

Sensors User Guide

Document Revision 01

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Terminology

Term	Definition
Sensor	An occupancy detection device connected to their respective resources that automatically recognizes occupant's presence.
Resource	A location where an appointment takes place. It can be a room, a desk, or any place in which an appointment can take place.
Reservation	Booking of an appointment.
OfficePlace Connect	A mediator between Exchange Server and OfficePlace Sensor. OfficePlace Connect directly works with Exchange Server and sends all appointments changes from OfficePlace Sensor to Exchange Server.



CHAPTER 1. Introduction

OfficePlace Sensor Overview

OfficePlace Sensor is a product of Add-On Products that manages Exchange appointments based on user occupancy, a set of sensor business rules and the actual sensor measurements of occupancy.

This product e.g., helps organizations to automatically create a reservation by detecting if there is any occupant in the resource, and automatically ends the reservation once the occupant leaves the resource.

The following diagram describes the overall interaction of Sensor with other stakeholders.



Figure 1. Sensor Management interface

Admin users can log in to the OfficePlace interface and perform Sensor-related tasks. Their tasks may include, but are not limited to the following:

- Creating and managing Sensor devices.
- Configuring resource rules for reservation creation at the connected resource.
- Setting up Sensor connection.

NOTE: Go to <u>System Requirements</u> page in Add-On Products website to have an overview of System requirements for Sensors.



CHAPTER 2. How to configure OfficePlace Sensor

To use OfficePlace Sensor, you need to log in OfficePlace. Open the browser and navigate to the address of the web server where **OfficePlace** is hosted.

It will display the Login screen of OfficePlace as below:



Figure 2. Sensor Management interface

Log in with your user account and you will access the OfficePlace interface and choose Sensor Management.

OfficePlace				Sensors				noot Tenant 🗸 🚳	Ω?	Α,
=	Sensors									
Organization Management	Sensors	Resource rules	Connection settings	$\textcircled{\sc black}{\sc black}$ Subscriptions \lor						
Organizations Locations	+ Add more	🖹 Delete. 🖉 Update .	🖒 Reload							\ Pi
Categories	0	Connection Setting 11	Resource Type T	Sensor ID 11	Operation ID 11	Resource 11	Occupancy Status 11	Last Modified Date 11	Action	
Sensor Management	-	KONTAKT.IO	Room	357690	00:faib6:0b:b6:53	resource01	Unoccupied	20/12/2023 10:17	0	
Tenant Management		DISRUPTIVE- TECHNOLOGIES	Room	emucl46trbpthr4ugq8ifmg	cl46is7qn1io2dj1enb0	resource02	Occupied	19/12/2023 10:19	1	
		DISRUPTIVE- TECHNOLOGIES	Room	emucl482mjpthr4ugq8iva0	cl46is7qn1io2dj1enb0	resource03	N/A	19/12/2023 10:19	0	
	-	LINAK	Room	WIFI2LIN-4C11AEDD7338- 13600465	WIFI2LIN-4C11AEDD7338- 13600465		Unoccupied	25/12/2023 08:21	Q	
		LINAK	Room	WIFI2LIN-4C11AEDD744C- 1360045E	WIFI2LIN-4C11AEDD744C- 1360045E		Unoccupied	25/12/2023 08:21	0	
		LINAK	Room	WIFI2LIN-C82896828194- 13600490	WIFI2LIN-C82896828194- 13600490	resource04	Unoccupied	21/12/2023 11:13	0	
		LINAK	Room	WIFI2LIN-C8289682E3C4- 1360048E	WIFI2LIN-C8289682E3C4- 1360048E		N/A	25/12/2023 08:21	0	
	Showing 1 to	15 of 15 antriar						« < 1 >	» 20 /	page



You can view the available Sensor devices as well as their IDs, operation IDs, the resources that are connected to Sensors, the occupancy status of the resources, and the action button to edit sensor.



Also, if you have ReadWrite permission in this section (given by the tenant owner or OfficePlace admin), you may add, manage Sensor devices, and connect them to available resources.

The Sensor Management includes following sections:

- <u>Connection settings</u>: This section lets you add and manage Connection Settings in order to set up connection to the respective Sensor devices.
- <u>Sensors</u>: This section lets you add and manage Sensor devices, the resources that they are connected to, and check the occupancy status of the Sensor-connected resources.
- <u>Resource rules</u>: This section lets you set resource rules for the Sensor-connected resources. These
 resource rules will be used to dictate what to do with the reservations booked for those resources,
 based on the data gathered from the Sensor devices.
- <u>Subscriptions</u>: This section lets you create Linak Installation Management, Linak Subscription, Kontakt.IO subscription, and Disruptive-Technologies Data connector that allow you to access and obtain real-time data associated to sensors automatically whenever there is a change observed.

Connection settings

In order to retrieve data from the Sensor devices, the Sensor system needs to have an API Key, sync URLs as well as account information for those Sensor devices' type (or in other words the device manufacturer DISRUPTIVE-TECHNOLOGIES, KONTAKT.IO, LINAK, and YANZI). These data can be registered in the **Connection settings** tab.

OfficePlace	Sensors	🏠 Root Tenant 🗸	ا ش	ф,	?	A
=	Connection settings					
 Organization Management 	🖙 Sensors 🛛 💂 Resource rules 🔀 Connection settings 🖄 Subscriptions 🗠					
Organizations						
Locations				Cr	eate	
Categories	DISDUDTIVE TECHNOLOGIES Add on Davidonment			Tîî		<u> </u>
Sensor Management	DISRUPTIVE-TECHNOLOGIES - Add-on Development				·	
Tenant Management	ତ Service Account email: cl46r1k4c4c0008hvql0@d46is7qn1io2dj1enb0.serviceaccount.d21s.com ତ Project ID: d46is7qn1io2dj1enb0					
	Project ID: deals/qfi102dj1enb0 Search Sensor URL: https://api.disruptive-technologies.com/v2/projects/(0)/devices					
	Pull Sensor URL: https://api.disruptive-technologies.com/v2/projects/(0)/devices/(1)					
			View	detail	5	
				T	r	
	KONTAKT.IO - kontak.io					
	Construction Search Sensor URL: https://apps.cloud.us.kontakt.io/v2/locations/rooms					
	Pull Room Sensor URL: https://apps.cloud.us.kontakt.io/v3/occupancy/rooms					
	Pull Desk Sensor URL: https://apps.cloud.us.kontakt.io/v3/occupancy/room-attributes					
			View	detail	5	
	-				_	
	LINAK - Add-on Products			l	Γ	
	Installation ID: 710385ed-b118-49d3-915a-85ed7aba5e18					Ŧ

Figure 4. Connection settings section

Connection setting: DISRUPTIVE-TECHNOLOGIES

NOTE: Before establishing a connection to Disruptive-Technologies IoT server, please refer to <u>Disruptive-</u> <u>Technologies Sensor Configuration Guide</u> for more details on how to configure this sensor type.



Add connection to DISRUPTIVE-TECHNOLOGIES

Click on [**Create**] button on the upper right to start adding a connection to sensors. The following screen will appear. Select 'DISRUPTIVE-TECHNOLOGIES' to continue configuring.

For this connection setting, fill in the fields which are described in the below table:

Add connection t	o sensors 💿	×
Connection Setting * Select Connection Setting	~	

Figure 5. Add connection to sensor

Enter Name Secret Key *	
Secret Key *	
Enter Key Secret	
Project ID *	
Enter Project ID	
Pull Sensor URL * ?	
Enter Pull Sensor URL	
	Enter Project ID Pull Sensor URL * ?

Figure 6.

Add connection to Disruptive-Technologies

Connection Setting	Fields	Description
DISRUPTIVE- TECHNOLOGIES	Name	Name of the connection.
	Key ID	
	Secret Key	Details of the Service Account that is integrated with the Disruptive Technologies API. To learn more about how
	Service Account email	to retrieve the fields for Disruptive-Technologies, refer to <u>Appendix A</u> .
	Project ID	
	Search Sensor URL	URL used by the Sensor system to gather the list of Sensor IDs provided by the device manufacturer that can be searched and added to the Sensor system later.
	Pull Sensor URL	URL used to request Sensor device data from the manufacturer.

Click [**Create**] and a confirmation screen that summarizes the filled-out information will prompt as the following figure:



Confirmation	<
Do you want to create this connection settings?	
DISRUPTIVE-TECHNOLOGIES	
Name: Add-On Products	
Key ID: 8fd68cf8-7515-11ec-9dd8-00155d296127	
Secret Key: ********	
Service Account email: admin@aod.vn	
Project ID: 61948f0a-9021-45fa-9022-5cb92c4cdb4c	
Search Sensor URL: https://api.disruptive-technologies.com/v2/projects/{0}/devices	
Pull Sensor URL: https://api.disruptive-technologies.com/v2/projects/{0}/devices/{1}	
Yes No	

Figure 7. Create connection setting - Confirmation

Click [Yes] to confirm, [No] to cancel the creation.

