping the arrow to the right of the field. Tap on *Add Notification* at the top of the screen.

   You're returned to the Add Notification screen.
6. Select an `<Equipment>` from the list by tapping the arrow to the right of the field if equipment is involved in the notification. Tap on *Add Notification* at the top of the screen.

   You're returned to the Add Notification screen.
7. Tap the *Breakdown* toggle switch if the notification involves a breakdown.

   A date and time are automatically added to the *Malfunction Start Date* and *Malfunction Start Time* fields. You can manually make changes to either the start date or time by editing the local notification.
8. Type a description in the `<Attachment Description>` field if you're attaching a photo.
9. Tap the *Photo* box to start the attachment process if you're attaching a photo.
10. Tap *Save* at the top of the screen when finished with your new, local, notification.

    The Add Notification Item screen appears.

11. Add an `<Item Description>`.
12. Select a `<Part Group>` from the list by tapping on the arrow to the right of the field. Tap on the *Add Notification Item* at the top of the screen to return.

    You're returned to the Add Notification screen.
13. Select a `<Part>` from the list by tapping on the arrow to the right of the field. Tap on the *Add Notification Item* at the top of the screen when finished.

    You're returned to the Add Notification screen.
14. Select a `<Damage Group>` from the list by tapping on the arrow to the right of the field. Tap on the *Add Notification Item* at the top of the screen when finished.

    You're returned to the Add Notification screen.
15. Select a `<Damage>` from the list by tapping on the arrow to the right of the field. Tap on the *Add Notification Item* at the top of the screen when finished.

    You're returned to the Add Notification screen.
16. Tap *Save* to save your new notification item when finished.

Results

The new notification appears at the top of the *Notifications* list. It's marked as a *[LOCAL]* notification, meaning it's only available on your mobile device, until you perform a sync with the back end. The notification is sent to your SAP back end the next time you transmit. Continue working with the notification, though note that you can't discard a notification once you've synced to the back end.

7.3 Adding a Task

Tasks are work that is planned under a notification.

Context

SAP Asset Manager uses tasks to plan the ways in which various people at your site or company can work together to process the notification and to perform the activities in the notification within a specified period of time.

Most of the time, your tasks for a notification are already set up for you on the back end by an administrator. In these cases, you will mark your tasks as started, ended, and successful. See Making Status Changes to Notification Objects [page 59] for more details.

Use the following steps to add a task to a notification:

Procedure

1. Tap on the *Notifications* field from the main *Overview* screen.

   The Notification List screen displays.
2. Select and tap on the notification to which you want to add a task.

   The Notification Details screen for that notification displays.
3. Tap the + icon and then select *Add Task* from the menu selections.

   The Add Notification Task screen displays.
4. Add a `<Description>` and select a `<Group>` and a `<Code>`. Add an optional `<Note>` if desired. When finished, tap *Save* to save your task.

Results

Your new task is saved in the *Notification Tasks* list as a local task. Be sure to perform a sync to save the new task to the back end.

7.4 Adding an Activity

An activity report describes a maintenance or service activity that was already performed, or one that was not the result of malfunction or damage.

Context

An activity report provides technical documentation of which activities were provided when and with what results. Typical examples of activities documented in activity reports are 'Fill up oil', 'Check pressure', or 'Tighten screws'.

Use the following steps to add an activity to a notification:

Procedure

1. Tap on the *Notifications* field from the main *Overview* screen.

   The Notification List screen displays.

2. Select and tap on the notification to which you want to add an activity.

   The Notification Details screen for that notification displays.
3. Tap the + icon and then select *Add Activity* from the menu selections.

   The Add Notification Activity screen displays.
4. Add a `<Description>` and select a `<Group>` and a `<Code>`. Add an optional `<Note>` if desired. When finished, tap *Save* to save your activity.

Results

Your new activity is saved in the *Notification Activities* list as a local activity. Be sure to perform a sync to save the new activity to the back end.

7.5 Adding an Item

Create a notification item to identify a problem, damage, or activity in greater detail than the original notification described.

Context

A notification can contain multiple notification items. You can enter data related to the notification in a notification item to determine additional problems, damages, or executed activities in greater detail.

Procedure

1. Tap on the *Notifications* field from the main SAP Asset Manager Overview screen.

   The Notifications details screen displays.
2. Select and tap the notification to which you want to add an item.

   The notification detail screen displays.
3. Tap the + icon and select *Add Item* from the menu.

   The Add Notification Item screen displays.
4. Fill out the `<Item Description>` field. Then fill out the rest of the fields and tap *Save* to complete the item.

Results

The notification item is added to the notification. See the *Post-requisites* section to add other details to the item. After you finish with the item, sync to the back end.

Next Steps

Once the notification item is added, tap the + and select the menu options from the menu to add the following optional additional details to the item:

- Add Cause
- Add Task
- Add Activity
- Add Note

7.6 Adding a Work Order

Context

If a notification does not yet have a work order associated with it, you can add a work order to the notification. If the notification already has work orders associated with the notification, the *Add Work Order* menu item is not available to you and you cannot add a work order to the notification.

You can tell if work orders are already associated with the notification if you see any work orders listed in the *Work Order* section. These work orders are current work orders. The work orders listed in the *Related Work Orders* section are historical, or past, work orders, that are related to the notification.

Procedure

1. Tap the + icon and select *Add Work Order*.

   The Add Work Order screen displays.
2. Fill out the fields. The `<Description>` field is mandatory. Tap *Done* when complete.

   The new work order is populated in the *Work Order* section.

Results

Notice that when you tap on your newly created work order, it has a *Notification* section displaying the details of the associated notification where you created the work order.

Next Steps

Be sure to sync your device to save your new work order to the back end.

8 Working with Meters

8.1 Meters Overview

Meter Management gives technicians access to SAP through a mobile device, with or without network access.

Using Meter Management, technicians can retrieve work orders assigned to them from the SAP system. Meter Management allows them to accomplish the following tasks:

- Meter installation
- Meter removal or replacement
- Meter disconnect or reconnect orders
- Periodic or aperiodic readings
- Meter repair orders
- Plant maintenance

Error Logs

When you sync to the back end after you modify a work order, you could get some sync errors. If errors occur:

1. Navigate to your profile page by clicking through to the main *Overview* screen, then tap on your profile icon.
2. Tap *Sync Errors* to open the Sync Errors screen.
3. Select an error and tap *Fix*. You are taken to the *Edit* screen for that object, so you can fix the issue.

Fix each error in this manner and then resync. If you cannot fix an error or errors, you can contact customer support. See the Getting Support for SAP Asset Manager [page 18] topic for more information.

8.1.1 Work Order Detail Screen with Meter Management Component

The *Work Order* detail screen with the Meter Management component is similar to the *Work Order* detail screen in the base SAP Asset Manager application, with a few key differences.

For an in-depth discussion of the Work Order detail screen, see the Work Order Detail Screen [page 31] topic. Here, only the differences between the two screens are discussed.

