# **Honeywell** Easy Healthy Building

**INSTALLATION AND OPERATIONS GUIDE** 

MAY 2021

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# **Document History**

Version	Published	Changes	Comments
05 - 21	11-05-2021	Whole document	New document

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# About this Guide

This guide provides information about the Healthy Building Dashboard and its configuration.

# About Easy Healthy Building

Easy Healthy Building provides a score that enables the user to understand their buildings in key performance indicators (Temperature, CO2, Humidity, PM2.5, TVOC, and Occupancy) which can be used with sensor feedback values to calculate the healthy building score which can be displayed on the Healthy Buildings Dashboard. This can provide an indication of comfort level and environment safety.

The Healthy Building dashboard provides, visibility of the health of a portfolio/Region /Building and its underlying zones. This helps to triage a zone based on their performance score. The Healthy Building score is computed at zone level.

### Healthy Building Dashboard

The information displayed on the Healthy Building Dashboard depends on the user type. There are two types of user:

- Admin
- Non-Admin

The Admin view is as shown below. In this view, this type of user has four tab such as:

- ALL KPI'S,
- ZONE WISE SUMMARY
- HEALTHY BUILDING ALARMS
- ZONE CONFIGURATION

Zone configuration is a tab where admin user can do all cured operation like creating zone, editing zone, deleting zone and disabling/enabling zone.

	ZONE WISE SUMMARY	HEALTHY BU	ILDING ALARM	ZONE CONFIG	URATION			
À		HEALTHY	BUILDING NOTIFIC	TION	AIR	QUALITY		
			2/9 Total Notifications			DEXCELLENT All Zones	Humidity INADEQUATE All Zones	
		1 Urg	ent High	1 Low	co <sub>2</sub>	2 INADEQUATE All Zones	PM2.5 PM2.5 I Zones out of Ran	Ige
		ALL ZON ALL ZON PO All Zo					Occupancy INADEQUAT All Zones	Ē
EALTHY	BUILDING ALARM					Notifi	cation Type All	
Time R	ange 💙 🕑 ? to ?					5 Sour	rce(s) / 9 Alarm(s)	
	Therese	Source	Message Text 🔺	Source State	Priority	Ack State		
Info	Timestamp							
Info 🌲	06-May-21 3:10:33 PM IST	Points-tvoc		Offnormal	255	0 Acked / 5 Un	acked	
Info A A		Points-tvoc Points-temp1		Offnormal Offnormal	255 255	1.2.	acked acked / 1 Pending	

The Non-Admin View is as shown below. It contains three tabs such as:

- All KPI'S
- ZONE WISE SUMMARY
- HEALTHY BUILDING ALARMS.

100		HEALTHY	BUILDING NOTIFICA	TION	AIR	AIR QUALITY		
		2/9 Total Not	ifications		$\odot$	DEXCELLENT All Zones	Humidity INADEQUATE All Zones	
		1 Urg	ent High	1 Low	CO2	INADEQUATE All Zones	PM2.5 1 Zones out of Range	
		ALL ZON				C 1 Zones out of Range	Occupancy INADEQUATE All Zones	
CALTUN	BUILDING ALARM					Notifi	cation Type All	
EALTHY								
	tange 👻 🕑 ? to ?					5 Sou	rce(s) / 9 Alarm(s)	
Time F	Range 🖌 🕑 ? to ? Timestamp	Source	Message Text 🔺	Source State	Priority	5 Sour	rce(s) / 9 Alarm(s)	
Time F		Source Points-tvoc	Message Text •	Source State Offnormal	Priority 255			
Time F	Timestamp		Message Text 🔺		-	Ack State 0 Acked / 5 Un		

# Dashboard Overview

The Healthy building dashboard provides high visibility of the healthiness of a portfolio / Region / Facility and underlying zones. The Healthy Buildings Score is an index score based on the building's sensors and other devices monitoring environmental factors and occupants.

