Desktop Application Instruction Manual





CV-IOT Desktop Application Instruction Manual

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Download the CV-IOT Desktop Application Installer

bit.ly/Metcal-CV-IOT-Desktop-Application

NOTE: During installation, do not change the suggested installation location for the software.

NOTE: During installation, you may receive a Setup Failure alert in a Microsoft C++ screen. Ignore this failure alert. Click Close.



Introduction

Minimum System Requirements
OS: Windows 10
CPU: Intel® Core™ i5 or better
RAM: 2GB of system memory
Graphics: Intel® HD Graphics
Storage : At least 150GB
Connectivity: Ethernet 10/100

The Metcal CV-IOT App provides the user the ability to monitor, analyze, and configure Connection Validation[™] smart soldering units in the field.

The CV-IOT module generates two types of packets to the Mongo database:

• Operational data packet

The operational data packet contains joint specific information containing joint count, and the power and temperature profile of the joint.

• System status data packet

The system status data packet contains information about the CV Soldering PSU connected to the IoT module. The packet contains system on/idling status.

The App is organized into three pages:

Dashboard view

The "Dashboard view" provides a snapshot of the soldering activities on the floor as a productivity and resource utilization chart when the Metcal CV-IOT App is installed as a standalone app. When the app is opened for the very first time, the user will be prompted to enter the address of the Mongo database server to access the records.



• Database view

The "Database view" provides the user systems operations data containing information on every solder joint made using the units in the field, with an interface to view, query, and analyze. The database view shows operational data packets from the CV-IOT unit. Navigate to "Database view" using the "Details" button.

• Admin view.

The "Admin view" is available through authenticated login to the system configuration for configuring the unit IP address, mongo DB address pointer, email, and alert configuration. The admin view shows system status packets. Navigate to "Admin view" using "Admin" button.



It is strongly suggested that the app be configured in the PC with a "Complete installation" to perform onboarding. Refer to "Installation Manual_141.docx" for installation instruction.

App Initialization

 Initially the desktop app starts with the Mongo address "mongodb://127.0.0.1:27017". The "Mongo Server Unavailable" prompt will appear if the machine running the app is not also running the Mongodb database.





 In the settings page, set the application type to "Server" if it is being installed on the system with Mongo server / full installation. For installation on secondary systems that access the database, install the application with default setting as "Client." There should not be more than one application with "Server" type accessing the same database as it will result in incorrect average tip life calculations.

Application ye Client Cli	METCAL.	AL IOT PLATFORM					
		ſ	DATABASE IP DATABASE Port Authentication Username Password	DATABASE IP 27017 Enable 🖌 Disable	Applicatio	n ype Client Genyer	
Cancel Schmitt		Carrel				Submit	



- If the Mongo server is available and the address is set correctly, the application will start normally, otherwise it will start with the "Mongo Server Unavailable" prompt.
- Wait for the desktop application to start.
- Authentication is not enabled in the Beta release. Please leave the default option "Disable" checked.

Onboarding devices

The user must be logged in as administration in "Admin view" to perform onboarding.

• Step 1: Login into the system as administrator for "Admin view" using "Admin" button.



• Step 2: The default username and password is "Admin", "Admin".

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• Step 3: Press on "Onboarding Devices" button to configure CV-IOT units.

Time Stamp	IP Address	MAC Address		Station Type		P/N - A		LotCode - A	Cartridge Type - A	P/N - B
2020-09-15 12:31:41	172.16.40.127	9c:65:f9:20:c4:a4	PSU-c4a4	EMPTY	SLEEP	NONE	0	0	EMPTY	NONE
2020-09-15 12:31:42	172.16.40.127	9c:65:f9:20:c4:a4	PSU-c4a4	EMPTY	IDLING	NONE	0	0	EMPTY	NONE
2020-09-15 12:31:42	172.16.40.127	9c:65:f9:20:c4:a4	PSU-c4a4	EMPTY	IDLING	CVC-9CH0050S	0	0	EMPTY	NONE
2020-09-15 12:31:42	172.16.40.127	9c:65:f9:20:c4:a4	PSU-c4a4	EMPTY	IDLING	CVC-9CH00505	2	0	EMPTY	NONE
2020-09-15 12:31:42	172.16.40.127	9c:65:f9:20:c4:a4	PSU-c4a4	EMPTY	IDLING	CVC-9CH0050S	2	9204	EMPTY	NONE
2020-09-15 12:45:09	172.16.40.127	9c:65:f9:20:c4:a4	PSU-c4a4	EMPTY	SLEEP	NONE	0	0	EMPTY	NONE
2020-09-15 12:45:09	172.16.40.127	9c:65:f9:20:c4:a4	PSU-c4a4	EMPTY	IDLING	NONE	0	0	EMPTY	NONE
2020-09-15 12:45:10	172.16.40.127	9c:65:f9:20:c4:a4	PSU-c4a4	EMPTY	IDLING	CVC-9CH0050S	0	0	EMPTY	NONE
2020-09-15 12:45:10	172.16.40.127	9c:65:f9:20:c4:a4	PSU-c4a4	EMPTY	IDLING	CVC-9CH0050S	2	0	EMPTY	NONE
2020-09-15 12:45:10	172.16.40.127	9c:65:f9:20:c4:a4	PSU-c4a4	EMPTY	IDLING	CVC-9CH0050S	2	9204	EMPTY	NONE
2020-09-15 12:45:17	172.16.40.127	9c:65:f9:20:c4:a4	PSU-c4a4	EMPTY	SLEEP	NONE	0	0	EMPTY	NONE
2020-09-15 12:45:17	172.16.40.127	9c:65:f9:20:c4:a4	PSU-c4a4	EMPTY	SLEEP	CVC-9CH0050S	0	0	EMPTY	NONE
2020-09-15 12:45:17	172.16.40.127	9c:65:f9:20:c4:a4	PSU-c4a4	EMPTY	SLEEP	CVC-9CH0050S	2	0	EMPTY	NONE
2020-09-15 12:45:17	172.16.40.127	9c:65:f9:20:c4:a4	PSU-c4a4	EMPTY	SLEEP	CVC-9CH0050S	2	9204	EMPTY	NONE
					Detail					
Quers 💭	Settings	E	mail		Enter e-mail		Estract &	Email	GCP	Alert

• Step 4: Use configuration interface to setup units.

