

PRODUCT OVERVIEW

Facility managers and building owners will use ClimaVision's User Interfaces hand in hand with application profiles such as Dynamic Airflow Balancing (DAB) or Variable Air Volume (VAV) with Reheat to remotely monitor and control their building portfolio.

ClimaVision User Interfaces offer invaluable insight into buildings' performance and simple, intuitive control over building parameters. ClimaVision's sensors and building management system deliver over a million data points daily per fifty thousand square feet of space, including temperature, humidity, volatile organic compound (VOC), CO₂, light, and sound levels taken every 60 seconds. The User Interfaces' heatmaps reflect this data in real time, and can help users understand energy performance and how their buildings react to thermal loads.

Beyond superior data visualization, ClimaVision's User Interfaces make tailoring building parameters fast and efficient. Alter building and granular schedules, use tuners to adjust operating algorithms, setup floor plans, and more – all remotely from the web or a mobile device.

FEATURES AND ADVANTAGES

- Portfolio-wide, remote control over building parameters.
- View your buildings' performance in real time with Google map integration.
- Heat maps provide instant insight into how your buildings control thermal loads throughout the day.
- Policy editor allows you to push schedules to hundreds of locations with a single click.
- Scheduling feature allows you to mark holidays and implement energy savings across your portfolio.
- Manage user setting, including editing profiles, passwords and editing or removing additional users.
- Building performance metrics. Compatible with major web browsers, iPhone, iPad, and Android.

