Introduction
to
Advisor Services

1. What is a Smart Lab
2. Background on Aircuity Advisor Services
3. Software requirements
4. Login and Navigation
5. Fume hood sash management
6. Next steps

What is a "Smart Lab"

"Smart Labs" are newly constructed or retrofitted laboratories that reduce building system energy consumption by 50% or more, augment established safety protocols and designs, and provide a data stream effectively commissioning the building at all times.
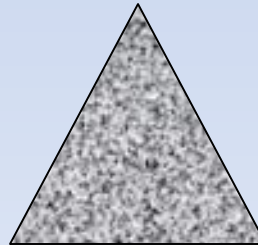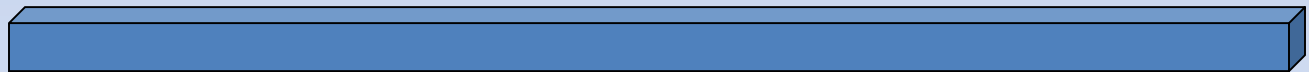
Mechanical System Balance

Autoclaves
Ultra -low temp freezers
Refrigerators
Incubators
Water purification systems
Microscopes
Computers
Shake tables

Lighting
Occupants
Building Shell
Windows

2-4 ACH

Lower air change rates more closely match the natural lab process load, reducing both fan power and reheat.

The Smart Lab Information Layer
Dashboard and Data Trends for Each Zone

- Air change rates (ACR)
- Internal air quality (IAQ)
- Sash position of each fume hood
- Occupancy
- Relative humidity
- Temperature
- Total supply
- Total exhaust
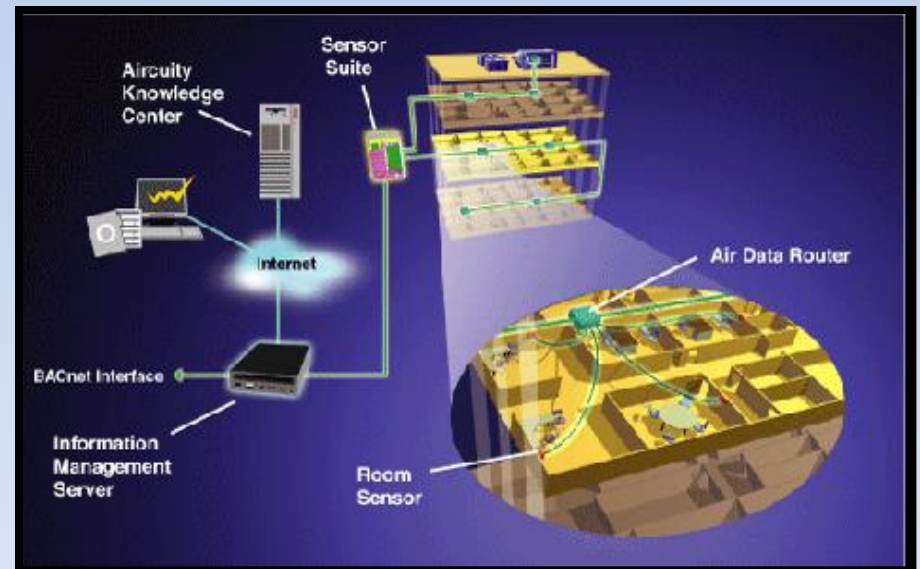
Why did FM invest in Advisor?

What benefit is Advisor to BFMI?

Where can I learn more?
http://www.aircuity.com/services/aircuity-advisor-program/

Benefits

Owners

Aircuity Advisor tools monitor a building's performance to determine whether it is operating at peak efficiency.

- Dashboards provide airside usage over time
  - View average total supply by AHU zone or space
  - Analyze usage over time
  - Verify desired ventilation rates are achieved/maintained
  - Display "Excess Supply Flow" compared to the desired target
  - View estimated savings in dollars
- Summary Reports show at a glance view
  - Is efficiency improving, declining, staying the save over time?

Monitor the building portfolio for efficiency while being informed of any potential issues.

Facilities

Aircuity Advisor tools aid Facilities personnel in assuring the HVAC equipment is functioning properly.

- Smart Notifications function as a call to action
- Dashboards provide insight to:
  - Over/under ventilated spaces
    - Driven by usage patterns
    - Due to changes in thermal demand
  - Filter issues based on particle count
  - Identify HVAC equipment malfunctions
  - Trends over time, across building
- Summary reports show HVAC performance over time

Deploy your resources more efficiently to diagnose and resolve issues as well as perform continuous commissioning to ensure optimum performance.

Sustainability

Aircuity Advisor provides Sustainability Managers insight to airside energy usage and savings opportunities.

- Smart Notifications alert if desired cfm thresholds are exceeded
- Dashboards analyze energy drivers
  - Spaces with highest energy consumption
  - Thermal, fume hood or DCV driven
  - Identify spaces/areas for energy optimization initiatives
- Summary Reports provide a comparison of current versus previous HVAC energy performance.

Proactively monitoring building performance enables you to achieve the energy savings entitlement provided by the OptiNet system.

Health and Safety

Aircuity Advisor provides Health and Safety professionals a means of ensuring that building occupants adhere to established protocols.

- Smart Notifications alert officials of IEQ events
- Dashboards provide details in graphical format
  - Time of incident
  - Location of events
  - Severity and duration
  - Frequency of occurrence
- Summary Reports provide a record of ventilation and IEQ performance for reporting or documentation purposes

Track IEQ events to establish and reinforce protocols ensuring all occupants are provided a healthy, safe and productive work space.

Getting Started

1. Internet Explorer
2. Microsoft Silverlight

There is a push to re-develop the entire dashboard system into HTML5 but this may take some time. Please call OIT and request Silverlight be installed if it was not part of the installation package you received.

http://www.aircuity.com

Advisor Login
User Name = ucirvine
Password = anteater

Enter:
User Name
Password
Click Login

Select a building you wish to review:

Select the building you are interested in viewing

Dashboards is the most common selection

Click the desired Advisor button to access that feature.
A new page will open.