The Honeywell Intelligent Sensors, combined with powerful computing, evaluate live sensor output and historical data to provide real-time insights into the health of the building. The Healthy Building dashboard consists of four tabs:

- ALL KPI'S,
- ZONE WISE SUMMARY
- HEALTHY BUILDING ALARMS
- ZONE CONFIGURATION (For admin only)

### ALL KPI'S

The ALL KPI'S tab comprises of four sections:

- HEALTHY BUILDING NOTIFICATION
- AIR QUALITY
- ALL ZONEWELLNESS
- HEALTHY BUILDING ALARMS

	ZONE WISE SUMMARY	HEALTHY BUILDING ALA	RM ZONE CONFIG	URATION			
		HEALTHY BUILDING NO	HEALTHY BUILDING NOTIFICATION				
		2/9 Total Notifications		Temperatur EXCEL All Zones		Humidity INADEQUATE All Zones	
		1 Urgent	0 <b>T</b> High Low	co:	2 INADEQUATE All Zones	PM2.5 PM2.5 I Zones out of Ran	ge
		ALL ZONES WELLNESS	1	TVC	0C \_1	Occupancy	E
		All Zones			Zones out of Range	All Zones	
EALTHY B	UILDING ALARM						
						cation Type All	
Time Ra	inge 💙 🕑 ? to ?				5 Sour	cation Type All rce(s) / 9 Alarm(s)	
		Source Message T		Priority	5 Sour	rce(s) / 9 Alarm(s)	
Time Ra	inge 💙 🕑 ? to ?	Source Message T Points-tvoc	Text ▲ Source State Offnormal	Priority 255	5 Sour	rce(s) / 9 Alarm(s)	
Time Ra	nge 💙 🕑 ? to ? Timestamp	Ū			5 Sour Ack State 0 Acked / 5 Un	rce(s) / 9 Alarm(s)	[

### Healthy Building Notification

HEALTHY BUILD	DING NOTIFICATI	ON
Total Notificatio	ons	
1 Urgent	) O High	1 Low

The Healthy Building Notification shows total number of active out of total raised alarms. Active alarms are further classified as Urgent, High or Low as described below.

KPI Point	Alarm C	ategory	Description
	0 Urgent	Urgent	The point value is out of the recommended range by $\pm4^{\rm o}{\rm C}$ or more.
Temperature	€ High	High	The point value is out of the recommended range by $\pm 3^{\circ}$ C or $\pm 2^{\circ}$ C.
	<b>V</b> Low	Low	If point value is out of the recommended range by $\pm 1^{\circ}$ C.
	0 Urgent	Urgent	The point values is greater than 1801 PPM.
Carbon Dioxide (PPM)	0 High	High	The points value is in between 801- 1800.
	0 Low	Low	The points value is in between 601- 801 PPM.
	0 Urgent	Urgent	The point value is <10 % or > 90 %.
Relative Humidity	0 High	High	The point value is <20 % / > 80 % or <30 % / > 70 %.
	0 Low	Low	The point value is <40 % / > 60 %.
	0 Urgent	Urgent	The point value is > 1.0 mg/m <sup>3</sup> .
Total Volatile Organic compound (TVOC) (mg/m³)	0 High	High	The point value is in between 0.3 to 0.5 mg/m3 (Poor or Fair status).
	<b>V</b> Low	Low	The points value is is in between 0.1 to 0.3 mg/m3 (Good status).
Particulate Matter 2.5 (PM 2.5)	0 Urgent	Urgent	The point value is > 0.065 mg/m³.
μg/m <sup>3</sup>	0 High	High	The point value is in between 0.3 to 0.5 mg/m <sup>3</sup> .

KPI Point	Alarm Category		Description
	0 Low	Low	If point value is in between 0.1 to 0.3 mg/m <sup>3</sup> .
	0 Urgent	Urgent	If less than 70% of population is satisfied.
Occupancy	0 High	High	If less than 70 to 89 % of population is satisfied.
	0 Low	Low	If less than 90 to 99 % of population is satisfied.