If you enter invalid information into the field(s), an error message similar to the following will be displayed that requires you to re-configure:



Figure 8. Incorrect configuration input

Update connection to DISRUPTIVE-TECHNOLOGIES

To update a DT connection, click [View details] on the bottom left of that connection to open the update connection screens similar as follows:



Update connection to s	ensors (? ×
Connection Setting *	Name *
DISRUPTIVE-TECHNOLOGIES \lor	Add-On Development
Key ID *	Secret Key *
asIW2IYpaS/HNAjazEUiqg7h1zMMV5oF+f	****
Service Account email *	Project ID *
cl46r1k4c4c0008hvql0@cl46is7qn1io2dj1e	cl46is7qn1io2dj1enb0
Search Sensor URL * ?	Pull Sensor URL * ?
https://api.disruptive-technologies.com/v2	https://api.disruptive-technologies.com/v2
Update	Cancel

Figure 9. Update connection to Sensors – Disruptive-Technologies

You can update all the available fields except for the 'Connection Setting'. When you are done, click [**Update**]. The 'Confirmation' screen which reviews all the updated values will be displayed as follows. Click [**Yes**] to save.

Confirmation	×
Do you want to save your change(s)?	
DISRUPTIVE-TECHNOLOGIES	
Name: Add-On Products	
Key ID: +IY22pBhNsCpilxY9F/hGHKIJtylws0d3HBFUgZ6EEU=	
Secret Key: *********	
Service Account email: coudang4uap000cibj00@coudahyo7irbigqlanh10.serviceacco unt.d21s.com	
Project ID: coudaho7irbigqlanh10	
Search Sensor URL: https://api.disruptive-technologies.com/v2/projects/{0}/devices	
Pull Sensor URL: https://api.disruptive-technologies.com/v2/projects/{0}/devices/{1}	
Yes No	

Figure 10. Update connection to Disruptive-Technologies – Update comfirmation



Delete connection to DISRUPTIVE-TECHNOLOGIES

'Confirmation' screen similar as follows will appear:

To delete a connection to DT sensors, click on icon on the upper right of that connection. If that sensor connection setting has associated sensor(s), you cannot remove the connection. The

Confirmation ×
▲ Warning
This connection setting has [1] associated sensor(s). You cannot delete it.

 Cancel

Figure 11. Sensor-attached Connection Setting - Delete Confirmation

If there is no sensor connected to that connection setting, you can delete the connection. Please note that, if you delete DT connection setting, the attached Data Connectors will also be removed from the system:

Confirmation	×
Warning If you delete a Disruptive-Technologies connection, its attached Data Connectors v likewise deleted.	will be
Are you sure that you want to delete the selected record(s)?	
Yes No	

Figure 12. Non-sensor attached Connection Setting - Delete confirmation

Click [Yes] to delete, [No] to cancel deleting.



Connection setting: KONTAKT.IO

NOTE: Before establishing a connection to Kontakt.IO IoT server, please refer to Kontakt.IO Sensor Configuration Guide for more details on how to configure this sensor type.

Add connection to KONTAKT.IO

Click on [**Create**] button on the upper right to start adding connection to sensors. The following screen will appear, and you have to choose the Connection Setting first to continue configuring.

Add connection t	o sensors 💿	×
Connection Setting *		
Select Connection Setting	\sim	

Figure 13. Add connection to sensor

If you select "Kontakt.IO", you have to fill in the following fields:

Commention Setting *	Name *	
Connection Setting *		
KONTAKT.IO	✓ Enter Name	
Api Key *	Search Sensor UF	RL * ?
Enter API Key		
Litter Ar i Key	Enter Search Se	nsor URL
Pull Room Sensor URL * ?	Pull Desk Sensor	URL* ?
		URL * ?
Pull Room Sensor URL * ?	Pull Desk Sensor	URL* ?
Pull Room Sensor URL * ?	Pull Desk Sensor	URL* ?
Pull Room Sensor URL * ?	Pull Desk Sensor	URL* ?

Figure 14. Add connections to Kontakt.IO

Connection Setting	Fields	Description
	Name	Name of the connection.
	АРІ Кеу	API key of Kontakt.IO is used to connect data from its respective Sensor devices to OfficePlace. Refer to <u>Appendix A</u> to learn how to retrieve it.
KONTAKT.IO	Search Sensor URL	URL used by the Sensor system to gather the list of Sensor IDs provided by the device manufacturer that can be searched and added to the Sensor system later.
	Pull Room Sensor URL	URL used to request Room Sensor device data from the manufacturer.
	Pull Desk Sensor URL	URL used to request Desk Sensor device data from the manufacturer.



Click [**Create**] and a confirmation screen that summarizes the filled-out information will prompt as the following figure:

Confirmation	×
Do you want to create this connection settings?	
KONTAKT.IO	
Name: Add-On Products	
Api key: 8fd68cf8-7515-11ec-9dd8-00155d296127	
Search Sensor URL: https://apps.cloud.us.kontakt.io/v2/locations/rooms	
Pull Room Sensor URL: https://apps.cloud.us.kontakt.io/v3/occupancy/rooms	
Pull Desk Sensor URL: http://apps.cloud.us.kontakt.io/v3/occupancy/room-attributes	
Yes No	

Figure 15. Create connection setting - Confirmation

Click [Yes] to confirm, [No] to cancel the creation.

If you enter invalid information into the field(s), an error message similar to the following will be displayed that requires you to re-configure:



Figure 16. Incorrect configuration input

Update connection to KONTAKT.IO

To update a KONTAKT.IO connection, click [View details] on the bottom left of that connection to open the update connection screens similar as follows:



-	Name *
KONTAKT.IO	✓ kontak.io
Api Key *	Search Sensor URL * ?
CwHxCCNwUEQI1yHnde1beoqwh7m\	NHo https://apps.cloud.us.kontakt.io/v2/locatio
Pull Room Sensor URL * ?	Pull Desk Sensor URL * ?
https://apps.cloud.us.kontakt.io/v3/oc	https://apps.cloud.us.kontakt.io/v3/occupa

Figure 17. Update connection to Sensors – KONTAKT.IO

You can update all the available fields except for the 'Connection Setting'. When you are done, click [**Update**]. The Confirmation which reviews all the new values will be displayed as follows. Click [**Yes**] to save.

Confirmation	×
Do you want to save your change(s)?	
KONTAKT.IO	
Name: 01	
Api key: 0csT8fpSfw36paTJCMV76czkrJBVMVm6lR9nl2MleaTGAM57ar2T7h+5GhftN NGNJ	
Search Sensor URL: https://apps.cloud.us.kontakt.io/v2/locations/rooms	
Pull Room Sensor URL: https://apps.cloud.us.kontakt.io/v3/occupancy/rooms	
Pull Desk Sensor URL: https://apps.cloud.us.kontakt.io/v3/occupancy/room-attribute s	
Yes No	

Figure 18. Update connection to KONTAKT.IO – Update confirmation

Delete connection to KONTAKT.IO

To delete a connection to Kontakt.IO sensors, click on 🔟 icon on the upper right of that connection.



If that sensor connection setting has associated sensor(s), you cannot remove the connection. The 'Confirmation' screen similar as follows will appear:

Confirmation	×	
Warning This connection setting has [1] associated sensor(s). You cannot delete it.		
	Cancel	

Figure 19. Sensor-attached Connection Setting - Delete Confirmation

If there is no sensor connected to that connection setting, you can delete the connection. The 'Delete Confirmation' screen will assemble the below figure:

Confirmation	×
Do you want to delete the selected record(s)?	
Warning If you delete a Kontakt.io connection, its attached Subscription will be likewise deleted Are you sure that you want to delete the selected record(s)?	
Yes No	

Figure 20. Non-sensor attached Connection Setting - Delete Confirmation

Click [Yes] to delete, [No] to cancel deleting.

Connection setting: LINAK

NOTE: Before establishing a connection to Linak IoT server, please refer to Linak Sensor Configuration Guide for more details on how to configure this sensor type.



Add connection to LINAK

Click on [**Create**] button on the upper right to start adding connection to sensors. The following screen will appear, and you have to choose the Connection Setting first to continue configuring.

Click on the drop-down button and select 'LINAK' type. Then, you are required to fill in different fields which are described in the table below:

Add connection to	sensors 🕐	
Connection Setting *		
Select Connection Setting	\sim	

Figure 21. Add connection to sensor

ne *
iter Name
tallation ID * ?
ter Installation ID
Sensor URL * ?
ter Pull Sensor URL

Figure 22. Add connection to Linak

Connection Setting	Fields	Description
LINAK	Name	Name of the connection.
	АРІ Кеу	API key of Linak is used to connect data from its respective Sensor devices to OfficePlace. This is provided by the Sensor device's manufacturer.
	Installation ID	Unique identifier for a specific device. Refer to <u>LINAK</u> <u>Installation Management</u> section for how to retrieve this ID.
	Search Sensor URL	URL used by the Sensor system to gather the list of Sensor IDs provided by the device manufacturer that can be searched and added to the Sensor system later on.
	Pull Sensor URL	URL used to request Sensor device data from the manufacturer.