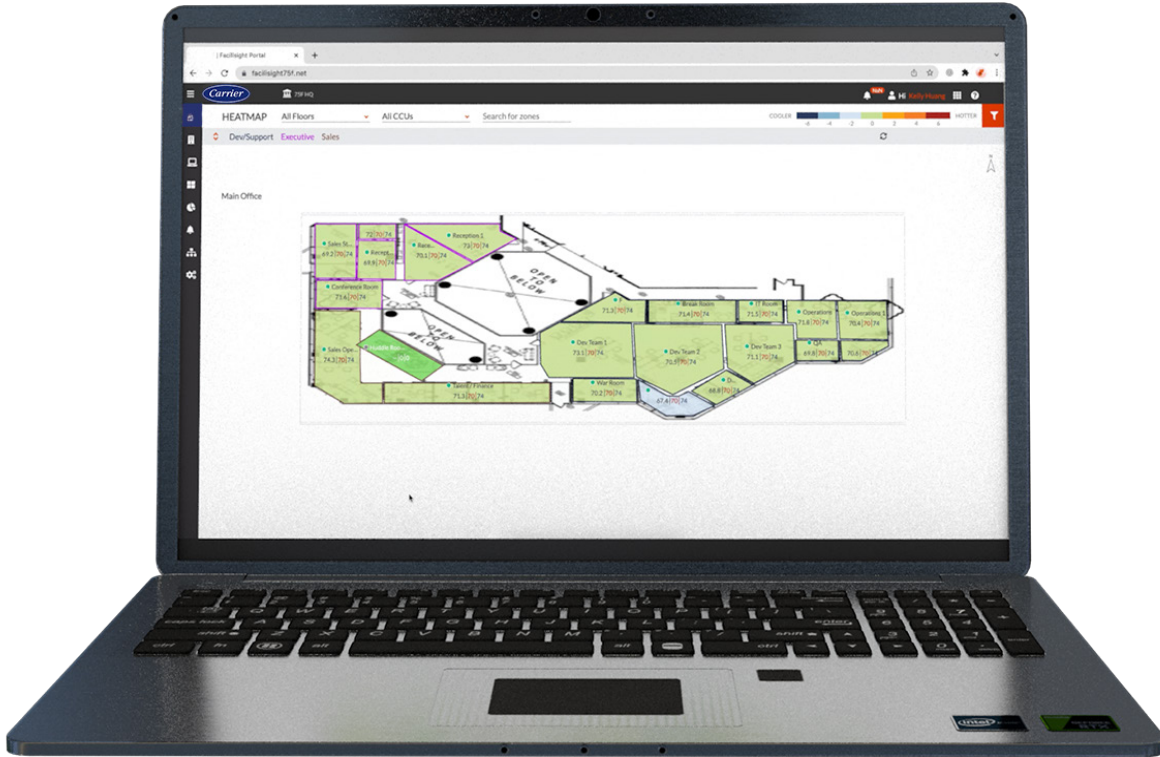
COMPATIBLE APPLICATIONS

- Dynamic Airflow Balancing (DAB)
- Variable Airflow Volume (VAV) with Reheat
- Outside Air Optimization (OAO)
- Indoor Air Quality Management (IAQM)
- Epidemic Mode



DASHBOARD, HEATMAPS AND FLOORPLANS

The ClimaVision User Interface dashboard provides users a high-level overview of their portfolio. A map with pinpoint markers displays the location of each building to correspond with a sidebar list of sites. From this view, users will also see the number of building sites, Central Control Units (CCUs), and zones under their control, as well as a list of alerts organized by severity.

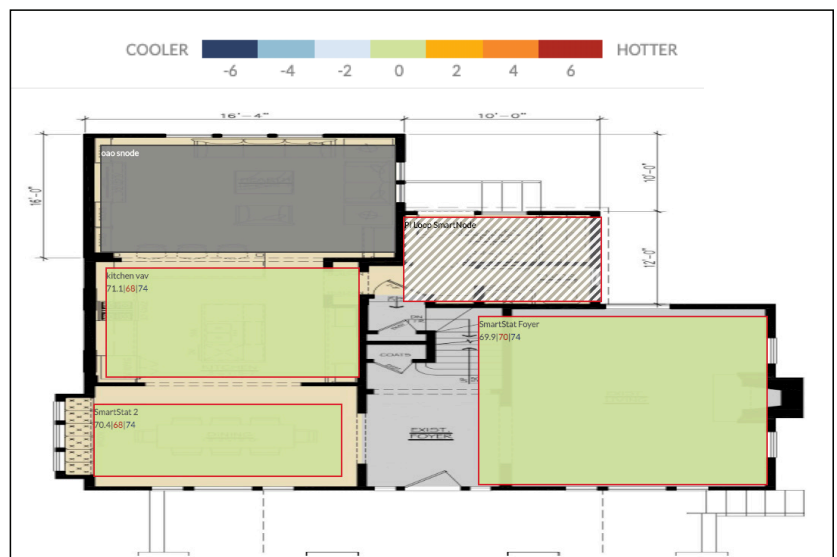


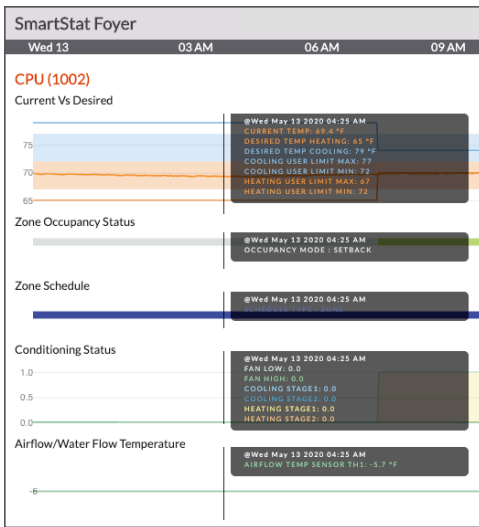
To view a building in detail, select either a pinpoint marker or a site name from the sidebar.

After ClimaVision’s solution is installed in a site, creating a heatmap in the ClimaVision User Interface is as simple as uploading an image of your floorplan and dragging and dropping corresponding zones into the correct placement. Users may readjust the size of the zone to fit their floorplan by clicking and dragging zone edges.