### Air Quality

AIR QUALITY	
Temperature	Humidity
EXCELLENT	A INADEQUATE
All Zones	All Zones
CO2	PM2.5
A INADEQUATE	$\wedge 1$
All Zones	Zones out of Range
TVOC	Occupancy
<u>^1</u>	A INADEQUATE
Zones out of Range	All Zones

This section provides a summary of the Indoor Air Quality (IAQ) of the building based on the zones. Air quality is calculated using the Honeywell Standard Healthy Building Algorithm.

It indicates status (Excellent, Good, Fair, Poor) of Temperature, CO2, Humidity, PM2.5, TVOC, and Occupancy KPIs.

Icon Indication	Description
$\odot$	The KPI is in the recommended range. Click on the icon to see details in ZONE WISE SUMMARY tab.
	The KPI is out of recommended range. Click on the icon to see details in ZONE WISE SUMMARY tab.

### All Zone Wellness



This Section provides the overall health status of the building.

The value is calculated using the wellness of the underlying zones, for example If there are three zones

Individual Zone Status Condition	ALL ZONE WELLNESS Status
If all three zones are in the Excellent Status	EXCELLENT
If two zones are in Good status and one in Excellent	GOOD
If two zones are in Good status and one in Poor	GOOD
If all zones are in Poor status	POOR
If two are in Poor status and one in Good status	POOR

### Healthy Building Alarm

Alarms related to the KPI points (linked to the asyHealthyBuildingAlarmClass) are recorded in the alarm console and can be viewed in this area of the Healthy Building dashboard. The Healthy Building dashboard supports two type of alarm consoles:

- honAlarmConsole
- Niagara alarm console.

If using the honAlarmConsole, then HEALTHY BUILDING ALARM Section appears as shown below.

EALTHY E	BUILDING ALARM						
						Notification Type All	•
Time Ra	ange 💙 🕒 ? to ?					5 Source(s) / 9 Alarm(s)	▼
Info	Timestamp	Source	Message Text 🔺	Source State	Priority	Ack State	
۰	06-May-21 3:10:33 PM IST	Points-tvoc		Offnormal	255	0 Acked / 5 Unacked	
۰	15-Apr-21 1:51:44 PM IST	Points-temp1		Offnormal	255	0 Acked / 0 Unacked / 1 Pending	
<b>.</b>	15-Apr-21 1:51:44 PM IST	Points-tvoc1		Offnormal	255	1 Acked / 0 Unacked	

If the HEALTHY BUILDING ALARM section, is linked to honAlarmConsole. you can filter by alarm type by selecting the required alarm type in **Notification Type** box or by clicking the Urgent, High and Low icon in HEALTHY BUILDING NOTIFICATION Section.

If honAlarmConsole is not available (not licensed), the HEALTHY BUILDING ALARM section uses the Niagara alarm console as shown below.

#### EASY HEALTHY BUILDING - INSTALLATION AND OPERATIONS GUIDE

IEALTHY	BUILDING ALARM						
Time F	Range 💙 🕑 ? to ?						7 Source(s) / 7 Alarm(s) 💌
Info	Timestamp	Source	Message Text	Source State	Priority +	Ack State	Alarm Class
۰	23-Mar-21 2:13:52 PM IST	co2		Normal	255	0 Acked / 1 Unacked	easyHealthyBuildingAlarmClass
٠	18-Mar-21 4:32:16 PM IST	new Temp		Fault	255	0 Acked / 1 Unacked	easyHealthyBuildingAlarmClass
	18-Mar-21 2:26:18 PM IST	pm2		Fault	255	0 Acked / 1 Unacked	easyHealthyBuildingAlarmClass
٠	18-Mar-21 2:25:57 PM IST	temp		Fault	255	0 Acked / 1 Unacked	easyHealthyBuildingAlarmClass
۰	17-Mar-21 2:01:13 PM IST	co2		Offnormal	255	0 Acked / 1 Unacked	Default Alarm Class

You can click on HEALTHY BUILDING ALARM in left top to view the detailed alarm console HEALTHY BUILDING ALARMS Tab.