Click [**Create**] and a confirmation screen that summarizes the filled-out information will prompt as the following figure:



Confirmation	×
Do you want to create this connection setting?	
LINAK	
Name: Add-on Development	
Api key: JVYX1xt1RshY52ezxLg2+DUqcqPeO3v02pQmsGVNvulS/nP0Uwqpc3zV/0GqZ pBCZ3IsTxYNv8cGM	
Installation ID: 710385ed-b118-49d3-915a-85ed7aba5e18	
Search Sensor URL: https://tracking.linakcloud.com/api/v1/installations/{0}	
Pull Sensor URL: https://tracking.linakcloud.com/api/v1/installations/{0}/desks/{1}	
Push Sensor URL: https://rc365sensortest03.eastasia.cloudapp.azure.com:14016/{0}/Ev entReceiver/events	
Yes No	

Figure 23. Create connection setting - Confirmation

Click [Yes] to confirm, [No] to cancel the creation.

If you enter invalid information into the field(s), an error message will be displayed as the figure below that requires you to re-configure:



Figure 24. Incorrect configuration input

Update connection to LINAK

To update a Linak connection, click [View details] on the bottom left of that connection to open the update connection screens similar as follows:



Connection Setting *	Name *
LINAK	 ✓ Add-On Products
Api Key *	Installation ID * ?
8fd68cf8-7515-11ec-9dd8-00155d2	296127 61948f0a-9021-45fa-9022-5cb92c4cdb4c
Search Sensor URL * 🤨	Pull Sensor URL * ?
https://tracking.linakcloud.com/api/	/v1/inst https://tracking.linakcloud.com/api/v1/inst

Figure 25. Update connection to Sensors – LINAK

You can update all the available fields except for the 'Connection Setting'. When you are done, click [Update].

Confirmation	×
Do you want to save your change(s)?	
LINAK	
Name: Add-On Products	
Api key: 1RDo1qFylxp4NBGGLD0jr2hXR5a29JVHrgHhLfHrT1C8lD/KD08tA8bcCVDjP9 5f/	
Installation ID: 61948f0a-9021-45fa-9022-5cb92c4cdb4c	
Search Sensor URL: https://tracking.linakcloud.com/api/v1/installations/{0}	
Pull Sensor URL: https://tracking.linakcloud.com/api/v1/installations/{0}/desks/{1}	
Yes No	

Figure 26. Update connection to LINAK – Update confirmation

Delete connection to LINAK

To delete a connection to Linak sensors, click on 🔟 icon on the upper right of that connection.

If that sensor connection setting has associated sensor(s), you cannot remove the connection. The 'Confirmation' screen similar as follows will appear:





Figure 27. Sensor-attached Connection Setting - Delete Confirmation

If there is no sensor connected to that connection setting, you can delete the connection. The 'Delete Confirmation' screen will assemble the below figure:

Confirmation	×
Do you want to delete the selected record(s)?	
Warning If you delete a Linak connection, its attached Subscription will be likewise deleted Are you sure that you want to delete the selected record(s)?	L
Yes No	

Figure 28. Non-sensor attached Connection Setting- Delete Confirmation

Click [Yes] to delete, [No] to cancel deleting.

Connection setting: YANZI

NOTE: Before establishing a connection to Yanzi IoT server, please refer to <u>Yanzi Sensor Configuration Guide</u> for more details on how to configure this sensor type.

Add connection to YANZI

Click on [**Create**] button on the upper right to start adding connection to sensors. The following screen will appear. Then, select 'YANZI' in **Connection Setting** box:

Add connection	to sensors 💿	
Connection Setting *		
Select Connection Setting	\sim	

Figure 29. Add connection to sensor



For Yanzi connection, these following fields must be filled in:

Add connection to sens	ors ?
Connection Setting *	Name *
YANZI ~	Enter Name
Pull Sensor URL * ?	Username *
Enter Pull Sensor URL	Enter username
Password *	Location ID *
Enter password	Enter location ID
Create	Cancel

Figure 30. Add connection to Yanzi

Connection Setting	Fields	Description
YANZI	Name	Name of the connection.
	Pull Sensor URL	URL used to request Sensor device data from the manufacturer.
	Username	Information of the account set up on Yanzi Cloud.
	Password	Refer to Yanzi Configuration User Guide for more
	Location ID	details.

Click [Create] and a confirmation screen that summarizes the filled-out information appears as follows:

onfirmation					
o you war	nt to create this connection settings?				
YANZI					
Name:	Add-On Products				
Pull Se	nsor URL: https://eu.yanzi.cloud				
Userna	me: username				

Figure 31. Create connection setting - Confirmation



Click [Yes] to confirm, [No] to cancel the creation.

If you enter invalid information into the field(s), an error message will be displayed as the figure below that requires you to re-configure:

Invalid configuration.	

Figure 32. Incorrect configuration input

Update connection to YANZI

To update a YANZI connection, click [**View details**] on the bottom left of that connection to open the update connection screens similar as follows:

Connection Setting *		Name *	
YANZI	\sim	YANZI-AOD	
Pull Sensor URL * ?		Username *	
wss://cirrus22.yanzi.se/cirrusAPI		nhn@aod.vn	
Password *		Location ID *	
•••••	•	487502	

Figure 33. Update connection to Sensors - YANZI

You can update all the available fields except for 'Connection Setting'. When you are done, click [**Update**]. The Confirmation which reviews all the new values will be displayed as follows. Click [**Yes**] to save.



Confirmation	×
Do you want to save your change(s)?	
YANZI	
Name: Add-On Products	
Pull Sensor URL: https://eu.yanzi.cloud	
Username: Sh@add-on.com	
Location ID: 487502	
Yes No	

Figure 34. Update connection to YANZI – Update Confirmation

Delete connection to YANZI

To delete a connection to YANZI sensors, click on in icon on the upper right of that connection.

If that sensor connection setting has associated sensor(s), you cannot remove the connection. The 'Confirmation' screen similar as follows will appear:

Confirmation	×
Warning This connection setting has [1] associated sensor(s). You cannot delete it.	
	Cancel

Figure 35. Sensor-attached Connection Setting - Delete Confirmation

If there is no sensor connected to that connection setting, you can delete the connection. The 'Delete Confirmation' screen will assemble the below figure:



Confirmation	×
Do you want to delete the selected record(s)?	
Yes No	

Figure 36. Non-sensor attached Connection Setting - Delete Confirmation

Click [Yes] to delete, [No] to cancel deleting.



Sensors

OfficePlace				Sensors				noot Tenant 🗸 🐯	Q ?	A
=	Sensors									
Organization Management	Sensors	💂 Resource rules	Connection settings	$$ Subscriptions \lor						
Organizations										
Locations	+ Add more	🔋 Delete 🧷 Update	🖔 Reload							ΎF
Categories	0	Connection Setting 11	Resource Type ↑	Sensor ID 11	Operation ID 11	Resource 11	Occupancy Status 11	Last Modified Date 11	Action	
Sensor Management		KONTAKT.IO	Room	357690	00:fa:b6:0b:b6:53	resource01	Unoccupied	20/12/2023 10:17	0	
Tenant Management		DISRUPTIVE- TECHNOLOGIES	Room	emucl46trbpthr4ugq8ifmg	cl46is7qn1io2dj1enb0	resource02	Occupied	19/12/2023 10:19	0	
		DISRUPTIVE- TECHNOLOGIES	Room	emucl482mjpthr4ugq8iva0	cl46is7qn1io2dj1enb0	resource03	N/A	19/12/2023 10:19	0	
		LINAK	Room	WIFI2LIN-4C11AEDD7338- 13600465	WIFI2LIN-4C11AEDD7338- 13600465		Unoccupied	25/12/2023 08:21	0	

Figure 37. Sensors section

Under Sensors, you can add and manage the individual Sensor devices and map them to the resources where they are placed.

Toolbar Buttons	Description
Add more	Add one or multiple Sensor devices and map them to specific resources.
Delete	Delete the selected Sensor devices.
Update	Update the selected Sensor devices.
Reload	Refresh the Sensor devices list.
Filter	Find sensor by the value of any field.