Use controls to set scope and time frame to view
Drag dashblocks between the dashboard and palette

Dashboard Controls

Dynamic Dashboard

Dashblock Palette
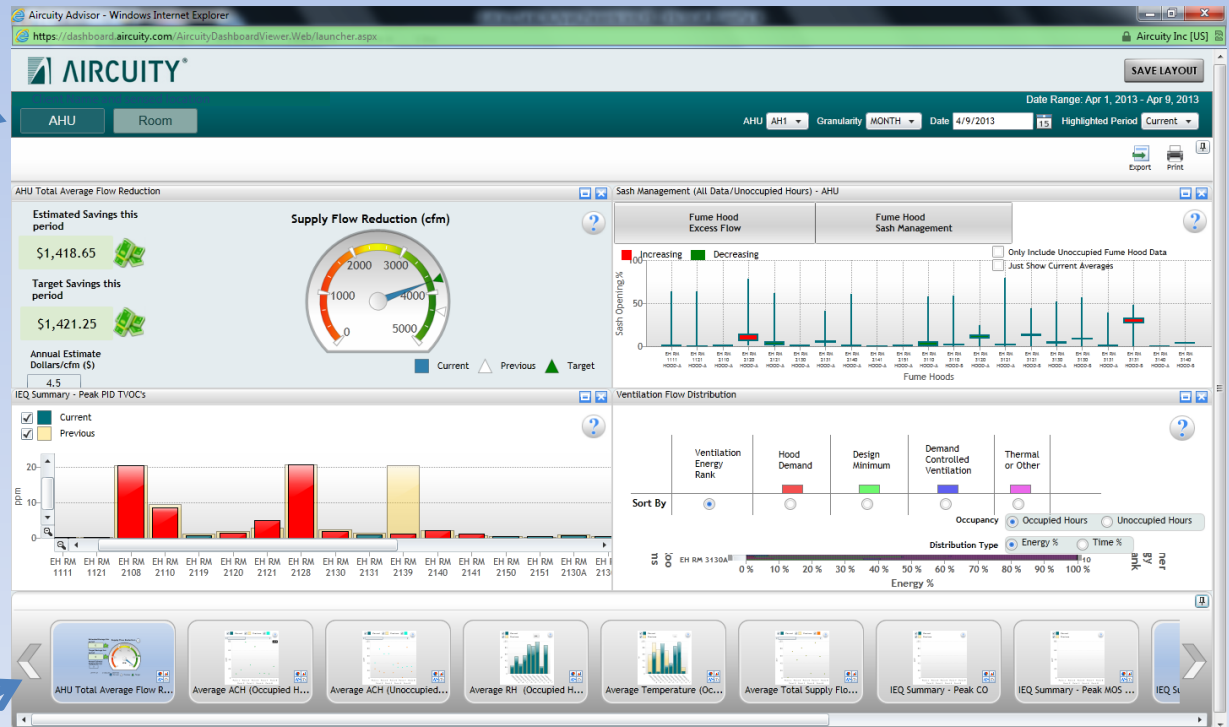
Often an overwhelming number of dash blocks are loaded. Close them out until you are able to view a manageable amount of data.

Dashblocks can be added by dragging them into the window

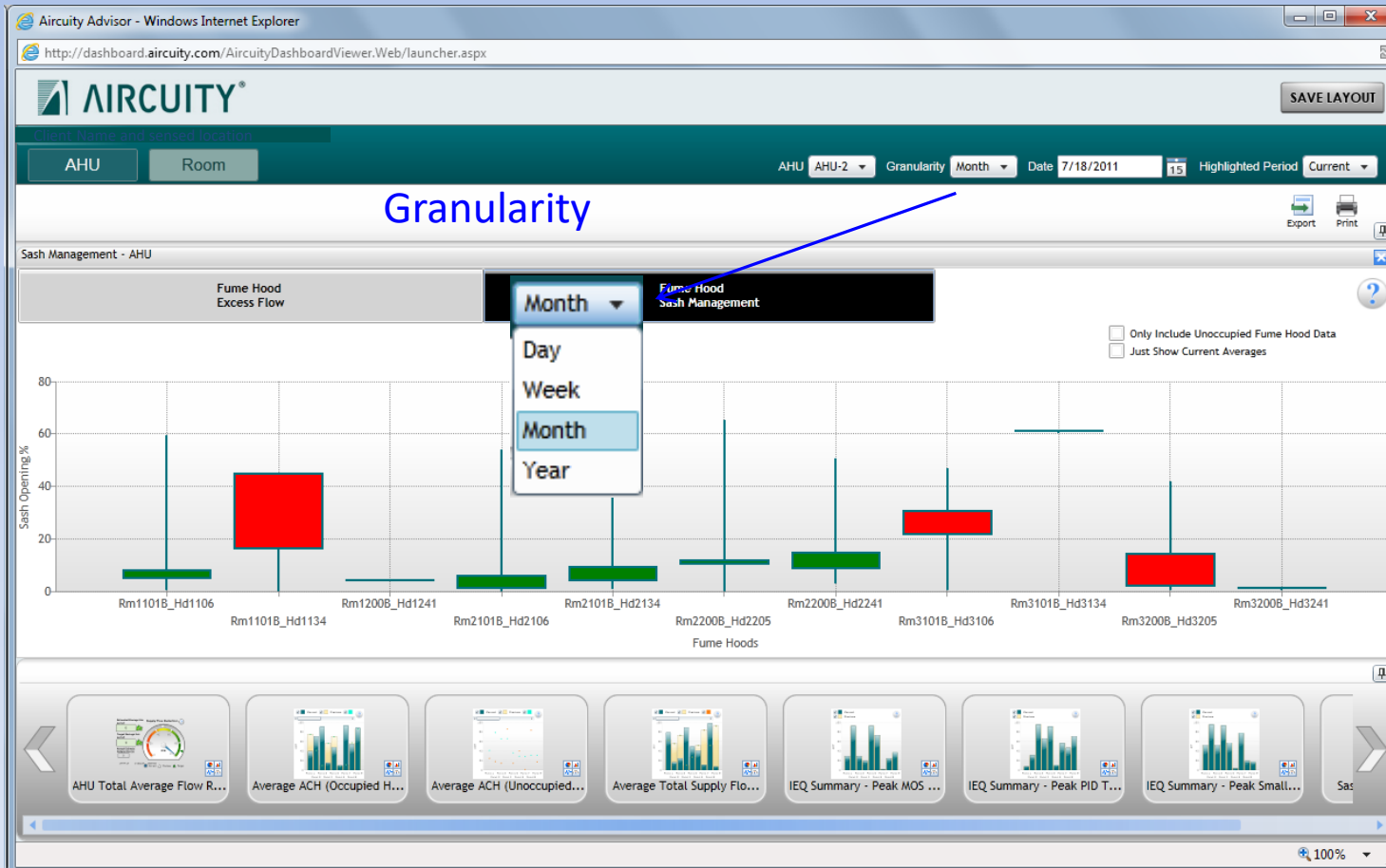# Dashblocks can be moved and placed in any order you wish