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		CONFIGURE	
TIMEZONE	UTC+01		
		APPLN UPGRADE	
DEVICE IP	DEVICE IP		
		FIRMWARE UPGRADE	
SERVER IP	SERVER IP		
		UNIT INFO	
			Close

Update Firmware and configure CV-IOT modules

Step 1: Hardware

- Setup the hardware per wire diagram below.
- Power up the CV-IOT Module and the CV System.

METCAL



Step 2: Install IP Scanner

- Advance IP scanner is a tool to find computing device attached to your network. It will be used to find the CV-IOT module you have connected, and is available at the website: https://www.advanced-ip-scanner.com/
- Double-Click to Install Advanced_IP_Scanner_x.x.xxxx.exe.
 <u>Note</u>: If asked to allow the application to make changes to your computer, click "Yes."

Step 3: Record Server IP Address (PC)

- If the database is located on the computer running the app, you will need to determine the IP address of that computer.
- From the Windows Start Menu, open the Command Prompt.
- From the command line of the Command Prompt, type in <ipconfig>. In this example, <u>IP address: 172.16.40.87</u>



Administrator: Git CMD	۲
Ethernet adapter Local Area Connection:	*
Connection-specific DNS Suffix .: okintl.loc IPv4 Address : 172.16.40.87 Subnet Mask : 255.255.248.0 Default Gateway : 172.16.40.1	III
Ethernet adapter Local Area Connection 5:	
Connection-specific DNS Suffix .: Link-local IPv6 Address : fe80::85a7:ac69:cad8:b029%23 Autoconfiguration IPv4 Address : 169.254.176.41 Subnet Mask : 255.255.0.0 Default Gateway :	
Wireless LAN adapter Wireless Network Connection:	
Media State Media disconnected Connection-specific DNS Suffix . :	
Tunnel adapter isatap.okintl.loc:	
Media State Media disconnected Connection-specific DNS Suffix . : okintl.loc	Ŧ

Step 4: Record Device IP Addresses (CV-IOT Module)

- Find the IP address of the client module by running the Advanced IP Scanner and looking for the MAC address that matches with the MAC address printed on the back of the unit.
- Record client IP (CV-IOT Module) address. In this example, the <u>MAC address</u> is <u>9C:65:F9:1E:3D:0E</u>, and the <u>IP address is 172.16.41.10</u>

6.41.20 es	P C F	Search	MAC address	ې م			
.6.41.20 es Name	IP	Search	MAC address	۶, م			
es Name	IÞ	Manufacturer	MAC address	(*			
Name	IP	Manufacturer	MAC address	(*			
6.41.10	172.16.41.10	AcSiP Technology Corp.	9C:65:F9:1E:3D:0E				
zuno-lt	172.16.41.9	Hewlett Packard	14:58:D0:B6:C6:E6	=			
smith	172.16.41.11	Hewlett Packard	B0:5A:DA:3E:EE:37				
orod02-lt	172.16.41.2	Intel Corporate	A4:4E:31:D8:75:94				
orodlaser	172.16.41.3	Intel Corporate	64:80:99:39:C8:FC	-			
	zuno-lt esmith prod02-lt prodlaser	zuno-lt 172.16.41.9 smith 172.16.41.11 prod02-lt 172.16.41.2 prodlaser 172.16.41.3	zuno-It 172.16.41.9 Hewlett Packard Ismith 172.16.41.11 Hewlett Packard Irod02-It 172.16.41.2 Intel Corporate Irrollaser 172.16.41.3 Intel Corporate	zuno-It 172.16.41.9 Hewlett Packard 14:58:D0:86:C6:E6 ismith 172.16.41.11 Hewlett Packard B0:5A:DA:3E:EE:37 prod02-It 172.16.41.2 Intel Corporate A4:4E:31:D8:75:94 prodlaser 172.16.41.3 Intel Corporate 64:80:99:39:C8:FC			

Configure Module

• This wizard enables configuring server IP in the Client.



• Select the Time zone of the unit from the dropdown menu.

TIMEZONE	UTC+01
	UTC-12
	UTC-11
	UTC-10
DEVICE IP	UTC-09
	UTC-08
	UTC-07
	UTC-06
	UTC-05
SERVER IP	UTC-04
	UTC-03
	UTC-02
	UTC-01
	υтс
	UTC+01
	UTC+02

Enter Device IP

DEVICE IP	DEVICE IP

Enter Server IP



• Press "Configure"



- The application shows an error if the DEVICE IP/SERVER IP field is empty or has incorrect value.
- If the input values are correct, the application responds with "True" to show the configuration was successful.



Update Client Application

• Press "Appln Upgrade"



- The application shows an error if the device is empty or has incorrect value.
- If the input values are correct, the application responds with "True" after updating to the latest application firmware.

In the case that OK International/Metcal has issued a newer firmware, the new release can be copied into folder "C:\Users\Public\Metcal IoT Platform\firmware" and then if the operator performs the ONBOARDING / APPLN UPGRADE function, the new firmware will be installed into the CV-IOT module.

Upgrade Client Firmware

Note: This feature has been removed in most installations.

- This wizard supports upgrading the client firmware package.
- Enter Device IP
- Press "Firmware Upgrade"
 - The application shows an error if the device is empty or has incorrect value.
 - If the input values are correct, the application responds with "True" to show that latest application.

Check Client Info

- This wizard supports reading firmware revision and time zone information from the client.
- Press "Firmware Upgrade"



UNIT INFO

- The application asserts violation if the device is empty or has incorrect value.
- If the input values are correct, the application displays software revision and time zone information on UI.

Test Communication between CV-IOT module and Desktop App

Step 1: CV-IOT module

- Check if the CV PS is connected through the USB port to the CV-IOT module.
- Check if the CV-IOT module is connected to the internet.
- Reboot the CV-IOT Module.
- Wait for the CV PS to reboot.
- Perform a solder joint.