Add Sensor

Clicking [Add more] button to open the 'Add Sensor' screen	Add Sensor	×
similar as follows:	Connection Setting *	
	Select Connection Settings	~
	Resource Type	
	Room Desk	
	Sensor ID* 🕐	, Search
	Occupancy confirmation time (hh:mm:ss) * ?	
	00:01:00	
	- Add Resource	
	Search resource	
	Display Name Email	
	යි resource01 resource01@aod.vn	
	ස් resource02 resource02@aod.vn	
	الله resource03@aod.vn	
	≓ resource04 resource04@aod.vn	
	ഷ്ക് resource05 resource05@aod.vn	
	Create	Cancel

Figure 38. Add Sensor



Field	Description
Connection Setting	Select a Connection Setting.
Resource Type	Select Room or Desk.
Sensor ID	After selecting a Sensor connection setting, click on [Search] to open a list of Sensor IDs gathered from the manufacturer. Add Sensor Import Cancel Add sensors Search for Sensor ID © Sensor ID Selected @ Sensor ID Selected @ Sensor ID Selected @ sensor ID Operation ID Room Name @ mucm 1b8ig3t1i8fdpegob0 cd46is7qn1io2dj1enb0 Motion 2 @ emucm 1b8ig3t1i8fdpegobg cd46is7qn1io2dj1enb0 Motion 2 @ emucm 1b8ig3t1i8fdpegobg cd46is7qn1io2dj1enb0 Motion 1 @ emucm 1b8ig3t1i8fdpegobg cd46is7qn1io2dj1enb0 Motion 2 @ emucm 1b8igs11i8fdpegobg cd46is7qn1io2dj1enb0 Motion 3
Occupancy confirmation time (hh:mm:ss)	 SENSOR ID 3 Used to determine whether a visitor occupies the resource or not. If a person remains at the resource for the rest of the specified confirmation time, that resource will be confirmed as occupied. The value of this field follows hh:mm:ss time format. By default, its value is 00:01:00 (meaning the resource is confirmed to be occupied if its connected Sensor device has detected that a person has been there for 1 minute).
Add Resource	Open/close the resource selection panel similar as follows: Search resource



NOTE: You can only select a resource if there is only one ID added in Sensor ID field. If there are 2 or more IDs added, you will see the following message instead:

🛕 Warning

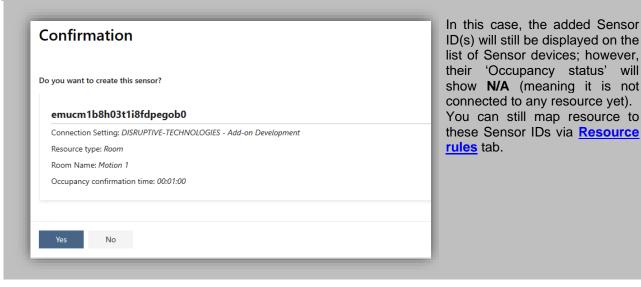
You cannot add resource if there are more than 1 Sensor ID. Please input 1 Sensor ID only in order to add resource.

When you are done, click [**Create**]. A confirmation screen will show up, choose [**Yes**] to start the creation. You will see a notification informing that the Sensor device(s) are being added. And when the process is completed, you will receive another notification informing the successful creation.

o you want to create this sensor?		
emucm1b8h03t1i8fdpegob0	4 ⁰	resource01
Connection Setting: DISRUPTIVE-TECHNOLOGIES	_ 0	Email: resource01@aodop.onmicrosoft.com
Resource type: Room		Timezone: Coordinated Universal Time
Room Name: Motion 1		
Occupancy confirmation time: 00:01:00		
Information When associating a sensor with a resource, a new resource for the resource already has a resource rule, that resource for the resource already has a resource rule.		
in the resource already has a resource rule, that resource	e rule will be	appneu.

Figure 39. Add Sensors - Confirmation

NOTE: You can add Sensor ID(s) without mapping any resource to the ID(s) yet. Before creating, the confirmation screen will be like this:





Update Sensor

In case you want to update a single Sensor, click on its Action button to open its 'Update Sensor' screen, e.g.:

Resource: reso	e Sensor	×
Resource:	DISRUPTIVE-TECHNOLOGIES - Add-on Development Resource Type: Room Room Name: Motion AOP Operation ID: cl46is7qn1io2dj1enb0 Sensor ID: emucm1b8h03t1i8fdpegob0	^
	onfirmation time (hh:mm:ss) * ?	
Update		Cancel

Figure 40. Update a single Sensor

On this screen, you can see its Connection Setting, Resource Type, Sensor ID, and the resource that it is connected to.

You can edit the field 'Occupancy confirmation time (hh:mm:ss)'. The value of this field must be greater than 00:01:00 and smaller than 01:00:00. Then, click [**Update**] to apply the change.

If you want to update multiple Sensors simultaneously, select those Sensors and click [\checkmark Update] on the toolbar. Modify the field 'Occupancy confirmation time (hh:mm:ss)' as you wish. The value of this field must be greater than 00:01:00 and smaller than 01:00:00. When completed, click [**Update**] to apply the change.

Update multiple Sensors	×
Occupancy confirmation time (hh:mm:ss) * ?	
00:01:00	
Update	Cancel

Figure 41. Update multiple Sensors



On Sensors section, each Sensor device also shows the current occupancy status of the resource that it is connected to:

- Unoccupied: meaning the connected resource is NOT occupied by anyone.
- **Occupied**: meaning the connected resource is occupied.
- N/A: meaning the Sensor device is not connected to any resource yet.

Delete Sensor

To remove a sensor, choose it and click [**Delete**] on the toolbar. You can choose multiple sensors and delete them simultaneously. The system will send you a confirmation message as the below figure:

Confirmation	×
Are you sure you want to delete the selected record(s)?	
Yes No	

Figure 42. Sensors – Delete Confirmation

NOTE: If there is any error happening to Sensor devices, a warning **Invalid Connection Setting**.' will also appear as below. You can still add/update/delete a sensor of that type.

۲	Connection Setting ↑↓	Resource Type ↑	Sensor ID 11	Operation ID 1	Resource ↑↓	Occupancy Status 1↓	Last Modified Date ↑↓	Action
	DISRUPTIVE- TECHNOLOGIES	Desk	emucl46u2t8a4e6o43r8tjg	cl46is7qn1io2dj1enb0	performance_Room1	Unoccupied	15-Dec-23 08:58	0
	LINAK 🕕	Room	WIFI2LIN-C82B96B2E3C4- 1360048E	WIFI2LIN-C82B96B2E3C4- 1360048E		N/A	26-Dec-23 10:04	0
	LINAK () Invalid Connectio	Room n Setting.	WIFI2LIN-FCF5C46ACF5C- 13600222	WIFI2LIN-FCF5C46ACF5C- 13600222		N/A	26-Dec-23 10:04	0



Resource rules

OfficePlace		Sensors			🟠 Root Tena	ant 🗸 🐯 🗘	?	A
=	Resource rules							
 Organization Management Organizations 	Sensors Resource rules	🕻 Connection settings 🛛 🖄 Sub	oscriptions \vee					
Locations	+ Add more 🗊 Delete 🖉 Update	🖔 Reload					7	🖓 Filt
Categories		Total Sensors ↑↓	Time zone ↑↓	Status ↑↓	Occupancy Status 🛝	Last Modified Date ↑↓	Action	
Sensor Management	🖵 resource01	1	SE Asia Standard Time	Enabled	Unoccupied	18-Jan-24 14:50:10	0	
Tenant Management	💂 resource02	1	SE Asia Standard Time	Enabled	Unoccupied	18-Jan-24 14:50:12	0	
	💂 resource03	1	SE Asia Standard Time	Enabled	Unoccupied	18-Jan-24 14:49:10	0	
	💂 resource04	1	SE Asia Standard Time	Enabled	Unoccupied	18-Jan-24 14:50:12	O	
	Showing 1 to 20 of 100 entries				« < 1 2 3	4 5 > >>	20 / pag	je 🚿

Figure 43. Resource Rules section

Here you can select among available resources and set resource rules for each or all of them.

Toolbar Buttons	Description
Add more	Select available resource(s) and add rules to them.
Delete	Delete the selected resources.
Update	Update resource rules for the selected resources.
Reload	Refresh the Resource Rules list.
Filter	Find sensor the value of any field.

Add Resource Rules

Clicking [Add more] will open 'Add Resource Rules' screen that includes 3 following steps:

Step 1: Select resource(s)

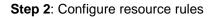
arch	resou	rce *		
₽ s	earch			
	۲	Display Name	Email	
0	Å	resource08	resource08@aod.vn	
	Å	resource09	resource09@aod.vn	
			Showing 1 to 2 of 2 entries	

Figure 44. Add Resources Rules – Add Resource



On this step, select a resource that you want to set resource rules, then click [Next] to proceed. You can also use the search option to look for the resource by name.

On this screen, you can also select multiple resources, and the resource rules that you are creating will then be applied to all selected resources. (Note that you will not be able to add Sensor devices later on. More details will be described below).



Add Resource Rules	×
Reservation configuration	
No-show setting ?	
No-show time limit (mins) ?	
15	
New reservation setting ?	
Reservation time (hh:mm:ss)	
00:30:00	
As long as possible ?	
Reservation extension setting ?	
Allow unlimited repeats ?	
Extension repeats (times)	
4	
Extension duration (mins)	
15	
Early Check-out setting ?	
Inoccupancy tolerance duration (mins) ?	
90	
Early check-out validation time duration (mins) 🕐	
10	
Next Back Cancel	

Figure 45. Add Resources Rules – Reservation Configuration

On this step, you configure the resource rules for the selected resource(s):

Rule	Description
	Enable/disable no-show setting.
No-show setting	When enabled: the connected Sensor will check if the resource is not occupied as expected due to the scheduled reservation. When there is no person showing up at the resource after the ' No-show time limit ' has ended, the resource reservation will be ended.



