How to use Doorbird in Vera, Imperihome and TinyCam Monitor

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These instructions were written using a Doorbird D10x, but should also work with the surface edition (D20x) or Birdguard (B10x), since they all share the same API (https://www.doorbird.com/api).

1. <u>Preparation / Installation:</u>

- Follow Doorbird installation instructions and confirm it works properly with the Doorbird Application
- Find out its IP address using <u>https://www.doorbird.com/checkonline</u>:



Online check

You can use this tool to check if your device (e.g. DoorBird Video Door Station, BirdGuard) has a connected to the Internet (mandatory!). Please enter the data matching to your device. You can find the required data on your "DIGITAL PASSPORT" document.

WiFi MAC address	1CCAE370
Token	
Submit	

(You can find your MAC address and Token from the Digital Passport delivered with Doorbird)

• Alternatively, you can also run an IP scanner software such as Angry IP Scanner and look for the device with a hostname starting with "bha-"

🗇 IP Range - Angry IP Scanner						
<u>S</u> can <u>G</u> o to <u>C</u> ommands Fa <u>v</u> orites <u>T</u> ools <u>H</u> elp						
IP Range: 192.168.178.	IP Range: 192.168.178.0 to 192.168.178.255 IP Range 🗸 💥					
Hostname: AVALON	1	🚹 IP 🛛 Netmask 🗸 🗖 📫 Start				
IP ^	Ping	Hostname	Ports [0+]			
🔵 192.168.178.1	0 ms	[n/a]	[n/s]			
🔵 192.168.178.2	0 ms	AVALON	[n/s]			
🔵 192.168.178.3	0 ms	[n/a]	[n/s]			
🔵 192.168.178.4	0 ms	BHC35-DB6F59	[n/s]			
🔵 192.168.178.7	1 ms	[n/a]	[n/s]			
🔵 192.168.178.8	0 ms	[n/a]	[n/s]			
🔵 192.168.178.10	3 ms	[n/a]	[n/s]			
9 192.168.178.12	2 ms	[n/a]	[n/s]			
🔵 192.168.178.13	123 ms	[n/a]	[n/s]			
🔵 192.168.178.14	98 ms	[n/a]	[n/s]			
9 192.168.178.15	20 ms	bha-1CCAE3706860.local	[n/s]			
🔵 192.168.178.16	18 ms	[n/a]	[n/s]			
9 192.168.178.18	234 ms	[n/a]	[n/s]			
0 192.168.178.20	3 ms	B018842	[n/s]			
9 192.168.178.21	105 ms	[n/a]	[n/s]			
🔵 192.168.178.249	1 ms	[n/a]	[n/s]			

• In this case, Doorbird_IP is 192.168.178.15

2. Adding Camera in Vera:

• Open Vera UI and select the Camera Tab -> Add Camera:



• Select IP Camera (Generic IP Camera), then Next Next Next until Vera tries to find the camera by itself:





• You have to wait for 6 minutes until it decides it cannot find it by itself (!) the select "Manually Install the camera (advanced), then Pick up the one corresponding to the IP address found in section 1:

Step 2: Pair Your Device				
Find Your Ca	amera's IP Addres	s on the Netwo	rk	
IP	MAC	Name	Select	
192.168.178.21	78:00:9E:FB:F0:5E	N/A	~	
192.168.178.15	1C:CA:E3:70:68:60	N/A	Ø	
192.168.178.12	88:F0:77:56:EA:79	N/A	~	
			•	
		Refre	sch list	

• Scroll down to "Manual Configuration" section:

Manual Configurati	on	
Select camera type*		
Other IP camera	•	
You are no longer requi which returns a JPG file/ http://192.168.8.200/sn	red to fill in the l snapshot in the apshot.cgi	P address just paste the full URI box below. Example:
Camera URL*	vord@xxx.xxx.xxx	.xxx/bha-api/image.cgi
Camera IP Address*		,
Camera Username		
<blank></blank>		
Camera Password		

• Configure as above (You can find Doorbird_IP from section 1)

• Scroll down to Test your camera connection:

Test Your Camera Configuration

Click Test Button below to confirm your Camera Configuration. Camera snapshot will appear below within 15 to 60 seconds.



• Scroll down to name your Camera and Select a Room to place it:

Name Your Camera	
Camera Name*	
My Camera Name	
*Requir	ed
Select Room for Camera	
Room	
Hallway	•
	Next

- Next to complete the Camera adding
- Once visible, select your new Camera -> Settings -> Advanced -> Extra Parameters -> New Service:

Extra Parameters	5		
	Live	Recorded Settings	
device #434			Back
Params Variables	New service Commands		
New service/var	able/value		
New service:	urn:micasaverde-com:serviceId:Can	nera2	
New variable:	DirectStreamingURL		
New value:	/bha-api/video.cgi		
Reload Engine Ac	d		

• Then "Add" then "Reload Engine"

• Once Engine is reload, try your camera:



• Not sure why the DirectStreamingURL is not working, but for now just click "Hide the message for this camera" and "Close"

3. Adding a Doorbell Sensor:

• Select Apps -> My apps and check the Virtual Motion Sensor Plugin is already installed:



• If not, just install it first

• Select "Details" then click on "Create Another":

Virtual Motion Sensor	<	Back	
Uninstall			
Additional Information			~
App id: 8301			
Current Version: 1.1			
Latest Version N/A			
Auto Update			
This plugin has created the following devices:			
# 141 Sensor G Night			
# 150 Sensor G Door			
# 200 Sensor BA Motion			
Create another Update App			