Step 2: Database view

• Navigate to database view using "Details" button in dashboard.

Step 3: CV Desktop App

• In the Detail View, you may click the green "refresh" button in the bottom left corner of the CV desktop to continuously view the latest data from the CV.





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DASHBOARD	Report Grap	ohs Lifetime Sum	Joint nary	Productivity	Event Base	d Power Gr	& Temp aph	Tab Data	Query	Filter	
Time Stamp	Station Name	Station Type	IP Address	MAC Address	PCB No	Cartridge Part#	Cartridge Type	Serial #	Lot Code	C0/F0	^
2020-10-13 <mark>0</mark> 9:50:24	PSU-3e70	EMPTY	192.0.0.1	9c:65:f9:1e:3e:70	NONE	CVC-8CN0010P	EMPTY	1002	9302	с	4
2020-10-13 <mark>0</mark> 9:50:17	PSU-3e70	EMPTY	192.0.0.1	9c:65:f9:1e:3e:70	NONE	CVC-8CN0010P	EMPTY	1002	9302	с	A
2020-10-13 09:50:11	PSU-3e70	EMPTY	192.0.0.1	9c:65:f9:1e:3e:70	NONE	CVC-8CN0010P	EMPTY	1002	9302	c	A .
2020-10-13 09:50:03	PSU-3e70	EMPTY	192.0.0.1	9c:65:f9:1e:3e:70	NONE	CVC-8CN0010P	EMPTY	1002	9302	с	A
2020-10-13 09:49:54	PSU-3e70	EMPTY	192.0.0.1	9c:65:f9:1e:3e:70	NONE	CVC-8CN0010P	EMPTY	1002	9302	c	A
2020-10-13 09:49:52	PSU-3e70	ЕМРТҮ	192.0.0.1	9c:65:f9:1e:3e:70	NONE	CVC-8CN0010P	EMPTY	1002	9302	c	A
2020-10-13 09:48:55	PSU-3e70	EMPTY	192.0.0.1	9c:65:f9:1e:3e:70	NONE	CVC-8CN0010P	EMPTY	1002	9302	c	A
2020-10-13 09:48:48	PSU-3e70	EMPTY	192.0.0.1	9c:65:f9:1e:3e:70	NONE	CVC-8CN0010P	EMPTY	1002	9302	с	A
2020-10-13 <mark>09:48:4</mark> 0	PSU-3e70	EMPTY	192.0.0.1	9c:65:f9:1e:3e:70	NONE	CVC-8CN0010P	EMPTY	1002	9302	c	A
2020-10-13 <mark>09:48:27</mark>	PSU-3e70	EMPTY	192.0.0.1	9c:65:f9:1e:3e:70	NONE	CVC-8CN0010P	EMPTY	1002	9302	c	A
2020-10-13 09:48:20	PSU-3e70	EMPTY	192.0.0.1	9c:65:f9:1e:3e:70	NONE	CVC-8CN0010P	EMPTY	1002	9302	c	1
2020-10-13 09:48:12	PSU-3e70	EMPTY	192.0.0.1	9c:65:f9:1e:3e:70	NONE	CVC-8CN0010P	EMPTY	1002	9302	с	4
2020-10-13 09:47:28	PSU-3e70	EMPTY	192.0.0.1	9c:65:f9:1e:3e:70	NONE	CVC-8CN0010P	EMPTY	1002	9302	c	A
2020-10-13 09:47:28	PSU-3e70	EMPTY	192.0.0.1	9c:65:f9:1e:3e:70	NONE	CVC-8CN0010P	EMPTY	1002	9302	c	A
4									_		b
Query 📿	Pages: 4				_ 1	+			Single Selection		

Configuring Static/ Dynamic IP of the CV-IOT Modules

- Step 1: Login into the system as administrator for "Admin view" from dashboard. The default settings to login is "Admin", "Admin".
- Step 2: Select the station to update IP address. The default IP configuration in units is dynamic.
- Step 3: Select "Detail" button at the bottom of the page.

From	То	Station	Statu	s Sei	ialA	LotA	CartridgeA	SerialB	LotB	CartridgeB	1
Time Stamp	IP Address	MAC Address	Station Name	Station Type	Status	₽/N - A	S/N - A	LotCode - A	Cartridge Type - A		^
2020-09-23 12:38:52	172.16.40.253	90:65:19:10:30:70	PSU-3e70	EMPTY	IDLING	CVC-8CN0010P	1002	9302	EMPTY	NONE	1
2020-09-23 12:38:54	172.16.40.253	9c:65:f9:1e:3e:70	PSU-3e70	EMPTY	SLEEP	CVC-8CN0010P	1002	9302	EMPTY	NONE	
2020-09-23 12:39:03	172.16.40.253	9c:65:f9:1e:3e:70	PSU-3e70	EMPTY	IDLING	CVC-8CN0010P	1002	9302	EMPTY	NONE	
2020-09-23 12:49:45	172.16.40.253	9c:65:f9:1e:3e:70	PSU-3e70	EMPTY	SLEEP	CVC-8CN0010P	1002	9302	EMPTY	NONE	
2020-09-23 13:15:00	172.16.40.253	9c:65:f9:1e:3e:70	PSU-3e70	EMPTY	SLEEP	NONE	0	0	EMPTY	NONE	
2020-09-23 13:15:01	172.16.40.253	9c:65:f9:1e:3e:70	PSU-3e70	EMPTY	SLEEP	CVC-8CN0010P	0	0	EMPTY	NONE	
2020-09-23 13:15:01	172.16.40.253	9c:65:f9:1e:3e:70	PSU-3e70	EMPTY	SLEEP	CVC-8CN0010P	1002	0	EMPTY	NONE	
2020-09-23 13:15:01	172.16.40.253	9c:65:f9:1e:3e:70	PSU-3e70	EMPTY	SLEEP	CVC-8CN0010P	1002	9302	EMPTY	NONE	H
2020-09-23 13:15:02	172.16.40.253	9c:65:f9:1e:3e:70	PSU-3e70	EMPTY	IDLING	CVC-8CN0010P	1002	9302	EMPTY	NONE	
2020-09-23 13:15:08	172.16.40.253	9c:65:f9:1e:3e:70	PSU-3e70	EMPTY	SLEEP	NONE	0	0	EMPTY	NONE	
2020-09-23 13:15:08	172.16.40.253	9c:65:f9:1e:3e:70	PSU-3e70	EMPTY	SLEEP	CVC-8CN0010P	0	0	EMPTY	NONE	
2020-09-23 13:15:09	172.16.40.253	9c:65:f9:1e:3e:70	PSU-3e70	EMPTY	SLEEP	CVC-8CN0010P	1002	0	EMPTY	NONE	
2020-09-23 13:15:09	172.16.40.253	9c:65:f9:1e:3e:70	PSU-3e70	EMPTY	SLEEP	CVC-8CN0010P	1002	9302	EMPTY	NONE	-
	Detail										