This is the most useful report to share with the lab users. Sash management can save UCI thousands of dollars a year. We encourage you to distribute this report monthly.
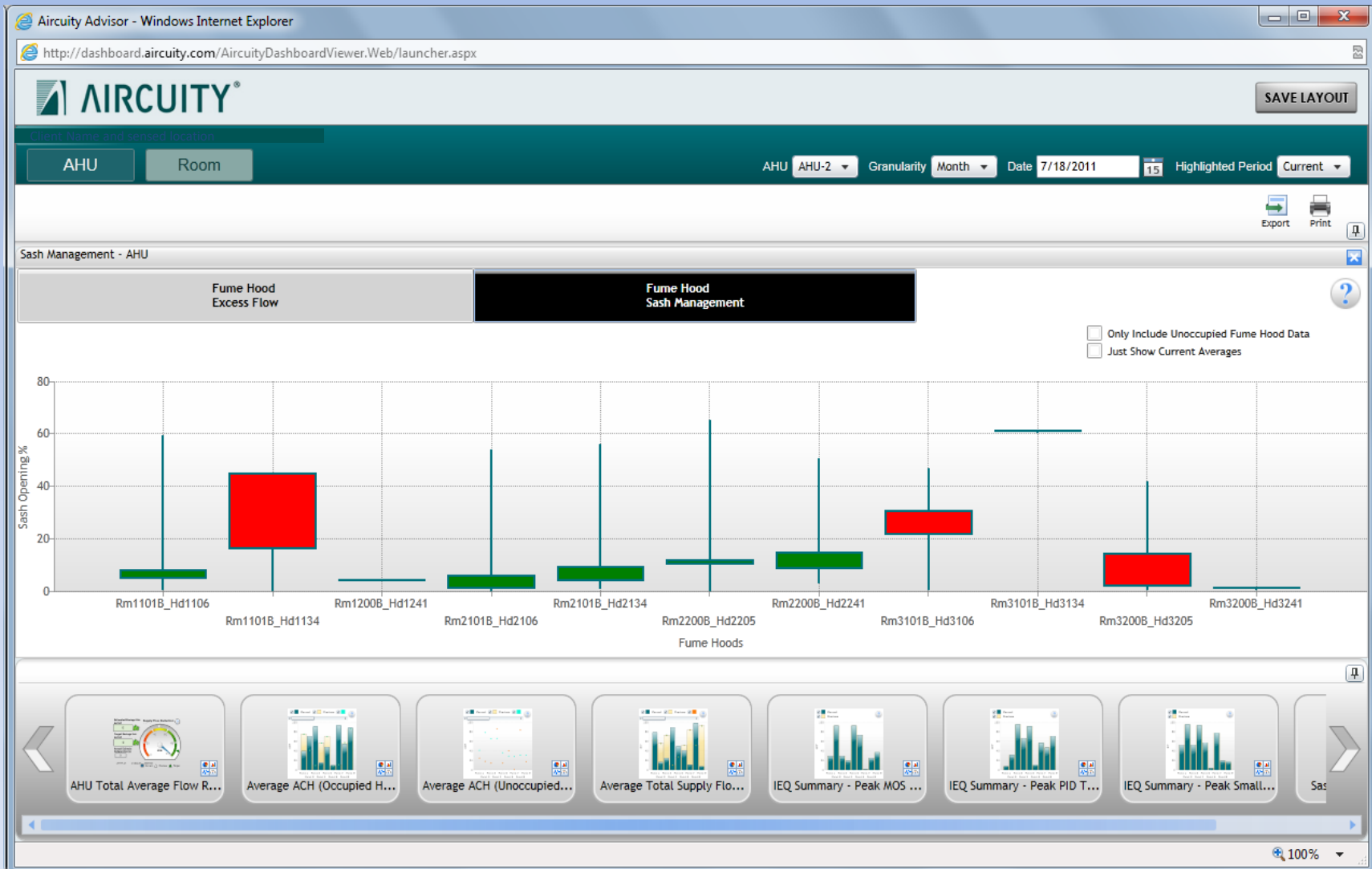
Select the "scope" of the view
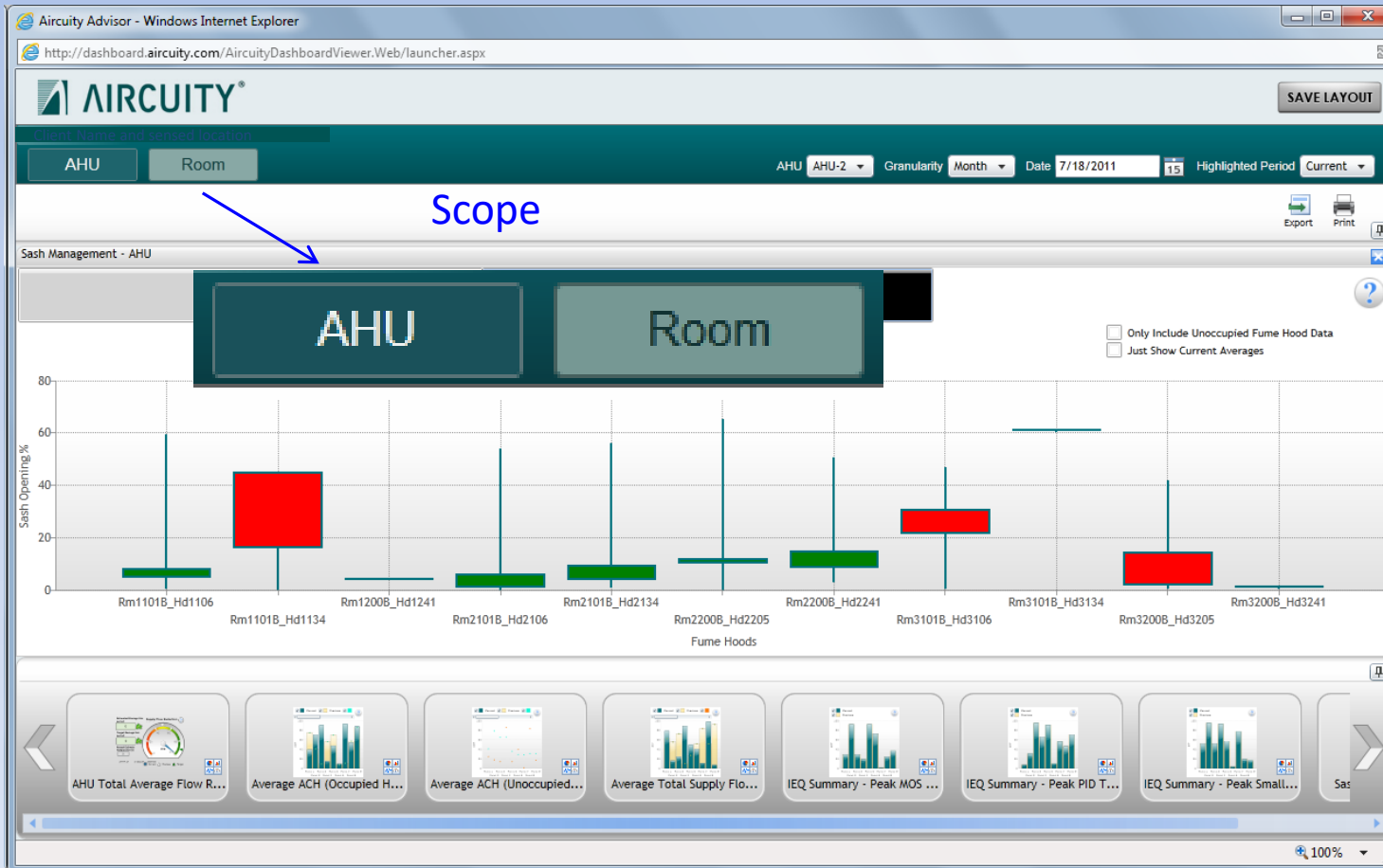
Select the time period over which data is analyzed

- Select the start date

Candlestick chart shows Min, Max and average for time period
Compares current period to previous period

