

THE MARSHALL BIRMINGHAM: A Student Housing Development Chock-Full of Amenities

The Marshall Birmingham, an off-campus student housing complex near the University of Alabama at Birmingham, offers a mix of managed Wi-Fi and video service to help college students make the most of their college experience. We thank Jordan Suchoff, vice president of operations at Aptitude Development, and Dan Myers, CEO of DojoNetworks, for helping gather information for this profile.

By Sean Buckley / *Broadband Communities*

In the hypercompetitive student housing market, providing a unique experience is critical to standing out. The University of Alabama at Birmingham (UAB) students can find that new experience at The Marshall Birmingham.

Location is a major draw for residents. Situated a block from the UAB campus, the student housing development offers 10,000 square feet of amenity space, including fitness facilities, resident lounges, breakout areas, an open-air social room, courtyards and a pool with campus views.

Jordan Suchoff, vice president of operations at Aptitude Development, which built the Marshall, says the company took into account the diverse needs of students. “Not every student wants to sit at a desk in his or her apartment and study, and others may not want to sit in the common area and study,” he says. “We build all those areas as well as world-class gyms and outdoor amenity areas for dining and things that can attract every type of student.”

The property is close to several well-known restaurants, such as Good People Brewing, The Red Cat Coffee House and Buffalo Wild Wings. Students can quickly access other attractions, including Regions Field and Railroad Park.

The building is positioned to fulfill an immense demand for more student housing as a result of UAB’s 30 percent enrollment surge since 2009. Aptitude wants students to focus on three main things: themselves, their studies, and the college experience.

UAB represents a significant student housing market. For one, it boasts the Capstone College of Nursing (CCN). In the undergrad and graduate academic year 2020-2021, CCN awarded 575 degrees. “As soon as we saw this school, we knew it was a home run to the point that we are building a second project right across the street,” Suchoff says.

TURNKEY BROADBAND, VIDEO

The Marshall accommodates diverse student needs by offering propertywide managed Wi-Fi broadband services via DojoNetworks. Students can access managed gigabit broadband service inside their apartments and in common areas, including garage spaces.

Managed Wi-Fi is a growing trend. According to a recent National Multifamily Housing Council (NMHC)/Kingsley Associates survey of renters, nearly 61 percent cited amenities as the most significant benefit of renting. Wi-Fi tops the list as the most wanted amenity, beating laundry room and garbage pickup.

So far, there have been no issues with accessing high-speed broadband. “Internet speed is essential for us,” Suchoff says. “At any given time, we might have 800 kids running 800 laptops doing hundreds of Google searches an hour, and I don’t want anyone to feel a lag.”

“DojoNetworks has done a great job providing us with a communitywide internet package that allows people to sit anywhere they want and have that internet speed they need,” Suchoff says. “We don’t want to limit where students can do these things, and DojoNetworks has been great in helping us get this property set up for success.”

Suchoff says the goal of any student property Aptitude oversees is to provide a turnkey experience for residents. Traditionally, a student would have to call a provider, set a time, and wait for a technician to come to the location and install the service.

“We want you to be able to show up with one suitcase full of clothes, your computer and your cellphone and not need anything else,” he says. “I want students to walk in, turn on their TV or laptop and connect to the network.”



At the Marshall Birmingham, students can walk onto the property, input their passwords, and go into their own private virtual LAN.

CommScope/Ruckus network access points support the DojoNetworks-managed Wi-Fi network, which consists of Ruckus 19-20 T750s for outdoor spaces and 16 650s for indoor space coverage. “The 650s give you good performance, and everyone gets gigabit speeds,” says Dan Myers, CEO of DojoNetworks. “There are wired ports in all units.”

On the TV side, students can choose from a wide range of linear and streaming TV channels. DojoNetworks offers 72 streaming videos and 80 linear channels using the DISH IP service. “Students can stream all the regular video channels on their ROKUs directly or on any device on the property,” Myers says.

A FRICTIONLESS EXPERIENCE

Besides providing internet access as soon as students move in, DojoNetworks focuses on offering what it calls a frictionless experience.