Figure 1: Admin View - Station Status



• Step 4: In the "Detail" view, press the "Configure" button next to the ip address.

Time	2020-09-23 13:15:01	IP	172.16.40.253	Configure
MAC	9c:65:f9:1e:3e:70	Station Name	PSU-3e70	Update
System Status	SLEEP	Station Type	LEAD	- Update
Cartridge P/N A	CVC-8CN0010P	Station Desc	REGULAR	Update

Figure 2: Configuration page with available configuration settings

- Step 5: The "IP Configuration" page will open up with display set "Dynamic" checked/unchecked.
 - if the current IP address is "Dynamic," this box will be unchecked and system provides the user fields to enter the "IP address," "Netmask," and "Gateway" to set the current unit with "Dynamic IP" to "Static IP."

If the current IP address is "Static." this box will be checked, and system does not require any other input from user. When "Submit" is pressed, the unit IP will change from "Static IP" to "Dynamic IP."

Static IP

- Step 1: To set the unit to "static IP" enter the IP address, netmask, and gateway. These fields must be obtained from the Network Administrator.
 - \circ $\;$ The field values to test on OKI-CYPRESS network.
 - IP Address: 172.16.40.127
 - Netmask: 255.255.248.0
 - Gateway:172.16.0.1

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V Dynamic Configure		
IP Address	172.16.40.253	
Netmask	255.255.248.0	
Gateway	172.16.0.1	
Cancel	Submit	

Figure 3: Fields required for configuring Static IP

- Step 2: Press "SUBMIT" and wait.
- Upon configuration the app will display a "Success / Fail" message.
- Wait for the System to reboot and establish connection with the database. In the meantime, close the popup, exit to Dashboard view using "Cancel" and "logout" button to see the joints generated by the unit with "Static IP".

🖌 Dynamic Configure	172.16.40.253	
Netmask	Update Successful	
Gateway		
Cancel	Submit	

Figure 4: Successful Static IP Configuration Message

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Jynamic Cont	figure			
IP Address		172.16.40.12		
Netmask		Update Unsuccessful		
Gateway		Close		
Cancel			Submit	

Figure 5: Failed IP Configuration Message

- Note:
 - If the address field is empty or incorrect, the system will provide an error pop-up.
 - If an error occurs, and the app cannot detect the condition, the system could possibly be configured with the wrong IP, making it unresponsive on the network. This requires manual intervention to reset the IP through the serial port.

Opnamic Configure	
IP Address	12/5]
Netmask	Field is Empty or Incorrect
Gateway	Close
Cancel	Submit

Figure 6: Flag Error for Invalid String



Dynamic IP

- Step 1: To set a unit with previously "static IP" to "dynamic IP", the app will show an unchecked "Dynamic" box. Simply press Submit and wait for the app to display success/error message.
- Wait for the System to reboot and establish connection with the database. In the meantime, close the popup, exit to Dashboard view using "Cancel" and "logout" button to see the joints generated by the unit with "Dynamic IP".

Dynamic	Configure	
	Update Successful Close	
Cancel		Submit

Figure 7: Successful Dynamic IP Configuration Message

Initial Startup

When the Metcal CV-IOT App is installed as a standalone app and it is opened for the very first time without an active database on that computer, it will prompt the user to enter the address of Mongo database server to access the records.





When "Close" is pressed, the database configuration page opens to allow the user to configure the database address.

METCAL.	METCAL IOT PLATFORM				
		DATABASE IP	DATABASE IP	Applic flor type Client	
		DATABASE Port	27017 Enable 【 Disable		
		Username Password			
	Cancel			Submit	
VER : 00.01.29			Cliest	magarite /10.9.0.0.27017	

Please note: the authenticated "Mongo" database login is not supported in the current revision. Leave the authentication check box in "Disable" and press "Save." If the database is available, the app will load the dashboard. Authentication is not enabled in the Beta release. Please leave the default option "Disable" checked.



Change / Setup New Mongo DB Server Address

The database address can be reconfigured anytime in the future using "Admin view." The steps for configure/reconfigure Mongo address is as follows:

- Step 1: Navigate from "Dashboard" to "Admin view" and login as Admin. The default settings to login is login: "Admin", password: "Admin".
- Step 2: Press "Settings" button in the footer of the page.

TCAL.	м	IETCAL IOT PLATE	ORM		ONBO	ARDING DEVICES				LOGOUT
From		Station	Statu	ıs Se	rialA	LotA	CartridgeA	SerialB	LotB	CartridgeB
Time Stamp		MAC Address			Status	₽/N - A	S/N - A	LotCode - A	Cartridge Type - A	
2020-02-04 09:33:19	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	NONE
2020-02-04 09:33:19	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH0010S
2020-02-04 09:33:20	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH0010S
2020-02-04 09:33:20	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH0010S
2020-02-04 09:33:20	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	CVC-7CH0010S
2020-02-04 09:39:10	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	NONE
2020-02-04 09:39:10	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	NONE
2020-02-04 09:39:11	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	CVC-7CH0010S
2020-02-04 09:39:11	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	CVC-7CH0010S
2020-02-04 09:39:11	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	CVC-7CH0010S
2020-02-04 09:39:40	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	NONE
2020-02-04 09:39:40	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH0010S
(
					Detail					
Querg 📿	Settings	;) E	mail		Enter e-mail		Extract & I	Email	GCP	Alert

Figure 8Admin View: DB Configuration

- Step 3: Obtain the address of the Mongo Server from your IT department or other authority if you are using a Mongo server on another machine, otherwise it will be your IP address if it is a local installation.
- Step 4: Enter the Mongo DB address and port in the field. Leave the authentication field unchecked and user and password fields empty. Mongo DB port must always be set to 27017, unless sharding is used (not used currently).

