

Honeywell

Honeywell Cloud Connect

User Guide

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Customer Support

Technical Assistance

To search our knowledge base for a solution or to log in to the Technical Support portal and report a problem, go to www.hsmcontactsupport.com.

For our latest contact information, see www.honeywellaidc.com/locations.

Introduction

Honeywell Cloud Connect (HCC) is a gateway application that transfers the data received from multiple devices to the cloud. HCC is used for onboarding printers and scanners to Honeywell Operational Intelligence Performance Management.

Requirements

A host computer with the following:

- Microsoft Windows® 10 (64-bit) or Windows 2012 Server / Windows 2016 Server / Windows 2019 Server operating system
- System updated with the latest Windows Security updates
- At least 8 GB of RAM
- At least 40GB hard drive
- A static IP address
- Google Chrome™ as default browser
- A secure, dedicated port that will be used for communication between HCC and the device agent
- A network connection to devices and access to the cloud

Note: *HCC and devices should be on the same network. When devices are in a different Subnet, the network group should allow the following device ports from devices to HCC: Default 8883, 21210, 21211, 21212, 21213. These default ports can be modified during installation.*

Whitelist URLs

The following URLs should be whitelisted to allow proper communication for HCC and Operational Intelligence.

- <https://ims.sentience.honeywell.com>
- <https://sentt02dprodv2.azure-devices.net>
- <https://gdprodsystemauthentication.sentience.honeywell.com>
- <https://sentgdprodregui.azurewebsites.net>
- <https://gdprodregui.sentience.honeywell.com>
- <https://caidc.apis.honeywell.com>
- <https://operationalintelligence.honeywell.com>
- <https://honeywell.com>

Installation and Setup

Note: *The assignment of ports can only be specified during installation.*

Install HCC

1. Log in to the host PC with admin privileges.
2. Go to the Honeywell software download website at hsmftp.honeywell.com.
3. Sign in or create an account if you don't already have one.

Note: *If you haven't already, download and install the Download Manager. Click on the link and follow the screen prompts.*

4. Locate the Honeywell Cloud Connect app in the Software directory and download HCC_Setup_*.zip.
5. Extract HCC_Setup_*.zip.
6. Right click on setup.exe and select **Run as administrator**.
7. If you are prompted to allow HCC to make changes on the system, click **Yes**.
8. Click **Next**.
9. Accept the license agreement then click **Next**.
10. Specify a destination folder or continue with the default location
C:\Program Files (x86)\Honeywell\HoneywellCloudConnect.
11. Click **Next**.

12. Continue with the default ports to be used to communicate with HCC. Or deselect the default port and specify a port number between 1024 and 65535.

Note: *The HCC Installation Wizard displays the list of default ports used for communication. Firewall exceptions must be in place for these ports: 8883, 21210, 21211, 21212, 21213, 21215, 21219.*

13. Select **Enable Cloud Service** if you want to send data to the cloud (e.g., for use with Operational Intelligence Performance Management).

14. Click **Next**

15. Specify a port for the SQL server. The default port is 3306.

16. Set up a password for access to the database. The password must meet the following criteria:

- Minimum of 8 characters long
- Combination of upper case and lower case letters, numbers, and symbols
- Allowable symbols are: ! @ # \$ ^ & * ()

17. Click **Next**.

18. Click **Install**.

HCC installation will take about 5 minutes.

19. Click **Finish**.

Once HCC has been installed, a shortcut will be added to your desktop.

Sign In and Register a Gateway

Note: *Signing up for HCC requires Chrome browser.*

1. Double-click the Honeywell Cloud Connect desktop shortcut.
2. If you are prompted to allow HCC to make changes to your computer, click **Yes**.
3. Sign in using your administrator credentials.
4. The first time you log in to HCC you will be required to register a gateway name. Enter the new gateway name.
5. Select a site from the drop-down list.
6. Complete all remaining mandatory fields.
7. Click **REGISTER**.

