

From: james | personal genius <[REDACTED]>
To: Brice Gordon <[REDACTED]>, Richard Kahn <[REDACTED]>
Cc: Karyna Shuliak <[REDACTED]>, Zorro Ranch <[REDACTED]>, [REDACTED]
[REDACTED] <[REDACTED]>
Subject: Re: Frond door system at 9 E 71st
Date: Fri, 03 Nov 2017 20:18:00 +0000

Hi Brice,

I was able to connect with Karyna today and get some context. I'm CC'ing Rich & Merwin so we're all on the same page and not duplicating work.

As I understand it, the doorbells @ 71st currently ring the house phones and text the staff members with a photo captured on doorbell press (the staff then has to get to a house phone to answer).

The problems with the current setup are:

1. The house phones are usually muted (do not disturb mode) in the areas of the house where JEE & Karyna frequent after staff hours, so they often miss deliveries.
2. There is virtually no cell service within the house and there are several wifi dead spots around the house that can prevent the staff from getting the doorbell notification txts in a timely manner.

Jeffrey had inquired whether the Nest Doorbell would be a solution, so they could get an app notification on doorbell press. That product doesn't ship until sometime next year, tho.

Brice offered the currently shipping Ring doorbell, instead (one of my other clients recently installed this — it works for them, but their environment has strong wifi).

My concerns with the Nest / Ring solutions are:

1. Privacy.

BOTH systems are essentially cloud-based PVRs — every visitor to the house would have a video of them uploaded to the internet. If those accounts were hacked (like the Murdock papers in London did with the Royal's voicemails) or subpoenaed by law enforcement, they'd have a complete log of everyone coming and going from the house and we'd never know. (It doesn't help that the device is clearly branded so the attacker would know where to go for the video logs, either.)

Obviously, if JEE is okay with that we would proceed, but I think it needs to be called out to him directly. (On the island, they unplug the Nest cam that records the dock whenever JEE is in residence to protect his privacy).

2. Security.

Both devices are wifi based, with no ethernet option. To support these devices, we'd need to broadcast a wifi signal on the security-system's network into the street, where a intent hacker could pick it up and gain access to the entire security PVR system, including all prerecorded video.

The standard WiFi password authentication method has been recently proven insecure (<https://krebsonsecurity.com/2017/10/what-you-should-know-about-the-crack-wifi-security-weakness/>)

and requires patches from every wireless access point & device connecting to the networks... so at the moment, all wifi networks are basically insecure.

3. **Integration.**

a. Getting wifi there is not trivial. Assuming that the existing panels have ethernet network connections to tap into, we still need to do that in a way that doesn't disconnect the existing panel, provides steady & consistent signal of 2 Mbps and still fits within the limited physical space.

b. Getting it to talk to the existing system... for these devices to be able to open the doors, they'd need to somehow activate the magnetic locks on the doors. And when we need to review security footage, do we then have two systems to search, the local PVR and the Ring/Nest cloud accounts?

4. **Scalability.**

We're essentially patching a consumer-grade webcam solution into what's a fairly expensive and thorough security system. *If* we could get it to work, it's very likely to be broken the next time another component needed to be upgraded.

Recommended Solutions:

1. Merwin has already requested a quote, from the vendor that installed / maintains the security system, for a portable-phone system that could be integrated in and work throughout the house. That would supplement the house phones, work where they're muted or in the areas without wifi.
2. Merwin will ask if there's an iPhone App upgrade that can connect to the existing system to get notifications of the doorbells / allow answering from cell phones.
3. I'd suggest we consider upgrading the existing Apple AirPort Extreme basestation wifi routers with Eero WAPs, like we have on the 6th floor.

Eero's do a fairly solid multi-point wireless relay, so we could achieve full-coverage, even in areas where we lack ethernet network ports (like the basement, first floor hallway, the back of the third floor, etc.) and their mesh-networking software provides seamless shifting between routers when you move from room to room/floor to floor.

