Installation

This chapter covers how to install the application, configure the Phone Services URL, grant the required system permissions, and set up alarm sound files.

Installation Methods

The application can be installed using any standard Mobile Device Management (MDM) platform, or manually by side-loading the generated .apk file from the device file system.

Phone Services URL Configuration

Upon the first successful launch after installation, all required permissions must be granted. The immediate next step is to configure the **Phone Services URL**. This URL connects the client application to the backend service and allows it to retrieve and display alarm history for the associated user groups.

The URL can be set in two ways:

- **Via MDM tool** — recommended for managed deployments. MDM configuration has higher priority and overwrites user configuration.
- **Manually by the user** — recommended for testing purposes only.

Note: To enable the *Alarm Groups Log in/out* feature, add the version=2 parameter to the base URL.

MDM Configuration

The application supports managed configuration via the service_address attribute in the MDM IT admin console. The following parameters can be configured:

Parameter	Type	Description
service_address	string	Phone Services URL endpoint
always_play_sound	boolean	Play sound even in silent/vibrate mode
notification_sound_volume	integer (0–15)	Notification volume level
save_logs	boolean	Save application logs to file

Parameters set within the managed configuration have **higher priority** and cannot be changed via Intents.

Example VMware Workspace ONE Custom Settings XML:

```
<characteristic
  type="com.airwatch.androidwork.app:com.callistocruise.alarming"
  uuid="568bc89d-1df8-4ce9-a041-e5a24acdb7ec">
  <parm name="service_address"
    value="http://CALLISTO_IP_ADDRESS/Applications/Inbound/Alarm%20Service/src/
PhoneListAlarms.asp?version=2"
    type="string">
  <parm name="always_play_sound" value="True" type="boolean">
  <parm name="notification_sound_volume" value="10" type="integer">
  <parm name="save_logs" value="True" type="boolean">
</characteristic>
```

If the MDM console cannot read the configuration schema, use an Intent broadcast instead.

SOTI example:

```
sendintent -b "intent:#Intent;action=com.callistocruise.alarming.intent.action.
SET_HOST_ADDRESS;S.service_address=http://CALLISTO_IP_ADDRESS/Applications/Inbo
und/Alarm%20Service/src/PhoneListAlarms.asp?version=2;end"
```

VMware Workspace ONE example:

```
mode=implicit,broadcast=true,
action=com.callistocruise.alarming.intent.action.SET_HOST_ADDRESS,
extraString=service_address=http://CALLISTO_IP_ADDRESS/Applications/Inbound/Ala
rm%20Service/src/PhoneListAlarms.asp?version=2
```

Sound Configuration

The application supports custom alarm sound files per alarm group. To use different sounds:

1. Place MP3 files in: /storage/emulated/0/Android/media/com.callistocruise.alarming
2. This folder is created automatically on the first app launch.
3. File names must exactly match the sound name defined in the group configuration.

Always Play Sound

The app can play sound even when the device is in Vibrate or Mute mode (subject to DND Alarms exception). Configure via MDM (always_play_sound attribute) or via Intent:

```
sendintent -b "intent:#Intent;action=com.callistocruise.alarming.intent.action.
SET_ALWAYS_PLAY_SOUND;B.always_play_sound=true;end;"
```

Note: This option has no effect if the user has turned off Show Notifications for the app, or if the Alarms DND exception is disabled in phone settings.

Notification Sound Volume

Volume can be set from 0 (minimum) to 15 (maximum). Configure via MDM (notification_sound_volume attribute) or via Intent:

```
sendintent -b "intent:#Intent;action=com.callistocruise.alarming.intent.action.
NOTIFICATION_SOUND_VOLUME;i.notification_sound_volume=15;end;"
```

Required Permissions

To ensure the application functions correctly and provides continuous alarm monitoring, the following permissions must be explicitly granted by the user at runtime.