A Welcome message will display during the registration and configuration process. Once it is completed, the HCC Device Dashboard will display.

After HCC has been registered, it will display as a Gateway on the Assets page in the Operational Intelligence user interface. To view an instance of HCC, log into Operational Intelligence and select Assets from the left-hand navigation menu.

Select the HCC gateway in the list of assets. When you view the HCC gateway information, the Status field indicates if HCC is connected or disconnected. See the Operational Intelligence User Guide for more information.

HCC User Interface

The Device Dashboard tab is the HCC home screen. On all the HCC tabs, a countdown timer in the lower right corner displays how much time remains in the current session. The default session is 60 minutes. Once the session expires, you must sign in again.

The HCC menu tabs are described in the table below:

Tab	Description
Device Dashboard	Displays devices that have already been onboarded. You can filter the device list using the Model drop down list.
Onboarding	Used to enroll scanners and printers in HCC. (See Handheld Scanners and Wireless Barcode Scanners on page 19 and Printers on page 5.)
Notification	Lists updates from devices to HCC.
About	Displays the version of HCC software you are using, the name of your gateway, the ID of the current user, and the Operational Intelligence Performance Management site to which you are connected.

Connected printers will send events, device information and metrics to Honeywell Operational Intelligence through the HCC gateway.

The steps for connecting a printer to HCC will depend on the type of printer:

- Mobile printers (see next section)
- Industrial printers (see page 7)

Mobile Printers

To connect a supported mobile printer to HCC you will either use the NETira CT configuration utility to push information to the printer from a file generated by HCC or use [Device Discovery and Onboarding](#) to automatically discover and onboard printers.

Requirements

- Up-to-date firmware installed on the printer
- Active printer network connection via wi-fi
- HCC installed on your network and accessible from the printer
- Ports 8883, 21210,21211, 21212, 21213 across HCC and the printer must be open
- NETira CT version 1.0.0.114 or higher

NETira CT is a configuration utility that allows you to make changes to the existing printer set up. NETira CT is available for download from the Honeywell software download website hsmftp.honeywell.com.

Note: For information about updating the printer firmware, setting up the wi-fi connection on your printer, or installing NETira CT, please refer to your printer's user documentation.

Manually Onboarding a Mobile Printer

Follow these steps to manually onboard a mobile printer. See [Device Discovery and Onboarding](#) for instructions on using HCC to discover and onboard printers on a network.

1. Open the HCC app.
2. Click the **Onboarding** tab.
3. To change frequency settings and provide configuration for the printer to communicate with HCC, tap the **Gateway Configuration** toggle button to enable editing and enter the desired frequencies.
4. Click **SAVE AS FILE**.
5. You will be prompted to select a password. Enter a password then click **CONFIRM**.
6. Navigate to the desired location, then click **Save**.
7. Extract the saved zip file. Enter the password when prompted.
8. Open the extracted file with a text editor, such as Notepad. An example is shown below:

```
{
  "GatewayConfiguration": {
    "IpAddress": "xxx.xx.xx.xxx",
    "HostName": "xxx.xxxxx.xx.xxxxxx.com",
    "Port": 21210,
    "TelemetryFreq": 3000,
    "AssetFreq": 3000,
    "BarCodeStatFreq": 3000
  },
  "AuthenticationConfig": [
    {
      "UniqueId": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",
      "SecureFingerPrint": "xxxxxxxxxxxxxxxxxxxxxxxxxxxx"
    }
  ]
}
```

9. Copy the unique ID, without the quotation marks.
10. Connect the printer to a USB port and turn the printer on.
11. Use the **Run as Administrator** option to open NETira CT.
12. Select **Update_Available_Connections_for_Printer** from the drop-down list in the top toolbar.
13. Once the available connection is found, click **USB_VIRTUAL_COM** in the drop-down list.
14. Click **Tools > Query Printer Configuration** to load the current printer settings.