Meters Section

The *Meters* section provides you with a list of all of the meters and their details associated with the work order.

Connection Object Section

The connection object is the location, details, and the list of all of the meters associated with the work order.

Activity Section

The activity listed in the *Activity* section is the main task you are accomplishing when you start the work order. When you tap *Start Work Order* the *Edit Activity* screen automatically appears, to ensure that you have the proper activity selected for the meter work order.

See also the *Related Activities* subsection below the *Activity* main section. Tap in the related activities to view other activities associated with the work order.

8.2 Installing a Meter

Context

Work orders with a type of *SM01* are indicated in a bubble underneath the work order name. This indication tells you the meter is a new meter installation. Note that the Meter Management component must be installed with the base SAP Asset Manager application to handle this type of work order.

Procedure

1. Tap on a work order.

   The *Work Order Detail* screen displays. If the work order has a meter available, and the meter type is *SM01*, you are expected to install the meter.
2. Tap the + icon and select *Install Meter* from the menu choices.

   The Meter Install screen displays.
3. Fill out all fields. Fields can change depending on selections. When finished, tap *Done*.

   A pop-up displays, asking if you want to take readings for the meter.
4. Tap *OK* to take a meter reading or *Skip* to skip the meter reading and install the meter without reading it. See the topic and subtopics in Measuring Points and Readings Overview [page 53] to learn how to take meter readings.

Results

Upon successfully installing the meter, a message appears saying *Registers Updated*. You are returned to the Work Order Detail screen. The *Meters* section displays the newly installed meter or meters.

Next Steps

You can now take readings on the installed meters as required by your work order or customer site.

8.3 Uninstalling a Meter

Context

Work orders with a type of *CU01* are indicated in a bubble underneath the work order name. This indication tells you the meter is a meter uninstallation. Note that the Meter Management component must be installed with the base SAP Asset Manager application to handle this type of work order.

Procedure

1. Tap on a started work order. If the work order is not already started, start the work order.

   The *Work Order Detail* screen displays. If the work order has a meter available, and the meter type is *CU01*, you are expected to uninstall the meter.
2. Tap the meter in the *Meters* section you wish to uninstall

   The Meter Detail screen displays.
3. Tap *Uninstall* at the top right of the screen.

   The Meter Uninstall screen displays.
4. Fill out all fields. Fields can change depending on selections. When finished, tap *Done*.

   A pop-up displays, asking if you want to take readings for the meter.
5. Tap *OK* to take a meter reading or *Skip* to skip the meter reading and install the meter without reading it. See the topic and subtopics in Measuring Points and Readings Overview [page 53] to learn how to take meter readings.

Results

Upon successfully installing the meter, a message appears saying *Registers Updated*. You are returned to the Work Order Detail screen. The *Meters* section displays the newly installed meter or meters.

8.4 Replacing a Meter

Context

Work orders with a type of *RP01* are indicated in a bubble underneath the work order name. This indication tells you the work order is for a meter replacement. Note that the Meter Management component must be installed with the base SAP Asset Manager application to handle this type of work order.

> **i** Note
>
> When you replace a meter, it is the same as performing a removal and then an installation. Therefore, the screens you see are a combination of removing a meter and Installing a Meter [page 68].

Procedure

1. Tap on a started work order. If the work order is not started, start the work order.

   The *Work Order Detail* screen displays. If the work order has a meter available, and the meter type is *RP01*, you are expected to replace the meter.
2. Tap the meter in the *Meters* section you wish to replace. Note that the original, or initial meter, must display as *Installed* in the *Meters* section or you will not be able to perform a meter replacement on the meter.

   The Meter Detail screen displays.
3. Tap *Replace* at the top right of the screen.

   The Replace: Uninstall Meter screen displays.
4. Fill out all fields. Fields can change depending on selections. When finished, tap *Done*.

   A pop-up displays, asking if you want to take readings for the meter.
5. Tap *OK* to take a meter reading or *Skip* to skip the meter reading and install the meter without reading it. See the topic and subtopics in Measuring Points and Readings Overview [page 53] to learn how to take meter readings.
6. A pop-up displays, asking if you want to proceed to install the new meter. Tap *OK* to install the new meter or *Skip* to skip installation. See Installing a Meter [page 68] for instructions on how to install a new meter.

Results

Upon successfully installing the new meter, if you chose to install a new meter, a message appears saying *Registers Updated*. You are returned to the Meter Detail screen. When you return to the Work Order Detail screen, the *Meters* section displays the newly installed meter or meters as well as the uninstalled meter or meters.

8.5 Connecting and Disconnecting Meters

8.5.1 Reconnecting a Single Meter

Context

Work orders with a type of *RC01* are indicated in a bubble underneath the work order name. This indication tells you the meter can be a meter installation. Note that the Meter Management component must be installed with the base SAP Asset Manager application to handle this type of work order.

Procedure

1. Tap on a work order. If the work order is not already started, start the work order.

   The *Edit Activity* screen displays if you started the work order
2. Most fields may be automatically selected and correctly filled out already. Tap in any fields that you need to correct and make new selections.
3. Tap *Done* after selecting all appropriate fields in the *Edit Activity*

   The *Work Order Detail* screen displays. If the work order has a meter available, and the meter type is *RC01*, you are expected to either uninstall, disconnect, reconnect the meter, or take a meter repair reading. The menu options available to you from the *Action* menu guides you through the appropriate task.
4. Tap the meter in the *Meters* section you wish to connect.

   The *Meter* detail screen displays. Here you have the choice to either *Take Readings* on all of the meters before connecting them, or you can *Connect* the meters without taking a final reading. To learn how to take meter readings, see the topic and subtopics in Measuring Points and Readings Overview [page 53].
5. Tap *Connect* at the top right of the screen.
6. Fill out all fields on the *Connect Meter* screens. Fields can change depending on selections. When finished, tap *Done*.

   A pop-up displays, asking if you want to take readings for the meter. To learn how to take meter readings, see the topic and subtopics in Measuring Points and Readings Overview [page 53].
7. Tap *OK* to take a meter reading or *Skip* to skip the meter reading and install the meter without reading it.

   Upon successfully installing the meter, a message appears saying *Registers Updated*. You are returned to the *Work Order* detail screen. The *Meters* section displays the newly installed meter or meters.

Results

Both the meter connect and the connect status on the activity are complete. To complete the work order, see Changing the Status of a Work Order [page 32] and subtopics.

8.5.2 Reconnecting All Meters

Context

Work orders with a type of *RC01* are indicated in a bubble underneath the work order name. This indication tells you the meter can be a meter installation. Note the Meter Management component must be installed with the base SAP Asset Manager application to handle this type of work order.

