

Sensor WebFusionX

Motivation

Due to limited mobile development resources, the focus for the Verkada Command app has been web-first, resulting in the mobile app offering only a subset of the web's functionalities. To address this, I integrated the **WebFusionX framework** to extend the complete range of Sensor web features to the mobile app to **align user experiences** across both platforms and ensure **consistent and comprehensive access** regardless of the device used.

Challenges

Synchronized scroll and snap

- Achieving **synchronized scrolling**, particularly when elements needed to **maintain a relative position** during scroll events
- The "**snap**" feature, where scrolling aligns to specific elements, ensuring they are **prominently positioned** when scrolling stops
- The solution involved using a combination of Javascript / CSS to monitor scroll events and **dynamically adjust** positioning of elements, and using **throttling** to optimize performance

Handling of zones / favorited devices

- Managing the **display and interaction logic** for zones and favorited devices
- This was tackled by implementing **precise conditional logic** and **data manipulations** for responsive updates and optimized re-renders

Results

New Sensor WFX pages

- Home page
- Dashboards page
- Analytics page
- Calibrations page

Enhanced user experience

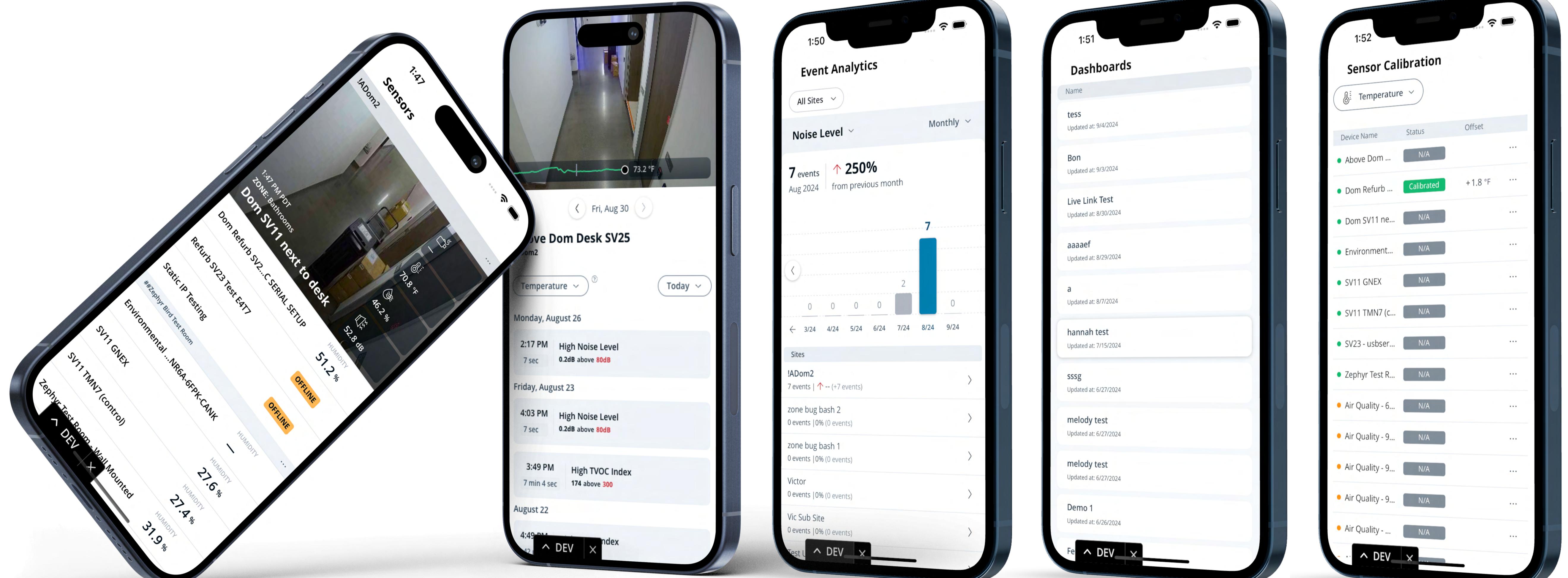
- Made user experience more fluid and intuitive with the integration of seamless animations and consistent, smooth interface

Cross-Platform Consistency

- Ensure uniform experience across different platforms, regardless of user's device or browser