Thank you,

James Ce

[your Personal Genius](#)

☐ Certified Support Professional 10.6

<http://personalgenius.co>

On Nov 1, 2017, at 8:48 PM, Brice Gordon <[REDACTED]> wrote:

Firstly thank you, very helpful.

looking at Ring 2 application, with Chime pro in basement areas
It seems to go a step further than the Nest Camera,

<https://ring.com/video-doorbell-2>

<https://ring.com/chime-pro>

the downside is the wifi at front door and basement areas, but that sounds doable
app can be run by multiple people therefore less chance Guest or Deliveries are missed

your thoughts?

On Wed, Nov 1, 2017 at 9:25 AM, james | personal genius <[REDACTED]> wrote:

I wasn't involved in the system's installation — so I'm only guessing what's inside — I assume there's ethernet from either the fingerprint reader or the keypad/doorbell camera, but these are both really small — maybe 4-inch by 5-inch and flush against the stone entry. The majority of the cameras are analog running component video cables. I believe the camera that covers the front sidewalk is Digital HD, so it has to have an ethernet connection, but I believe they ran that special for that camera upgrade.

I don't see how there'd be room in the panel outside the front door to support a switch or Wireless Access Point inside or cable running out of it to an external WAP. If we wanted an external WAP to cover the exterior front door, we could probably run something down from the second floor, but would require additional wiring.

The two closest internal WAPs are an AirPort Extreme in Lesley's office window and another in the security office. The latter is a wireless relay off the one in Lesley's office (and not the most reliable). The problem is that the columns that bracket the window in Les' office are solid — they completely blocked the wifi signal on 6 that was trying to do a similar run from the kitchen to the AV stack.

What are you hoping to install? Maybe there's a way we could hardwire it or find a small, low power single point WAP that would fit inside the wall outside.

Thank you,

James Ce

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On Oct 31, 2017, at 5:11 PM, Brice Gordon <[REDACTED]> wrote:

If there is Ethernet to exterior camera

Is there exterior access point we could replace camera with , ie ruckus

Sent from my iPhone

On Oct 31, 2017, at 12:14 PM, james | personal genius <[REDACTED]> wrote:

It's hardwired, Ethernet to the security room, I believe. That part was down by the company that installed the system, so I'm not certain.

Thank you,

James Ce

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On Oct 31, 2017, at 2:07 PM, Brice Gordon <[REDACTED]> wrote:

Do you know how existing camera is fed?

Sent from my iPhone

On Oct 31, 2017, at 12:00 PM, james | personal genius <[REDACTED]> wrote:

No. The door & walls are too thick. Even if we had an access point inside the front door the signal would be spotty.

Thank you,

James Ce
your Personal Genius
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On Oct 31, 2017, at 1:59 PM, Brice Gordon <[REDACTED]> wrote:

Anyway we can get good WiFi to front door ?

Sent from my iPhone

Begin forwarded message:

From: Merwin Dela cruz <[REDACTED]>
Date: October 31, 2017 at 11:43:32 AM MDT
To: Brice Gordon <[REDACTED]>, Karyna Shuliak <[REDACTED]>
Cc: [REDACTED]
Subject: Re: Frond door system at 9 E 71st

There is no wifi but there is a wire that connected to a switch.

[Sent from Yahoo Mail for iPhone](#)

On Tuesday, October 31, 2017, 1:36 PM, Brice Gordon <[REDACTED]> wrote:

Merwin
Quick question
Is there clear WiFi signal at the front door ?

Sent from my iPhone

> On Oct 28, 2017, at 12:54 PM, Karyna Shuliak <[REDACTED]> wrote:
>

> Hi Merwin, Brice and [REDACTED]

>

> As you know, we are having some issues with the front door system at 9 E 71st. There was an improvement with the text message alerts, that Merwin had installed recently, but there are still problems remaining.

>

> The main goal is to be able to HEAR and RESPOND to the door bell FROM ANY LOCATION in the house. Anyone working or staying at the house should be able to do this at any time.

>

> I addressed the issue to Mr. Epstein, he thinks it would be best to have it connected to everyone's cell phones, perhaps through the app, so that we can turn it on and off when needed. He says there is a system called NEST, that might be helpful.

>

> Karen, Brice, I know you have been speaking to Randy, who helped you with the gate system at the ranch. If he has any ideas for us, that would be much appreciated.

>

> Thank you very much,

>

> Karyna

>

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>

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Brice Gordon

Stanley, NM

Ph [REDACTED]