Home Home Secure Home

written by Mert SARICA | 1 September 2023

Towards the end of 2022, when my spouse and I decided to settle in the United States, our first task was to find a place to live. Having lived in a house with 24/7 residential security guard services in Istanbul, Turkey, for many years, we had never been particularly concerned about security. However, when it came to living in a detached house and ensuring its physical security, it became my responsibility as a cybersecurity professional and DIY enthusiast. :)

Thanks to our realtor Ms. Arda AKBAŞ, even before setting foot in the United States, we managed to find a three-story, detached house in a low-crime area remotely.

As my first task, I started examining the exterior of the house using Google Maps. to roughly identify suitable locations for outdoor cameras.

When it came to finding a suitable alarm system, as a DIY enthusiast, Ring, Eufy, SimpliSafe, ADT Blue alarm systems caught my attention. After extensive research and evaluations, despite some negative news regarding privacy and vulnerabilities, I decided to choose the Ring alarm system due to its price, performance, and extensive ecosystem.

After moving into the house, my first task was to inspect each floor as if I were a burglar. As you might expect from American movies, I encountered many (27) sliding windows and 3 doors opening to the garden. The basement was a cute place, ideal for making a home gym, with 1 room, 2 windows, and a door opening to the garage, unlike in horror movies where it’s always the place where monsters and bad spirits reside.



According to the emerging needs, I first ordered the second-generation main alarm system from Ring, which consists of 14 pieces. In addition to that, I also ordered panic buttons that activate the siren when pressed for 3 seconds, detectors capable of detecting the sound of glass breaking, and motion detectors.



After securing the windows and doors with magnetic door contacts and ensuring the safety of specific areas with glass break and motion detectors, it was time to purchase indoor and outdoor cameras.

Since the garage had two doors accessible from the outside and one door from the inside, it was an important location to position an indoor camera. To avoid dealing with electrical wiring, I decided to go with battery-powered cameras and purchased the Ring Stick Up Cam for the garage. Next, I installed and set it up.





When it came to exterior cameras, my first priority was capturing footage of anyone approaching the front door, as well as having the ability to engage in

two-way communication. Therefore, I purchased the Ring Video Doorbell 4, which allowed me to achieve these functionalities. Instead of drilling and mounting it on the wall, I chose to hang it on the door. Additionally, I purchased the DOORBELLBOA Anti-Theft Video Doorbell Door Mount as an additional accessory.

Two days after activating the smart bell, it caught its first uninvited guest. :)

Since the main entrance door of the garage was outside the camera’s field of view, I decided to install the Ring Spotlight Cam Pro on both the main entrance door and the back door of the house. To avoid frequently changing the batteries of the cameras (which typically last around 3 months depending on usage), I not only equipped each camera with two batteries but also purchased the second-generation Ring Solar Panel, a solar-powered panel, and connected it to the cameras. This way, the panels have relieved me of the hassle by charging the batteries on sunny days.


ring


ring





In the following days, we had another uninvited guest, but this time, he was caught in the backyard. :)