	This field specifies the no-show time limit (in minutes) for the 'No-show setting'.
No-show time limit (mins)	The value of this field must be positive integer from 1 to 60 (minutes). By default, its value is ' 15 ' (meaning 15 minutes).
	NOTE : This field is only available if ' No-show setting ' is turned on.
	Enable/disable new reservation setting.
New reservation setting	When enabled: if the resource is confirmed to be occupied (based on the Occupancy confirmation time as mentioned above), a new reservation will be created for that resource.
	The time for the created reservation is determined by the field 'Reservation time (hh:mm:ss)'.
	This field specifies the time duration for the created reservation.
Reservation time (hh:mm:ss)	The value of this field follows hh:mm:ss time format which must be greater than 00:01:00 and smaller than 24:00:00. By default, its value is ' 00:30:00 ' (meaning 0 hour - 30 minutes - 0 second).
	NOTE : This field is only available if ' New reservation setting ' is turned on.
	If the available time until the next planned reservation is less than the specified ' Reservation time (hh:mm:ss) ', the new reservation will be created for the available time range and last until the next reservation's start time.
As long as possible	For example: Reservation time (hh:mm:ss) : 00:30:00 Available time until the next reservation (hh:mm:ss) : 00:15:00 If ' As long as possible ' is checked, a new reservation with a duration of 15 minutes will be created and last until the next reservation's start time.
	NOTE : This option is only available if ' New reservation setting ' is turned on.
	Enable/disable reservation extension setting.
Reservation extension setting	When enabled: the reservation can be extended if the connected sensors detect the person remains at the resource after the reservation's end time.
	The extension time is determined by the field 'Extension repeats (times)' and 'Extension duration (mins)'.
	This field specifies the maximum number of times that reservation extension can be repeated.
Extension repeats (times)	The value of this field must be positive integer from 1 to 60 (times). By default, its value is '4'. NOTE : This field is only available if ' Reservation extension setting ' is turned on.



	This field specifies the extension duration per repeat (in minutes).
	The value of this field must be positive integer from 1 to 720 (minutes). By default, its value is ' 15 ' (meaning 15 minutes).
Extension duration (mins)	Combining with the default value of ' Extension repeats (times) ', it means the reservation can be extended maximum 4 times, each time lasts 15 minutes.
	NOTE : This field is only available if ' Reservation extension setting ' is turned on.
	If this option is checked, 'Extension repeats (times)' will be disabled.
Allow unlimited repeats	Instead, the reservation can be extended for an unlimited number of times. But if the extension conflicts with another reservation, the extension is stopped at the next reservation's start time.
	NOTE : This option is only available if 'New reservation setting ' is turned on.
	Enable/disable early check-out setting.
Early Check-out setting	When enabled: the reservation can be ended early if the occupant leaves resource before the reservation's end time.
	The configuration for this setting is determined by ' Inoccupancy tolerance duration (mins)' and 'Duration before end time to disable Early check-out (mins)'.
	This field determines the duration (in minutes) in which inoccupancy of the resource is ignored. It allows breaks during the reservation without ending it.
Inoccupancy tolerance duration (mins)	E.g., Employee may leave the desk during a meeting without ending the reservation before its end time.
	The value of this field must be positive integer from 1 to 720 (minutes). By default, its value is ' 90 ' (meaning 90 minutes).
	NOTE : This field is only enabled if ' Early Check-out setting ' is turned on.
Forly shoels and solves lided as	In case the occupant leaves the resource before the reservation's end time, the inoccupancy will not be considered as an early check-out scenario if the recorded time of inoccupancy takes place within the last period of the reservation defined by the value of this field (in minutes).
Early check-out validation time duration (mins)	The value of this field must be positive integer from 1 to 720 (minutes). By default, its value is ' 10 ' (meaning 10 minutes).
	NOTE : This field is only enabled if ' Early Check-out setting ' is turned on.

When you are done, you can click [Next] to proceed, or click [Back] to return to the previous step if you want to make some changes.



Step 3: Connect the selected resource to a Sensor device (optional)

onnect with	n sensor				
earch for a s	sensor				
, ○ Search					
۲	Connection setting	Sensor ID	Operation ID	Room Name	Desk Name
	KONTAKT.IO	9b2e0bf2-2454- 4072-ac55- 259febd4204d	434654	Room 01	Desk 01
	KONTAKT.IO	cc32fc7c-e7ad- 42c7-abca- b36c3acd7ad4	434654	Room 02	Desk 02
		Showing 1 to	7 of 7 entries		
		≪ < 1 >	» 20 / page	~	

Figure 46. Add Resources Rules – Connect with Sensor

On this step, you can choose to connect a Sensor device to the selected resource if you have only selected 1 resource from the first step. The shown Sensor devices are the ones that you have added in <u>Sensors</u> tab and they are not connected to any resource yet. You can use the Search function to look for a particular device using its ID.

When you are done, click [Create] to proceed, or click [Back] to return to the previous step.

You can also ignore this step and just click [**Create**]. In this case, the resource rules will still be applied to the selected resource, but this resource is not connected to any Sensor device yet. This also means the resource rules will not work yet because there is no occupancy data due to the lack of Sensor device.

If you have selected multiple resources from the first step, the following message will be displayed instead:

Add Resource Rules ×					
	ensor not be added because more than 1 Resource are selected. Plea o be able to add Sensor.	ase select 1			
Create	Back	Cancel			

Figure 47. Add Resources Rules – Errors when connecting with Sensor



In this case, you can still click [**Create**] to proceed, meaning the resource rules will still be set for the selected resources. But these resources are still not connected to any Sensor device yet. Similarly, the added resource rules will not work due to the lack of Sensor device.

Step 4: Confirmation

you want to create these resource rules?			
Resource Rules	\$ ⁰	resource08	
Reservation configuration		Email: resource08@a0d.vn	
\sim No-show setting: Off		Timezone: (UTC) Coordinated Universal Time	
No-show time limit (mins): 15			
\sim New reservation setting: Off			
As long as possible: Off			
Reservation time (hh:mm:ss): 00:30:00			
arsigma Reservation extension setting: Off			
Allow unlimited repeats: Off			
Extension repeats (times): 4			
Extension duration (mins): 15			
\sim Early Check-out setting: Off			
Inoccupancy tolerance duration (mins): 90			
Early check-out validation time duration (mir 10	וs):		
Sensors			
Connection Setting: KONTAKT.IO Sensor ID: 9b.	2e0bf2-2454-40	72-ac55-259febd4204d	
Resource type: Desk			
Room name: Room 01 Desk name: Desk 01			

Figure 48. Add Resources Rules – Confirmation

This step allows you to review all the configurations made so far. If you want to reconsider your settings, click **[No]** to return to the previous step.

If you are done, click **[Yes]** to confirm the resource rules creation (and connect to the selected resource to the Sensor device if you have done so in step 3). You will then see a notification informing that your Resource rules are being created.

When the process is completed, you will receive another notification informing you that the Resource rules have been successfully created. And you will also see the new resource(s) added to the list on the Resource rules section.

- If the resource rules is attached with a sensor, after a certain time (Occupancy confirmation time (hh:mm:ss) specified in Sensor section), the Occupancy Status of that resource rules will switch from N/A to either Occupied or Unoccupied.
- If the resource rules is attached with no sensor, its Occupancy Status is N/A.



NOTE: When adding a Sensor that is associated with a resource, a new resource rule will be automatically created and attached to that resource. *Refer to Figure 39 in <u>Sensors</u> part for more details.*

Update Resource Rules

To update the resource rules of a resource, you can click **Action** button of the resource to open the 'Update Resource Rules' screen, e.g.:

OfficePlace Sensors 🟠 Root Tenant 🗸 🐯 🗘							?	A	
=	Resource rul	es							
Organization Management	- Sensors	😾 Resource rules	🔓 Connection settings 🛛 🖄 Su	bscriptions $^{\smallsetminus}$					
Organizations	+ Add more	e 🗐 Delete 🖉 Upda	ate 🖒 Reload					7	¶ F
Categories	۲	Resource ↑	Total Sensors ↑↓	Time zone ↑↓	Status ↑↓	Occupancy Status ↑↓	Last Modified Date $\uparrow\downarrow$	Action	
Sensor Management	R	resource01	1	SE Asia Standard Time	Enabled	Unoccupied	18-Jan-24 14:50:10	0	
Tenant Management	2	resource02	1	SE Asia Standard Time	Enabled	Unoccupied	18-Jan-24 14:50:12	0	l
	2	resource03	1	SE Asia Standard Time	Enabled	Unoccupied	18-Jan-24 14:49:10	0	
	2	resource04	1	SE Asia Standard Time	Enabled	Unoccupied	18-Jan-24 14:50:12	0	J
	Showing 1 to	20 of 100 entries				《 〈 1 2 3	4 5 > >>	20 / pag	ge

Update Resource Rules		×
resource01 resource01		Available
Email: resource01@aod.vn	Timezone: Coordinated Universal Time	
🖬 Configurations 🖙 Sensors		

Figure 49. Update a single Resource Rule

This screen includes an overview of the resource including its name, email, and timezone. There is also the **[Available]** switch, in which if it is switched off: the Occupancy Status of that Resource Rules will switch to N/A.