Heatmaps utilize a rich color scheme to cue users in on real-time conditions in zones. Zones with warm colors, such as orange, are warm zones, and zones with blue colors are cool. The system measures this against desired setpoints – zones that are warmer than a pre-determined desired setpoint by two degrees will be orange, and zones cooler than a desired setpoint by two degrees will be blue.

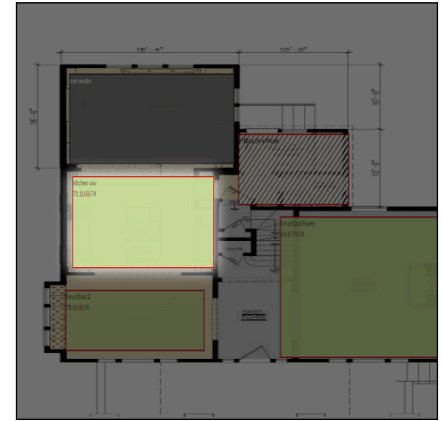
Zones that fall within deadband (the temperature range in which neither heating nor cooling is needed) will be green. Textures on top of zone colors indicate specialized conditions, such as zones in vacation mode.





To see live datapoints such as zone temperature, humidity or airflow temperature, users need only hover their cursor over the zone. When users click on the zone, they can also see all the user intent settings associated with that zone. Clicking on a system icon brings up parameters related to system or building operation. Some examples of this include minimum and maximum humidity settings, schedules, and vacation modes. These intents are editable from the same window.

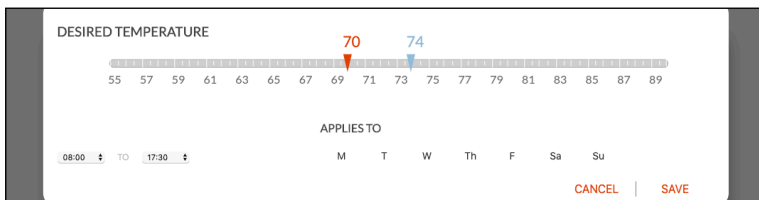
The ClimaVision User Interface layout makes searching for zones easy for facility managers with a large number of zones in their building. Normally, this would crowd the screen and make each zone very hard to distinguish from the adjoining one. With the search feature, users can search for a zone by floor, CCU name, or zone name.



For example, searching the term “space” will yield all the zones and CCUs with that word in the title. These results will appear in a spotlight format – simply hover your mouse over the highlighted zones to see details. All zones not spotlighted in the search will be unactionable for user interaction.

SCHEDULING, TUNERS AND ADJUSTMENTS

Setting a granular schedule for your building and its zones is a significant source of energy savings and comfort. This feature allows facility managers to relax overarching building parameters during unoccupied hours – overnight, for example, or for days at a time when no one is in the building-- and tailor occupied settings to specific zones within a building.

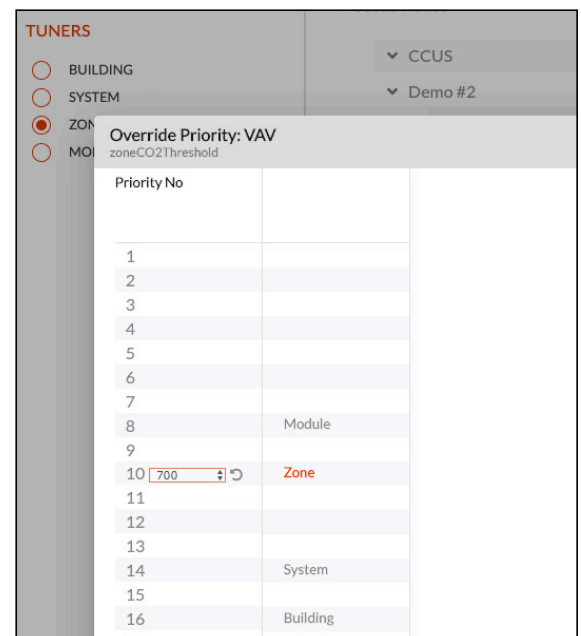


Setting schedules with ClimaVision’s User Interface is simple and intuitive compared to traditional building automation systems (BAS). The top layer of scheduling is the building schedule – these schedule rules will apply to all subsequent zones within that building.