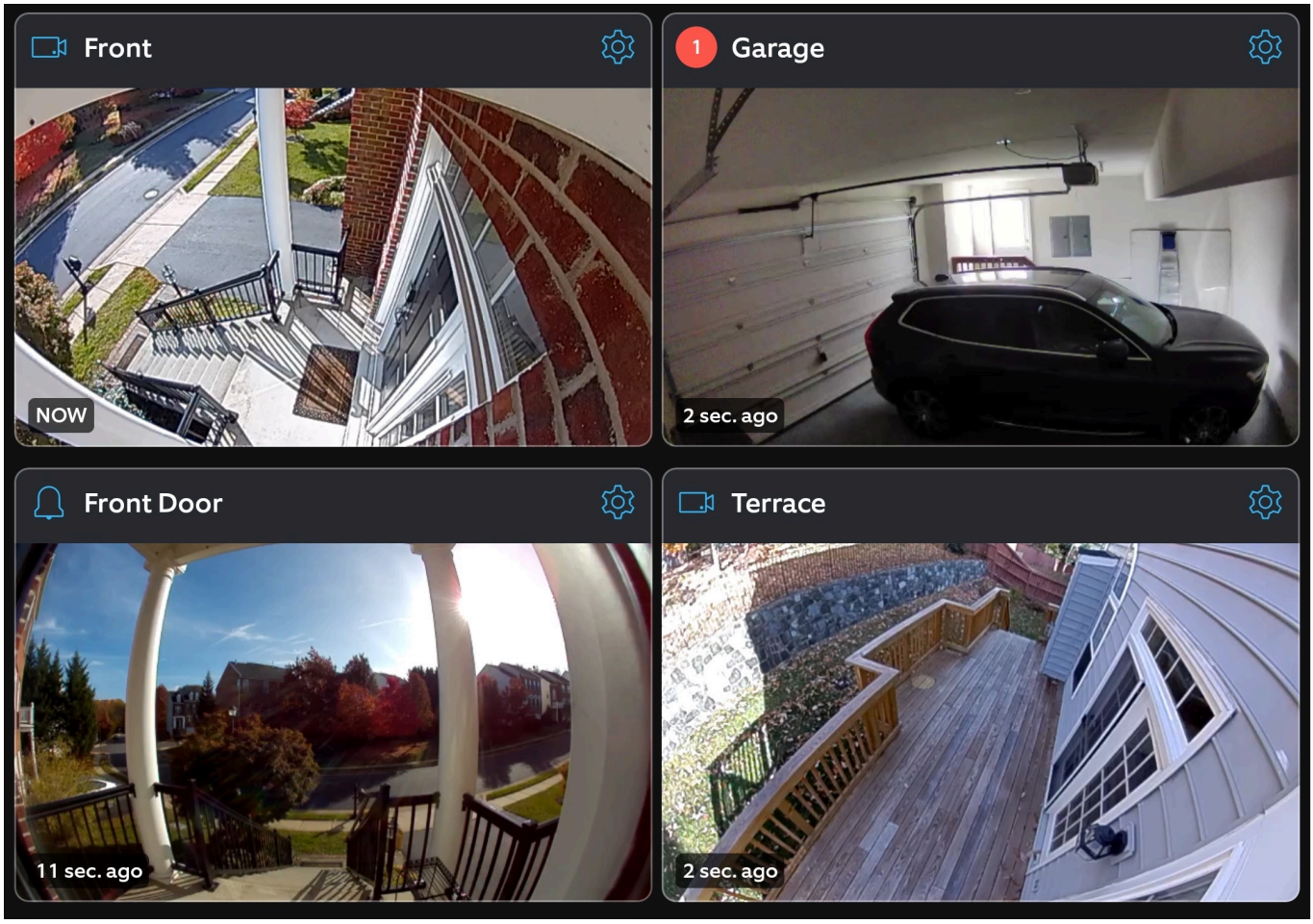
Just like in cybersecurity (CISSP Domain 3: Security Architecture and Engineering), deterrence is an important security control in physical security as well. Therefore, I made sure not to overlook placing 2 Ring Solar Security signs that are powered by solar energy and illuminate at night, at the entrance of the house and in the backyard. This serves as a deterrent to potential intruders.