Below the resource overview, there are:

• **Configurations** tab: where you can make changes to the resource rules. If you do not want to make changes to the Sensors, you can click [**Update**] to apply changes to the resource rules.



Configurations	
Reservation configuration	
No-show setting ?	
No-show time limit (mins) ?	
15	
New reservation setting ?	
Reservation time (hh:mm:ss) 00:30:00	
As long as possible ? Reservation extension setting ?	
Allow unlimited repeats ?	
Extension repeats (times)	
4	
Extension duration (mins)	
Update Delete	Cancel

Figure 50. Update a single Resource Rule - Configurations

• **Sensors** tab: where you can add/remove Sensor devices from the resource. Click on this tab will show all the Sensors that are connected to this resource, e.g.:

E C	Configurat	tior	ns Sensors				
+	- Add mo	re					
	\$		Connection setting \uparrow	Sensor ID ↑↓	Operation ID	Room Name	Desk Name
				No da	ata available.		

Figure 51. Update a single Resource Rule - Sensors

In this example, this resource is not connected to any Sensor yet; therefore, it shows 'No data available'.



To add a Sensor, click [Add more] to show all the available Sensor devices. Select the Sensor device that you want to add to this resource, then click [Save].

Search	e × (Cancel				
	\$	Connection setting ↑	Sensor ID ↑↓	Operation ID	Room Name	Desk Name
•		DISRUPTIVE- TECHNOLOGIES	emucl46trbpthr4ugq8i fmg	cl46is7qn1io2d j1enb0	Motion AOD	
		DISRUPTIVE- TECHNOLOGIES	emucl482mjpthr4ugq 8iva0	cl46is7qn1io2d j1enb0	Motion AOP	

Figure 52. Update a single Resource Rule – Add Sensor

Press [Yes] to approve the addition when the following confirmation screen appears:

Configurations	□ Sensors
Do you really v	vant to save this changes?
Yes	No

Figure 53. Update a single Resource Rule – Add Sensor Confirmation

To delete a Sensor, select it and click [Delete], and a confirmation message will pop up:

5	Configurations Sensors						
1	🗎 Del	ete ©	Connection setting ↑	Sensor ID ↑↓	Operation ID	Room Name	Desk Name
	0	-1	DISRUPTIVE- TECHNOLOGIES	ci9u4n5vbhng00c2s3f g	cm60sa2nfim majm5ohig		Signe Desk

Figure 54. Update a single Resource Rule – Delete Sensor



E Configurations	□ Sensors
Are you sure y	ou want to delete the selected sensor(s)?
Yes	No

Figure 55. Update a single Resource Rule – Delete Sensor confirmation

Click [Yes] to confirm the removal.

NOTE: Please note that you do **NOT** need to go back to **Configurations** tab and click [**Update**] to apply the changes in **Sensors** tab.

Jpdate Multiple Resource Rules	>
Resource rules status	
Available	
Reservation configuration	
No-show setting ?	
No-show time limit (mins) ?	
15	
New reservation setting ?	
Reservation time (hh:mm:ss)	
00:30:00	
As long as possible ? Reservation extension setting ?	
Allow unlimited repeats ?	
Extension repeats (times)	
4	
Extension duration (mins)	_
15	
Early Check-out setting ?	
Inoccupancy tolerance duration (mins) ?	
90	
Early check-out validation time duration (mins) ?	
Update Back Cance	el

You can update multiple resource rules by choosing them and clicking [**Update**] button on the 'Resource rules' section toolbar, it will open the 'Update Multiple Resource Rules' screen. Here, you can only update resource rules for all selected resources, but not the Sensor devices. You can change Sensor device if you update a single resource only.

Click [Update] to finish.

Figure 56. Edit Multiple Resource Rules.



Delete Resource Rules

To remove the resource rule, choose it and click [**Delete**] on the toolbar or **Action** icon \checkmark If the resource of that resource rule is connected to sensor(s), the confirmation screen will appear as below:

Confirmation	×
Are you sure you want to delete the selected record?	
Warning When deleting the resource rule of a resource, the sensors will be disconnected from that resource.	
Yes No	

Figure 57. Resource Rules – Delete Confirmation

If the resource of that resource rule is not connected to sensor(s), the confirmation screen will appear as below:

×

Figure 58. Resource Rules – Delete Confirmation

Click [Yes] to remove the resource rule(s).

NOTE: If a resource is deleted, the resource rule attached to that resource will be removed from the Resource Rules list under Sensor Management section.



Subscriptions

By default, **Subscriptions** tab is not displayed on Sensor Management interface. Refer to **OfficePlace Administrator Guide** to learn how to make it visible:

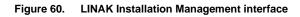
OfficePlace Sensors					
=	Sensors				
 Organization Management 	📼 Sensors	😓 Resource rules	Connection settings	🖄 Subscriptions 🗠	
Organizations	+ Add more	🏛 Delete 🖉 Update	e 🖒 Reload	LINAK Installation Management	
Categories	۲	Connection Setting $\uparrow\downarrow$	Resource Type ↑	LINAK Subscription KONTAKT.IO Subscription	eration ID ↑↓
Sensor Management		KONTAKT.IO	Room	DISRUPTIVE-TECHNOLOGIES Data Connector	:fa:b6:0b:b6:53
Tenant Management					

Figure 59. Sensor Subscriptions section

LINAK Installation Management

In this section, you can create new Linak Installation to get Installation ID and Installation Token for Linak configuration. Click on **Subscriptions** tab and navigate to **LINAK Installation Management**.

OfficePlace		Sensors	🏠 Root Tenant 2 🗸 👸	\$ 📭 ? 💊
=	Subscriptions > LINAK Subscription			
 Organization Management 	🗆 Sensors 🛛 🖵 Resource rules 🛛 🗋 Connection	n settings 🖉 Subscriptions 🗸		
Organizations		LINAK Installation Management		
Locations		LINAK Subscription		
Categories		KONTAKT.IO Subscription		
Sensor Management	+ Add more 🖉 Update 📋 Delete 🖒 Reload	DISRUPTIVE-TECHNOLOGIES Data Connector		
Tenant Management	Installation Name ↑	Installation ID ↑↓ Installation Token ↑↓	Expiration Token ↑↓	Action
	🖙 Installation 1	710385ed-b118-49d3-915a-85ed7aba5e18		٩
	🖙 Installation 2	fabdfc2a-7de4-4beb-9daa-9cf90caae902		٢
	🖙 Installation 3	18d79590-444f-46ea-83d7-70e910971aee		٩
	Installation 4	fc4a381f-7696-4f70-8968-a5087c313aa8		٩
	🖙 Installation 4	c3e889c3-1ea5-4def-b0c5-b39831a27d0f		٩
	Showing 1 to 5 of 5 entries		≪ < 1	> >> 20 / page <>



Toolbar Buttons	Description
Add more	Create new Installation.



Delete	Delete the selected Installation.
Update	Update name for the selected Installation.
Reload	Refresh the Installation list.

Add Installation

Clicking [Add more] button to open the 'Create Installation' screen.

If you have neither Installation ID nor Installation token, select '**Create new Installation ID**' option. Here, enter the name for Installation.

Create Installation 💿	×
Create new Installation ID Add existing Installation ID Installation Name * Enter Installation Name	
Create	Cancel

Figure 61. Create Installation

If you already had an Installation ID but not Installation token, please select 'Add existing Installation ID' option and enter the Installation ID that you own.

Create Installation	×
Create new Installation ID Add existing Installation ID	
Create	Cancel

Figure 62. Create Installation with existing Installation ID

Click [Create] and the confirmation screen assemling the below figure will emerge:



Create Installation	×
Do you want to create new installation?	
Yes No	

Figure 63. Create Installation - Confirmation

Press [Yes] to approve.

- Then, the added Installation will be displayed on Linak Installation Management panel. You can notice
 that the Installation ID is automatically generated for you (if you select 'Create new Installation ID'
 option)
- The name of the existing Installation ID is automatically filled in (if you select 'Add existing Installation ID' option).

Subscriptions > LINAK Subscription						
a Senso	rs	Resource rules	on settings 🖉 Subscriptions 🗠			
+ Add	more	🖉 Update 🏾 🗎 Delete 🖒 Reload				
		Installation Name ↑	Installation ID $\uparrow \downarrow$	Installation Token ↑↓	Expiration Token 🔱	Action
		Installation 1	710385ed-b118-49d3-915a-85ed7aba5e18			٩
		Installation 2	fabdfc2a-7de4-4beb-9daa-9cf90caae902			٩
		Installation 3	18d79590-444f-46ea-83d7-70e910971aee		Please c	ick here to generate a new token
0		Installation 4	fc4a381f-7696-4f70-8968-a5087c313aa8		_	Å
	_	Installation 5	c3e889c3-1ea5-4def-b0c5-b39831a27d0f	3cc93b2a-f457-4b38-bf0c-43cfc7c7192e	26-Jun-24 16:54	ŵ

Figure 64. Generate Installation token

Next, to generate an Installation token, please click on the Action button of that Installation. The system will send you a confirmation message as the below figure:

Generate Token	×
Do you want to generate new token for this installation?	
Yes No	

Figure 65. Generate Token - Confirmation



Click [Yes] to confirm. After that, the new Installation token is generated and expires in 30 days. You can regenerate a new installation token up until the last day of the token's term.