Procedure

1. Tap on a work order. If the work order is not already started, start the work order.

   The *Edit Activity* screen displays if you started the work order
2. Most fields may be automatically selected and correctly filled out already. Tap in any fields that you need to correct and make new selections.
3. Tap *Done* after selecting all appropriate fields in the *Edit Activity*

   The *Work Order Detail* screen displays. If the work order has a meter available, and the meter type is *RC01*, you are expected to either uninstall, disconnect, reconnect the meter, or take a meter repair reading. The menu options available to you from the *Action* menu guides you through the appropriate task.
4. Tap the meter in the *Meters* section you wish to connect.

   The *Meter* detail screen displays.
5. Tap *Connect All* at the top right of the screen.

   The *Connect All Meters* screen appears, displaying a list of all meters you are connecting.
6. Tap *Done* to confirm the list of meters to connect.

   A message displays saying all meters are connected. You are then returned to the *Meter* detail screen.
7. If desired, tap on *Take Readings*, to take final readings for the meters. To learn how to take meter readings, see the topic and subtopics in Measuring Points and Readings Overview [page 53].

   Upon successfully installing the meters, a message appears saying *Registers Updated*. You are returned to the *Work Order* detail screen. The *Meters* section displays the newly installed meter or meters.

Results

Both the meter connect and the connect status on the activity are complete. To complete the work order, see Changing the Status of a Work Order [page 32] and subtopics.

8.5.3 Disconnecting a Single Meter

Context

Work orders with a type of *SM01* are indicated in a bubble underneath the work order name. This indication tells you the meter can be a meter uninstallation. Note that the Meter Management component must be installed with the base SAP Asset Manager application to handle this type of work order.

Procedure

1. Tap on a work order. If the work order is not already started, start the work order.

   The *Edit Activity* screen displays if you started the work order
2. Most fields may be automatically selected and correctly filled out already. Tap in any fields that you need to correct and make new selections.

   The *Work Order Detail* screen displays. If the work order has a meter available, and the meter type is *SM01*, you are expected to either uninstall, disconnect, reconnect the meter, or take a meter repair reading. The menu options available to you from the *Action* menu guides you through the appropriate task.
3. Tap the meter in the *Meters* section you wish to disconnect.

   The *Meter* detail screen displays. Here you have the choice to either *Take Readings* on all of the meters before disconnecting them, or you can *Disconnect* the meters without taking a final reading. To learn how to take meter readings, see the topic and subtopics in Measuring Points and Readings Overview [page 53].
4. Tap *Disconnect* at the top right of the screen.
5. Fill out all fields on the *Disconnect Meter* screens. Fields can change depending on selections. When finished, tap *Done*.

   A pop-up displays, asking if you want to take readings for the meter. To learn how to take meter readings, see the topic and subtopics in Measuring Points and Readings Overview [page 53].
6. Tap *OK* to take a meter reading or *Skip* to skip the meter reading and install the meter without reading it.

   Upon successfully uninstalling the meter, a message appears saying *Registers Updated*. You are returned to the *Work Order* detail screen. The *Meters* section displays the newly installed meter or meters.

Results

Both the meter disconnect and the disconnect status on the activity are complete. To complete the work order, see Changing the Status of a Work Order [page 32] and subtopics.

8.5.4 Disconnecting All Meters

Context

Work orders with a type of *SM01* are indicated in a bubble underneath the work order name. This indication tells you the meter can be a meter uninstallation. Note the Meter Management component must be installed with the base SAP Asset Manager application to handle this type of work order.

Procedure

1. Tap on a work order. If the work order is not already started, start the work order.

   The *Edit Activity* screen displays if you started the work order
2. Most fields may be automatically selected and correctly filled out already. Tap in any fields that you need to correct and make new selections.

   The *Work Order Detail* screen displays. If the work order has a meter available, and the meter type is *SM01*, you are expected to either uninstall, disconnect, reconnect the meter, or take a meter repair reading. The menu options available to you from the *Action* menu guides you through the appropriate task.
3. Tap the meter in the *Meters* section you wish to disconnect.

   The *Meter* detail screen displays.
4. Tap *Disconnect All* at the top right of the screen.

   The *Disconnect All Meters* screen appears, displaying a list of all meters you are disconnecting.
5. Tap *Done* to confirm the list of meters to disconnect.

   A message displays saying all meters are disconnected. You are then returned to the *Meter* detail screen.
6. If desired, tap on *Take Readings*, to take final readings for the meters. To learn how to take meter readings, see the topic and subtopics in Measuring Points and Readings Overview [page 53].

   Upon successfully uninstalling the meters, a message appears saying *Registers Updated*. You are returned to the *Work Order* detail screen. The *Meters* section displays the newly installed meter or meters.

Results

Both the meter disconnect and the disconnect status on the activity are complete. To complete the work order, see Changing the Status of a Work Order [page 32] and subtopics.

8.6 Taking a Meter Repair Reading

Meter repair readings are meter readings that are not on a regular schedule. They are entered manually in the back end by an administrator and attached to a work order.

Context

Work orders with a type of *SM01* are indicated in a bubble underneath the work order name. This indication tells you the meter is a meter for you to disconnect, reconnect, or take a meter repair reading. The menu options available to you from the *Action* menu will guide you through the appropriate task. Note that the Meter Management component must be installed with the base SAP Asset Manager application to handle this type of work order.

Procedure

1. Tap on a started work order. If the work order is not already started, start the work order.

   The Work Order Detail screen displays.
2. Look in the *Activity* section of the Work Order Detail screen. Here you will find details on the meters in the work order. A *meter repair* meter that needs a reading is a meter that is already disconnected.
3. Tap on the meter in the *Meters* section you wish to read.

   The Meter Detail screen displays.
4. Tap either *Take Readings* or *Take Reading*, depending on which menu item displays on the top right of your screen.

   The Take Reading or Take Readings screen displays.
5. To take a single meter reading or multiple meter readings, see the following procedures:
   - Taking All Measuring Point Readings [page 55]
   - Taking a Single Measuring Point Reading [page 56]

Results

In the *Current Reading* section, the new measurement point reading information appears. The previous measurement point reading now appears in the *Previous Reading* section. Be sure to *Sync* your mobile client to send the measurement point reading information to the back end.

8.7 Taking an Aperiodic Meter Reading

Aperiodic readings are meter readings that are not on a regular schedule. They are entered manually in the back end by an administrator and attached to a work order.

Context

Work orders with a type of *MR01* are indicated in a bubble underneath the work order name. This indication tells you the meter is an aperiodic meter. Note that the Meter Management component must be installed with the base SAP Asset Manager application to handle this type of work order.

Procedure

1. Tap on a started work order. If the work order is not already started, start the work order.

   The Work Order Detail screen displays.
2. Tap on the meter in the *Meters* section you wish to read.

   The Meter Detail screen displays.
3. Tap either *Take Readings* or *Take Reading*, depending on which menu item displays on the top right of your screen.

   The Take Reading or Take Readings screen displays.
4. To take a single meter reading or multiple meter readings, see the following procedures:
   - Taking All Measuring Point Readings [page 55]
   - Taking a Single Measuring Point Reading [page 56]

Results

In the *Current Reading* section, the new measurement point reading information appears. The previous measurement point reading now appears in the *Previous Reading* section. Be sure to *Sync* your mobile client to send the measurement point reading information to the back end.