Candlestick chart shows Min, Max and average for time period
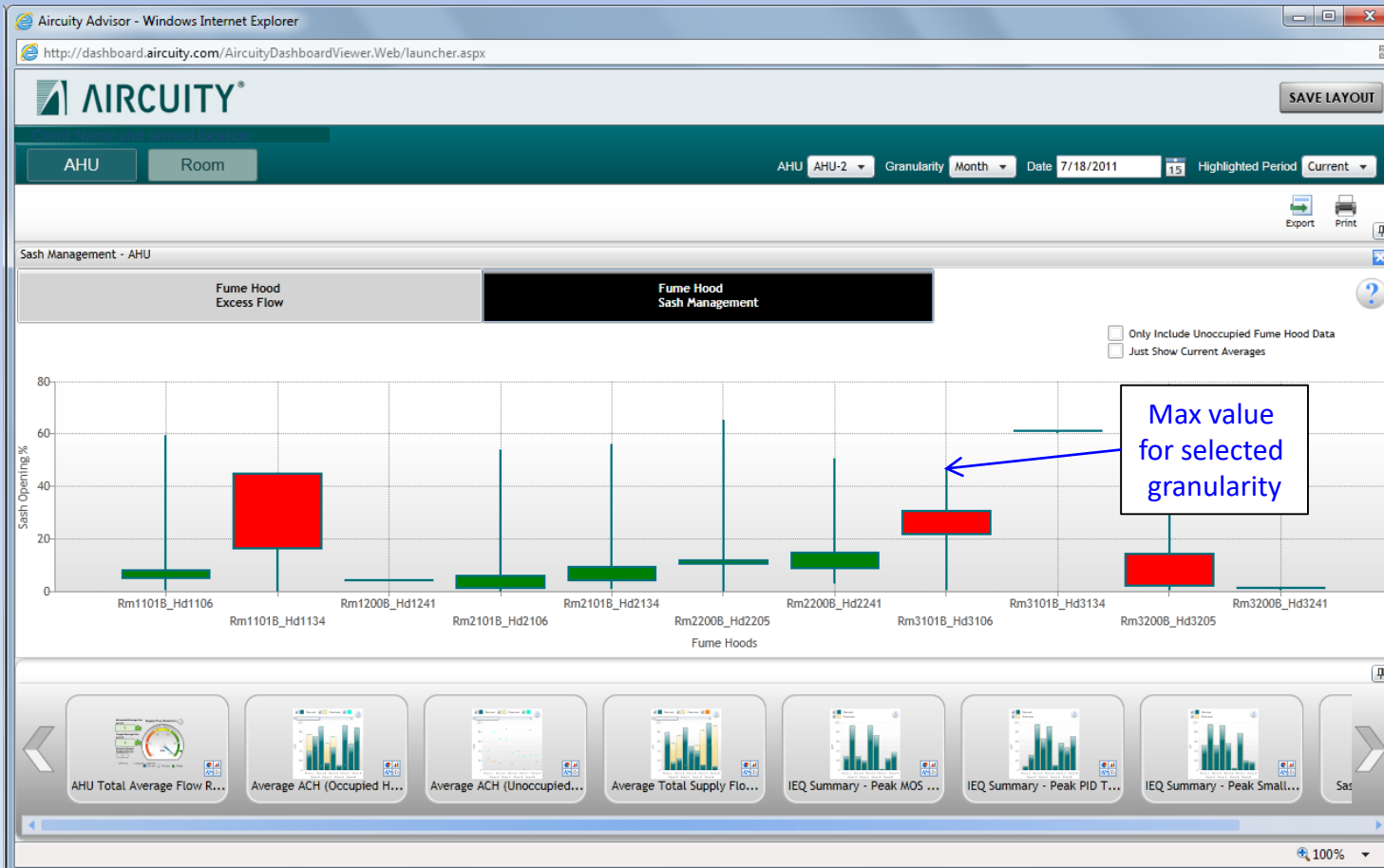
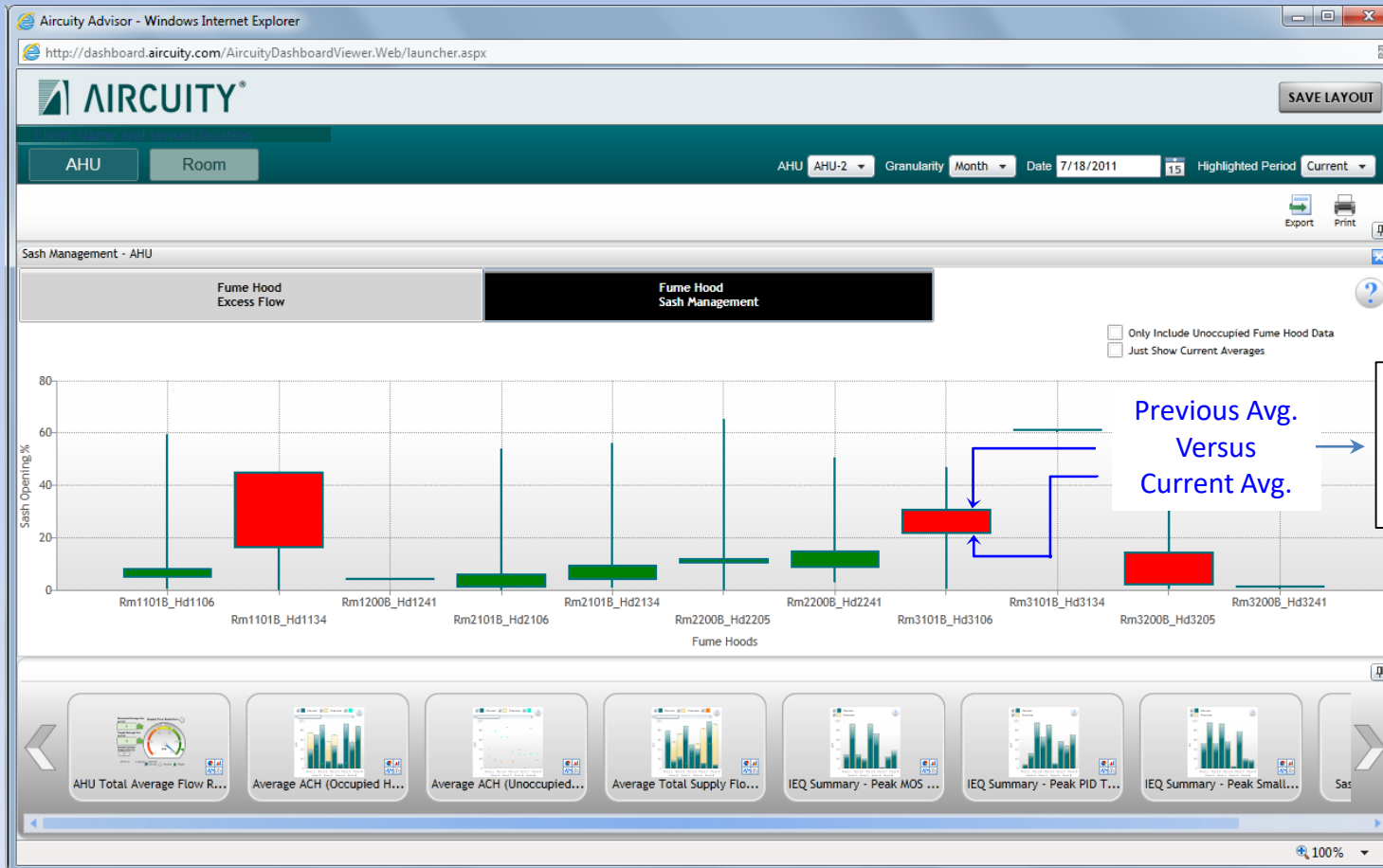Compares current period to previous period