Notification Permission

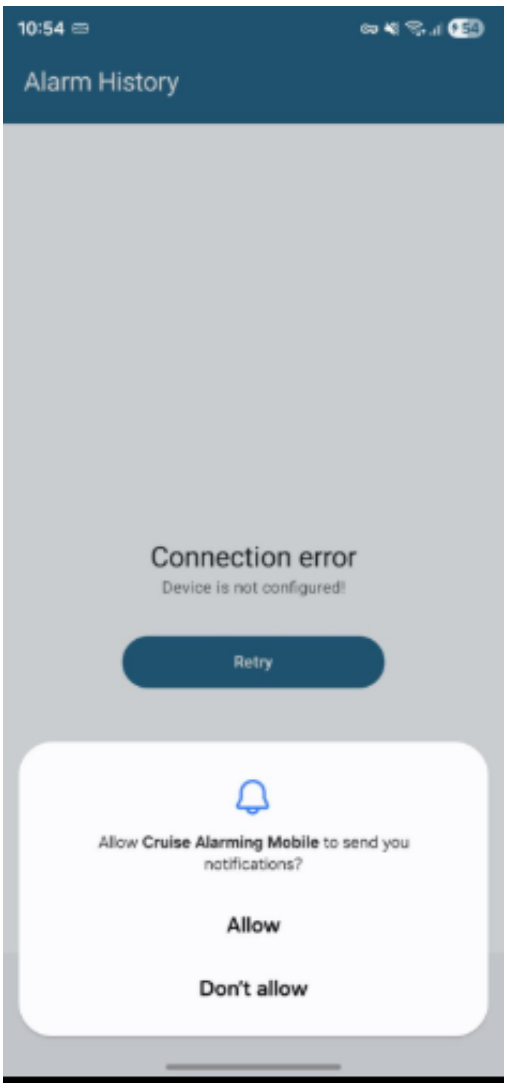
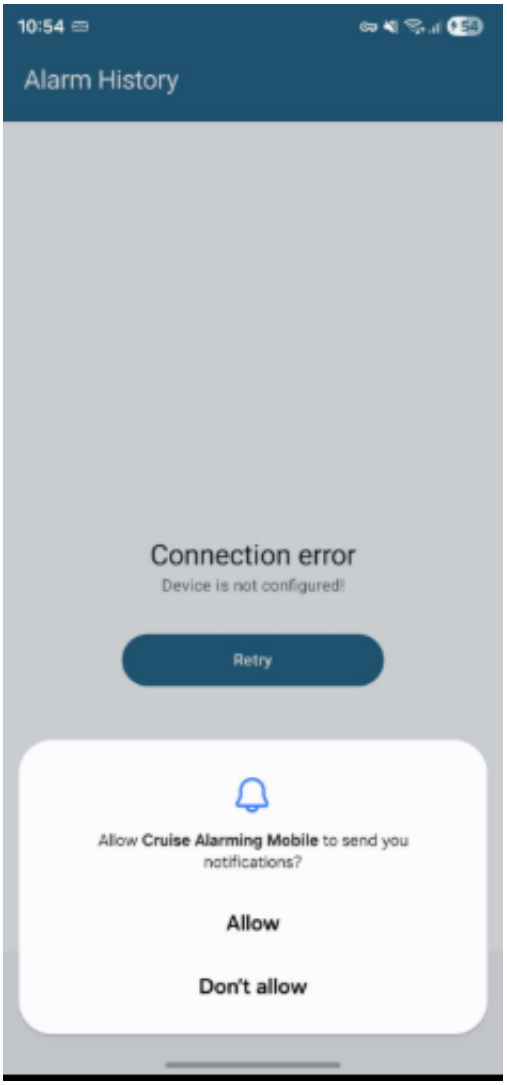


Figure 1: Notification Permission Dialog



Attribute	Detail
Type	Runtime Permission
Action	Tap **Allow** in the system dialog.
Impact if denied	No visual notifications or notification sounds will be received.