8.8 Taking a Periodic Meter Reading

Periodic readings are meter readings that are on a regular schedule for billing purposes.

Context

Work orders with a type of *MR01* are indicated in a bubble underneath the work order name. This indication tells you the meter is n periodic meter. Note that the Meter Management component must be installed with the base SAP Asset Manager application to handle this type of work order.

Procedure

1. Tap on a started work order. If the work order is not already started, start the work order.

   The *Work Order* detail screen displays.
2. Tap on the meter in the *Meters* section you wish to read.

   The Meter Detail screen displays.
3. Tap either *Take Readings* or *Take Reading*, depending on which menu item displays on the top right of your screen.

   The Take Reading or Take Readings screen displays.
4. To take a single meter reading or multiple meter readings, see the following procedures:
   - Taking All Measuring Point Readings [page 55]
   - Taking a Single Measuring Point Reading [page 56]

Results

In the *Current Reading* section, the new measurement point reading information appears. The previous measurement point reading now appears in the *Previous Reading* section. Be sure to *Sync* your mobile client to send the measurement point reading information to the back end.

9 Working with Crew

9.1 Crew Management Overview

Crew Management Management allows you to manage your crew and vehicles with significantly lower cost and greater flexibility.

Crew Management adds the following functionality to the core SAP Asset Manager application:

- Add, remove, and select crew technicians
- Add, remove, and select vehicles
- Track vehicle usage through vehicle odometer readings
- Report, review, and approve time for crew
- View summary for your crew technicians over a two week period

> **i** Note
>
> If you do not see the features and functions described in the following topics, the Crew Management component is not installed on your mobile device. Talk to your site administrator if you believe you should have access to this component. See Time Sheet Overview [page 97] and the accompanying topics for more information on time entries when Crew Management is not installed.
>
> Only use the Crew Management functions in SAP Asset Manager if you are in a team lead or a supervisory role on your job crew or site.

As a supervisor or team lead, Crew Management helps you to identify which team members on your crew are available to work, and which vehicles in your fleet are available for use. At the end of each shift, log the mileage used on each vehicle and the hours each crew member worked.

See the following topics for information on how to perform your Crew Management duties within the SAP Asset Manager application:

- Adding Crew Members [page 79]
- Adding Vehicles [page 80]
- Adding a Time Entry [page 80]
- Editing a Time Entry [page 82]
- Removing Crew Members or Vehicles [page 82]
- Editing a Vehicle Odometer [page 83]

9.2 Adding Crew Members

Context

Before you can work with your crew in the SAP Asset Manager application, first add the crew members to your crew list. Initially, your crew list is empty when you open the application. Use the following procedure to add your crew members to your crew list.

Procedure

1. From the main overview screen, tap the *Crew* section.

   The Crew Detail screen displays. If you have never set up your crew before, your *Current Crew Members* section is empty.
2. Tap the + icon and select *Add Crew Member*.

   The *Add Crew Member* screen displays.
3. Tap the *Crew Members* row to see your crew member options.

   A list of crew members available to you appears, along with a search field at the top of the list.
4. Select your crew members. You can select more than one crew member on the list. When finished with your selections, tap the *Add Crew Member* on the top left of the screen. Your crew member choices are saved and you are returned to the previous screen.
5. Tap *Done* on the Add Crew Member screen to return to the Crew screen.

   The crew members you selected populate in the Current Crew Members section. Tap *See All* to see the full list.

Results

Your crew members are added to your crew list. If you have accidentally added the wrong crew member, see the topic Removing Crew Members or Vehicles [page 82] for information on removing the member.

Tap on any crew member to see additional details about that crew member. Details are read only. Tap on the phone icon () to initiate a call to the crew member. Or, you can tap on the envelope icon () to start an e-mail to that crew member.

Next Steps

When you are ready to add time entries to the members of your crew, see the topic Adding a Time Entry [page 80]. To add vehicles for your crew, see the topic Adding Vehicles [page 80].

9.3 Adding Vehicles

Context

Before you can work with your vehicles in the SAP Asset Manager application, first add the vehicles to your vehicle list. Initially, your vehicle list is empty when you open the application. Use the following procedure to add your vehicles to your vehicle list.

Procedure

1. From the main overview screen, tap the *Crew* section.

   The Crew Detail screen displays. If you have never set up your vehicles before, your *Vehicles* section is empty.
2. Tap the + icon and select *Add Vehicle*.

   The *Add Vehicle* screen displays.
3. Tap the *Vehicles* row to see your crew member options.

   A list of vehicles available to you appears, along with a search field at the top of the list.
4. Select your vehicles. You can select more than one vehicle on the list. When finished with your selections, tap the *Add Vehicle* on the top left of the screen. Your vehicle choices are saved and you are returned to the previous screen.
5. Tap *Done* on the Add Vehicle screen to return to the Crew screen.

   The vehicles you selected populate in the Vehicles section. Tap *See All* to see the full list.

Results

Your vehicles are added to your crew list. If you have accidentally added the wrong vehicle, see the topic Removing Crew Members or Vehicles [page 82] for information on removing the vehicle.

Tap on any vehicle to see additional details about that vehicle. You can change the odometer reading on a vehicle. See the topic Editing a Vehicle Odometer [page 83] for more information.

9.4 Adding a Time Entry

Context

As a crew supervisor, it is your responsibility to report the time of every member of your crew for each time period worked. Try to add the time for each crew member after every shift that crew member has worked, so

the time entry is accurate. However, you can review and edit time entries for your entire crew for up to 2 weeks, or 14 days, after you have entered their labor time.

Procedure

1. Tap the *Time Sheets* section from the main Overview page. You can either tap on *Today* to view your current crew members, or tap *See All* to view the past 14 days of time logged.
2. Tap the + icon to add a new time entry.

   The Add Time screen displays.
3. Fill out the appropriate fields. When finished, tap *Done*.

Results

Time entry is logged for the crew member you selected on the *Add Time* screen. Perform this procedure for each crew member on your crew daily. If you must edit a time entry, see the Editing a Time Entry [page 82] procedure.

9.4.1 Working with Overtime Labor Entries or Entries that Span Multiple Days

SAP Asset Manager provides the ability to log labor time for workers whose shifts extend across a span of days, as well as other similar scenarios.

Logging overtime labor entries, or labor entries that span across multiple days, works in the same way as a labor entry that spans an ordinary 8-hour shift. See Adding a Time Entry [page 80] for more information.

The difference between a normal 8-hour shift and a shift that spans across days, however, shows in the *Confirmation* screen for the labor time entry as well as in the *Confirmations* detail screen. The *Start Time* is based on when you start either the work order or manually begin a new labor time entry. The *End Time* is input by you, the user, when the work order or labor time entry is complete. Note that you can have different days for a *Start Time* and *End Time*.