Note: To use TLS authentication, the CV-IOT unit needs additional certification packages installed to log data to Mongo server with authentication enabled. As it



is not preinstalled currently in the kernel in all modules, the authentication feature is not used currently in the app.

• Step 5: The interface shows an error when empty fields submitted at the configuration interface.

			Application type	Client
	DATABASE IP	þATABASE IP		
	DATABASE Port	27017		
	Authentication	Enable √ Disable		
	Username			
	Password			
			_	
Cancel				Submit

Figure 9: Mongo DB Address Interface

			Application type	Client
	DATABASE IP	DATABASE IP		
		27017 Field is Empty or Incorrect Close		
	Password			
Cancel				Submit

Figure 10: String validation error

In the settings page, set the application type to "Server" if it is being installed on the system with Mongo server/full installation. For installation on secondary systems that access the database, install the application with default setting as "Client." There should not be more than one application with "Server" type accessing the same database as it will result in incorrect average tip life calculation.



Configuring Email Address

- Step 1: From the dashboard, login into the Admin page.
- Step 2: Select the "Email" button from the footer.

		м	ETCAL IOT PLATE	ORM		ONBO/	ARDING DEVICES				LOGOUT	
ME	From		Station	Statu	s Sei	rialA	LotA	CartridgeA	SerialB	LotB	CartridgeB	
	Time Stamp		MAC Address				P/N - A	S/N - A		Cartridge Type - A	Р/N - В	Ĥ
	2020-02-04 09:33:19	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	NONE	
	2020-02-04 09:33:19	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH00105	
	2020-02-04 09:33:20	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH00105	
	2020-02-04 09:33:20	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH00105	
	2020-02-04 09:33:20	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	CVC-7CH00105	
	2020-02-04 09:39:10	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	NONE	
	2020-02-04 09:39:10	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	NONE	
	2020-02-04 09:39:11	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	CVC-7CH00105	
	2020-02-04 09:39:11	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	CVC-7CH00105	
	2020-02-04 09:39:11	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	CVC-7CH00105	
	2020-02-04 09:39:40	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	NONE	
	2020-02-04 09:39:40	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH00105	
))
						Detail						
	Query 📿	Settings	E	nail		Enter e-mail		Estract & E	mail	GCP	Alert	

Figure 11: Configuring Email

- Step 3: Configure the email address that will serve as sender or 'smtp relay' for this app. Obtain the "SMTP" server details from the email provider, generate key/ password for configuring email.
- Step 4: Enter the configuration details and press "Submit" to save the configuration details.
- Step 5: Try to extract and send email as shown in the next section. If email is not sent correctly, check the configuration details, re-enter configuration details and submit again.



		🖌 Enable 🔤 Disable
	SMTP Server IP	SMTP IP
	SMTP Server Port	25
	From	
	Subject	
	Кеу	
Cancel		Set

Figure 12: Email Address Setting

Global Cartridge Configuration

- Step 1: From the dashboard, login into the Admin page.
- Step 2: Select "GCP" to set tip life monitoring parameters.
- Step 3: To set a cartridge End of Life (EoL) find the row with that cartridge and change the item in the 'End of Life' column to 'true.'
- Step 4: To save and exit, click 'Save.' To exit without saving click 'Close.'



Global Con	figuration Page	Catrridge V LotCode V Ser	ialNumber 🗸	End of L	ife (EoL) Threshold days	1 *
	Selected	Cartridge	Serial Number	Lotcode	Date of First Use	End of Life
	false	CVC-7CH0050S	7	9087	04-Nov-2020	true
	false	CVC-7CH0030S	4	8303	04-Nov-2020	true
	false	CVC-7CH0020S	4	8303	04-Nov-2020	true
	false	CVC-7CH00405	45	833	11-Aug-2020	true
	false	CVC-7CH00105	7	9999	11-Aug-2020	true
	false	CVC-8VG0016P	31	9072	11-Aug-2020	true
	false	CVC-7CH0040P	201	9183	11-Aug-2020	true
	false	CVC-7CH0060S	4	4800	11-Aug-2020	true
	4					
		Close				Save

Alert Configuration

• Step 1: From the dashboard, login into the Admin page.

	M		OPM		ONBO	ARDING DEVICES				LOGOUT
ETCAL										
From		Station	Statu	s Ser	ialA	LotA	CartridgeA	SerialB	LotB	CartridgeB
Time Stamp		MAC Address				P/N - A	S/N - A	LotCode - A	Cartridge Type - A	Р/N - В
2020-02-04 09:33:19	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	NONE
2020-02-04 09:33:19	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH0010S
2020-02-04 09:33:20	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH00105
2020-02-04 09:33:20	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH00105
2020-02-04 09:33:20	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	CVC-7CH00105
2020-02-04 09:39:10	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	NONE
2020-02-04 09:39:10	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	NONE
2020-02-04 09:39:11	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	CVC-7CH00105
2020-02-04 09:39:11	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	CVC-7CH00105
2020-02-04 09:39:11	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	CVC-7CH0010S
2020-02-04 09:39:40	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	NONE
2020-02-04 09:39:40	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH0010S
4										Þ
					Detail					
Query 📿	Settings	E	mail		Enter e-mail		Estra	ct & Email	GCP	Alert

Figure 13: Alert Configuration

- Step 2: Set up alerts to be monitored by the app.
- Step 3: Note: Alert Intervals are not implemented in this version.



Currently only cartridge change notification is the only alert monitored by app. The email is sent only once at the time of event.