15. In the Printer Component list on the left, click **Honeywell Cloud Connectivity**.
16. Paste the unique ID from [Step 9](#) into the **HCC-UID** field.
17. Return to the text editor and copy the secure fingerprint value (without the quotation marks).
18. Return to NETira CT.
19. Paste the secure fingerprint into the **HCC-FP** field.
20. Check the boxes next to **HCC-UID, HCC-FP, Connectivity Enable, Data Collection Duration, Data Collection Enable, Server IP Address, Server Host Name** and **Server Port**. Verify that the values in these fields are correct.
21. Click **Tools > Set New Values**.
22. Click **Send** to push the information to the printer.
23. Wait approximately 30 seconds then query the printer using NETira. Enrollment should display as, "Enrollment Success."
24. Disconnect the USB cable between your computer and printer.

The printer will now be able to communicate with HCC provided that it is connected to wi-fi and the host computer is on.

Note: *Once a printer has been onboarded, it may take a couple of minutes to display in the HCC Device Dashboard.*

Industrial Printers

Use the printer's web page to connect a supported industrial printer to HCC.

Requirements

- Up-to-date firmware installed on the printer
- Active printer network connection via wi-fi or local area network (LAN)
- HCC installed on your network and accessible from the printer
- Ports 8883, 21210, 21211, 21212, 21213 across HCC and the printer must be open

Note: *For information about using the printer web page, updating the printer firmware, or setting up the network connection on your printer, please refer to your printer's user documentation.*

Manually Onboarding an Industrial Printer

Follow these steps to manually onboard an industrial printer. See [Device Discovery and Onboarding](#) for instructions on using HCC to discover and onboard printers on a network.

1. Open the HCC app.
2. Click the **Onboarding** tab.
3. To change the frequency at which HCC sends data to the cloud, tap the **Gateway Configuration** toggle button to enable editing and enter the desired frequencies.
4. Click **SAVE AS FILE**.
5. You will be prompted to select a password. Enter a password, following the requirements displayed on the window, then click **CONFIRM**.
6. Navigated to the desired location, then click **Save**.
7. Extract the saved zip file. Enter the password when prompted.
8. Open the extracted file with a text editor, such as Notepad. The file contents should look similar to the example below:

```
{
  "GatewayConfiguration": {
    "IpAddress": "xxx.xx.xx.xxx",
    "HostName": "xxx.xxxxx.xx.xxxxxx.com",
    "Port": 21210,
    "TelemetryFreq": 3000,
    "AssetFreq": 3000,
    "BarCodeStatFreq": 3000
  },
  "AuthenticationConfig": [
    {
      "UniqueId": "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx",
      "SecureFingerPrint": "xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx"
    }
  ]
}
```

9. Access the printer's web page and click **Configure > Network Settings > Connectivity Agent**.
10. Enter the following information into the web page from the HCC file you downloaded:
 - Server address
 - Server Hostname
 - Port number
 - Telemetry Frequency (Seconds)

- Unique ID
- Fingerprint Validation

11. Click **Save**.

12. Click **Configure > System Settings > Manage Services**.

13. Select **Enable** from the Connectivity Agent drop-down box. (Enabling the agent after updating the settings will ensure a new registration with the HCC gateway.)

14. Click **Save**.

The printer should connect to HCC within a couple of minutes. There is no need to restart the printer.

Note: *Once a printer has been onboarded, it may take a couple of minutes to display in the HCC Device Dashboard.*

Overview

The HCC Discovery Tool is an application to discover mobile and industrial printers across multiple subnets, upgrade printers, and transfer Honeywell Cloud Connect (HCC) coordinates to onboard printers into the Operational Intelligence Cloud.

Prerequisites

- Honeywell Cloud Connect (HCC) installed and registered
- Network should allow ICMP ping request and response across HCC and Printer IP ranges provided
- Ability to ping printer IP address from HCC system among the IP address ranges provided as input
- Ports 8883, 21210, 21211, 21212, 21213 across HCC and the printer must be open
- Approvals from IT team, if necessary. This utility initiates a query for every IP address within the IP address subnet range provided. These operations could be treated as a network intrusion.