However, note that the date displaying on the *Confirmations* detail screen displays only the start date as updated after you input an end time. This is normal behavior for the application, and your hours are recorded.

The same principle applies if you finish your work for the day, log off, and put the work order on hold the following day. When you update your labor time entry, the *Confirmations* detail screen shows only the start date as updated for the entry. If you tap on the labor time entry to access the *Confirmation* detail screen, you can see that all details are logged correctly for your labor time entry.

9.5 Editing a Time Entry

You can edit any time entry for a crew member in a 14-day period. To edit a time entry:

1. Click a crew member on your list with a time entry that you want to edit.
2. Click the time entry of the crew member to edit so that the *Time Entry* detail screen displays.
3. Tap the *Edit* button. The Edit Time screen displays.
4. Make any edits to the time entry you desire. If you want to delete the time entry, tap *Discard* at the bottom of the screen. When complete, tap *Done*.

The update to the time entry is successful and your changes are displayed in the Time Entry details screen for that crew member.

9.6 Removing Crew Members or Vehicles

Removing a Crew Member

To remove a crew member from your crew list, tap the crew member you want to remove in the *Current Crew Members* section of the Crew Detail screen. When the Crew Member Detail screen for the crew member displays, tap *Remove* at the bottom of the screen.

If the time sheet is incomplete for the crew member, a pop-up displays, asking if you want to record time for the crew member. Tap *OK* to record time. You are then taken to the time entry screen. See Adding a Time Entry [page 80] for information on how to add time.

If the time sheet is incomplete, you do not want to record time, and you want to remove the crew member from your team, tap *No* to remove them without recording time. The crew member is removed from the crew member list.

If the time sheet is complete for the crew member, you are asked to confirm their removal only. Tap *OK* to confirm the removal.

Removing a Vehicle

To remove a vehicle from your vehicle list, tap the vehicle you want to remove in the *Vehicles* section of the Crew Detail screen. When the Vehicle Detail screen for the vehicle displays, tap *Edit*, then tap *Remove*, located at the bottom of the screen. Tap *OK* to confirm the removal.

9.7 Editing a Vehicle Odometer

If your company requires you to keep track of vehicle mileage, you can edit the odometer readings on each vehicle to reflect the distance that vehicle was driven during a set time period. To edit an odometer on a vehicle, perform the following steps:

1. From the main overview screen, tap the *Crew* section.
2. In the *Vehicles* section, tap the vehicle to which you are changing the odometer. To see all of the vehicles, tap *See All*.
   The Vehicle Detail screen displays.
3. Tap *Edit*.
   The Edit Vehicle screen displays.
4. Note the *Previous Reading*, which is the previous odometer reading. Tap in the *Odometer* field and add the new odometer reading, making sure it is higher than the previous reading. Tap *Done* when finished entering the reading.
5. Tap *Done* at the top right to return to the Vehicle Detail screen.
   Your new odometer reading is displayed along with the previous odometer reading.

Be sure to sync your device to save your odometer readings to the back end.

10 Working with Field Operations Worker

10.1 Field Operations Worker Add-On Component

Field Operations Worker, or FOW, is an add-on component to SAP Asset Manager. If you do not see FOW features while using the SAP Asset Manager application, your site has not installated the component.

SAP Asset Manager for Field Operations Worker leverages the digital core with SAP S/4HANA for task driven activities and rounds. It supports workers who perform asset inspections and checks with focus on measurement points and on smaller services and repairs.

10.1.1 Field Operations Worker Overview

Use the Field Operations Worker (FOW) component to see the routes that you are assigned to. A route indicates stops as well as the collection of technical objects at each stop.

Field Operations Worker adds the following functionality to the core SAP Asset Manager application:

- **Display routes on map:** As a field operations worker, you can see a quick preview of your assigned routes from the *Overview* and *Map* pages
- **View routes data:** On the *Route Details* page, you can see information such as the ID, a description of the route, the priority of the route, the due date of the route, location, and the number of stops on the route
- **View stops data:** On the *Stops Details* page, you can see information such as location, and the technical objects at the stop
- **Rapid field data capture:** Allows you to take readings for all of the measuring points assigned to one technical object, on a single screen

10.2 Working with Routes

10.2.1 Routes Overview Page

As a field operations worker, you can see a quick preview of your routes from the *Overview* page. On the *Overview* page map, you can select and deselect routes to show or hide them on the map. Hiding routes on the map does not hide technical objects (assets).

The following details are available for each route:

- Route description (equivalent to the order description) ex: Freeway Route
- Route ID (equivalent to order number)
- Number of stops

- Route status
- Route priority
- Route Due Date

You can see up to four routes that are due to be completed (in the *Routes section*). To see the complete list of assigned routes, click *See All.*

10.2.1.1 Route Details

When you select a route on your *Routes List*, you navigate to the *Route Details* page. On the *Route Details* page, you can see the details pertaining to the route, as well as the stops that belong to this route.

Route details include:

- ID
- Description
- Priority
- Order Type
- Mobile Status
- Due Date
- Number of stops
- A noninteractive map displaying the route in question: clicking on this map allows you to navigate to a full view interactive map with the same route selected including its stops and technical objects
- List of stops (for each stop, a description, location, number of assets and status is displayed)

10.2.1.2 Searching for Routes

Clicking *See All* on the *Overview* page in the Routes section allows you to navigate to the *Routes List* page.

You can see the following information regarding each route on the list:

- Description
- ID
- Status
- Number of stops on route
- Due Date

You can search for routes from the *Routes List* by entering the route ID or description using the free text search field on top of the *Routes List*. The *Routes List* is filtered according to your search-related entries.

By default, routes are listed by the following priority: routes that are overdue are listed first, followed by routes that have due dates. Routes that have no due date are listed last.

Click *Filter* to sort routes by due date, description, and route ID. Routes can also be filtered according to Mobile Status (Received, Started, Hold, Transfer, and Completed).

> **i Note**
>
> Even in offline mode, you can see a list of downloaded routes that are assigned to you.

10.2.2 Route Definition

A *route* is a path through a set of stops. Each stop is a set of technical objects. A technical object is either an equipment or a functional location in the SAP Asset Manager application.

A route is built as a type of work order. Your work site differentiates a route and a standard work order on the back end. The technical objects that belong to each stop are defined using operations.

Each equipment or functional location belongs to one operation. If many technical objects share the same functional location, they all belong to the same stop. If the technical objects do not share a common functional location, each technical object is considered its own stop. A stop cannot have more than one functional location.

10.3 Working with Stops

Searching for Stops

You can search for a stop on your worklist using the free text search feature. To find a stop, enter a description for the stop to display related results.

> **i** Note
>
> Even in offline mode, you can see a list of stops that belong to your assigned routes.

Stop Details Page

You can click *View Stop Details* to see additional information about a specific stop on a map.