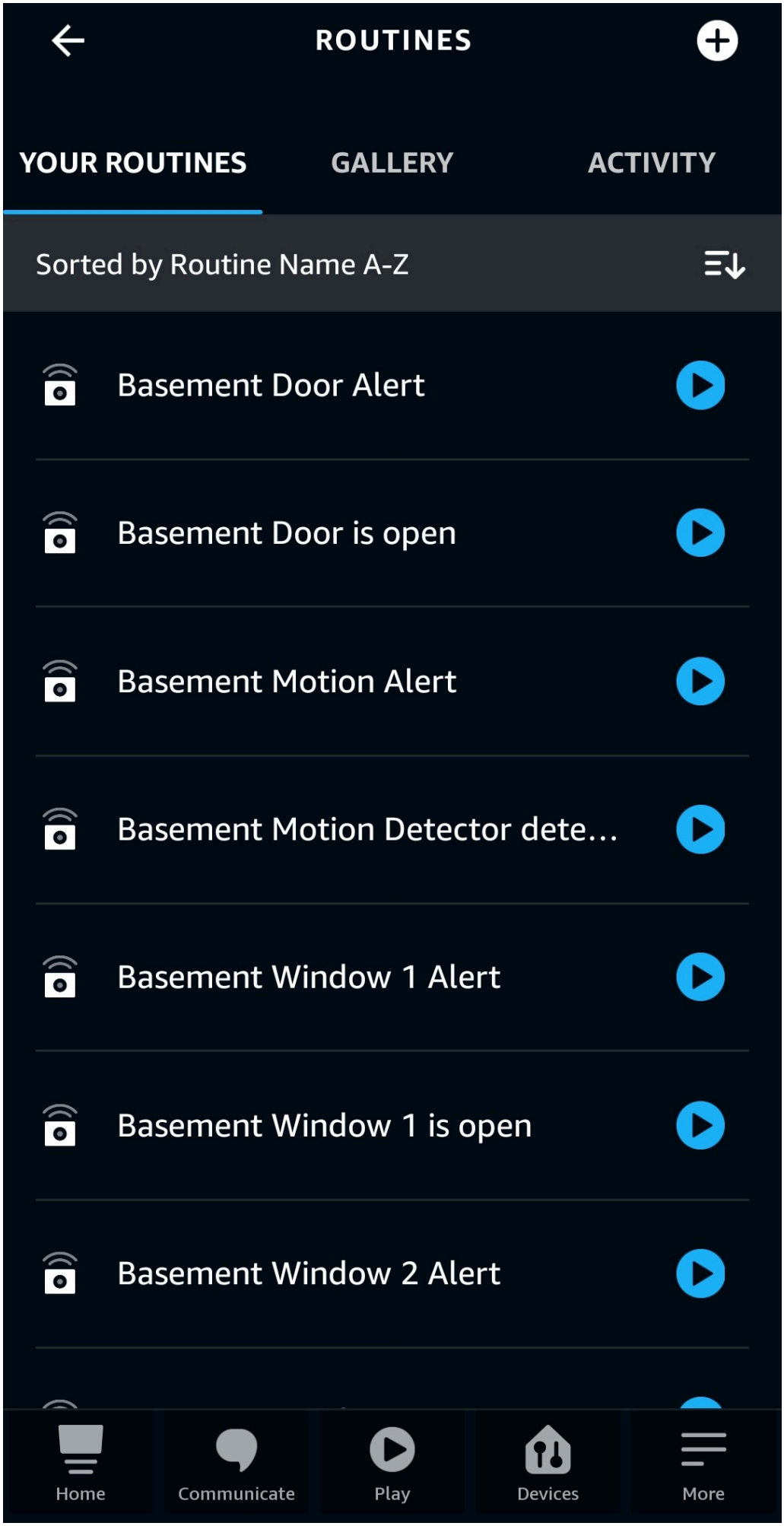
For the business continuity, the main alarm system (Base Station) is equipped with a battery that can provide power for up to 15 minutes during short power outages, and it also has cellular connectivity support to handle internet