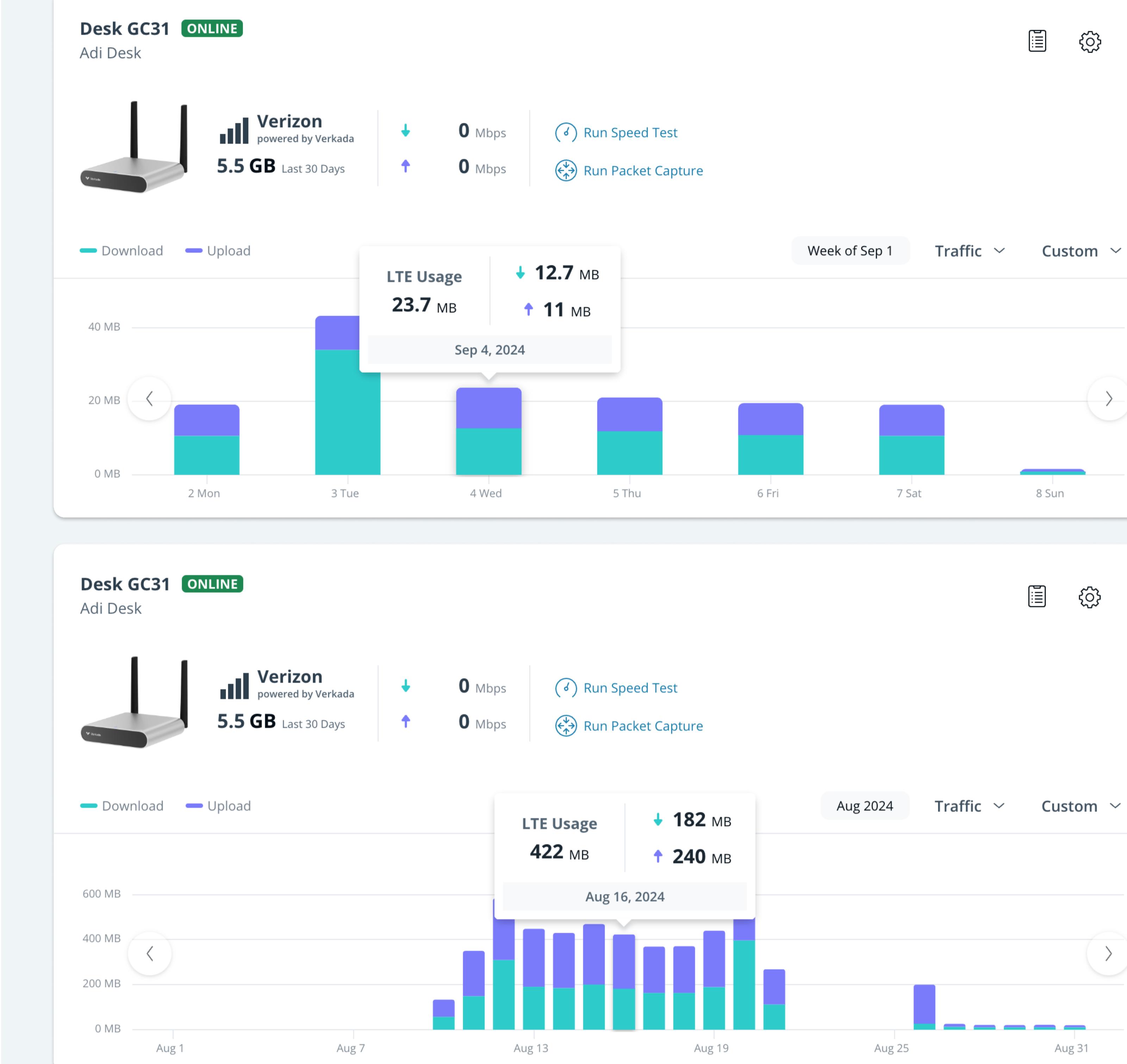
Integration of Verity components

- Prioritized accessibility by replacing primary components including Table / List with their Verity equivalents



HANNAH LEE

Gateway Bar Graph



Motivation

The gateway details graph is designed to help users **analyze gateway traffic effectively**. For longer intervals, understanding the **total cellular usage** is crucial for interpreting the data.

However, the original gateway details graph only displayed a line chart of gateway speed, with data shown in **hourly intervals**. This limited view prevented users from gaining a more comprehensive understanding of **broader traffic trends** over extended periods.

Solution / Results

- Display monthly + weekly data as a **stacked bar chart**
- Aggregate cellular usage** by day, accounting for different timezones
- Allow users to **hover** over a bar to view a **breakdown** of cellular download and upload usage
- Allow users to **click** on a bar to view a line graph with more **detailed data** for that particular day
- Ensure rendered data accounts for **WAN usage, offline devices**, and other relevant factors

See it in action