Leveraging differential phase shift keying (DPSK), the company provides over-the-air encryption for traffic for every client on the network. DPSK is a common form of phase modulation that conveys data by changing the phase of the carrier wave on an RF network.

“We integrate via an application programming interface (API) with

the property management software, so we’re pulling in the information we need to support the residents automatically,” Myers says.

Students can connect to the internet when they move in. A week before arrival, they get an e-mail. They can then call or text DojoNetworks, which provides credentials.

“Students can walk onto the property, input their passwords, and go into their own private virtual LAN (VLAN),” Myers says. “They can then use the VLAN and go anywhere on the property. It’s as if they’re behind their routers anywhere on the property.”

Suchoff agreed that providing instant internet access inside their apartments or other parts of the development is “a big thing for us.”

“The fact that our student residents can pick up their laptops, go to their friend’s apartment and seamlessly be on

the internet is a huge advantage,” he says.

The same thing goes for guests. Myers says students do not have to “share credentials from the network when people come over.”

Finally, Aptitude can use DojoNetworks propertywide internet for internet of things (IoT) applications, such as building management. “DojoNetworks is an operational partner to Aptitude,” Myers says. “If any of their partners have needs such as a separate VLAN, we will provide it.”

STRONG CUSTOMER SERVICE

When deliberating about internet service providers, Aptitude had two critical considerations. “Price is important, but so is customer service,” Suchoff says. “DojoNetworks has been a great partner, and we can get someone, including the

PROPERTY OF THE MONTH HIGHLIGHTS

~ The Marshall at Birmingham ~

- Propertywide, bulk-managed Wi-Fi residents can use throughout the property while staying in their own secure, encrypted networks
- 72 streaming video channels and 80 linear channels through DISH IP



DojoNetworks enabled common-area wireless access.

CEO, on the phone anytime.”

Myers likened having broadband to being like any other utility that residents expect to be consistently available. “It’s about customer experience, so it always needs to work and can’t be a pain point,” he says. “They need it as much as their water and electricity.”

According to DojoNetworks, less than half its customer base opens a trouble ticket in 12 months. On average, any customer can connect with a live customer service rep within 15 seconds.

The secret sauce behind the service provider’s customer service capabilities is its Elemento software system. A single-screen system that supports DojoNetworks, property managers and residents, Elemento can track each resident’s Wi-Fi performance and bandwidth usage across an entire property.

Moreover, a property owner can use Elemento as an equipment-monitoring hub for smart-building devices, such as door sensors, humidity monitoring,

smoke or fire sensors, leak detection and other asset protection through the IoT. A resident can submit and track service tickets, monitor devices and usage, upgrade plans or pay bills.

Myers says that although electronics can fail, the more critical issue is how a provider addresses problems. “How a provider reacts to and responds from a communication standpoint and then does what it says it’s going to do, is important,” he says.

MEETING TIMELINES

Typically, the time to coordinate internet for a building is 12 to 24 months. Aptitude was on track to complete the building early, which posed a challenge for DojoNetworks, which purchases dark fiber from other providers to connect each building. “Aptitude reached out to us with a little lead time but informed us it would be opening two months early,” Myers says. “When you’re purchasing circuits, that’s a no-no.”

Still, DojoNetworks met the deadline. Getting fiber into the building was one issue. DojoNetworks needed connectivity to other parts of the building and Underwriter’s Labs (UL)-listed equipment racks, a unique requirement in Birmingham.

“They had some needs even before we got it turned up,” Myers says. “There are situations in new construction in which the elevators and other things need internet 30 days before the building needs internet.”

Nevertheless, Suchoff says, providers must be flexible about network activation timelines, which are often adjusted during construction. “Internet is the last thing that gets turned on in any building we’re constructing,” he says. “It’s always a moving target; I need my units to be completed before DojoNetworks can finalize its work and turn on the network. My residents can’t get a certificate of occupancy without the network being complete.”

VITAL STATISTICS

Property Description: The Marshall Birmingham is a seven-story apartment building near the University of Alabama Birmingham (UAB). It features 10,000 square feet of amenity space, including state-of-the-art fitness facilities, resident lounges, breakout areas, an open-air social room, courtyards, and a pool with campus views. The building is positioned to fulfill the immense demand for more student housing resulting from UAB’s 30 percent enrollment surge since 2009.