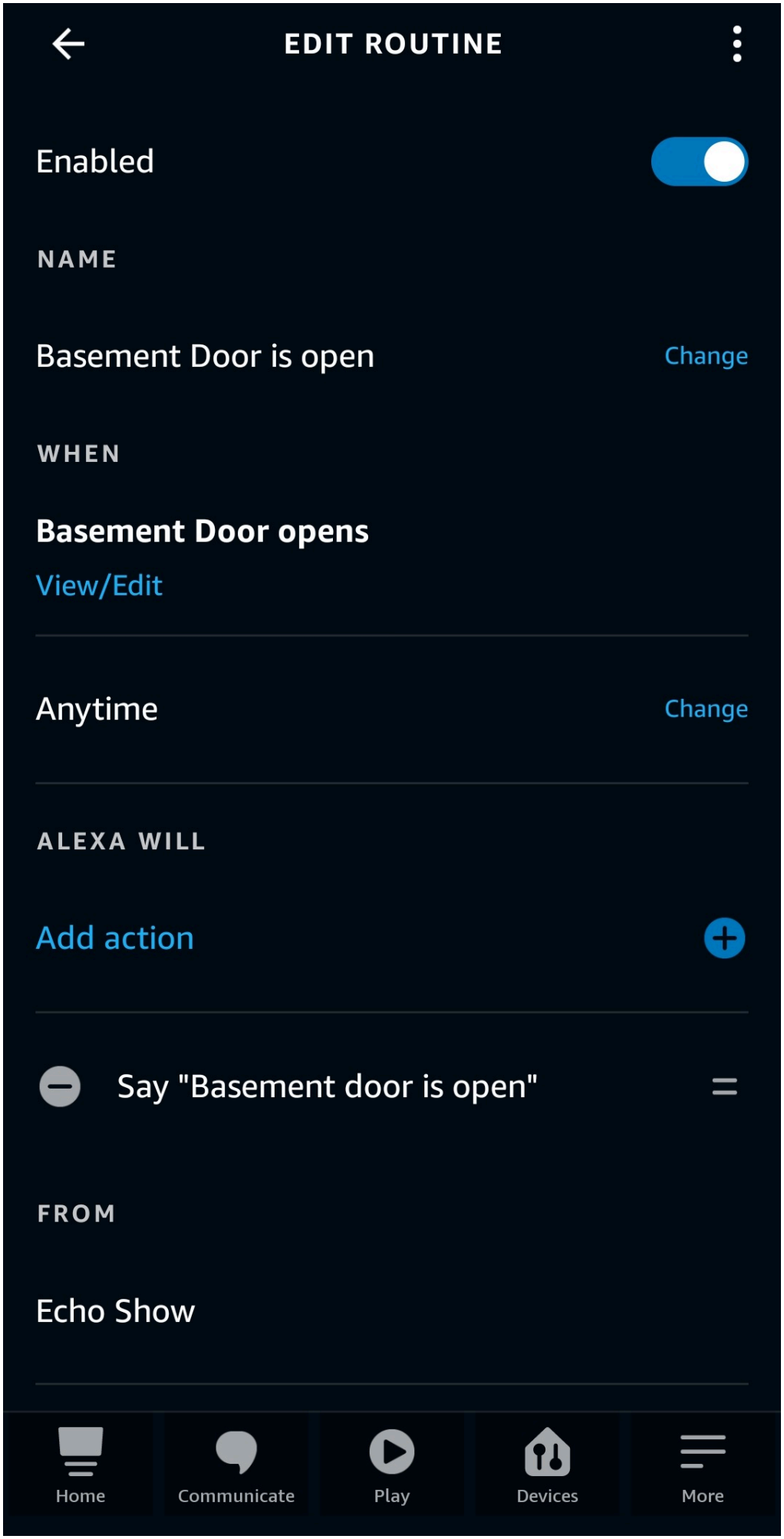
outages. As someone who wants to ensure stability, I also purchased the APC BE600M1 and BE425M Battery Backup uninterruptible power supply units to support not only the router and alarm system but also other electronic devices I have.

After completing all the installations, I now have a smart alarm system provided by Ring mobile application, which allows me to monitor and receive notifications about activities happening in and around my home 24/7. To expand the monitoring beyond just myself, I have also started utilizing Ring's Protect Pro 24/7 professional monitoring service.



Finally, I completed the setup with Alexa, Echo Show 10, an AI-supported voice assistant that can integrate with the Ring alarm system, transmit alarms generated by the system verbally, allow live viewing of cameras, make calls to the person ringing the doorbell, and most importantly, customize alarms according to your needs with Routines.


ROUTINES
YOUR ROUTINES
GALLERY
ACTIVITY
Sorted by Routine Name A-Z
Basement Door Alert
Basement Door is open
Basement Motion Alert
Basement Motion Detector dete…
Basement Window 1 Alert
Basement Window 1 is open
Basement Window 2 Alert
Home
Communicate
Play
Devices
More


EDIT ROUTINE
Enabled
NAME
Basement Door is open
Change
WHEN
Basement Door opens
View/Edit
Anytime
Change
ALEXA WILL
Add action
Say "Basement door is open"
FROM
Echo Show
Home
Communicate
Play
Devices
More

In conclusion, the Ring alarm system, along with all its components, cost us approximately $2000. While it cannot replace our beloved and loyal companion, North, in terms of being our family’s guardian, we believe the Ring alarm system provides a great opportunity for him to enjoy early retirement and long naps. :)



I assume this article will be useful for those who want to use a DIY alarm system like me. Hope to see you in the following articles.