File Configuration for Older Printer Firmware

The following steps must be performed if you are using printer firmware older than MR17. This step is required because printer firmware older than MR17 does not support HCC Coordinates in encrypted format. For newer versions, skip this step.

1. Navigate to the folder "C:\Program Files (x86)\Honeywell\HoneywellCloud-Connect\HCC_UI.
2. Open the file com.honeywell.opintel.savana.ui.exe.config using Notepad or Notepad++.

3. Search for the parameter “EncryptSFPAndUIId” and set the value to false. It should look like this:

```
<add key="EncryptSFPAndUIId" value="false"></add>
```

4. Save the file
5. Relaunch the HCC UI after making these changes.

Define Printer Subnet Range

Use the printer_subnet_range.csv spreadsheet to identify all printers within a specified subnet range. The .csv file is used to import the available subnet range(s). See [Define Discovery Option Inputs](#).

Note: HCC uses different templates for mobile and industrial printers. The template that is downloaded is based on the value selected in the Choose Printer Family drop-down list.

1. On the HCC window, select a value in the **Choose Printer Family** drop-down list.
2. Click **Download Template** and save the .csv file to your local system.
3. For every subnet range, specify the Starting IP Address and Ending IP Address in the .csv file.

For industrial printers, enter the Username and Password. These are the credentials that will be used to login to the printer web page. Make multiple entries if the printer username and password are different for different printers within a given IP Address Range.

4. Save.

Note: Samples are provided in the csv file in rows 3 and 4. Overwrite these rows with the actual subnet ranges.

Define Discovery Option Inputs

Define the parameters that will be used to discover and onboard printers.

1. Launch HCC.
2. Click the **Onboarding** tab.
3. Under Gateway Configuration, select the **Gateway IP** address.
 - The **Gateway Host Name**, **Telemetry Frequency**, **S/W Update Query Interval**, and **Barcode Statistics Frequency** display the default values. You may update these if needed. The minimum value for **Telemetry Frequency** is 3600 seconds.
4. Click **ONBOARD PRINTERS**.

5. Select a value from the **Choose Printer Family** drop-down list. The available options are:
 - RP2\RP4: Discover\onboard RP2\RP4 mobile printers at the specified subnet ranges.
 - RL3E: Discover\onboard RL3E mobile printers at the specified subnet ranges.
 - RL4E: Discover\onboard RL4E mobile printers at the specified subnet ranges.
 - PM23\PM43: Discover\onboard PM23\PM43 industrial printers at the specified subnet ranges.
 - PM42: Discover\onboard PM42 industrial printers at the specified subnet ranges.
 - PX940V\PX940A: Discover\onboard PX940V\PX940A industrial printers at the specified subnet ranges.
 - PX6ie\PX4ie: Discover\onboard PX6ie\PX4ie industrial printers at the specified subnet ranges.
 - PC23d\PC43d\PC43t\PD43: Discover\onboard PC23d\PC43d\PC43t\PD43 industrial printers at the specified subnet ranges.
 - All Honeywell Mobile Printers: Discover\onboard all mobile printers.
 - All Honeywell Industrial Printers: Discover\onboard all industrial printers.
6. Click **Import Subnet Range(s)** then select the printer_subnet_range.csv file. The system displays the Sub Net Ranges for all sites that will be included in the update.
7. Identify the firmware file(s) to use. Click **Browse** then navigate to the firmware file location.
 - If you selected a specific Printer Family, such as RP2\RP4 or PM23\PM43, select the firmware file.
 - If you selected the Printer Family as “All Honeywell Mobile Printers” or “All Honeywell Industrial Printers,” select the path to a folder that contains all of the required firmware files. A firmware file is required for each of the printer families being onboarded at the site.