Installation Token ↑↓	Expiration Token ↑↓	Action
		٩
		٩
		٩
	You cannot generate	a new token until 1 day before expiration date.
3cc93b2a-f457-4b38-bf0c-43cfc7c7192e	26-Jun-24 16:54	J.

Update Installation

In case you want to update an Installation, click on 'Update' button on the toolbar to open its 'Update Installation' screen, e.g.:

Update Installation 💿	×
Installation Name *	
Installation 3	
Update	Cancel

Figure 66. Update Installation

You are able to modify the Installation Name only. Click [Update] and the following confirmation will emerge:

ĺ	Update Installation	×	
l	Do you want to save your change(s)?		
	Yes No		

Figure 67. Update Installation - Confirmation

Select [Yes] to update.



Delete Installation

If the Installation you want to delete has no attached Sensor **and** has not been added to any Connection Setting, you can delete that Installation.

To remove that Installation, select it and click [**Delete**] on the toolbar. The 'Confirmation' screen will assemble the below figure:

Delete Installation	×
Do you want to delete the selected record(s)?	
Yes No	

Figure 68. Delete Installation - Confirmation

Click [Yes] to finish the removal.

NOTE: You cannot delete an Installation if that Installation has attached Sensor(s) **or/and** has been added to a Connection Setting. If you attempt to delete it, a failure notification will be sent to you:

		Notifications	×
Subscriptions ~			Clear all
		Einak Installation Delete Failed 17:11 17:11 17:11 10 17:11 10 17:11 10	×
Installation ID ↑↓	Installa	Fail to delete the Linak Installation.	- 1
710385ed-b118-49d3-915a-			



LINAK Subscription

This subscription is used to automatically obtain real-time data from Linak sensors whenever there is a change observed without user's request.

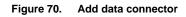
OfficePlace	Sensors		ıt 2 🗸	ŝ	Q	?	A
=	Subscriptions > LINAK Subscription						
 Organization Management Organizations Locations 	□ Sensors 🖳 Resource rules 📑 Connection settings	E Subscriptions ∨			1	Create	
Categories Sensor Management	LINAK - Add-On Products	LINAK Subscription KONTAKT.IO Subscription DISRUPTIVE-TECHNOLOGIES Data Connector				Ē	
Tenant Management	ন্ত Push URL: https://d9eb-113-190-242-155.ngrol	Guyrour/eventkecelver/envaryevent		V	'iew de	<u>etails</u>	
							_

Figure 69. Linak Subscription interface

Add LINAK Subscription

Click on [Create] button on the upper right to start adding data connector and the following screen will appear:

Connection Settings *		Push Sensor URL *	
Select Connection Settings	~	Enter Push Sensor URL	



Fields	Description
Connection Setting	Type of connection setting.
Push Sensor URL	URL used to obtain Sensor device data automatically from the manufacturer without Pull request.

NOTE: You can create a Linak subscription only if Linak connection setting is available. With each Linak connection setting, you can only create one Linak subscription.



When you have filled all the fields, click [**Create**]. A confirmation screen will show up, choose [**Yes**] to confirm the creation. You will see a notification informing that the data connector is being added. And when the process is completed, you will receive another notification informing the successful creation.

Confirmation	×
Do you want to create this subscription?	
Yes No	

Figure 71. Add subscription - Confirmation

Update LINAK Subscription

If you would like to update a data connector, click [View Details] of its connector to open the update data connector screen similar as follows:

Update data connector	? ×
Connection Settings *	Push Sensor URL *
LINAK - Add-On Products \lor	https://d9eb-113-190-242-155.ngrok.io/ro
Update	Cancel

Figure 72. Update data connector

You are only allowed to modify the 'Display Name' field. Click [**Update**] and a confirmation will emerge assembly the below figure:

Confirmation	×
Do you want to save your change(s)?	
Yes No	

Figure 73. Update data connector - Confirmation



Select [Yes] to save your modifications.

Delete LINAK Subscription

To delete a data connector, click on icon on the upper right corner of that data connector and a message will be displayed to confirm your removal request:

Confirmation	×
Do you want to delete the selected record(s)?	
Yes No	

Figure 74. Delete data connector - Confirmation

Click [Yes] to confirm.

KONTAKT.IO Subscription

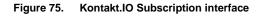
This subscription is used to automatically obtain real-time data from Kontakt.IO sensors whenever there is a change observed without request from user.

Configure Channel

To be able to create a new subscription for Kontakt.IO, you must add a Channel for the subscription beforehand.

Under Sensor Management section, select Kontakt.IO Subscription tab:

OfficePlace	Sensors		e v 🕸 🗘 ? 🔥
=	Subscriptions > KONTAKT.IO Subscription		
 Organization Management Organizations Locations 	🖙 Sensors 🛛 💂 Resource rules 🛛 🔓 Connection settings	Subscriptions UNAK Installation Management LINAK Subscription	Create
Categories Sensor Management	Channel 1	KONTAKT.IO Subscription DISRUPTIVE-TECHNOLOGIES Data Connector	i :
Tenant Management	ම Connection Settings: KONTAKT.IO 01 ම Channel ID: 66557bf2f021bd6eb9042a88 ම Event Hub: Root Tenant 344		
			<u>View details</u>



Click on [Create] button to open the following screen:



Create new channel		
Connection Settings *	Channel Name *	
Select Connection Settings \sim	Enter Channel Name	
Event Hub *		
Create	Cancel	

Figure 76. Create new channel

Fields	Description
Connection Settings	Select a Connection Setting.
Channel Name	Name of Channel.
Event Hub	A cloud native data streaming service. The Event Hubs are configured by the manufacturer.

After filling out all fields, press [Create] at the bottom of the screen and the following confirmation screen appears:

Confirmation	×
Do you want to create this channel?	
Yes No	

Figure 77. Add subscription - Confirmation

Click [Yes] and your new channel will be displayed on the channel list.



NOTE: You can create a channel only if Kontakt.IO connection setting is available. With each Kontakt.IO connection setting, you can create one channel only.

To update a Channel, click [View Details] on bottom right to open the update channel screen similar as follows:

Connection Settings *		Channel Name *	
KONTAKT.IO - 01	\sim	Channel 2	
Event Hub *			
Root Tenant 344	\sim		

Figure 78. Update channel

You can update all the available fields except for "Connection Settings'. When you are done, click [**Update**]. The 'Confirmation' screen as below would appear:

Confirm	ation	×
Do you want	to save your change(s)?	
Yes	No	

Figure 79. Update confirmation

Click [Yes] to finish.

To delete a channel, click on iii icon on the right of that channel. The 'Confirmation' screen similar as follows would appear:



Confirmation	×
Do you want to delete the selected record(s)?	
Yes No	

Figure 80. Delete confirmation

Click [Yes] to delete, [No] to cancel deleting.

Create subscription

After creating/updating a channel, you now can add Kontakt.IO subscription to that channel. There are two cases after you creating a new channel:

Click on More Actions i near the Delete icon i and select [Verify Connection].

Subscriptio	ons > KONTAKT.IO S	ubscription		
📼 Sensors	🖵 Resource rules	Connection settings	🖄 Subscriptions 🗁	
				Create
	Channel 1			
- L	^ල Connection Setting	s: Kontakt.io - 01		Create Subscription Verify Connection
_	ල Channel ID: 66557b	f2f021bd6eb9042a88		
_	ී Event Hub: Root Ter	nant 344		
				View details

Figure 81. Verify connection

• If the Connection State is 'CONNECTED', it means Kontakt.IO subscription has been automatically added to your Channel. No more actions need to be taken.



Channel connection	×
Status: Name:	active Channel 1
Endpoint:	sb://sensorkontakt.servicebus.windows.net/
Shared Access Key Name:	WRnUvuNr5xuq2zlibjbsuv+F2brlcvuWQ+AE hC2lwC4=
Event Hub Name:	kontakteventhub
Last Update:	29-May-24 13:22
Connection State:	CONNECTED
	Cancel

Figure 82. Connection State - Connected

• If the Connection State is 'DISCONNECTED', it means you must create subscription manually.

Channel connection	×
Status:	active
Name:	Channel 1
Endpoint:	sb://sensorkontakt.servicebus.windows.net/
Shared Access Key Name:	WRnUvuNr5xuq2zlibjbsuv+F2brlcvuWQ+AE hC2lwC4=
Event Hub Name:	kontakteventhub
Last Update:	29-May-24 13:22
Connection State:	DISCONNECTED
	Cancel

Figure 83. Connection State - Disconnected

On the Kontakt.IO subscription list, select More Actions \vdots on the right of the channel you would like to add subscription \rightarrow [**Create Subscription**].