• Wait until it is actually created, then select it in "Devices":

Control	Back			
		Device name:		
		Front Door Bell		
		Assigned to room-		
		Please choose a room	•	
			Save Changes	
	DISARI	IED		

- Name it and place it in the correct room
- Click on Advanced and check its device ID:

Control	Back
device #435	
Params Variable	s New service Commands
name	Front Door Bell
device_type	urn:schemas-dcineco-com:device:VMotion:
altid	
ip	
mac	
manufacturer	
id_parent	0
⊘nobulk ⊘embedded ⊘disabled ⊘restricted	
device_file	D_VMotion.xml
id	435
time_created	1475420240

- In this case, Virtual_Sensor_ID is 435
- Open a Browser and enter the following URL:

http://Username:Password@Doorbird_IP/bhaapi/notification.cgi?url=http://Vera_IP:3480/data_request?id=action%26DeviceNum=Virtual_Sensor_ID%26s erviceId=urn:dcineco-

com:serviceId:VMotion1%26action=SetTripped&event=doorbell&relaxation=120&subscribe=1

(You can find Doorbird_IP from section 1 and Username/Password from the Digital Passport delivered with Doorbird, Vera-IP is the IP addres of your Vera controller and 120 is the time the sensor should remain triggered)

• Verify that the reply shows "RETURNCODE": "1":

	Arc	×	The X Apply Ap	
←	\rightarrow	G	🛈 192.168.178.15/bha-api/notification.cgi?url=http://192.168.178.8:3480/data_request?id=action%26Dev 🛧 📔	
{"B "ht com	HA": tp://	{ "F /192. vicel	RETURNCODE": "1", "NOTIFICATIONS": [{"event": "doorbell","subscribe": "1","url": .168.178.8:3480/data_request?id=action&DeviceNum=435&serviceId=urn:dcineco- Id:VMotion1&action=SetTripped","user": "","password": "","relaxation": "120"}]}}	

4. Adding a Motion Sensor or Door Opening Sensor:

• If you want to make a sensor for the motion Sensor or the Door Opening, follow the same instructions as for Doorbell, just replace "doorbell" with "motionsensor" or "dooropen".

5. Adding a Infrared switch:

• Select Apps -> My apps and check the Virtual Motion Sensor Plugin is already installed:



• If not, just install it first

• Select "Details" then click on "Create Another":

Virtual ON/OFF Switches	<	Back	
Uninstall			
Additional information			\sim
App id: 1408			
Current Version: 1.35			
Latest Version 1.35			
✓ Auto Update			
This plugin has created the following devices:			
# 436 VirtualSwitch			
Create another Update App			
Help			>

• Wait until it is actually created, then select it in "Devices":

Control Back		
		Device name: (Front Door Infrared
		Assigned to room Please choose a room
		Save Changes
	DISARMED	

- Name it and place it in the correct room
- Select Scenes -> Add Scene, Select the device we just created as Trigger "when turned on": Add Scene

Help for scene	creation		+
		Back to Scene List	
Step 1: Se	elect a Trigger		
device	Device Trigger Front Door infrared is turned on		â
Add another	trigger	9	F
Next Step		6	

• Next Step -> Add Delayed action, Wait for 3 Minutes, Switch the same device Off:

Add Scene

Help for scene creation	+
	Back to Scene List
Step 1: Select a Trigger	Q
1 Device Trigger Front Door Infrared is turned on	
Step 2: Device Actions	
What do you want to have happen?	â
Wait for 3m and then Front Door Infrared Off	>
What do you want to have happen?	
Select Devices	>
Add delayed action	÷
Next Step	0

• Next Step -> Also, execute the following luup code:

< Back	
Flocal status; result = luup.inet.wget("http://Username:Password@Doorbird_IP/bha-api/light-on.cgi", 5)	

(You can find Doorbird_IP from section 1 and Username/Password from the Digital Passport delivered with Doorbird)

• Select the correct room and name for your scene:

Name Your Scene	Room Name:
Name Switch Front Door infrared On	Name Your Scer

• Click on Finish

6. Adding Doorbird in Imperihome:

Of course you can view the Camera device from Vera in Imperihome, but you can also access directly, local or remote, as follows:

- Add a New System of "MJPEG/h264/MPEG4 IP Camera" with following parameters:
 - o Local MJPEG or RTSP(*) Url: http://Username:Password@Doorbird_IP/bha-api/video.cgi
 - Local JPEG Url: http://www.username:Password@Doorbird_IP/bha-api/image.cgi.cgi

(You can find Doorbird_IP from section 1 and Username/Password from the Digital Passport delivered with Doorbird)

- For the remote settings, basically same URL's, but you need to replace Doorbird_IP by your home IP address and configure your router to redirect port to Doorbird_IP, I will update this doc once I found what my router password is [©]
- So far, only image grabbing is working in Imperihome, but you can set the Image refresh rate to "Continuous" or "1 second", which is quite OK.

7. Adding Doorbird in TinyCam Monitor:

This is super easy since TinyCam Monitor supports Doorbird directly! Simply Add a new camera and select the correct Vendor, Camera model and of course do not forget to enter the

correct Username/Password from the Digital Passport delivered with Doorbird:



• Once added, you can even trigger the Infrared light of Doorbird directly into TinyCam Monitor:



8. Notes / Future:

• Need to find out why Direct Streaming of the video does not work in both Vera or Imperihome