### NOTE

Alarms related to KPI points linked to any alarm class other than easyHealthyBuildingAlarmClass are recorded in alarm console but not shown in the dashboard.

### Zone Wise Summary

The Zone Wise Summary tab displays the Temperature (TEMP), Humidity (HUM), Carbon dioxide (Co2), air pollutant (PM 2.5), Total Volatile Organic Compounds (TVOC), and Occupancy (OCC) parameters for each zone in a given facility.

ALL KPI'S ZONE WISE SUMMARY HEALTHY BUILDING ALARM ZONE CONFIGURATION								
STATUS	ZONE	TEMP	ним	C02	PM2.5	туос	OCCUPANCY	
GOOD	Z1	22.0 °C	70.0 %RH		0.0 ug/m <sup>3</sup>	0 mg/m <sup>3</sup>	-	VIEW TREND
POOR	Z2	14.0 °C	10.0 %RH	1200.0 ppm	0.0 ug/m <sup>3</sup>	0.1 mg/m <sup>3</sup>	-	VIEW TREND
GOOD	Z3	21.0 °C	50.0 %RH	1200.0 ppm	0.05 ug/m <sup>3</sup>	0.8 mg/m <sup>3</sup>		VIEW TREND

Columns	Description	ı		
STATUS	atus is Calculated for each Portfolio/Region/Facility from sensor metric data in terms ge as per ASHRAE 62.1 standard. The zone status range can be EXCELLENT, GOOD, OR.			
	Status Description			
	Excellent	The percentage value is between 90% - 100%.		
	GOOD	The percentage value is between 75% - 89 %.		
	FAIR	The percentage value is between 60% - 74%.		
	POOR	The percentage value is between 0% - 59%.		
Zone	The name o	f the zones configured in the building.		
TEMP	The Zone's	temperature KPI value.		
HUM	The Zone's	Humidity KPI value.		
CO2	The Zone's	CO2 KPI value.		
PM2.5	The Zone's	PM2.5 KPI.		
TVOC	The Zone's	TVOC KPI value.		
000	The Zone's	Occupancy KPI value.		
VIEW TREND	User can se drop-down.	lect KPI point trend for particular time period from <b>Time range</b> drop-down and <b>KPIs</b>		
	When selec	ted KPI trend is displayed. Export allows the values to be exported to a .csv file.		

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## Healthy Building Alarms

Alarms related to the KPI points (linked to the asyHealthyBuildingAlarmClass) are recorded in the alarm console and can be viewed in this area of the Healthy Building dashboard. The Healthy Building dashboard supports two type of alarm consoles:

- honAlarmConsole
- Niagara alarm console.

If using the honAlarmConsole, then HEALTHY BUILDING ALARM Section appears as shown below.

					Selec	t Notification Typ	e: Low	
Tim	e Range	• ♥ () ? to ?					5 Source(s) / 5 Ala	rm(s) 🔻
	Info	Timestamp	Source	Message Text 🔺	Source State	Priority	Ack State	Alarm C
	٠	19-Apr-21 10:30:02 AM IST	Points-newP		Offnormal	255	Acked / 1 Unacked	easyHe
		14-Apr-21 5:37:50 PM IST	Points-temp		Offnormal	255	Acked / 1 Unacked	easyHe

If the HEALTHY BUILDING ALARM section, is linked to honAlarmConsole. you can filter by alarm type by selecting the required alarm type in **Select Notification Type** box.

If honAlarmConsole is not available (not licensed), the HEALTHY BUILDING ALARM section uses the Niagara alarm console as shown below.