Demographics: College students

Greenfield or retrofit? Greenfield

Number of units: 409 beds spread among one-, two-, three- and four-bedroom units

Style (High-rise/mid-rise/garden): Mid-rise

Time to deploy? Four weeks

Date services started being delivered: May 15, 2022

LESSONS LEARNED

What was the biggest challenge?

Aptitude requested that service go live two months before the original start date. This required preparing for fiber installation earlier than originally ordered. The service provider also needed to be able to purchase Wi-Fi access points at a time when there were supply chain issues.

What was the most significant success?

DojoNetworks delivered trouble-free service early.

What did the experience teach the leasing/sales office about marketing, installing or supporting these services?

Aptitude's team on the ground enjoyed working with DojoNetworks. It took some time for Aptitude's team to get used to working with a company that had such a high level of customer service.

What should other owners consider before they get started on a similar deployment?

The two most important things are customer service for the students and for the deployment team. DojoNetworks is a home run on both.

SERVICES

Services offered or planned on the network: DojoNetworks offers symmetrical gigabit high-speed internet access. Residents can access traditional linear TV over coax and IP-based streaming video. DojoNetworks also enabled common-area wireless access.

PROVIDER CHOICE

Do additional service providers operate separate broadband networks on the same property? No.

On the web described, can residents choose among multiple service providers? No.

TECHNICAL SUPPORT

Is the point of contact for resident technical support the property

manager, the service provider or a third party? DojoNetworks is the technical support contact.

BUSINESS

Which parts of the network does the service provider own, and which parts belong to the property owner? Aptitude owns the entire network, and DojoNetworks operates it as if it owns it.

How do the service provider and owner work together to market the services? What marketing approaches have been particularly successful? This is a propertywide, bulk managed Wi-Fi system provided to all residents, and they can use it throughout the property while staying in their own secure, encrypted network.

Is there a bulk-service agreement?

If so, what services are included?

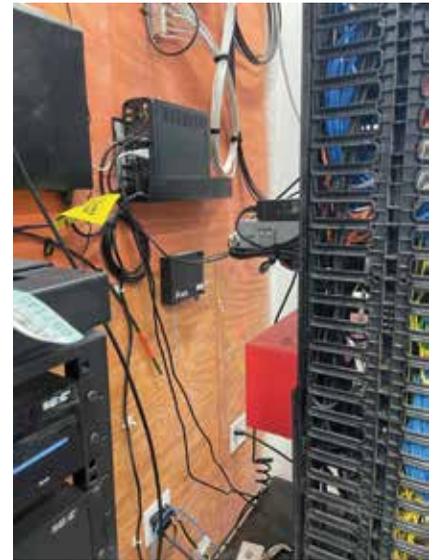
Residents can get gigabit broadband services as part of the bulk-service agreement with DojoNetworks, which installed a propertywide managed Wi-Fi network. In addition, residents can access 80 linear and 72 streaming TV channels via a Dish Smartbox.

NETWORK BENEFITS

Is there any evidence that the network helps attract residents, retain residents, increase property values, etc.? Internet is the one amenity these days that is an expected luxury. No news is good news when it comes to the internet. Internet service providers hear from residents only when there is an issue; Aptitude reports it never hears from residents.

TECHNOLOGY

The broadband architecture consists of fiber to the building and independent distribution frames (IDFs). The fiber runs to all IDFs from the main distribution frame (MDF). DojoNetworks uses Ethernet CAT 6A wiring and Wi-Fi 6 equipment to



DojoNetworks uses Ethernet CAT 6A wiring and Wi-Fi 6 equipment to deliver signals to each unit.

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Methods for running cables between buildings: DojoNetworks runs single-mode fiber from the MDF to all IDFs. It then runs Cat 6A to each unit from the IDFs.

Vendors/products

- DojoNetworks (design, installation, operations, support and Elemento cloud-based management system)
- Ruckus/CommScope (switching and access points – R650s and T750s) 🌱



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