Each stop shows you the following information:

- Description of stop, ID, Control Key, Work Center Plant, Work Center Type
- The location of the stop. If an address exists in the backend, it is displayed here as the location. If no address is maintained in the backend, then the equipment ID and the description of the location are concatenated.
- The location could also be a *functional location* (all equipment that is located at the same place is grouped into a functional location at one stop).
- The location could also be a *common functional location*. A common functional location encompasses locations as well as technical objects.

  > Example

If at one stop, a functional location has two pieces of equipment and you need to capture data for the functional location as well as for the equipment, the backend service displays three assets for this stop.

- The location of the stop displayed on the *Stop Details Map* (you can select the map to navigate to a more detailed map displaying the selected stop and an information panel)
- A list of technical objects at a particular location that you need to capture data for. There is a section for equipment and another one for functional locations.

10.4 Working with Technical Objects

View Technical Objects

Technical objects are either equipment or functional locations. In the *Stop Details* page, you can see sections for equipment and for functional locations. These sections contain technical objects for which you collect data for on each stop. You can access this list even when in offline mode. Technical objects are only assigned to a selected stop.

Searching for Technical Objects

You can search for technical objects on your worklist. In the *Equipment* and *Functional Location* section, select *See All* to access the list of the technical objects belonging to one stop.

View Technical Object Details

From the *Technical Objects List* on the *Stop Detail*s page, you can select a technical object to navigate to the corresponding *Technical Object Details* page.

Taking Readings for a Technical Object

From the *Functional Location Details* page, click *Take Readings*. The *Field Data Capture* page displays. See the Measuring Points and Readings Overview [page 53] topic and subtopics underneath for more information.

If the technical objects have measuring points assigned to them, you can also click *Take Readings from Map* from the Map screen. The *Details* panel on the map includes the action *Take Readings?*.

11 Working with Customer Service

11.1 Customer Service Overview

The Customer Service component is used at sites where work on the application involves maintenance or services performed under contract for customers or other third parties.

Customer Service adds the following functionality to the core SAP Asset Manager application:

- Details of service engagements of the technician with the customer
- Details of business partner information associated with the customer
- Details of contract and warranty information for the customer
- Online mapping functionality for both customer addresses and partner address

> **i** Note
>
> If you do not see the features and functions described in the following topics, the Customer Service component is not installed on your mobile device. Talk to your site administrator if you believe you should have access to this component.

Customer Service orders and notifications can coexist with standard work orders and notifications on the SAP Asset Manager application. You can easily tell the difference, as service orders are called out with an *SO* in the `<Description>` field on the Orders screen. Service notifications are called out with an *S* in the `<Description>` field on the Notifications screen.

See the following topics for information on how to perform your Customer Service duties within the SAP Asset Manager application:

- Service Orders [page 88] and subtopics
- Service Notifications [page 91] and subtopics
- Business Partners [page 94]
- Filtering Objects [page 22]
- Searching for Objects [page 24]

11.2 Service Orders

A service order is used to document service and customer service work. In particular, you can use a service order to:

- Plan services specifically with regard to usage of material, utilities, and personnel
- Monitor the execution of services

11.2.1 Service Order Detail Screen

> **i Note**
>
> Service orders function and look almost identical to work orders, with a few differences. The topics in this chapter are specific to service notifications only. The links in this section point to topics in the *Working with Work Orders* chapter, but are still relevant for service orders. See the *Working with Work Orders* chapter for further general information on work orders.

The Service Order detail screen gives you a brief description of the service order, the service order location, and the steps to perform the service order. After you tap on a service order listing from the main Overview screen, or the Orders Detail screen, you are taken to the Service Order Detail screen for the specific service order.

The service order header lets you know the service order status and the priority. The service order header also gives you a brief description of the service order and the work required to perform the job.

The *Location* is displayed underneath the work order header. Depending on your site, the location could be a factory, a building campus, or in a city.

The *Sold-To Party* section shows the business partner information for the sold-to party. A sold-to party is a person or company that places an order for goods or services. Use the phone icon () to initiate a phone call to the business partner. Or tap the e-mail icon () to pull up your e-mail service and automatically start an e-mail to the business partner. Tap on the sold-to partner to access more details about the sold-to party.

After reaching your site location, use the *Service Details* section to help you perform and complete your job. You can tap on any individual service order operation for more information, such as attachments or more people to contact, if needed, for that operation, or step.

Operations are the step by step procedures that you perform to complete the service order. Tap on the operation to view the operation, any suboperations, and all of the objects contained within. See How to Work with an Operation or Suboperation Maintenance Activity [page 36] and its subtopics for more information.

If there is any equipment associated with your service order, they are listed in the *Equipment* section underneath the operations. Click an equipment, or asset, to see all of the equipment details for the equipment. Equipment details vary depending on the asset, but can include measuring points, the history of the asset, and any attachments associated with the equipment. See Equipment Overview [page 44] and the rest of the topics in the *Working with Equipment* chapter for more information.

The *Functional Location* section also displays equipment, but in this case, the equipment is tied to a specific place where you will perform a maintenance-based task. Tap on the equipment in the Functional Location section to view the Functional Location detail screen and to perform maintenance duties on the equipment. For more information, see the Working with Functional Locations [page 27] topic.

Underneath the Functional Location section, there are sections for *Parts*, *Documents*, *Notes*, *Business Partners*, *Related Work Orders*, and *Related Notifications*. A number to the right of the section name lets you know how many objects are associated with that section, if any. For example, if two notes are associated with the job you tapped, you see a *2* to the right of the *Notes* field. Tap on any section to see that detail screen. See the following topics for more information:

- Managing PRTs [page 42]
- Working with Attachments [page 25]
- Working with Notes [page 27]

- Working with Business Partners [page 29]

You can add the following to a service order by tapping the + icon at the top of the screen and selecting the appropriate menu item:

- Add Follow-up Work Order: See Adding a Follow-Up Work Order [page 35]
- Add Operation: See How to Work with an Operation or Suboperation Maintenance Activity [page 36]
- Add Part: See Issuing a Part [page 38]
- Add Note: See Working with Notes [page 27]
- Add Notifications: See Adding a Local Notification [page 61]
- Add Reminder: See Adding and Editing Reminders [page 16]

Tap the *Edit* menu item to edit the current service order displayed on the Service Order detail screen. To learn how to edit any object in the SAP Asset Manager, including a service order, see the Editing an Object [page 25] topic.

11.2.2 Creating a Service Order

You can create a service order from the *Service Orders Detail* screen.

Procedure

1. Tap on the Plus icon (+) and select *Add Order* from the menu list.

   The Add Order screen displays.
2. Type a short description for the service order in the `<Description>` field. The Description field is mandatory.
3. Select a `<Type>` of order. Since you are creating a service order, select type *SO1*.