HEALTHY	BUILDING ALARM						
Time R	ange 👻 🕑 ? to ?						7 Source(s) / 7 Alarm(s) 💌
Info	Timestamp	Source	Message Text	Source State	Priority +	Ack State	Alarm Class
٠	23-Mar-21 2:13:52 PM IST	co2		Normal	255	0 Acked / 1 Unacked	easyHealthyBuildingAlarmClass
٠	18-Mar-21 4:32:16 PM IST	new Temp		Fault	255	0 Acked / 1 Unacked	easyHealthyBuildingAlarmClass
	18-Mar-21 2:26:18 PM IST	pm2		Fault	255	0 Acked / 1 Unacked	easyHealthyBuildingAlarmClass
٠	18-Mar-21 2:25:57 PM IST	temp		Fault	255	0 Acked / 1 Unacked	easyHealthyBuildingAlarmClass
٠	17-Mar-21 2:01:13 PM IST	co2		Offnormal	255	0 Acked / 1 Unacked	Default Alarm Class
٠	17-Mar-21 1:59:28 PM IST	hum		Offnormal	255	0 Acked / 1 Unacked	Default Alarm Class
	17-Mar-21 1:58:25 PM IST	temp		Offnormal	255	0 Acked / 1 Unacked	Default Alarm Class

You can click on HEALTHY BUILDING ALARM in left top to view the detailed alarm console HEALTHY BUILDING ALARMS Tab.



#### NOTE

Alarms related to KPI points linked to any alarm class other than easyHealthyBuildingAlarmClass are recorded in alarm console.

# Zone Configuration

This tab is only available for Admin users. It enables Admin users to create a new zone, edit an existing zone, and delete a zone.

									Reached	l maximum 2 license
ATE ZONE			•	•						
one Name			Add Ze	one						
EMPERATUR	E		ним	IDITY			C02			ť
Drag and Drop points corresponding to TEMPERATURE				Drag and Drop p	g and Drop points corresponding to HUMIDITY			Drag and Drop points corresponding to CO2		
PM2.5 Drag and Drop points corresponding to PM2.5				TVOC Drag and Drop points corresponding to TVOC			OCCUPANCY Drag and Drop points corresponding to OCCUPANCY			DCCUPANCY
ONE MANAGER							-			
	STATUS	TEMPERAT	HUMIDITY	CO2	PM2.5	туос	OCCUPANCY	ZONE WELL	EDIT ZONE	DELETE ZONE
ZONE		GOOD	GOOD		EXCELLENT	EXCELLENT		GOOD	sar.	Ē
<b>ZONE</b>		0000								
		INADEQUATE	POOR	FAIR	EXCELLENT	GOOD		POOR	ø	â

Sr. No.	Elements	Description
1	Enter Zone Name*	The Zone Name
2	KPI Tiles	Six smart tiles are available for KPI points.
		Tiles only accept points with facets that match the required facet for the type of tile.
		Therefore, it is necessary to define facets for the point before attempting to add a point to a tile. For example, if temperature is not having degree Celsius, Fahrenheit, Kelvin, millikelvin facet the temperature tile will not understand the KPI and an error is displayed,
		◎ Warning! Point's Units doesn't match with KPI type
		The following KPI points are can be added to the appropriate tile Temperature, Humidity, CO2, PM2.5, TVOC, and Occupancy. NOTE: - Only one point can be added per tile.
3	Add Zone	Add a zone.
4	Zone Manager	The, status of all the KPI points associated with the zone. It also allows zones to be edited, deleted, and enabled/disabled.

# Installation Requirements and Licensing

# System Requirements

To use the Healthy Building dashboard Services user requires the following:

- Niagara 4.10
- Web browser
- Windows 10, 64 bit or higher version
- Healthy Buildings License

### Healthy Building License

The Easy Healthy Building Dashboard comes with a trial license for 30-days. This trial feature is available only for supervisor. User need to have Healthy Building Dashboard module in the installer. Refer Install Healthy building Services for launching Healthy Building service. After launching healthy building service user will get start trial UI as shown below,

- Nav	ar Application Director		×
11       C       C       My Hetwork         Image: Comparison of the second sec		Start Trial	

Click start trial to start trial version for 30-days. The licenses notification is seen on the dashboard as shown below. In trial version only five zones are considered for calculating the Wellness. A notification banner is seen at top right corner if user is exceeding the zone limit count.



