Mobile App

Mobile app for Client Visualization.

This page explains how to use the FrameworX mobile app to connect to a Solution Server and view data from a solution in a mobile device. On the Apple App Store the app is named **FrameworX - SCADA HMI Client**.

The FrameworX mobile app is an iOS and Android mobile web viewer app that connects to a Solution Server at runtime for data visualization. It encapsulates HTML5 pages and renders them inside the mobile app. It also supports alarm notifications and advanced geolocation features.

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Overview

The FrameworX mobile app is a mobile web viewer app that connects to a Solution Server at runtime for data visualization. It encapsulates HTML5 pages and renders them inside the mobile app. It also supports alarm notifications and advanced geolocation features.

Features Highlights

The mobile app brings solution visualization to mobile by connecting to a Solution Server and rendering HTML5 displays inside the app, with support for mobile-focused features.

- Connects to a Solution Server to access a solution in Runtime
- Renders HTML5 WebViewer pages inside the mobile app
- Visualizes real-time data and screens from the target runtime
- Sends alarm notifications on Android and iOS when enabled and permitted by the device
- Uses mobile resources such as geolocation for location-based use cases

Requirements

- Connectivity: the device must have network access to the Solution Server (LAN, VPN, or internet).
- Permissions: to receive alarm notifications, allow notifications when the device asks. On iOS, the first time the app connects to a runtime on the local network, iOS also asks for access to the local network. Allow it.
- Alarm notifications on iOS: available with the FrameworX runtime 10.1.5g or later, or 10.1.6. To deliver them while the app is closed, the runtime computer needs outbound HTTPS access to the internet on port 443.

Download

The app is distributed in the following platforms:

- Google Play Store
- Apple App Store (FrameworX - SCADA HMI Client)

Initial Setup

The steps to install the app here are the general steps:

1. **Open the app**
    a. Tap Open, or find the app on your home screen/app drawer
2. **Make sure your application is running on the server (URL defined on initial page)**
3. **You should be able to see your solution Portable and HTML5 pages**

Configuration

The app uses the settings you enter to build a server endpoint and start a session.

Settings Reference

Name	Description
URL	URL Connection to your application server (default https://demo.tatsoft.com)

User	Enter the username that the Solution Server authenticates. The server uses this identity to apply permissions to displays, data, and actions.
Password	Enter the password for the user when the server requires credential authentication. Leave this field empty only when your environment uses a method that does not require a password for this connection.
Enable alarm notification	Turn on alarm notifications to receive alarm events from the connected runtime, and allow notifications when the device asks. Available on Android and iOS. On iOS, it requires the FrameworX runtime 10.1.5g or later, or 10.1.6.
Connect	Start the session. The app connects to the endpoint, authenticates, and loads the HTML5 visualization for the target runtime.

Geo Localization

The geo localization properties return the client user's latitude and longitude. These values represent the user's current geographic location and can be used for map positioning or any feature that relies on geolocation.

```
@Client.Session.GeoLocationLatitude;
@Client.Session.GeoLocationLongitude;
```

Camera, QR Code, and Barcode Capture (10.1.5)

Starting with FrameworX 10.1.5, the iOS app exposes the device camera to user scripts through the `ClientSession` API. Operators can capture images, scan QR codes, and scan barcodes directly from a Display, and the runtime routes the captured payload back to user logic.

Capabilities:

- Camera access exposed to user scripts via the `ClientSession` API on iOS devices.
- Companion helper `TK.ApplyImageBytesToShape` renders captured image bytes onto a Display shape (e.g., a rectangle or image control) without writing the file to disk.
- QR codes and standard 1D/2D barcodes are decoded on the device; the decoded text is delivered to scripts as the capture payload.

Typical workflow:

1. The operator taps a Display button that triggers a script using `ClientSession` to open the camera in QR / barcode scan mode.
2. The operator scans a QR code or barcode on equipment, packaging, or a work order.
3. A `ClientSession` event fires with the decoded payload.
4. A Script reads the payload and routes the operator to the relevant Display, work order, or asset record based on the QR / barcode content.

For the full `ClientSession` API surface and the `TK.*` Toolkit helpers used in these flows, see the Script Reference.

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