Cartridge Changed	Priority	🗸 High 🔲 Low
Power Reset	Reminder Interval	Sec 25
IP Address Change	То	Vitibadineshijyahoo.com
ESD Activated	Message	
IMC Reject (Read Light)		
Hand Piece Disconnect		
Idle Temp Alert		
📢 Tip Life Alert		
Cancel		Config

Figure 14: Alert Configuration Interface

Dashboard View

- Step 1: Overall Productivity and Station productivity chart can be viewed for different time period (weekly/monthly) by changing the drop-down menu.
- Step 2: Chart can be zoomed in and out by double clicking on the chart.
- Step 3: Station specific details can be obtained by double clicking the pie chart.

Database View

Query/Live Mode

• Live Mode: To view soldering data coming from the station. The screen refreshes every 20 sec for new data.





Filtering

- Filters are provided to search the database for information about a specific time period/cartridge or station. The CV-IOT App supports simple filtering.
- Step 1: Select "Filter" from the header for the dropdown filter options to appear.

DASHBOARD	Report Grap	ns Lifetime Summ	Joint arg	Productivity	Event Based	Power Gra	& Temp aph	Tab Data	Query	Filter	
Time Stamp	Station Name	Station Type	IP Address	MAC Address	PCB No	Cartridge Part#	Cartridge Type	Serial #	Lot Code		Â
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.16.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH0010S	LEAD	7	9999 F		B
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.16.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH0010S	LEAD	7	9999 F		e
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.16.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH0010S	LEAD	7	9999 F		E
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.16.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH00105	LEAD	7	9999 F		B

• Step 2: Select a Filter from the dropdown menu.

DASHBOARD	Report	Graphs	Lifetime Joint Summary		Productivity	Event	t Based	Power & Ter Graph	np	Tab Data	Qu	iery	Filter
From	То		Station	PCB	Cartridge	Serial	Lot	Count	Port	Event	С-Туре	S-Type	ldle Temp
Time Stamp	Station Na	me Sta	ation Type	IP Address	MAC Address	PCB N	lo Cartr	idge Part#	Cartridge Type	Serial #	Lot Co	de	Cº/Fº
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.1	6.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH	0010S LEAI	D	7	9999	F	E
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.1	6.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH	0010S LEAI	D	7	9999	F	E
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.1	6.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH	0010S LEAI	D	7	9999	F	E
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.1	6.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH	0010S LEAI	D	7	9999	F	E

• Note that Filtering only works in when the Database view is in Query mode, not in Live mode.

From		IP	Station	PCB	Cartridge	Serial	Lot Count	: Port	Event	С-Туре	S-Type Idl	e Temp
Time Stamp	Station N	IP 172.16.40.127	Туре	IP Address	MAC Address	PCB No	Cartridge Part#	Cartridge Type	Serial #	Lot Code	C º / F º	Ê
2020-10-31 9:47:00	PSU-3ed0	172.16.40.205 172.16.41.10	172.1	6.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH00105	LEAD	7	9999	F	E
2020-10-31 9:47:00	PSU-3ed0	172.16.41.8 172.16.40.86	172.1	6.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH00105	LEAD	7	9999	F	Е
2020-10-31 9:47:00	PSU-3ed0	172.16.40.222	172.1	6.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH00105	LEAD	7	9999	F	E
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.1	6.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH00105	LEAD	7	9999	F	E
2020-10-31 9:46:00	PSU-3ed0	LEAD	172.1	6.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH00105	LEAD	7	9999	F	E

• Data in the database view is displayed as pages with a maximum of 100 records per page, with total number of pages displayed the footer.



• Data in the database can be viewed by transitioning from current pages to another page using "+" and "-".



Summary

- A brief summary of data in the database can be obtained by using the "Summary" button in the footer.
- Summary is displayed as chart.

DASHBOARD	Report (Graphs	Lifetime Joint Summary	Productivity	Even	t Based	Ро ч ег & Теп Graph	np	Tab Data	Qu	ery	Filter
From	То	IP	Station PCB	Cartridge	Serial	Lot	Count	Port	Event	C-Type	S-Type	Idle Temp
Time Stamp	Station Nar	ne Stati	on Type IP Addres	s MAC Address	РСВ Г	lo Cartri	dge Part# C	Cartridge Type	Serial #	Lot Co	de	C º / F º
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.16.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CHC	010S LEAD	þ	7	9999	F	E
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.16.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CHC	010S LEAD	þ	7	9999	F	E
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.16.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CHC	010S LEAD	þ	7	9999	F	E
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.16.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CHC	010S LEAD	þ	7	9999	F	E

Joint Detail

• Joint details can be viewed in detail by highlighting the row and pressing "Tab data" button/ double clicking on the row.

DASHBOARD	Report	Graphs	Lifetime Joint Summary		Productivity	Event	Based	Power & Ter Graph	mp	Tab Data	Qu	ery	Filter
From	То		Station	PCB	Cartridge	Serial	Lot	Count	Port	Event	C-Type	S-Type	Idle Temp
Time Stamp	Station Na	ime Sta	ation Type	IP Address	MAC Address	PCB N	lo Cartri	dge Part#	Cartridge Type	Serial #	Lot Co	de	C º / F º
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.16	.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH0	010S LEA	D	7	9999	F	E
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.16	.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH0	010S LEA	D	7	9999	F	E
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.16	.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH0	010S LEA	D	7	9999	F	E
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.16	.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH0	010S LEA	D	7	9999	F	E

• All the information about the joint is displayed on a single page.



Graph

- Power and Temperature graph of each joint can be view by selecting the row and pressing the "Graph" button in the footer.
- Multiple joints characteristics (max 3 joints) can be compared by unclicking "Single Selection" checkbox in the footer.

