

Cisco User Defined Network: The New Big Deal on Campus

Ask any university IT administrator what the worst day of their job is and you will hear many of them say, “The first day of the semester.”

Really? Why?

The answer is simple: It’s the day that students come back loaded with devices to add to the dormitory network. New mobile phones, tablets, laptops, smart TVs, video game consoles, stereo speakers, virtual assistants, and even network-attached doorbells all are fighting for space on the shared network.

When students can’t connect their devices to the network, who do they submit a ticket to? The IT admin. On the first day of the semester, there’s a queue that winds through the IT building with students waiting to talk to someone so that they can get their newest device onto the network. Normally the fix is simple, but when there are a lot of students with a lot of devices, these “easy” fixes start piling up. Not only that, but the important projects that IT staff were working on have to be put on hold so they can help students.

And it happens every. Single. Semester.

Presenting Cisco® User Defined Network.

A part of Cisco DNA Center (Available second half of calendar year 2020.), Cisco User Defined Network is the new solution that vanquishes these early-semester frustrations. Cisco User Defined Network allows IT staff to give each end user oversight over his or her own network partition. Instead of asking IT for help in registering their devices to the network, users can remotely and securely register their devices on their personal network.

For more information

For more information, visit [UDN](#).

Here's everything you need in order to deploy Cisco User Defined Network:

- Cisco DNA Center
- Cisco User Defined Network mobile app
- Cisco Catalyst Wi-Fi 6 or Aironet Wi-Fi 5 access points
- Cisco Catalyst 9800 Series wireless controllers
- Cisco Identity Services Engine (ISE)

How it works is simple. The first step is to double-check to make sure the network is running the latest version of Cisco DNA Center and that you have the appropriate hardware and software. The second is to send a communication to students with instructions on how to download the User Defined Network app—conveniently found in the Apple App Store or Google Play Store. This part usually occurs before the semester begins.

Once students get the email and read the easy-to-understand instructions, they download the app.

While at their homes—or anywhere, really—the students log into the app with their school credentials and begin registering all of the devices they want to bring to school. Unlike with competitors' solutions, students don't need to physically be on campus to do this. Once a student has onboarded and registered all of the devices with the university, the student's own partitioned network is ready to go.

This means that students can begin using their devices the minute they get to campus. Not only that, but post-move-in they have far more security and control over who can be on their network. A student can invite people to their personal network to share devices. They can also dismiss people from their personal network with the push of a button on the app. This added security goes a long way in making the IT admin's job much easier too.

Since User Defined Network (UDN) is paired with Cisco Identity Services Engine (ISE), the provisioning of policy is automated, with all students' devices visible to the IT admin. Access to university resources can be controlled by IT too. UDN isolates users' devices into separate partitions, effectively segmenting each user's devices from others within the same domain. In the event of a security incident, this shrinks the attack surface, limits the lateral spread of ransomware, and enables rapid threat containment. If a student clicks on the wrong phishing email, malicious traffic is no longer spread throughout the entire dorm and is contained within a single device or UDN.

Speaking of an easier job, as the semester begins, IT admins will notice that their email queue is smaller and there aren't as many students lining up outside of the IT offices. Cisco DNA Assurance provides double checks, letting IT admins know that the networks are running perfectly and alerting them to any problems. This allows IT admins to tackle the other day-to-day tasks they're expected to complete.

Now, instead of dreading the beginning of the semester, IT admins are looking forward to the new year—all thanks to Cisco User Defined Network.