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After completion of 30-days trial, user need to purchase license. There are two types of licenses such as

- Commercial Licenses These licenses are available for one year, three year and five year.
  - Small commercial License This license has one year of expiration period with zones limitation of two.
  - Medium Commercial License This license has three year of expiration period with zones limitation
    of five
- Enterprise License This license has three-year expiration period with unlimited. zones.

User need to consider number of zones required for building to have correct healthy building calculation. Based on number of zones suitable licenses can be selected.

## Install Healthy building Services

Healthy Building service and required components integrated with Supervisor Station template.

#### Steps to launch Healthy Building

- 1. On the menu bar select **Window > Side Bars** and ensure **Show Side Bar** is checked.
- 2. Navigate to **Window** > **Side Bars** and select **Palette**. to open the palette pane.
- 3. Click . TheOpen Palette dialog box is displayed.

Select one or more palettes	to open, or just start typing:	Browse
filter		
Module	Description	t
aaphp	American AutoMatrix Public Host Protocol Version 8.10 From August 2000	
aapup	American AutoMatrix PUP Driver	
abstractMqttDriver	This is a driver for the MQTT client.	
aceEdge	Driver for ACE on Tridium Edge devices	
alarm	Niagara Alarm Module	
alarmOrion	Niagara Alarm Orion Module	
analytics	Niagara Analytics Framework	
analytics-lib	Niagara Analytics Library	
andoverAC256	AndoverAC256 Driver	
andoverInfinity	Andover Infinity Driver	
	101 A 1141	

4. Enter easyHealthyBuilding in the filter field.

- Palette	
🖿 🕱 🙍 easyHealthyBuilding	•
<ul> <li>Service</li> <li>Alarm</li> <li>TagDictionary</li> <li>DataModel</li> </ul>	

- 5. Select the **easyHealthyBuilding** module.
- 6. Click **OK.**
- 7. In Palette expand to **Services** folder and select **EasyHealthyBuildingService**.

• Palette	đ
easyHealthyBuilding	*
<ul> <li>Service</li> <li>EasyHealthyBuildingService</li> <li>Alarm</li> <li>TagDictionary</li> <li>DataModel</li> </ul>	Î
	v

8. In the Nav tree navigate to Station > Config > Services.

Drag the **EasyHealthyBuildingService** service on to the folder **Station > Config > Services**. The Healthy Building services is added to the station.

# Configure Healthy Building

### Configure Facets for the KPI Points

In order to use Healthy Building Dashboard, the facets for each KPI point must be configured. For example, temperature supports four type of unit such as degree Celsius, Kelvin, millikelvin, Fahrenheit.

#### To configure a KPI point's facet:

1. In the Nav tree navigate to the point and double click the point. The property sheet for the selected point is displayed.

Property Sheet	
Numeric	
Facets	units=null,precision=1,min=-inf,max=+inf 📎 🕓 👻

2. Click >> next to facet.

The Config Facets dialogue box is displayed.

≫

👫 Config Facets		×		
Key	Туре	Value 🛤		
units	Unit	null		
precision	Integer	1		
min	Double	-inf		
max	Double	+inf		
	1			
	(+)	<b>X</b> © -		
01	K Cancel			

3. In the first drop-down select parameter type and then in second drop-down select the units.

4				×
	temperature (K)	- null (null)	- © -	
	ОК	fahrenheit (°F)		
	UK	celsius (°C)		
		kelvin (K)		
		millikelvin (mK)		

4. Click **OK**.

# KPI point units supported by Healthy Building

The following table provide information about the KPI point units that are supported by healthy building.