		,	Productivity	Event B	ased	Power & I Graph	emp	Tab Data	Qu	ery	Filter
то І	IP Static	n PCB	Cartridge	Serial	Lot	Count	Port	Event	С-Туре	S-Type	idie Temp
Station Name	Station Type	IP Address	MAC Address	PCB No	Cartrid	lge Part#	Cartridge Type	Serial #	Lot Co	de	Cº/Fº
SU-3ed0	LEAD	172.16.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH00	105 LE	AD	7	9999	F	E
SU-3ed0	LEAD	172.16.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH00	105 LE	AD	7	9999	F	E
SU-3ed0	LEAD	172.16.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH00	105 LE	AD	7	9999	F	E
3U-3ed0	LEAD	172.16.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH00	1105 LE	AD	7	9999	F	E
Pages: 38				- 1	+			6	🖌 Single	Selection	
5	To I Station Name 1/J-3ed0 UJ-3ed0 1/J-3ed0 UJ-3ed0 1/J-3ed0 UJ-3ed0 3/J-3ed0 Dages: 3/B	To IP Station Station Itame Station Type U-3ed0 LEAD U-3ed0 LEAD Ju-3ed0 LEAD Ju-3ed0 LEAD Pages: 38	To IP Station PCB Station Name Station Type IP Address U-3ed0 EAD I72.161.6 U-3ed0 EAD I72.161.6	To IP Station PCB Cattridge Station Name Station Type IP Address MAC Address VJ-3ed0 LEAD 172.16.1.6 90:65:19:1e:3e:d0 VJ-3ed0 LEAD 172.16.1.6 90:65:19:1e:3e:d0	To IP Station PCB Cartridge Strial Station Hame Station Type IP Address MAC Address PCB Ho VJ-3ed0 LEAD 172.16.1.6 Sc:65:19:1e:3e:d0 CFX-027 VJ-3ed0 LEAD 172.16.1.6 Sc:65:19:1e:3e:d0 CFX-027	To IP Station PCB Cartridge Serial Lot Station Name Station Type IP Address HAC Address PCB No Cartrid VJ-3ed0 LEAD 172.16.1.6 Sc:65:19:1e:3e:d0 CFX-027 CVC-7CH00 VJ-3ed0 LEAD 172.16.1.6 Sc:65:19:1e:3e:d0 CFX-027 CVC-7CH00	To IP Station PCB Cartridge Serial Lot Count Station Name Station Type IP Address IMAC Address PCB No Cartridge Part# VJ-3ed0 LEAD 172.16.1.6 Sc:65:19:1e:3e:d0 CFX-027 CVC-70400105 LE VJ-3ed0 LEAD 172.16.1.6 Sc:65:19:1e:3e:d0 CFX-027 CVC-70400105 LE	To IP Station PCB Cartridge Serial Lot Count Port Station Name Station Type IP Address MAC Address PCB No Cartridge Part# Cartridge Type V-3ed0 LEAD 172.16.1.6 St65:91:e3:ed0 CFX-027 CVC-7CH0010S LEAD V-3ed0 LEAD 172.16.1.6 St65:91:e3:ed0 CFX-027 CVC-7CH0010S LEAD	To P Station PCB Cartridge Serial Lot Count Port Event Station Name Station Type IP Address MAC Address PCB No Cartridge Part# Cartridge Type Serial # V-3ed0 LEAD 172.16.1.6 Sc:65:19:1.63:ed0 CFX-627 CVC-7CH00105 LEAD 7 V-3ed0 LEAD 172.16.1.6 Sc:65:19:1.63:ed0 CFX-627 CVC-7CH00105 LEAD 7 V-3ed0 LEAD 172.16.1.6 Sc:65:19:1.63:ed0 CFX-027 CVC-7CH00105 LEAD 7 V-3ed0 LEAD 172.16.1.6 Sc:65:19:1.63:ed0 CFX-027 CVC-7CH00105 LEAD 7 V-3ed0 LEAD 172.16.1.6 Sc:65:19:1.63:ed0 CFX-027 CVC-7CH00105 LEAD 7 V-3ed0 LEAD 172.16.1.6 Sc:65:19:1.e3:ed0 CFX-027 CVC-7CH00105 LEAD 7 Pages: 38 - - - - - - -	To IP Station PCB Cartridge Serial Lot Count Port Event C-Tage Station Itame Station Type IP Address HAC Address PCB No Cartridge Part# Cartridge Type Serial # Lot Count U-3ed0 LEAD 172.16.1.6 Stel59:16:3ed0 CPC 4/2 CVC-7CH000S LEAD 7 9999 U-3ed0 LEAD 172.16.1.6 Stel59:1e:3ed0 CPC 4/2 CVC-7CH000S LEAD 7 9999 U-3ed0 LEAD 172.16.1.6 Stel59:1e:3e:d0 CPC 4/2 CVC-7CH000S LEAD 7 9999 U-3ed0 LEAD 172.16.1.6 Stel59:1e:3e:d0 CPC 4/2 CVC-7CH000S LEAD 7 9999 U-3ed0 LEAD 172.16.1.6 Stel59:1e:3e:d0 CPC 4/2 CVC-7CH000S LEAD 7 9999 U-3ed0 LEAD 172.16.1.6 Stel59:1e:3e:d0 CPC 4/2 CVC-7CH000S LEAD 7 9999	To IP Station PCB Cartridge Serial Lot Court Port Event C-Type S-Type Station Name Station Type IP Address IMAC Address PCB Ho Cartridge Part# Cartridge Type Serial # Lot Code# V-3ed0 LEAD 172.16.1.6 Sc65/19:16:3e:d0 CFC-07 CVC-7CH0010S LEAD 7 9999 F V-3ed0 LEAD 172.16.1.6 Sc65/19:16:3e:d0 CFC-07 CVC-7CH0010S LEAD 7 9999 F V-3ed0 LEAD 172.16.1.6 Sc65/19:16:3e:d0 CFC-07 CVC-7CH0010S LEAD 7 9999 F V-3ed0 LEAD 172.16.1.6 Sc65/19:16:3e:d0 CFC-07 CVC-7CH0010S LEAD 7 9999 F V-3ed0 LEAD 172.16.1.6 Sc65/19:16:3e:d0 CFC-07 CVC-7CH0010S LEAD 7 9999 F V-3ed0 LEAD 172.16.1.6 Sc65/19:16:3e:d0 CFC-07

Productivity

• Productivity of joints is displayed based on Cartridge and time period can be graphed using "Productivity" button in the footer.