Note: *Firmware files must follow the required file naming convention. See the following table for details. See [Modify Default Naming Convention](#) on page 17 for information on how to change the default file names, if required.*

Printer Family	Details	File Naming Convention
All Honeywell Mobile Printers	Folder path containing RP2\RP4 firmware files.	File name starts with "SAV" Example: SAV_19.07_002_0409_S14418_2020-03-25.bin

Printer Family	Details	File Naming Convention
All Honeywell Mobile Printers	Folder path containing RL3e or RL4e firmware files	RL3e: File Name starts with "RL3e" Example: RL3e_18.06_0627_S14508_2020-04-16.bin RL4e: File Name starts with "RL4e," Example: RL4e_18.06_0627_S14508_2020-04-16.bin
All Honeywell Industrial Printers	Folder path containing PM23\PM43 firmware files	File name starts with "Phoenix_" Example: Phoenix_firmware-signed.bin
All Honeywell Industrial Printers	Folder path containing PM42 firmware files	File name starts with "Phoenixlite_" Example: Phoenixlite_firmware-signed.bin
All Honeywell Industrial Printers	Folder path containing PX940V\PX940A firmware files	File name starts with "Hydra_" Example: Hydra_firmware-signed.bin
All Honeywell Industrial Printers	Folder path containing PX6ie\PX4ie firmware files	File name starts with "Atlas_" Example: Atlas_firmware-signed.bin
All Honeywell Industrial Printers	Folder path containing PC23d\PC43d\PC43t\PD43 firmware files	File name Starts with "Kilimanjaro_" Example: Kilimanjaro_firmware-unsigned.bin

8. If the host name resolution is unavailable and the system is on multiple IP addresses, choose a value from the **Select IP Address** drop-down list to indicate where printer devices and HCC are connected.
9. Select the operation type:
 - **Discover Devices:** Discovers printers on the network, but the printers are not automatically onboarded. On completion of discovery, you can select the desired printer(s) then click the **Onboard Devices** button to onboard only the chosen devices.
 - **Onboard Devices:** Discovers and onboards all printers on the network.
10. Choose when to perform the update.
 - **Start Now:** Performs the update immediately.
 - **Schedule At:** Performs the update at a recurring interval. Choose the **Start From** and **End By** dates to define the range of dates on which discovery and onboarding will be initiated. Select the **Start Time** to indicate when HCC should begin to perform the update. Choose the **End Time** to indicate when HCC should stop attempting to discover printers. The tool will attempt to discover and onboard printers

until either the end time is reached or all printers for the specified IP address have been onboarded.

Note: *Setting the Start and End Times ensures that HCC will not try to update printers during hours they may be in use.*

11. Click **Start**.

HCC displays a list of printers that have been discovered and indicates the status of the operation.

Note: *To manually end the discovery process before the End Date/Time, click the **Stop** button.*

12. When the operation completes, the system displays the message, “Discovery Completed : Total Devices <x>.”

Status	Description	Comment
Open	Onboarding not yet started	Printer discovered at given IP Address. Printer will be onboarded if printer state remains at 'Non Enrolled' state
In Progress	Firmware update initiated Firmware file transfer in progress Firmware file transfer completed Firmware update in progress	State while transferring firmware file.
In Progress	Configuration update in progress Configuration updated	Tool is in the process of updating printer with HCC Coordinates (HCC IP Address, UID & FP). Note: If the status remains as Config Update for more than one hour within the scheduled time, refer to the Troubleshooting section Onboarding Fails for possible solutions.
Success	Device onboarded Device already onboarded	Printer successfully onboarded.
Failed	Due to network issue, failed to transfer firmware file. Due to network issue, failed to update configuration. Due to network issue, failed to onboard device. Failed to transfer firmware due to invalid credentials or network issues. Due to network issue, failed to upgrade firmware. Invalid firmware file. Firmware file not found.	Possible causes: Network failures at various stages. User did not provide the firmware file.

Scheduling Discovery and Onboarding

This section provides additional information on scheduling discovery and onboarding. You can schedule the dates and times that HCC will attempt to discover and onboard devices. The scheduling function allows you to attempt to discover and onboard devices over multiple dates during only specified hours. By limiting activity to only a specified time period, you can avoid updating firmware while printers are likely to be in use.