KPI Point	Units Supported by Healthy Building Dashboard
Temperature	Celsius (°C) Fahrenheit (°F) Kelvin (K) Millikelvin (mk)
Relative Humidity	Percent relative humidity %RH
Carbon- dioxide	parts per million (ppm)  Concentration ()  Cancel  Cancel
Particulate Matter 2.5	Micrograms per cubic meter (µg/m <sup>3</sup> ) density (m-3·kg) OK Cancel
Total Volatile Organic compound (TVOC)	Milligrams per Cubic meter(mg/m <sup>3</sup> ) density (m-3·kg) OK Cancel Cancel
	temperature (K)     null (null)     fahrenheit (°F)     celsius (°C)     kelvin (K)     millikelvin (mK)

## Create a Building Zone

To create a building zone

- 1. Display the Healthy building Dashboard.
- 2. Select the **ZONE CONFIGURATIION**.
- 3. Enter the building zone name in the **Zone Name** field.

LL KPI'S ZO	NE WISE SUMM	ARY HEALTH	HY BUILDING AL	ARM ZONE	CONFIGURATIO	DN 🛡				
REATE ZONE			_2	-4					Reached	maximum 2 licensed z
Zone Name			Add Z HUM				C02			
Drag and D TEMPERAT	)rop points corresp URE	oonding to		Drag and Drop points corresponding to HUMIDITY			Drag and Drop points corresponding to CO2			02
PM2.5 Drag and D	)rop points corresp	TVO		oints correspondin	g to TVOC	OCCUPAN	NCY	orresponding to C	CCUPANCY	
ZONE	STATUS	TEMPERAT	HUMIDITY	C02	PM2.5	тиос	OCCUPANCY	ZONE WELL	EDIT ZONE	DELETE ZONE
🖽 Z1		GOOD	GOOD		EXCELLENT	EXCELLENT		GOOD	an a	ā
<u>Ⅲ</u> Z2		INADEQUATE	POOR	FAIR	EXCELLENT	GOOD		POOR	ø	â
🖽 Z3		EXCELLENT	EXCELLENT	FAIR	EXCELLENT	POOR		GOOD	ø	ā
				~	< <b>1</b> >	»				

4. Drag and drop the Healthy Building points from the NAV tree to the required tiles.

**NOTE** Correct facets must be assigned to the KPI point. If an incorrect point is assigned to a tile an error is displayed.

5. Click **Add Zone**. The building zone is added in the **Zone Manger**.

### Modifying a Building Zone

A building zone can be edited of deleted using the ZONE MANAGER.

ZONE	STATUS	TEMPERAT	HUMIDITY	CO2	PM2.5	TVOC	OCCUPANCY	ZONE WELL	EDIT ZONE	DELETE ZONE
Z1		GOOD	GOOD		EXCELLENT	EXCELLENT		GOOD	ø	Ē
Z2		INADEQUATE	POOR	FAIR	EXCELLENT	GOOD		POOR	ø	Ē
Z3		EXCELLENT	EXCELLENT	FAIR	EXCELLENT	POOR		GOOD	a.	Ē

#### To edit a zone:

- 1. Display the Healthy building Dashboard.
- 2. Select the **ZONE CONFIGURATION.**
- 3. In the **ZONE MANAGER** navigate to the zone that is to be edited
- 4. Click 📝
- 5. Add or remove the KPI points as per the requirement.
- 6. Click **Save**, this action save modification.

#### To delete a zone:

- 1. Display the Healthy building Dashboard.
- 2. Select the **ZONE CONFIGURATIION.**
- 3. In the **ZONE MANAGER** navigate to the zone that is to be edited
- Click delete icon next to the zone that is to be deleted.
   A confirmation dialog box is displayed.



5. Click Yes.

# Healthy Building Dashboard Properties

Admin user can view dashboard properties in EasyHealthyBuildingServices Propertysheet as shown below.

- Nav	ar Application Director	asyHealthyBuildingService	ar License Manager	asyHealthyBuildingService	
tł O 🗵 🕼 My Network	Property Sheet				
My Host : IE38LTF4WG552.global.ds.honeyv     My File System     My File System     My Modules     JP Platform     Application Director     Certificate Management     License Manager     Platform Administration	Status Fault Cause Enabled License Details Emergency Conta Scroller Speed Dashboard Them	Slow	g License Details	a	•
Station Copier  TCP/IP Configuration  Station (hbDemo)  Alarm  Go Config  Services  Model Config  M	😭 Building Image	1.0000		Refresh Save	

The Various Dashboard properties are explained in the below table.