Candlestick chart shows Min, Max and average for time period

Compares current period to previous period

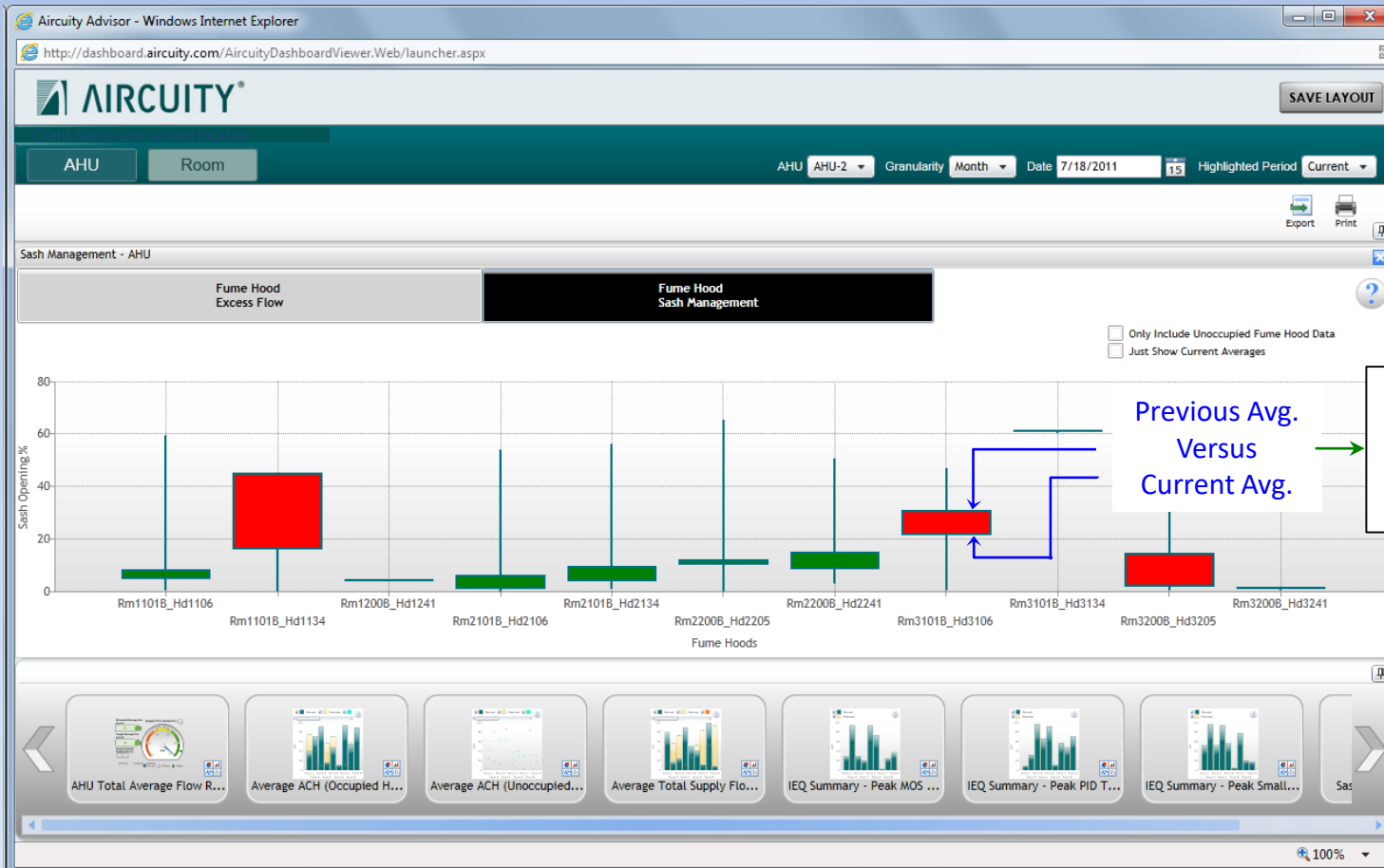# Candlestick chart shows Min, Max and average for time period