You can define the following parameters:

- **Start From** - The first date that HCC will attempt to discover and onboard printers in the selected subnet range(s).
- **End By** - The date that HCC will stop attempting to discover and onboard printers in the selected subnet range(s).

If the Start From and End By dates are the same, discovery will occur on a single date. If the dates are different, discovery will occur on each defined date during the defined time range (Start Time/End Time).

- **Start Time** - The time (HH:MM) that HCC will begin to discover and onboard printers on each date in the defined date range.
- **End Time** - The time that HCC will stop attempting to discover and onboard printers. The End Time can be on the same day as the Start Time or on the following day so that the process runs overnight. Note that HCC will stop attempting to discover devices at midnight on the End By date regardless of the defined End Time. See the examples below to clarify.

The following table provides examples of discovery and onboarding schedules.

Scheduling Examples

Start From	End By	Start Time	End Time	Behavior
11/15/2020	11/17/2020	05:00PM	09:00PM	Zero Touch Onboarding runs three cycles: 1. 11/15/2020 from 5:00PM to 9:00PM. 2. 11/16/2020 from 5:00PM to 9:00PM. 3. 11/17/2020 from 5:00PM to 9:00PM.
11/15/2020	11/17/2020	05:00PM	06:00AM	Zero Touch Onboarding runs three cycles: 1. 11/15/2020 from 5:00PM to 11/16/2020 at 6:00AM. 2. 11/16/2020 from 5:00PM to 11/17/2020 at 6:00AM. 3. 11/17/2020 from 5:00PM to 11/17/2020 at 11:59PM.
11/15/2020	11/15/2020	05:00PM	06:00AM	Zero Touch Onboarding runs one cycle: 1. 11/15/2020 from 5:00PM to 11/16/2020 at 11:59PM.

Modify Default Naming Convention

Follow these steps if you need to modify the default naming conventions.

1. Open the file AutoDiscoveryService.dll.config using Notepad++. The file is located in C:\Program Files (x86)\Honeywell\HoneywellDiscoveryTool\Service.
2. Navigate to the ModelFwFileNameMap section.
3. Modify the mapping against the printer family listed in this section as required. See the code sample below.
4. Save.

Sample code:

```
<ModelFwFileNameMap>
  <add key="rp2" value="sav*"></add>
  <add key="rp4" value="sav*"></add>
  <add key="rl3e" value="rl3*"></add>
  <add key="rl4e" value="rl4*"></add>
  <add key="px940v" value="hydra_*"></add>
  <add key="px940a" value="hydra_*"></add>
  <add key="px6ie" value="atlas_*"></add>
  <add key="px4ie" value="atlas_*"></add>
  <add key="pm23" value="phoenix_*"></add>
  <add key="pm43" value="phoenix_*"></add>
  <add key="pm42" value="phoenixlite_*"></add>
  <add key="pc23d" value="kilimanjaro_*"></add>
  <add key="pc43d" value="kilimanjaro_*"></add>
  <add key="pc43t" value="kilimanjaro_*"></add>
  <add key="pd43" value="firmware*"></add>
  <add key="lm45" value="solo_*"></add>
  <add key="pm45" value="solo_*"></add>
</ModelFwFileNameMap>
```


HANDHELD SCANNERS AND WIRELESS BARCODE SCANNERS

Connected handheld scanners and wireless barcode scanners (wearable mini computers) will send events, device information and metrics to the Honeywell cloud through the HCC gateway. To communicate with HCC, handheld scanners must be connected to host computers. Wireless barcode scanners must be connected to a wireless network.

Onboarding Wireless Barcode Scanners

Follow these steps to onboard wearable mini computers.