Appear on Top / Display over other apps

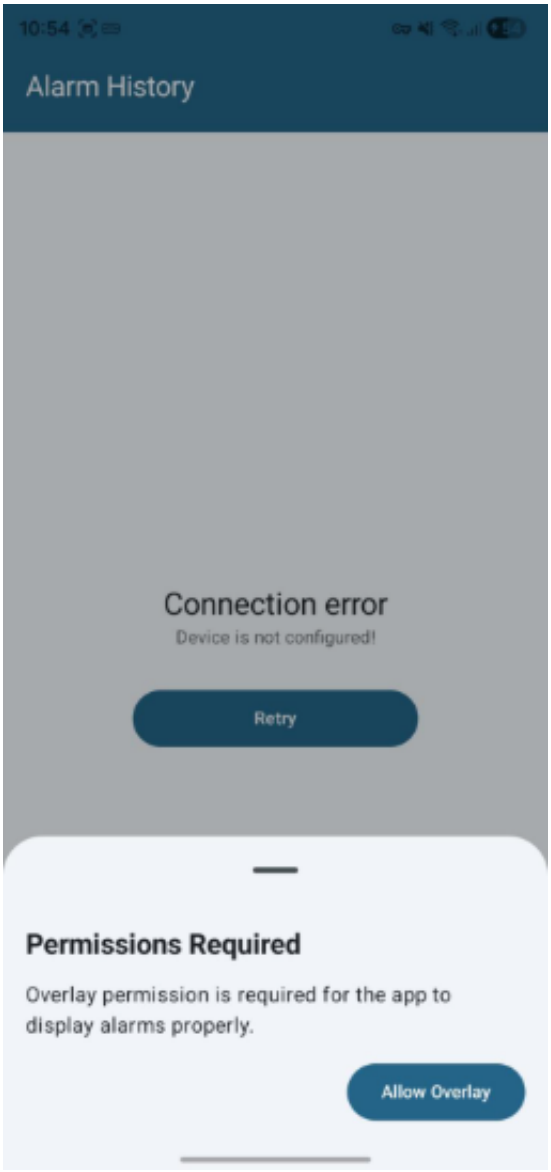


Figure 2: Overlay Permission Dialog

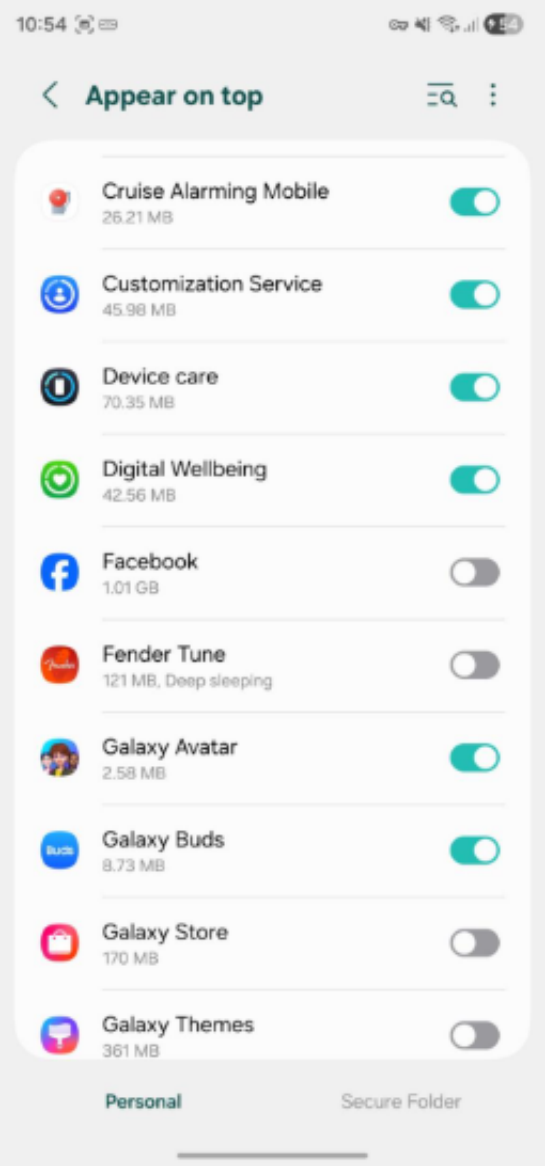


Figure 3: Appear on top — settings screen

Attribute	Detail
Type	Special Permission
Action	Tap **Allow Overlay**, then enable the toggle in the settings screen.
Impact if denied	Service will not restart automatically on system boot; alarms may not display over other apps.
Note	Required for Android OS versions higher than 10.