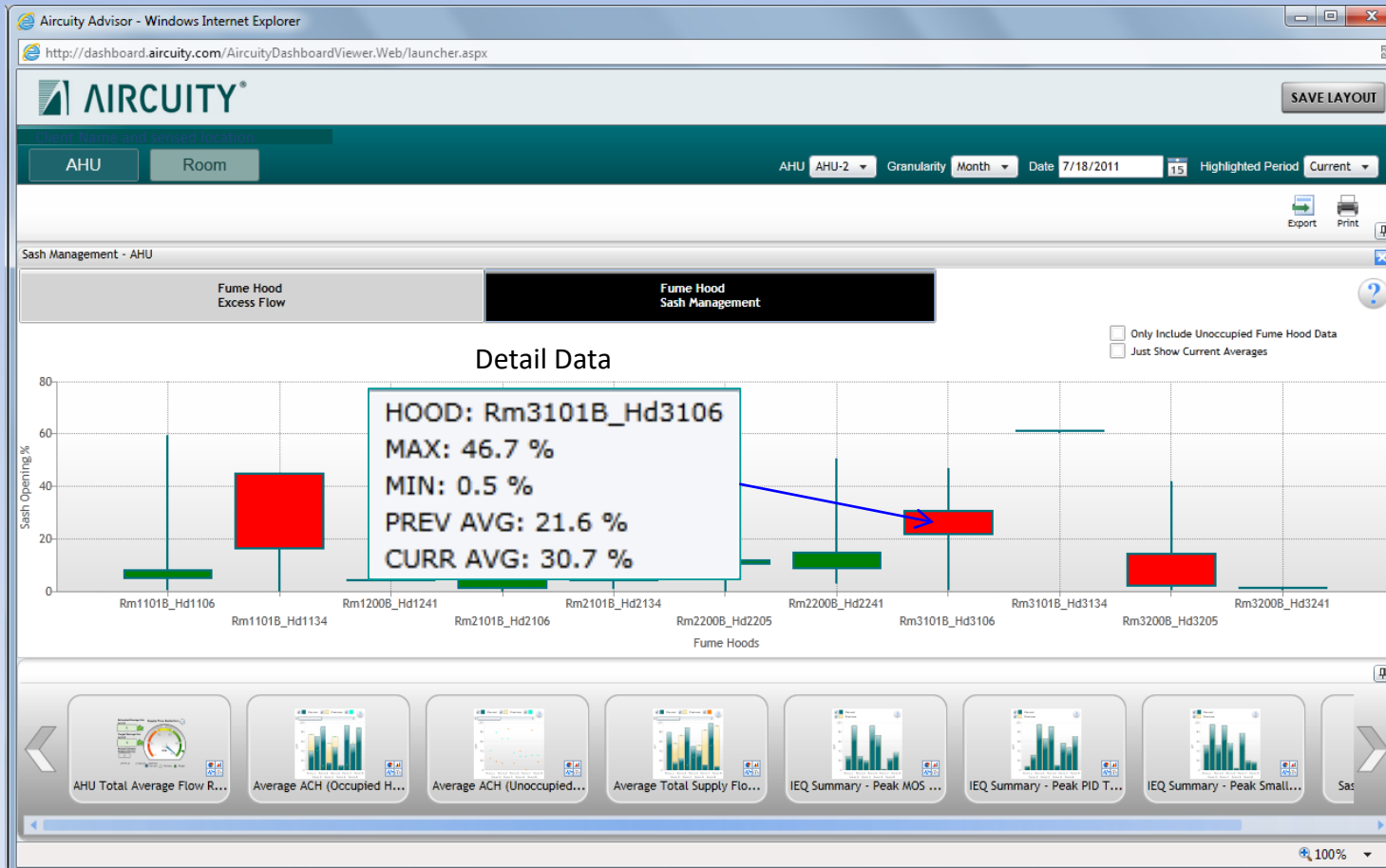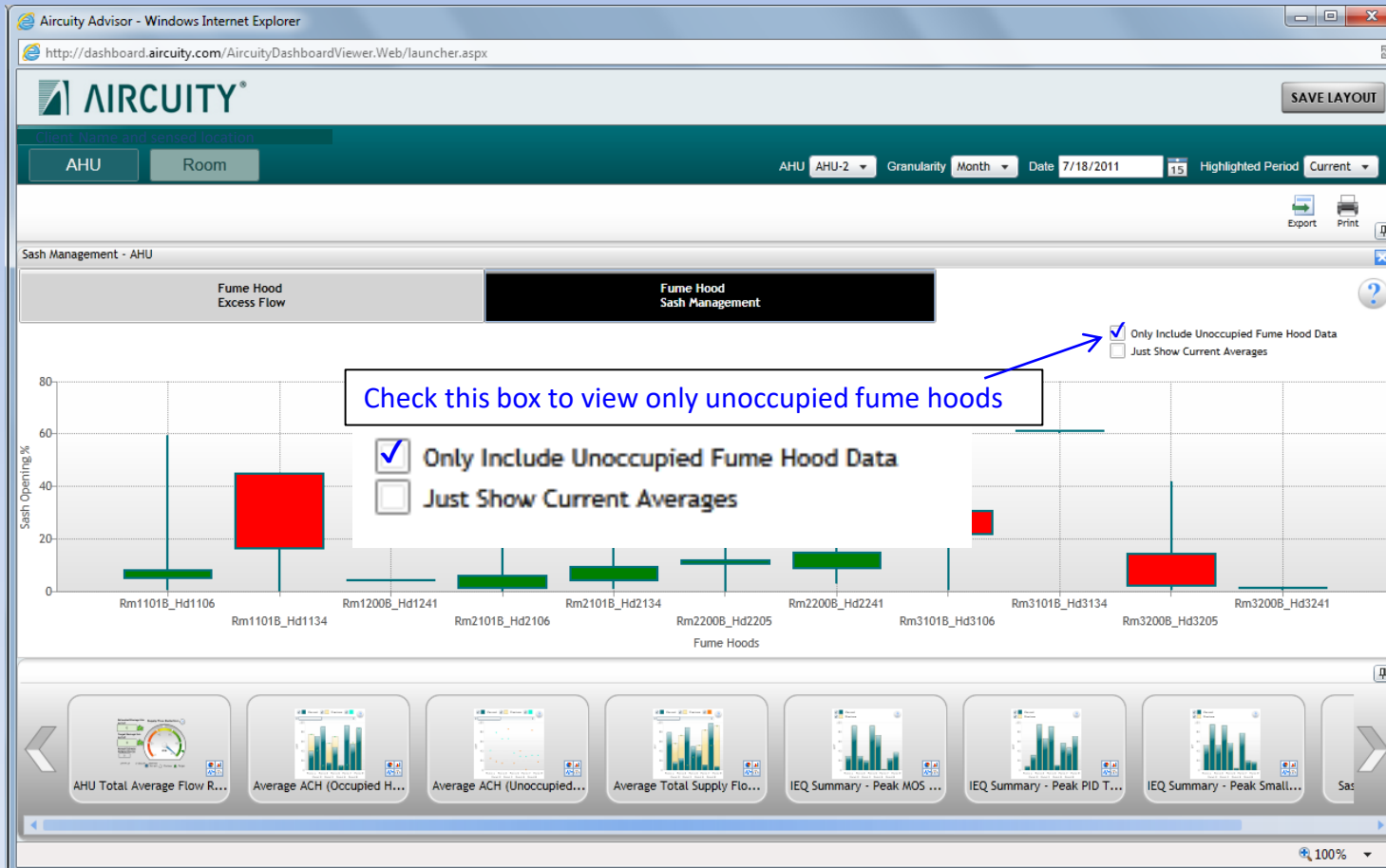# Compares current period to previous period
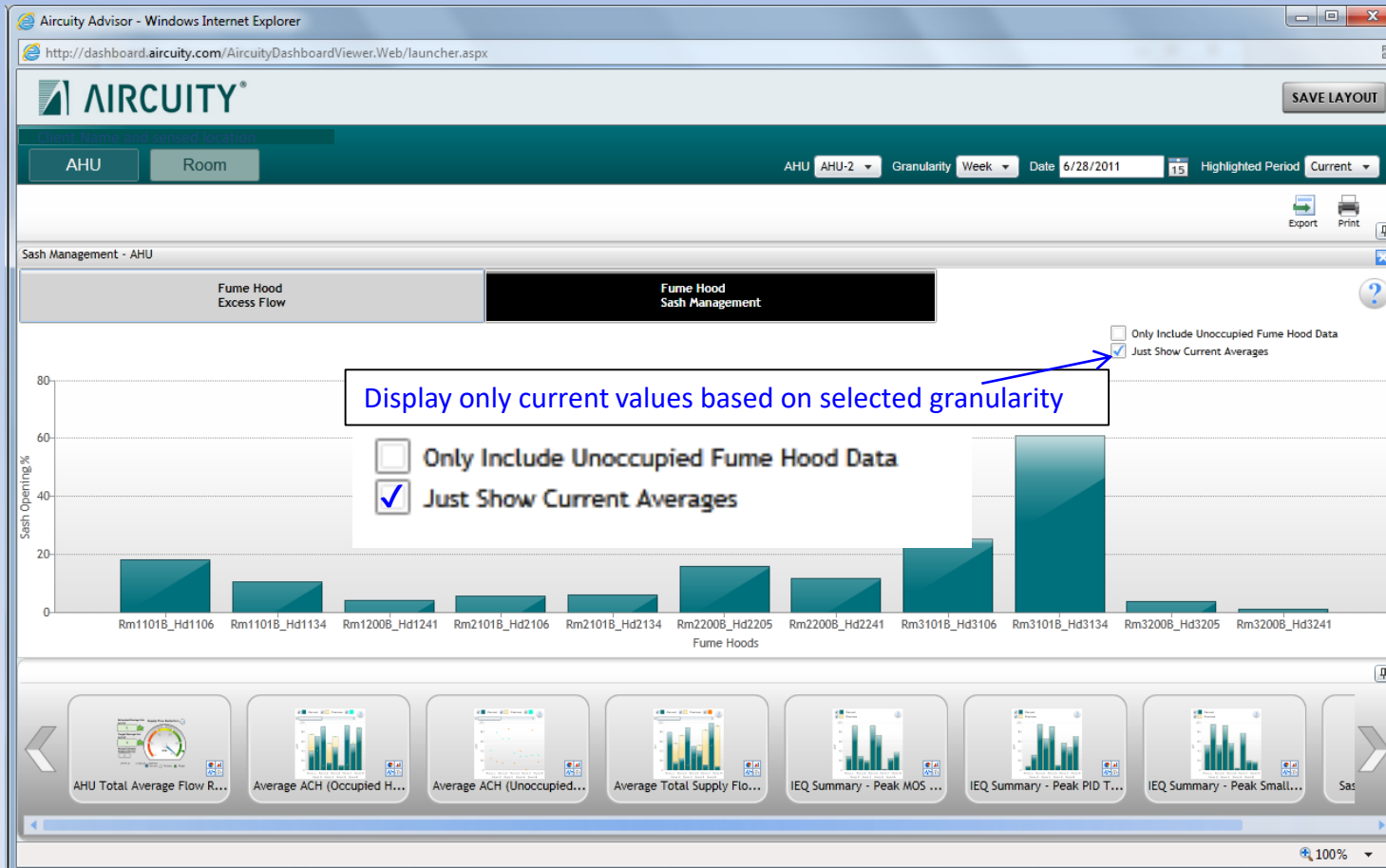
Hover over the bar to display details

