

**DOCKETED**

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# Cybersecurity Considerations in Flexible Demand Appliance Standards

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Workshop on Senate Bill 49 Flexible Demand Appliance Standards

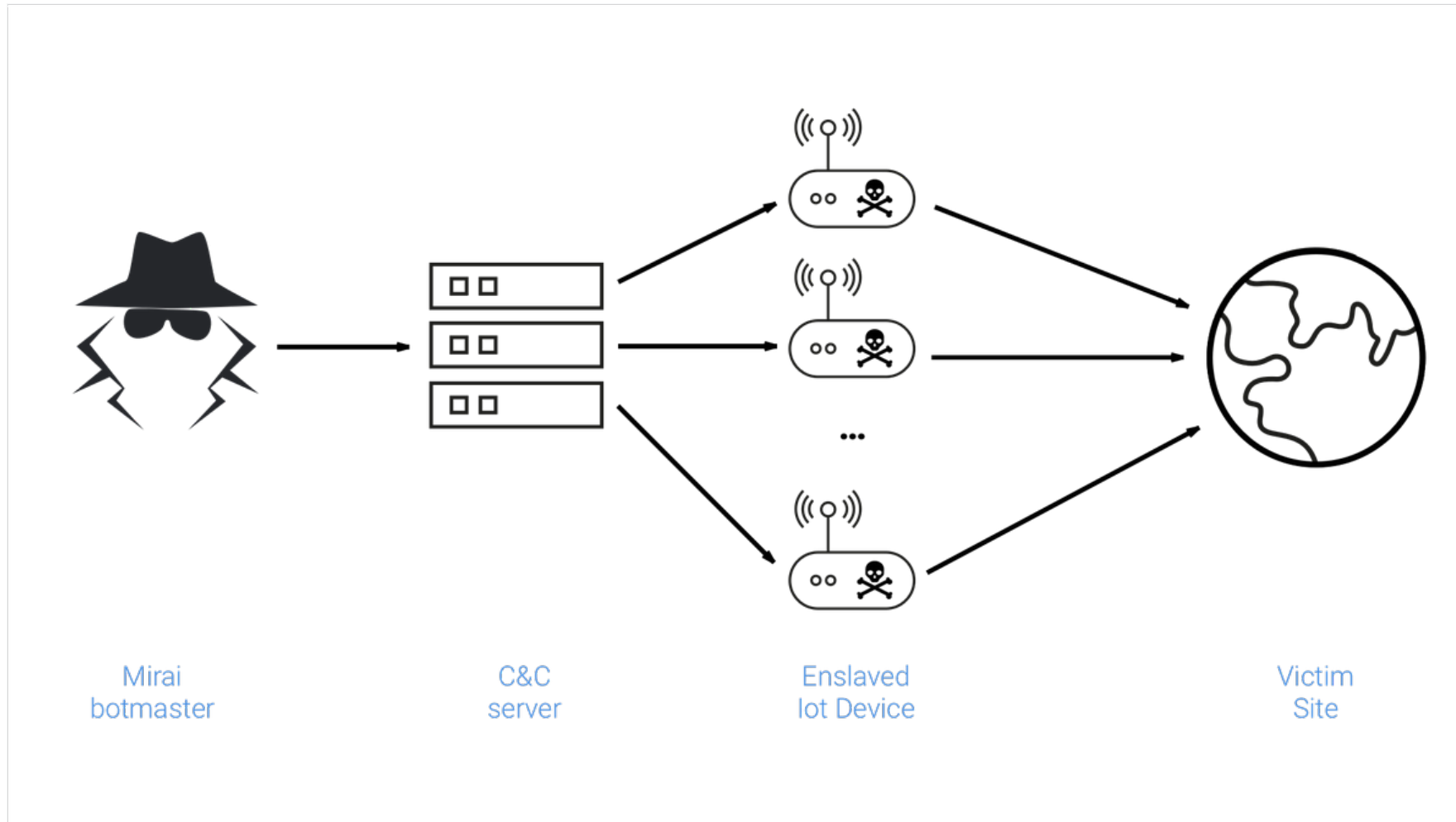
 Why

 What

 How

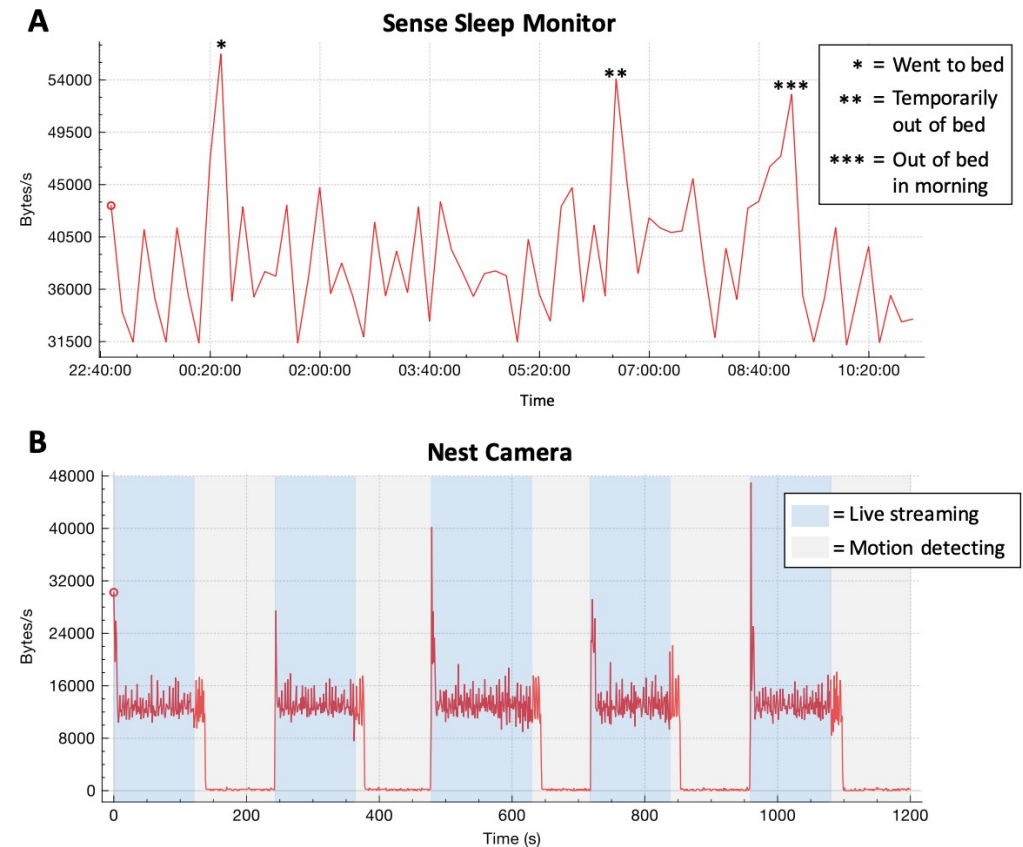
# IoT devices can be weaponized

- Mirai botnet exploited IoT devices in smarthomes



# IoT devices can leak sensitive information

- Cleartext  
e.g., medical devices
- Encrypted  
side channel attacks



 Why

 What

 How

# Key requirements

## **Should support authentication**

Don't use predictable cookie-cutter passwords

## **Should use secure communications**

TLS/PKI

## **Should be patchable**

Vulnerabilities/exploits are inevitable

 Why

 What

 How



# Nutrition Labels


Help consumers understand  
security practices  
data collection






## Security & Privacy Overview

# Smart Device Co.

Smart Video Doorbell NS200  
Firmware version: 2.5.1 - updated on: 11/12/2020  
The device was manufactured in: China

**1**


 Security Mechanisms	Security updates	Automatic - Available until at least 1/1/2022			<b>2</b>
	Access control	Password - Factory default - User changeable, Multi-factor authentication, Multiple user accounts are allowed			

 Data Practices	Sensor data collection	 Visual	 Audio	 Physiological	 Location	<b>3</b>
	Sensor type	Camera	Microphone			
	Purpose	Providing device functions	Providing device functions, Research			
	Data stored on device	Identified	No device storage			
	Data stored on cloud	Identified	Identified - Option to delete			
	Shared with	Manufacturer, Government	Manufacturer			
	Sold to	Not disclosed	Not sold			


Other collected data: Motion, Account info, Payment info, Contact info, Device setup info, Device tech info, Device usage info

Privacy policy: [www.NS200.smartdeviceco.com/policy](http://www.NS200.smartdeviceco.com/policy)


**4**

  
More Information

Detailed Security & Privacy Label:  
[www.iotsecurityprivacy.org/labels](http://www.iotsecurityprivacy.org/labels)



CMU IoT Security and Privacy Label CISPL 1.0 [iotsecurityprivacy.org](http://iotsecurityprivacy.org)



<https://www.iotsecurityprivacy.org/generate>