Individual zone schedules can be tweaked, but they must fall within the time period of the overarching building schedule. In a traditional BAS, this is where scheduling can get cumbersome – if a facility manager wants to edit the building schedule, they must then recommission all the subsequent zone schedules to fit within the new building schedule.

ClimaVision’s User Interface is smart enough to give the user the option to automatically force-trim zone schedules that fall outside a building schedule, making new building schedules a one-time task. Beyond scheduling, facility managers have editing power over default system settings, such as humidity and CO₂ levels, among others.

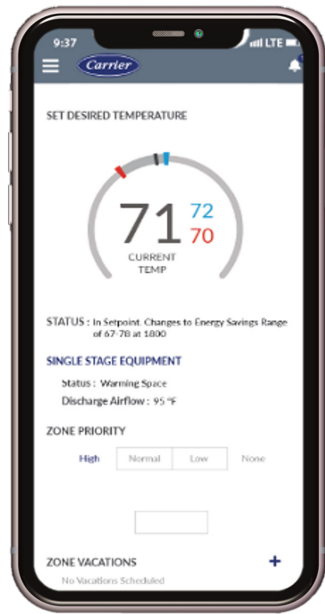
If a building owner knows an important brainstorming session is coming up, for example, they may override the default CO₂ value from 1,000 ppm to 700 ppm in the conference room’s zone. This tuner would call for mixing higher levels of outside air (OA) in that space, thus lowering the CO₂ value.



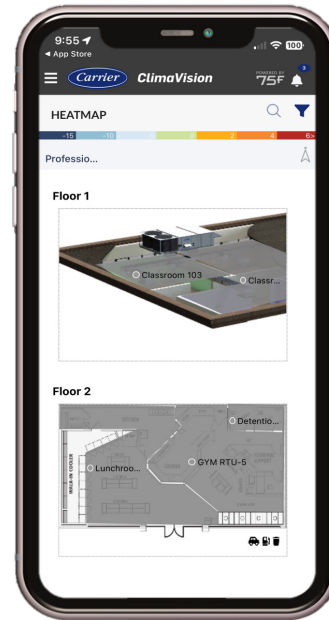
MOBILE APPS

Once a floorplan and heatmap have been set up in the User Interface on the web, that portfolio-wide data will be available on a mobile device as well. Tuner and scheduling adjustments made in the ClimaVision User Interface will automatically merge into the mobile view, making for a seamless user interface across devices.

As in the web application, the mobile application will allow users to view heatmaps, search for specific zones and CCUs, navigate system alerts, set schedules, and manage other settings.



OCCUPANT APP



FACILITY MANAGER APP

USER MANAGEMENT AND SINGLE SIGN-ON

ClimaVision's User Interface supports single sign on for users having a Microsoft or Google account as an alternate to a traditional password. This allows users to sign on with their regular business account rather than having to remember a separate password.

ClimaVision User Interface users are registered under different role types. Your role will determine your ability to view or edit different sites.

Every building site within the ClimaVision User Interface will belong to an organization. Organization Managers have access to all the sites under an organization, though facility managers are the users in charge of site user management to ensure the places in which people work, play, and learn are safe, comfortable, productive, and sustainable. In ClimaVision User Interface, facility managers are sorted into primary and secondary roles. Primary facility managers – one per site – may add, edit, or remove secondary facility managers and secondary installers. Secondary facility managers have access to sites assigned to them but may not edit user permissions.

Installers are users who have been identified during a CCU registration in the installation process. When these users log into the portal, they do have access to view all the sites they have been assigned to even across organizations.