   The `<Sold-to-Party>` field and the `<Account Indicator>` field appear.
4. Select a `<Sold-to-party>`, if the one automatically selected is not the correct one.
5. Choose the `<Account Indicator>` amount.
6. Tap a `<Priority>` box if the automatically selected priority is not the correct one.
7. Select a `<Functional Location>` from the list by tapping the arrow to the right of the field. When done, tap on *Add Order* at the top of the screen to return.
8. If an equipment is involved in the notification, select an `<Equipment>` from the list by tapping the arrow to the right of the field. When done, tap on *Add Order* at the top of the screen to return.
9. If you are attaching a document or a photo, tap on the *Attachments* square to start the attachment process.
10. When finished with your service order, tap *Done* at the top of the screen.

    A popup appears with the message saying *Service Order has been created*.

Results

The new service order appears at the top of the *Orders* list.

Next Steps

Be sure to perform a sync to transmit the new service order to the back end.

11.2.3 Editing or Discarding a Service Order

Editing a Service Order

For detailed information on editing any screen in the SAP Asset Manager application, see the Editing an Object [page 25] procedure.

Discarding a Service Order

You can discard any locally created service order that you have not yet transmitted to the back end. To discard a service order, locate the detail screen for the individual local service order. Tap *Discard*, found at the bottom of the screen. Tap *OK* on the confirmation popup message. The service order is successfully discarded.

11.3 Service Notifications

SAP Asset Manager uses service notifications to alert the mobile device user that a customer-owned device or equipment on site needs repairing or maintenance. Use a service notification to:

- Maintain or repair the object or equipment
- Create follow-up tasks
- Create follow-up service orders

11.3.1 Service Notification Detail Screen

> **i Note**
>
> Service notifications function and look almost identical to the base SAP Asset Managernotifications, with a few differences. The topics in this chapter are specific to service notifications only. The links in this section

point to topics in the *Working with Notifications* chapter, but are still relevant for service notifications. See the *Working with Notifications* chapter for further general information on notifications.

The *Service Notification Detail* screen gives you a brief description of the notification, the location, the tasks, and the activities required to complete the notification. To view the *Service Notification Detail* screen for a notification, tap on a notification listing from the *Main Overview* screen or the *Notifications Detail* screen.

The service notification header lets you know the service notification status, priority, and due date. The service notification header also gives you a brief description of the service notification and the work required.

The *Location* is displayed underneath the header. Depending on your site, the location could be a factory, a building campus, or in a city.

The *Sold-To Party* section shows the business partner information for the sold-to party. A sold-to party is a person or company that places an order for goods or services. Use the phone icon () to initiate a phone call to the business partner. Or tap the e-mail icon () to pull up your e-mail service and automatically start an e-mail to the business partner. Tap on the sold-to partner to access more details about the sold-to party.

After reaching your site location, use the *Service Details* section to help you perform and complete your job. You can tap on any individual service notification operation for more information, such as documents, for that operation, or step.

If there is any equipment associated with your service notification, they are listed in the *Equipment* section underneath the operations. To see all of the equipment details for the equipment, click an equipment, or asset. Equipment details vary depending on the asset, but can include measuring points, the history of the asset, and any attachments associated with the equipment. See Equipment Overview [page 44] and the rest of the topics in the *Working with Equipment* chapter for more information.

The *Functional Location* section also displays equipment, but in this case, the equipment is tied to a specific place where you are performing a maintenance-based task. Tap on the equipment in the Functional Location section to view the Functional Location Detail screen and to perform maintenance duties on the equipment. For more information, see the Working with Functional Locations [page 27] topic.

The *Notification Items* section displays items associated with the service notification. Items identify problems, damage, or activity in greater detail than the original service notification.

The *Notification Tasks* section displays your task list for the service notification. Your tasks are the work that you have to do to complete the service notification.

The *Notification Activities* section shows a list of maintenance or service activity that was already performed for the service notification. Or, an activity report can be a report on the object or equipment that is not the result of damage or malfunction.

Underneath the *Notification Activities* section, there are sections for *Documents* and *Notes*. A number to the right of the section name lets you know how many objects are associated with that section, if any. For example, if two notes are associated with the job you tapped, you see a *2* to the right of the *Notes* field. Tap on any section to see that detail screen. See the following topics for more information:

- Working with Attachments [page 25]
- Working with Notes [page 27]

You can add the following to a service notification by tapping the + icon at the top of the screen and selecting the appropriate menu item:

- Add Task: See Adding a Task [page 62]

- Add Activity: See Adding an Activity [page 63]
- Add Item: See Adding an Item [page 64]

Tap the *Edit* menu item to edit the current service notification displayed on the Service Notification Detail screen. To learn how to edit any object in the SAP Asset Manager application, including a service notification, see the Editing an Object [page 25] topic.

11.3.2 Creating a Service Notification

You can create a service notification from both the service orders detail screen and the service notifications detail screen.

Procedure

1. Tap on the Plus icon (+) and select *Add Notification* from the menu list.

   The Add Notification screen displays.
2. Type a short description for the notification in the `<Notification Description>` field. The Notification Description field is mandatory.
3. Select a `<Type>` of notification, if the one automatically selected is not the correct one.
4. Select a `<Sold-to-party>`, if the one automatically selected is not the correct one.
5. Tap a `<Priority>` box if the automatically selected priority is not the correct one.
6. Select a `<Functional Location>` from the list by tapping the arrow to the right of the field. When done, tap on *Add Notification* at the top of the screen to return.
7. If an equipment is involved in the notification, select an `<Equipment>` from the list by tapping the arrow to the right of the field. When done, tap on *Add Notification* at the top of the screen to return.
8. If you are attaching a document or a photo, tap on the *Attachments* square to start the attachment process.
9. When finished with your notification, tap *Done* at the top of the screen.

   A popup appears with the message saying *Notification has been created*.

Results

The new notification appears at the top of the *Notifications* list.

Next Steps

Be sure to perform a sync to transmit the new service notification to the back end.

11.3.3 Editing or Discarding a Service Notification

Editing a Service Notification

For detailed information on editing any screen in the SAP Asset Manager application, see the Editing an Object [page 25] procedure.

Discarding a Service Notification

You can discard any locally created service notification that you have not yet transmitted to the back end. To discard a service notification, locate the detail screen for the individual local service notification. Tap *Discard*, found at the bottom of the screen. Tap *OK* on the confirmation popup message. The service notification is successfully discarded.

11.4 Business Partners

For detailed information on business partners, see Working with Business Partners [page 29].

12 Working with Maps

12.1 Maps Overview and Settings Options

Maps and geospatial data play an important part in the daily operations of many organizations.

By adding geospatial data to the technical data of an equipment, you get a full picture of that equipment. Maps allow you to visually see where your work orders, notifications, equipment, and functional locations are in relation to where you are or to other objects.

Use the following sections to learn how to customize your map view.

> **i** Note
>
> Full use and map features vary, depending on the selected geographic information system (GIS) supplier of your company and the implementation of the maps. Also note that geospatial data and coordinates are not maintained by SAP, they are maintained by your company or your GIS supplier.
>
> Map settings are defined in the back end. If you do not have access to one or more of the following options, it is because they are disabled by your administrator.