Properties	Description						
Status	Shows Healthy Building status						
License Details	This property gives details regarding License status, License expiration, Zone limit and License configuration.						
	License Details Easy Healthy Building License Details						
	License Status License Will Be Expired In A Few Days						
	License Expiration 2021-05-27						
	Zone Limit 2						
	Show Notification Time +00001h 00m 00s						
	License Check Config License Check Config      Rule1 License Notification Rule						
	If License Expires In 90 day						
	Show Notification For +00000h 30m 00s						
	The Rule2 License Notification Rule						
	If License Expires In 45 day						
	Show Notification For +00001h 00m 00s						
	Rule3 License Notification Rule						
	If License Expires In Is day Show Notification For +00000b 00m 00s						
	License Check Interval						
Scroll Speed	User can set the speed of scrolling notification on the dashboard.						
Dashboard Theme	User can set the dashboard theme.						
Building Image	User can change images that are available in station shared location as per the requirement.						

# Changing Dashboard Theme

Healthy Building dashboard comes in two themes, dark and light.

- 1. In the NAV tree open the **Station** > **Config** > **Services** folder
- 2. Double click EasyHealthyBuildingService.

The property sheet of EasyHealthyBuildingService is displayed.

* Nav	🐺 Application Director 🛛 🗃 _asyHealthy&uildingService 🖉 License Manager 🖓 _asyHealthy&uildingService	
14 O 🗵 🕲 My Network	Property Sheet	
<ul> <li>My Host: IE38LTF4WGSS2.global.ds.honeyv</li> <li>My File System</li> <li>My Modules</li> <li>gr Platform</li> <li>Application Director</li> <li>Certificate Management</li> <li>Lexicon Installer</li> </ul>	EasyHealthyBuildingService       (Easy Healthy Building Service)         Status       (ok)         Fault Cause       Image: Comparison of the comparison o	
C License Manager	Dashboard Theme Light	
	Building Image null	* >

- 3. In the **Dashboard Theme** box select the theme. Default theme is Light Theme
- 4. Click Save.

# Healthy Building User

There are two types users for Healthy Building (Admin and Non-admin).

Steps to change the healthy building user

- 1. In the NAV tree open the **Station** > **Config** > **Services** folder
- 2. Double click EasyHalthyBuildingService.
- 3. The property sheet of EasyHealthyBuildingService is displayed.

Nav	wy Application Director		ingService	W License Manager	asyHealthyBuildingService	
til         O         IM         My Network         Image: Comparison of the co	Property Sheet	The second se	thy Buildin	g Service)		
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TCP/IP Configuration     TCP/IP Configuration     Station (hbDemo)     Alarm     O Config     Services						
Drivers     D					Befresh Tave	

- 4. In the **Healthy Building** box to select the user.
- 5. Click Save.

# FAQ's

- 1. What happens behind the screens when points are drag and dropped on tiles? Whenever point is attached to tile, then we are tagging the point, adding History extension and alarm extension in order to get history and alarm from that KPI point.
- 2. Can the system integrator per define the tags (via a Smart Tag Dictionary or via manual assigning) to efficiently add points to the zones for bulk operation?
- What is the concept when I use Healthy Building in the controller? Only JACE or equivalent controllers are supported by Healthy Building and the concept is exactly the same as per supervisor design.
- 4. How can the single dashboards from the controllers be merged on "master" dashboard level (entire site)?

For MVO1 the different controllers have to share data to the main JACE (or equivalent) OR the supervisor, to cumulate all the sensor data to represent the Zone / Building view in Healthy Building Dashboard.

5. Is the system database considered here to support tags and indexing?

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31- 00499-01 | Rev 05-2021