Do Not Disturb (DND) Access

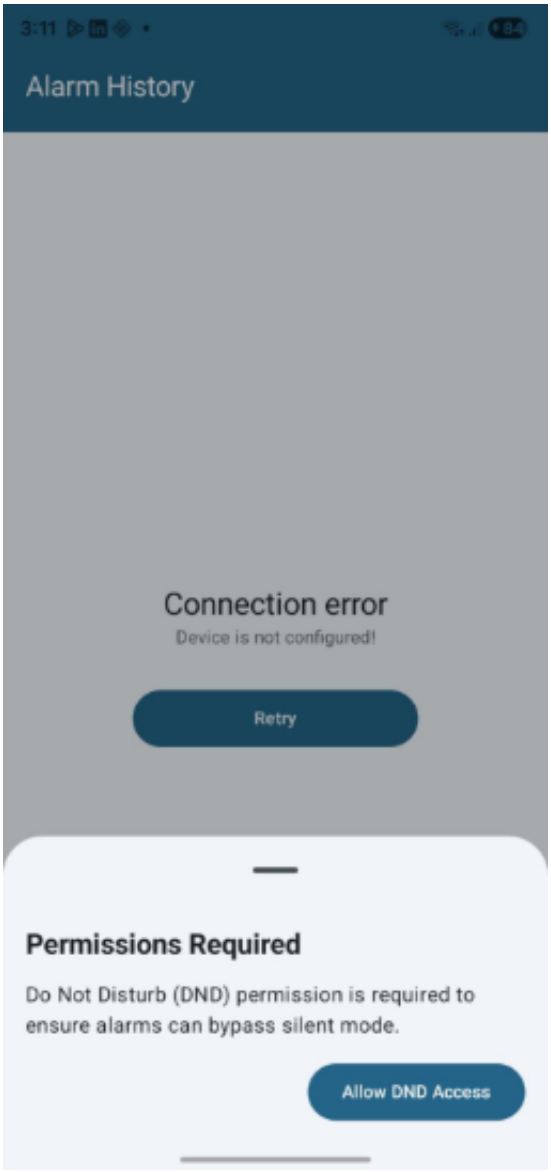


Figure 4: DND Access Dialog

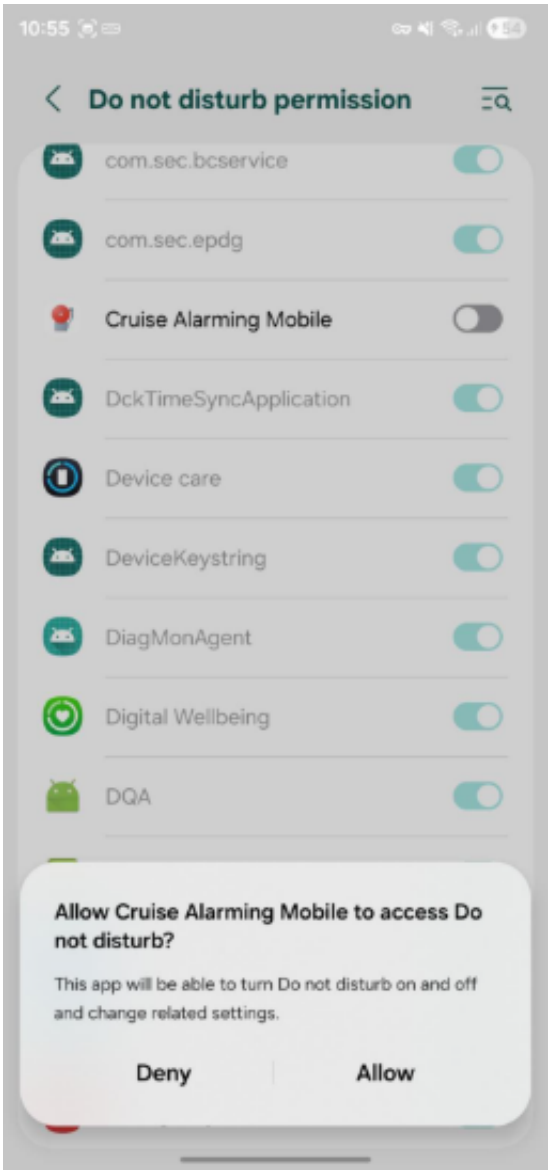


Figure 5: Do Not Disturb permission settings screen

Attribute	Detail
Type	Special Permission
Action	Tap **Allow**.
Impact if denied	Alarms will be silenced by DND mode; the *Always Play Sound* feature will not work correctly.