View hoods where sash management should be questioned
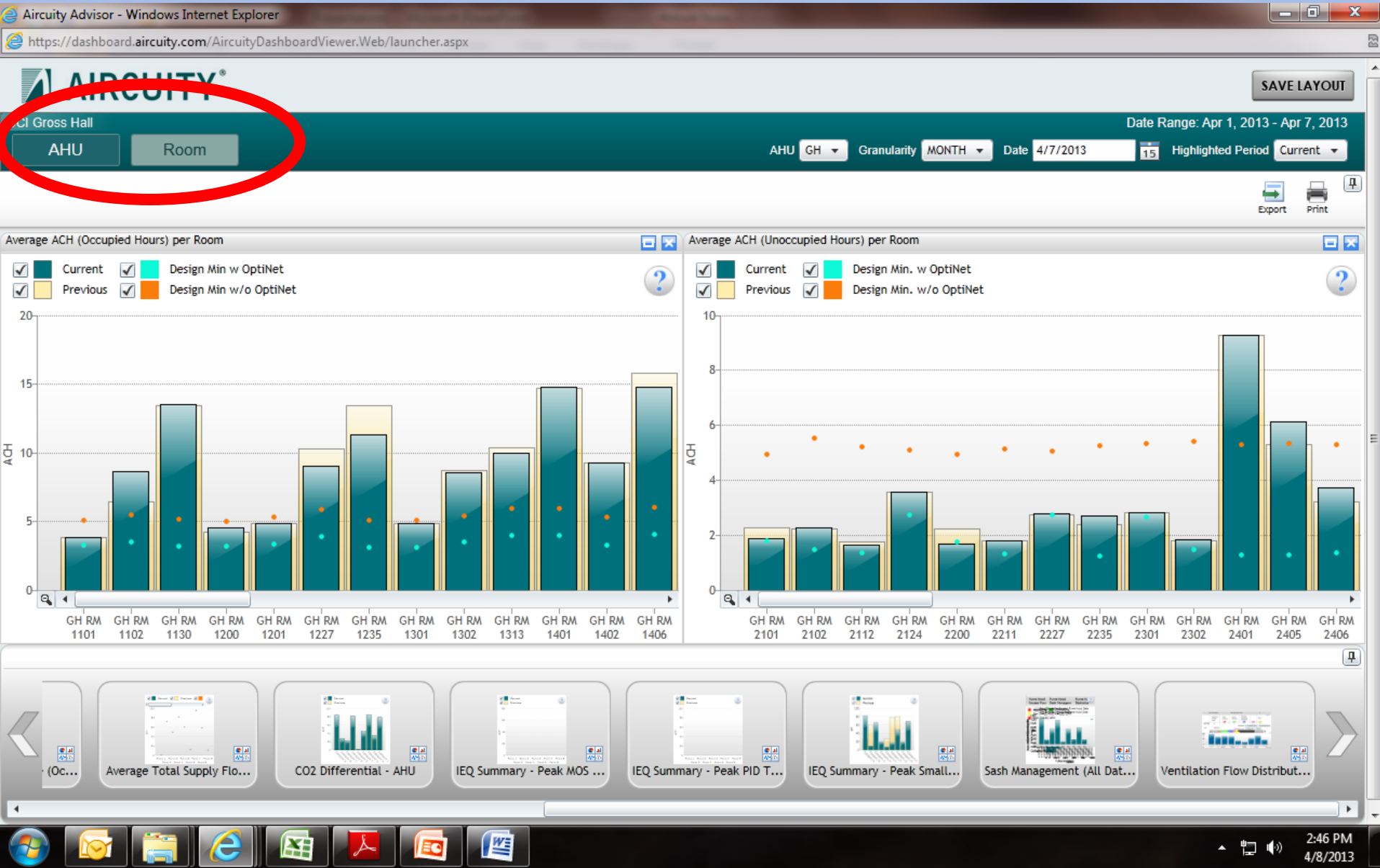
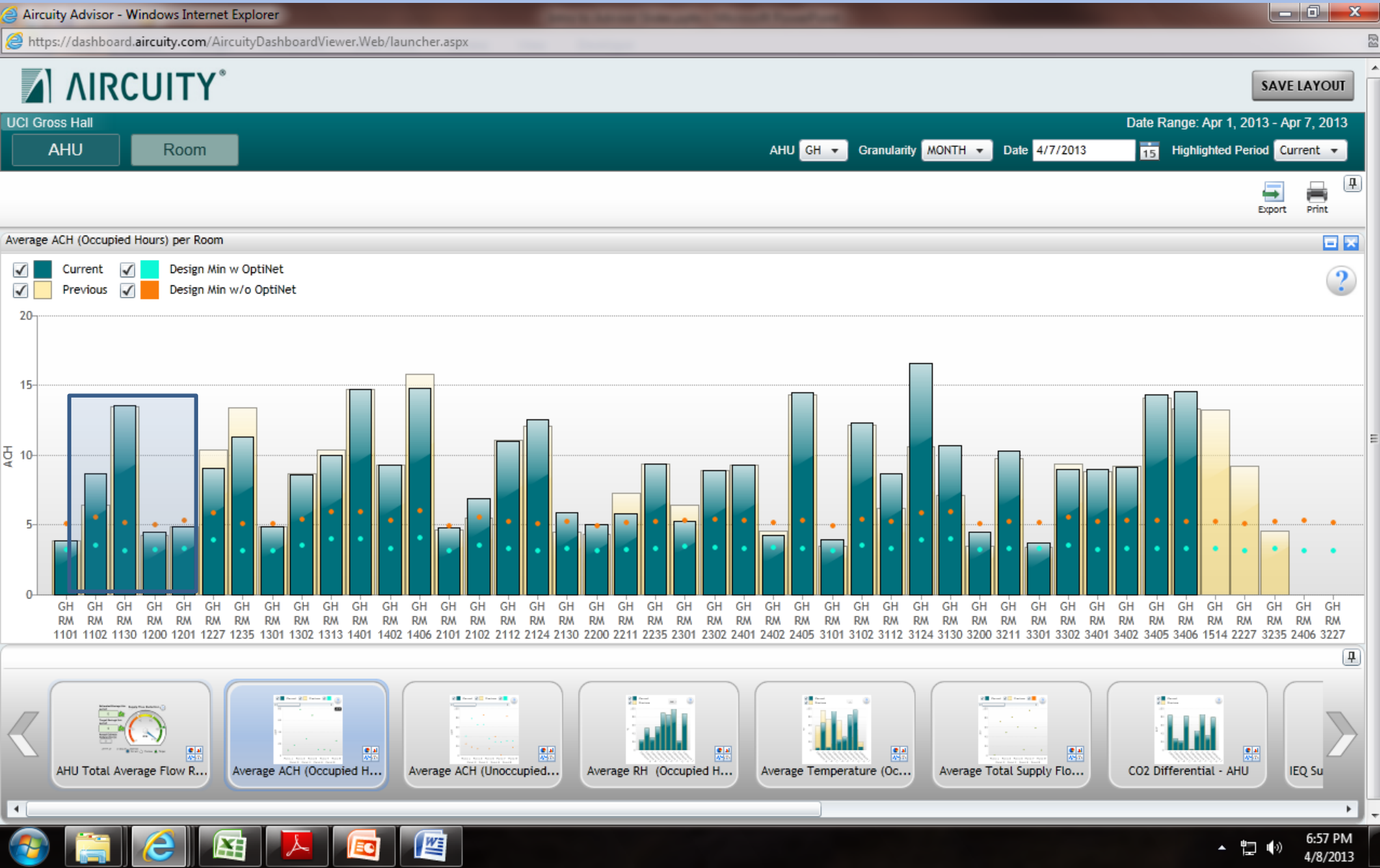– Hood or Lab is unoccupied but sash(es) are open
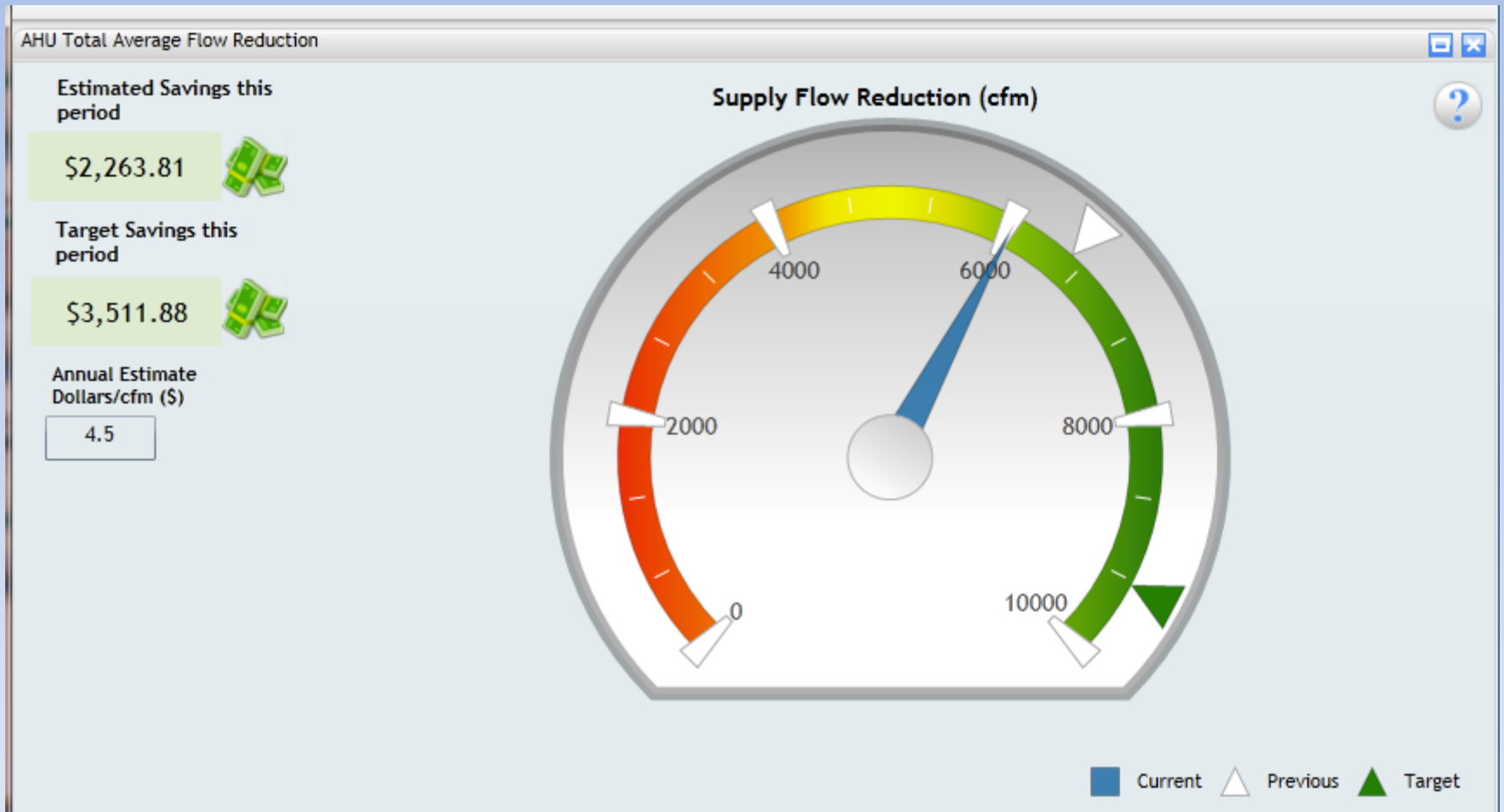
Display just the current average sash position

AHU gives data from the high level overview
Room breaks the data down

You can pan and zoom as needed.

Advisor Services is still in the deployment phase some blocks show savings that don't make sense, show flows that may be very high, etc. Please bring this to our attention.

Questions?

https://webfiles.uci.edu/mgudorf/Intro%20to%20Advisor%20Slides.pptx