🖻 Sensors 🛛 💂	Resource rules	Connection settings	A Subscriptions	
				Create
ල Co		s: KONTAKT.IO - 01 f2f021bd6eb9042a88		Create Subscription Verify Connection
ି Eve	ent Hub: Root Ter	nant 344		<u>View details</u>

Figure 84. Manually create subscription

The system would send you a confirmation message as the below figure. Choose [Yes] to finish.

Confirn	nation	×
Do you want	t to create a new subscription for the selected channel?	
Yes	No	

Figure 85. Create subscription confirmation

After adding subscription manually, you can select [**Verify connection**] again and notice that the Connection State is now switched to 'CONNECTED'. Now you have successfully created the subscription for Kontakt.IO.



Channel connection	×
Status: Name:	active Channel 1
Endpoint:	sb://sensorkontakt.servicebus.windows.net/
Shared Access Key Name:	WRnUvuNr5xuq2zlibjbsuv+F2brlcvuWQ+AE hC2lwC4=
Event Hub Name:	kontakteventhub
Last Update:	29-May-24 13:22
Connection State:	CONNECTED
	Cancel

Figure 86. Create subscription successfully

• If the Connection State is 'INVALID', it means you have entered invalid value to the field(s). Update the channel and then re-verify the connection. If you still attempt to create subscription for an invalid channel, no subscription will be created.

Channel connection	×
Status:	active
Name:	Channel 1
Endpoint:	sb://sensorkontakt.servicebus.windows.net/
Shared Access Key Name:	WRnUvuNr5xuq2zlibjbsuv+F2brlcvuWQ+AE hC2lwC4=
Event Hub Name:	kontakteventhub
Last Update:	29-May-24 13:22
Connection State:	INVALID
	Cancel

Figure 87. Connection State - Invalid

NOTE: A channel can only be connected to one subscription. If you click [**Create subscription**] for a channel that already has a subscription, the system would delete that existing subscription and replace it with a new one.



DISRUPTIVE-TECHNOLOGIES Data connector

This data connector is used to automatically obtain real-time data from Disruptive-Technologies sensors whenever there is a change observed without request from user.

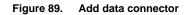
OfficePlace	Sensors	🏠 Root Tenant 2 🗸	ŝ	Q	?	A
=	Subscriptions > DISRUPTIVE-TECHNOLOGIES Data Connector					
 Organization Management 	🖙 Sensors 🛛 🧏 Resource rules 📑 Connection settings 🖉 Subscription	ons 🔨				
Organizations	LINAK Installati	on Management				
Locations	LINAK Subscrip	tion			Create	
Categories	KONTAKT.IO Su	ubscription		Ŵ	;	Î
Sensor Management	DT Data Connector	ECHNOLOGIES Data Connector		ш	:	
Tenant Management	Connection settings: DISRUPTIVE-TECHNOLOG ES - Ααα-υη ΡΓΟ	oaucts				
	Project ID: coudaho7irbigqlanh10					
	Push Sensor URL: https://d9eb-113-190-242-155.ngrok.io/root/	EventReceiver/LINAK/events				
	ම Data connection ID: cpbcrs7os02re5lvobcg					
	Account ID: coudang4uap000cibj00@coudaho7irbigqlanh10.sen	viceaccount.d21s.com				
			Viev	w deta	<u>ails</u>	

Figure 88. Disruptive-Technologies Data connector interface

Add DISRUPTIVE-TECHNOLOGIES Data connector

Click on [Create] button on the upper right to start adding data connector and the following screen will appear:

Add data connector 💿			×
Connection Setting *		Display Name *	
DISRUPTIVE-TECHNOLOGIES	~	Enter Display Name	
Push Sensor URL * Enter Push Sensor URL			
Create			Cancel



Fields	Description
Connection Setting	Type of connection setting.
Display Name	Name of data connector.
Push Sensor URL	URL used to obtain Sensor device data automatically from the manufacturer without Pull request.



NOTE: You can create Disruptive-Technologies Data connector only if DT connection setting is available. With each DT connection setting, you can create one data connector.

When you have filled all the fields, click [**Create**]. A confirmation screen will show up, choose [**Yes**] to confirm the creation. You will see a notification informing that the data connector is being added. And when the process is completed, you will receive another notification informing the successful creation.

Confirmation	×
Do you want to create this d	ita connector?
Yes No	

Figure 90. Add data connector - Confirmation

Update DISRUPTIVE-TECHNOLOGIES Data connector

If you would like to update a data connector, click [View Details] of its connector to open the update data connector screen similar as follows:

Update data connector 💿			
Connection Settings *	Display Name *		
Select Connection Settings $~~$	DT Data Connector		
Push Sensor URL * https://d9eb-113-190-242-155.ngrok.io/ro			
Update			

Figure 91. Update data connector

You are only allowed to modify the 'Display Name' and 'Push Sensor URL' fields. Click [**Update**] and a confirmation will emerge assembly the below figure:



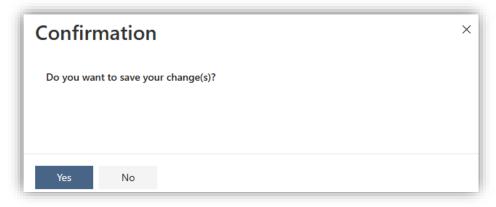


Figure 92. Update data connector - Confirmation

Select [Yes] to save your modifications.

Delete DISRUPTIVE-TECHNOLOGIES connector

To delete a data connector, click on icon on the upper right corner of that data connector and a message will be displayed to confirm your removal request:

Confirmation	×	
Do you want to delete the selected record(s)?		
Yes No		

Figure 93. Delete data connector - Confirmation

Click [Yes] to finish the removal.



CHAPTER 3. Appendices

Appendix A: Retrieve details for DISRUPTIVE-TECHNOLOGIES connection setting

Follow these steps to retrieve details for Disruptive-Technologies:

Step 1: Navigate to <u>DT Studio</u> and sign in to your account \rightarrow Go to your Project or create a new one \rightarrow **API** Integrations \rightarrow Service Accounts \rightarrow Add Service Account \rightarrow ADD.

	Studio AOD / AOD Inv	ventory 🗘 📳 New Feature! 🥕 🛈 🕃 Feedback?
•	Sensors & Cloud Connectors Project Dashboard	Service Accounts Interact with the API through a Service Account. Learn more →
۰	Notifications	
৶	File Export	Service Accounts for API access You log into Studio with your User, but when you create an application using our API, all the programmatic
*	Project Settings	interactions are done through a Service Account. Learn more → Add Service Account
\diamond	API Integrations	
	🖧 Data Connectors	Service Account name * AOD
	O- Service Accounts	
	ဦာ Emulator	CANCEL ADD

Figure 94. Add Service Account

Step 2: Click on the Service Account just created, you can edit the display name, and select role for this account. The role is what determines which actions user has permission to perform within the project or organization. It is recommended that you select '*Project developer*' role for full editing permission.

Studio AOD / AOD Inv	ventory \$	New Feature! 🥕 🛈 Feedback?
Sensors & Cloud Connectors	Service Accounts Interact with the API through a Service Accou	nt. Learn more →
Notifications	Create New Service Account	← Back to full list
J File Export	NAME/EMAIL	Service Account details
Project Settings	AOD	Display name AOD
API Integrations •		Role in the current Project
🖧 Data Connectors		Project developer
O- Service Accounts		Service Account email cm0hhmoeircg008vh5c0@cm0hfaanfimo5ojo406g.serviceaccount.d21s.com
b Emulator		Service Account ID cm0hhmoeircg008vh5c0
		Enable Basic Auth (not recommended for production usage)

Figure 95. Retrieve Service Account details



From this screen, you can retrieve following details:

- Name: retrieved from Display name.
- **Project ID**: retrieved from Service Account ID.
- Service Account email

On the Active Keys section, click [Create new] and a pop-up named 'Created Key Details' will be displayed:

Created Key Details	
Key ID cm0hjgtj70r000eheovg	
Please copy and save the secret below, as it will not be shown again.	
Secret 8a9b044efd5f4480b04bdf4063528807	
	CLOSE

Figure 96. Retrieve Key details

Here, you can retrieve 2 other details:

- Key ID
- Key Secret: retrieved from Secret value.

NOTE: Remember to copy the key secret value right after creating Key Details because it will not be shown again once you close this pop-up.



Appendix B: Retrieve API Key for KONTAKT.IO connection setting

Open the browser and navigate to the address of the web server where <u>Kio Cloud</u> is hosted. Sign in with your account and the following interface will appear:

kontakt.io Launchpad						
Your apps.					Security	
					Sign out	
Kio Cloud						
	\odot	Ē	0	:	0)	
	Smart Location	Policy Foundry	Device Management De	evice Management 2.0	Users	
Kio Apps						
Kin Abbs						

Figure 97. Kio Cloud \rightarrow Security

Click on your user profile icon on the upper right corner of the screen and select [Security]:

Secu Secu	
- USLKS	ırity (nhn@aod.vn)
Alha	EspTVrUMrUAUNgtMCRSgiSIZuMxU Set Control of

Figure 98. Retrieve API Key for Kontakt.IO

Here, you can retrieve and copy the Server API Key for Kontakt.IO connection setting.