Battery Optimization

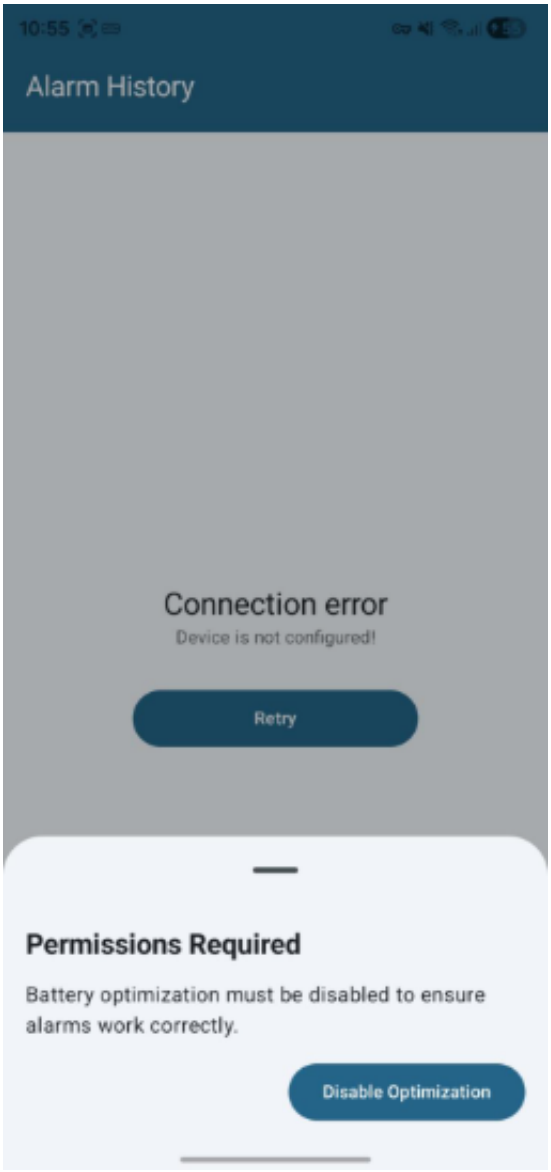


Figure 6: Battery Optimization Dialog

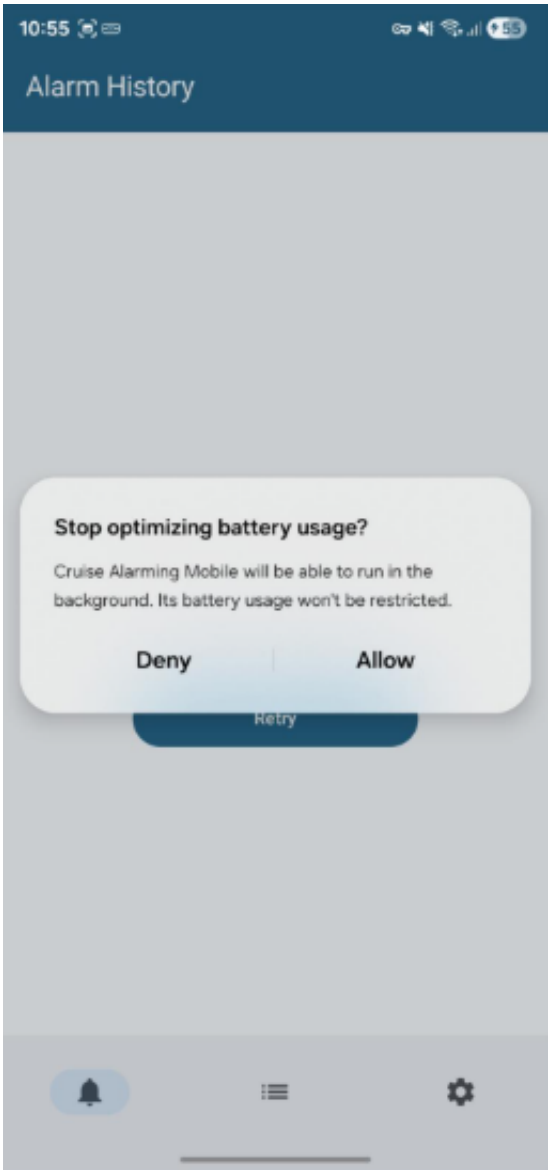


Figure 7: Stop optimizing battery usage dialog

Attribute	Detail
Type	Special Permission
Action	Tap **Allow** (Disable Optimization).
Impact if denied	The OS may restrict background operation, preventing timely alarm reception.

Background Service Behavior

The Cruise Alarming Mobile service starts automatically when the app is launched for the first time and remains active even after device reboot. The service is only stopped if the application is forcefully closed via **Force Stop** in phone settings.