Searching Using the Maps View

For information on searching using maps, see the topic Searching using the Maps View [page 96].

Working with Map Settings

Tap the *Information* icon to adjust the following map settings:

- **Basemaps:** Select the type of map view, such as gray, streets, topo, or satellite
- **Reference Layers:** Select different layers to see buildings, roads, or incidents overlaid onto your map, depending on what is programmed in your back end
- **Business Layers:** Select the dynamic layers setting to adjust how many or how few work orders, equipment, functional locations, and notification objects you see on your map
- **Near Me Distance:** Sets objects within the specified near me radius of your current location
- **Near Me Units:** Sets the distance in either miles or kilometers

When finished adjusting the settings, tap *Close* to save your changes and close the *Settings* panel. You can adjust your settings at any time.

Toggling Device Location

Tap the *Navigation* icon to turn on device location.

When you initially install and log in to SAP Asset Manager, device location is off. The first time you tap the *Navigation* icon, a pop-up displays with a question asking *Show your location on the map?*. Tap *OK* to give permission to enable and continue.

Enabling your location allows your device to center your location on the map and among the layers you selected to display using the map settings. Enabling your location also allows you to use any navigation features after you tap *Directions* on a selected object.

Automatic Zoom Out or Zoom In Function

Tap the *Zoom* icon to automatically refocus your map to the largest possible size that shows all objects and layers selected in the *Settings* options. Refocusing the map could mean that the map zooms in and enlarges the map or that the map zooms out to display all objects and layers selected.

If you feel that the map is too small to view all objects when you tap the *Zoom* icon, try selecting fewer feature layers and objects in the *Settings* options.

12.2 Searching using the Maps View

The Maps view has some common work order searches built into the application for you, such as Work Orders Due Today, High Priority, and Near Me.

The SAP Asset Manager application has made it easy for you to search for the work orders you must access right away with three built-in search queries. To find the search queries, from the Overview page, tap the map. When the main Map page displays, tap the *Magnifying Glass* icon.

A *Search* list displays on the far left of the map screen. Notice there are three buttons underneath the search field. You can type in any search terms you like in the search field at any time. However, an easy way of displaying the most time sensitive and critical jobs is to tap any one of the three buttons: *Work Orders Due Today*, *High Priority*, or *Near Me*.

You can tap any of the buttons or all of the buttons. Tapping more than one button filters the list even further. You can untap a button if the results you get are too filtered.

When satisfied with your filtering, you can tap on an item on the filtered list to see the work order details. Or, you can tap on the map to exit out of the search list to see the entire map. You can then tap on one of the icons on the map itself to see the details of that object or to get directions to the object from the map.

> **i** Note
>
> The *Near Me* filter is only available when you have *Device Location* enabled. See the Maps Overview and Settings Options [page 95] to learn more about the device location feature.

13 Working with Time

13.1 Time Sheet Overview

The time sheet provides a standardized time entry function for employees.

Time sheets are used to enter person-related working times for the SAP Asset Manager application through a single transaction. Employees maintain their attendance times, periods of absence, and working times personally in the system, together with information about the work order, notifications, and so on. The data is then transferred from the client device to the Mobile Add-On for SAP S/4HANA during a transmit.

> **i** Note
>
> If you are a crew supervisor and are using SAP Asset Manager with the Crew Management add-on component, see those topics for the component for more information on adding and editing time entries. Start with the Crew Management Overview [page 78] to learn more about the component.

13.2 Accessing Time Sheets

Access the Time Sheets screen by tapping on the *Time Sheets* line on the main *Overview* screen.

The Timesheet List screen displays, showing a list of all work dates. You can select and tap any of these line items to access the work date details.

Editing a Time Entry

You can edit any locally created time entry, as long as you have not yet synced that time entry to the back end. Tap on the time entry to access the *Edit Time Entry* screen. For information on editing any type of object in SAP Asset Manager, including a time entry, see the Editing an Object [page 25] procedure.

Note that you cannot edit or discard any time entries that you have already synced with the back end.

Discarding a Time Entry

You can discard any locally created time entry, as long as you have not yet synced that time entry to the back end. Tap on the *Edit Time Entry* screen. To discard the time entry, tap on *Discard* found at the bottom of the screen. A Confirm Discard pop-up message displays. Tap *OK* to confirm the time entry discard.

Note that you cannot edit discard any time entries that you have already synced with the back end.

13.3 Adding a Time Sheet Entry

Context

When you start a work order, time is automatically logged in that work order until you put it on hold, transfer it, or complete it. However, you can also manually add a time sheet entry.

Manually add a time sheet entry to log time not associated with specific work orders, such as sickness or educational activities. You can also add time to existing work orders that are assigned to you.

Procedure

1. Tap *Time Sheets* from the main Overview page.

   The Time Sheets screen displays.
2. Tap the + icon to add a new time entry.

   The Add Time screen displays.
3. Fill out the appropriate fields. When finished, tap *Done*.

Results

A time entry is logged for you. See the Accessing Time Sheets [page 97] topic to learn how to edit or discard a time entry that you have not yet synced to the back end.

13.4 Working with Clock In Clock Out

The Clock In Clock Out (CICO) feature decouples time tracking from the mobile status of a work order or operation, allowing multiple users to start and log time against the same work order or operation simultaneously.

Clock in clock out, or CICO, allows multiple users to work on the same work order or operation, where all users receive the work orders and operations to their devices. CICO allows multiple work orders and operations to be in the Started state that belong to different users. Mobile device users are able to see the CICO state of all work orders or operations on their device.

Users can also use the search bar to find work order or operations lists based on clock in or clock out status. Search on *clock in*, *clocked in*, *clock out*, or *clocked out*.

Working with CICO Work Orders or Operations

If CICO is enabled on your SAP Asset Manager application:

- Multiple people can work on the same work order or operation even if the work order or operation is already in the *Started* state by another user
- All users can see the CICO status of work orders or operations on their device
- When you clock in to a work order or operation:
  - You can clock in to any work order or operation on your device
  - You can only clock in to one work order or operation on your device at a time
  - The timestamp of the work order or operation is saved to your user ID in the back end
  - The mobile status of the work order or operation is set to *Started* if it isn't already in a started state
- When you clock out of a work order or operation:
  - The work order or operation status is set to either *Hold* or *Complete*
  - If a work order or operation is set to *Complete* and confirmation time is used, you can set it as the final confirmation
  - You must clock out of your current work order or operation before clocking in to a different work order or operation

If CICO is not enabled on your SAP Asset Manager application:

- Muliple users cannot work on the same work order or notification
- You can start any work order or operation in a *Received*, *Hold*, or *Local* state, as usual

Working with CATS or Confirmation Time on CICO Work Orders or Operations

If CICO is enabled on your SAP Asset Manager application:

- All time recording (CATS and Confirmation) uses the clock in clock out period as the default duration in time entry screens

If CICO is not enabled on your SAP Asset Manager application:

- CICO time entry is accomplished through status changes of the work order or operation.

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