1. Connect the device to the host computer.
2. Open the HCC app.
3. Click the **Onboarding** tab.
4. If **Wi-Fi Settings** is enabled, turn it off using the toggle button.
5. To change the frequency at which HCC sends data to the cloud, tap the **Gateway Configuration** toggle button to enable editing and enter the desired frequencies.
6. Click **GENERATE BARCODE**.
7. To change bar code type or size, use the drop-down lists then click **Apply**.
8. Click **Print** to print the bar code or click **Download** to save the bar code as a .png image file.
9. Scan the bar code with the device that you want to connect to HCC.

Onboarding Handheld Scanners

Follow these steps to onboard scanners.

Extract the Configuration File

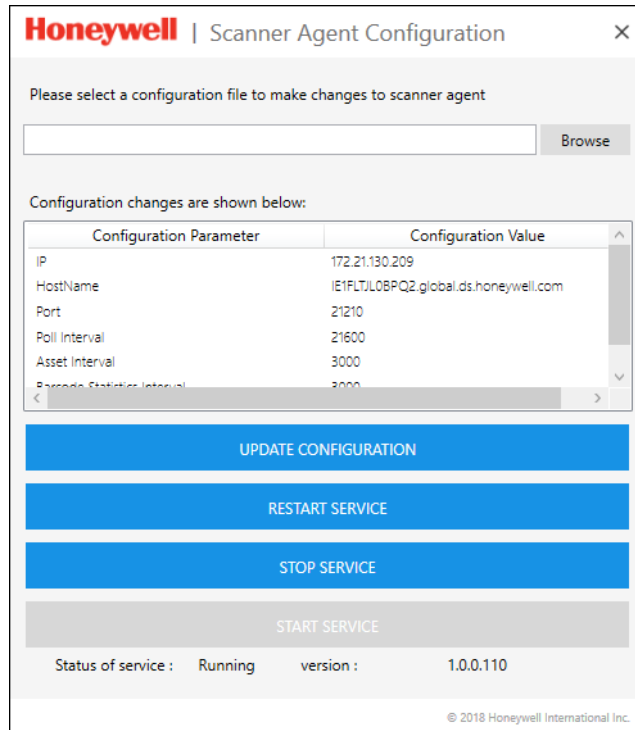
1. Connect the device to the host computer.
2. Open the HCC app.
3. Select the **Onboarding** tab.
4. If Wi-Fi Settings is enabled, turn it off using the toggle button.
5. To change the frequency at which HCC sends data to the cloud, tap the Gateway Configuration toggle button to enable editing and enter the desired frequencies.
6. Click **SAVE AS FILE**.
7. You will be prompted to select a password. Enter a password then click **CONFIRM**.
8. Navigate to the desired location, then click **Save**.

Use the saved file to update Scanner Agent Configuration.

Scanner Agent Installation

Prerequisites:

- The scanner agent must be installed on the machine where the scanner is physically connected to the PC via a USB cable.
 - The PC must be running Windows. Scanner Agent/HCC are not compatible with Linux machines.
1. Extract setup.exe from the CCPPR_ScannerPlugin_XX.XX.XX.XX.zip package and run the setup.exe in admin mode.
 2. Once installed, launch the "Scanner Agent Configuration" desktop shortcut in admin mode.