DASHBOARD	Report Grap	hs Lifetin Sum	e Joint mary	Productivity	Event Ba	sed	Power & Te Graph	emp	Tab Data	Qu	ery	Filter
From	То	IP Stat	ion PCB	Cartridge	Serial	Lot	Count	Port	Event	C-Type	S-Type	ldle Temp
Time Stamp	Station Name	Station Type	IP Address	MAC Address	PCB No	Cartrid	ige Part#	Cartridge Type	Serial #	Lot Co	de	Cº/Fº
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.16.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH00	010S LE/	AD	7	9999	F	E
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.16.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH00	010S LE/	AD	7	9999	F	E
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.16.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH00	010S LE/	AD	7	9999	F	E
2020-10-31 9:47:00	PSU-3ed0	LEAD	172.16.1.6	9c:65:f9:1e:3e:d0	CFX-027	CVC-7CH00	010S LE/	AD	7	9999	F	E

Extract & Email Operations data

- Step 1: Log into the system as administrator for "Admin view". The default settings to login is "Admin", "Admin".
- Step 2: Ensure that the system is not "Live" mode.
- Step 3: Enter e-mail address and press send.
- Step 4: Pop-up confirmation is sent on successful or failed transmission of email.

Please note: Only the collection of operations data information from the database is emailed to the customer.

Desktop Application Instruction Manual



TCAL	M	ETCAL IOT PLATE	ORM		ONBOA	RDING DEVICES				LOGOUT
From	То	Station	Statu	ıs Se	rialA	LotA	CartridgeA	SerialB	LotB	CartridgeE
Time Stamp	IP Address	MAC Address	Station Name	Station Type	Status	P/N - A	S/N - A	LotCode - A	Cartridge Type - A	P/N - B
2020-02-04 09:33:19	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	NONE
2020-02-04 09:33:19	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH00105
2020-02-04 09:33:20	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH00105
2020-02-04 09:33:20	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH00105
2020-02-04 09:33:20	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	CVC-7CH00105
2020-02-04 09:39:10	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	NONE
2020-02-04 09:39:10	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	NONE
2020-02-04 09:39:11	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	CVC-7CH00105
2020-02-04 09:39:11	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	CVC-7CH00105
2020-02-04 09:39:11	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	CVC-7CH00105
2020-02-04 09:39:40	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	NONE
2020-02-04 09:39:40	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH00105
4						-		-		
					Lietan					

Figure 15: Extract & Email

ETCAL	1	IETCAL IoT PLATF	ORM							LOGOUT
From	То	Station	Stat	us Se	rialA	LotA	CartridgeA	SerialB	LotB	CartridgeB
Time Stamp	IP Address	MAC Address	Station Name	Station Type	Status	P/N-A	S/N - A	LotCode - A	Cartridge Type - A	P/N-B
2020-02-04 09:33:19	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	NONE
2020-02-04 09:33:19	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH0010S
2020-02-04 09:33:20	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH0010S
2020-02-04 09:33:20	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH0010S
2020-02-04 09:33:20	172.16.1.6	9c:65:f9:1e:3e:d0						0	EMPTY	CVC-7CH0010S
2020-02-04 09:39:10	172.16.1.6	9c:65:f9:1e:3e:d0			Email Se	int		0	EMPTY	NONE
2020-02-04 09:39:10	172.16.1.6	9c:65:f9:1e:3e:d0						0	EMPTY	NONE
2020-02-04 09:39:11	172.16.1.6	9c:65:f9:1e:3e:d0						0	EMPTY	CVC-7CH0010S
2020-02-04 09:39:11	172.16.1.6	9c:65:f9:1e:3e:d0					Close	0	EMPTY	CVC-7CH00105
2020-02-04 09:39:11	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	NONE	NONE	0	0	EMPTY	CVC-7CH0010S
2020-02-04 09:39:40	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	NONE
2020-02-04 09:39:40	172.16.1.6	9c:65:f9:1e:3e:d0	PSU-3ed0	LEAD	SLEEP	NONE	0	0	EMPTY	CVC-7CH0010S
4		13 20						2	A:	,
					Detail					
Query 2	Setting	5 E	mail		rk@kmail.com		Extract 8	Email	GCP	Alert

Figure 16: Send Email Confirmation

If the email field is empty, the window opens to allow the user to perform extraction of data to local folder, archive complete DB, drop database and load demo database.



	_
Press button to Archive	Archive
Press button to Extract	Extract
Press button to Drop DB	Drop
Press button to Load Demo DB	Load Demo DB
	Close

Admin View

- Step 1: Filtering based system status and station type / cartridge is provided in the "Admin view".
- Step 2: Detailed view of station status can be viewed by selecting the record and pressing "Detail" in the footer.
- Step 3: The detail view provides option for the user to configure station type / cartridge type as "LEAD/LEAD-FREE", station description and IP address.

Average Tip Life

- The graphic shows the aggregate/average life of tips for each geometry.
- When cartridge EoL is forced, the Average tip life does not increment if the cartridge is not used after that time. However, if the cartridge is continued to be used after forced EOL, the average tip life increments to reflect the real-time use.

Tip Deployment by Geometry and Station

• Step 1: From the dropdown menu select tip deployment by geometry to display the number of tips used / in use for 7 days, 30 days, 90 days and 1-year works.





• Step 2: From the dropdown menu select tip deployment by station to display the number of tips user per station in use for 7 days, 30 days, 90 days and 1-year works. Double click on the bar to display the number of tips based on tip geometry.



• Change the selected in "Global Configuration Page" through Admin login and see the tips displayed change based on selection.



Warranty

OK International warrants this product against any defects in material or workmanship for (1) year from the date of purchase by the original owner. This Warranty excludes normal maintenance and shall not apply to any opened, misused, abused, altered, or damaged items. If the product should become defective within the warranty period, OK International will repair or replace the product free of charge as its sole option. The repaired or replacement item will be shipped, freight prepaid, to the original purchaser. The warranty period will start from the date of purchase. If the date of purchase cannot be substantiated the date of manufacture will be used as the start date of the warranty period.

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