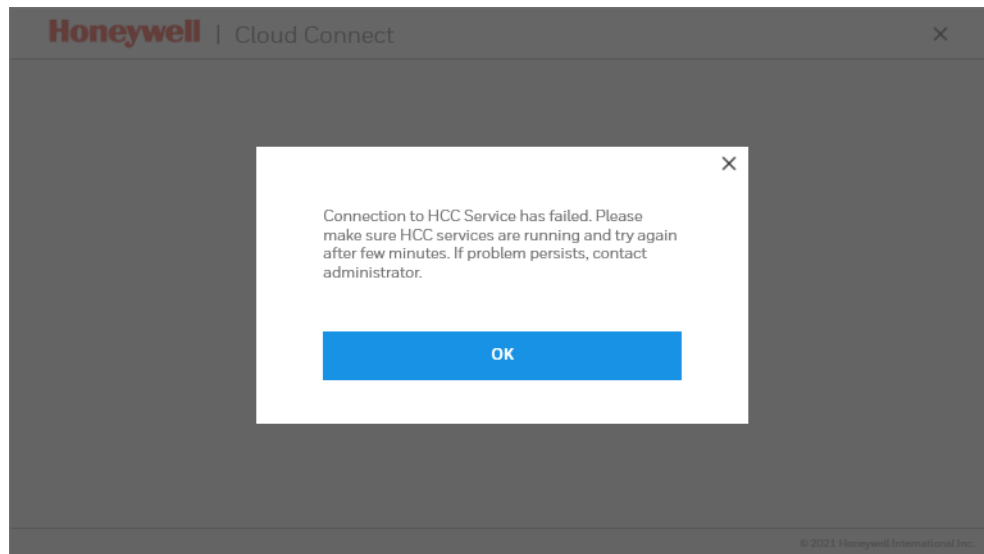
3. In the Scanner Agent Configuration UI, click **Browse** then select the config.json file extracted from HCC.
4. Click **UPDATE CONFIGURATION**.
5. Click **RESTART SERVICE**.
6. The scanner should be detected by the scanner agent and information should be passed to HCC and to cloud services.

This chapter provides information on problems that users may encounter and gives possible solutions to those issues.

HCC User Interface

Connection to HCC Services Failed

Issue: The HCC User Interface displays the message “Connecting to Services” then displays “Connection to HCC services has failed.”



Possible Cause: One or more HCC services are not running.

Solution: Follow these steps:

1. Ensure that all of the services below are available:
 - HccAPIInfoService
 - HccAssetManagmentService

- HccCacheEngine
 - HccDataEngine
 - HccEnrollmentService
 - HccEventService
 - HccSentConnectService
 - HccTelemetryService
 - HccWatchDogService
 - Mosquitto Broker
2. Restart the service “HccCacheEngine”.
 3. Restart the service “HccDataEngine”.
 4. On successful restart, launch the HCC UI from the desktop.

Username and Password Prompt not Displayed

Issue: After clicking the Sign In button on the HCC UI, HCC fails to display the dialog prompting Username and Password.

Possible Cause 1: Required URLs are not whitelisted.

Solution: See [Whitelist URLs](#) on page 2 for a list of URLs that should be whitelisted to allow proper communication for HCC and Operational Intelligence.

Possible Cause 2: The latest Windows Security Updates have not been installed.

Device not Shown in Op Intel Portal

Issue: After a device has been onboarded through HCC, it is not shown in the Operational Intelligence user interface.

Possible Cause: Required URLs are not whitelisted.

Solution: See [Whitelist URLs](#) on page 2 for a list of URLs that should be whitelisted to allow proper communication for HCC and Operational Intelligence.

Printers

Onboarding Fails

Issue: Users are able to login to the industrial printer web page from the HCC system indicating HCC and printer communication, but manual printer onboarding fails or Zero Touch onboarding stays at “In Progress - Configuration updated” for longer than one hour.

Possible Cause: Firewall restrictions on ports used for communication. Firewall exceptions must be in place for these ports: 8883, 21210, 21211, 21212, 21213, 21215, 21219.

Solution: Work with the IT team to open the recommended ports between HCC and the devices.

Printer Status Incorrectly Shown as Online

Issue: HCC UI/Sinaps display shows device status as online even though the printer is powered down or taken out of the network.

Solution: The system is functioning as designed. Device status is marked as offline based on a query to the device at the defined Telemetry interval (default interval is 6 hours). Until that interval, device status will continue to be shown as online. No user action is required.

Scanners

Device not Detected

Issue: The device is not detected.

Possible Cause: REM interface is not enabled.

Solution: Ensure that the device has REM interface enabled.

Enable the **REMIFC1** on the device by scanning the following barcode:



After performing this step, the device should show as connected in the HCC UI dashboard.

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