

Virginia Tech Wireless Services Update

DCSS

April 19, 2016

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NI&S

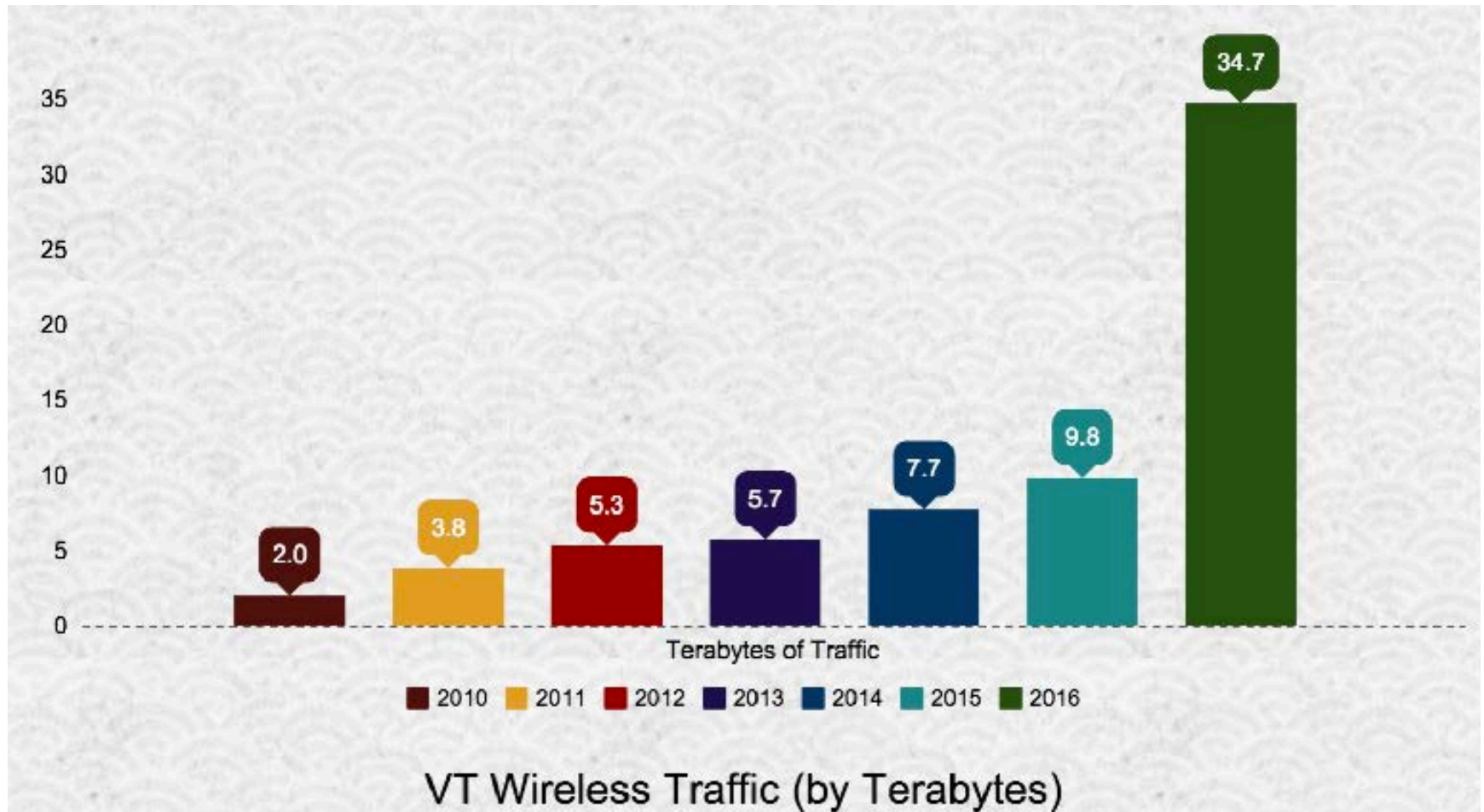
Agenda

- Wireless Infrastructure update
- Wireless usage
- Wireless Service Enhancement project
 - eduroam
 - Guest service

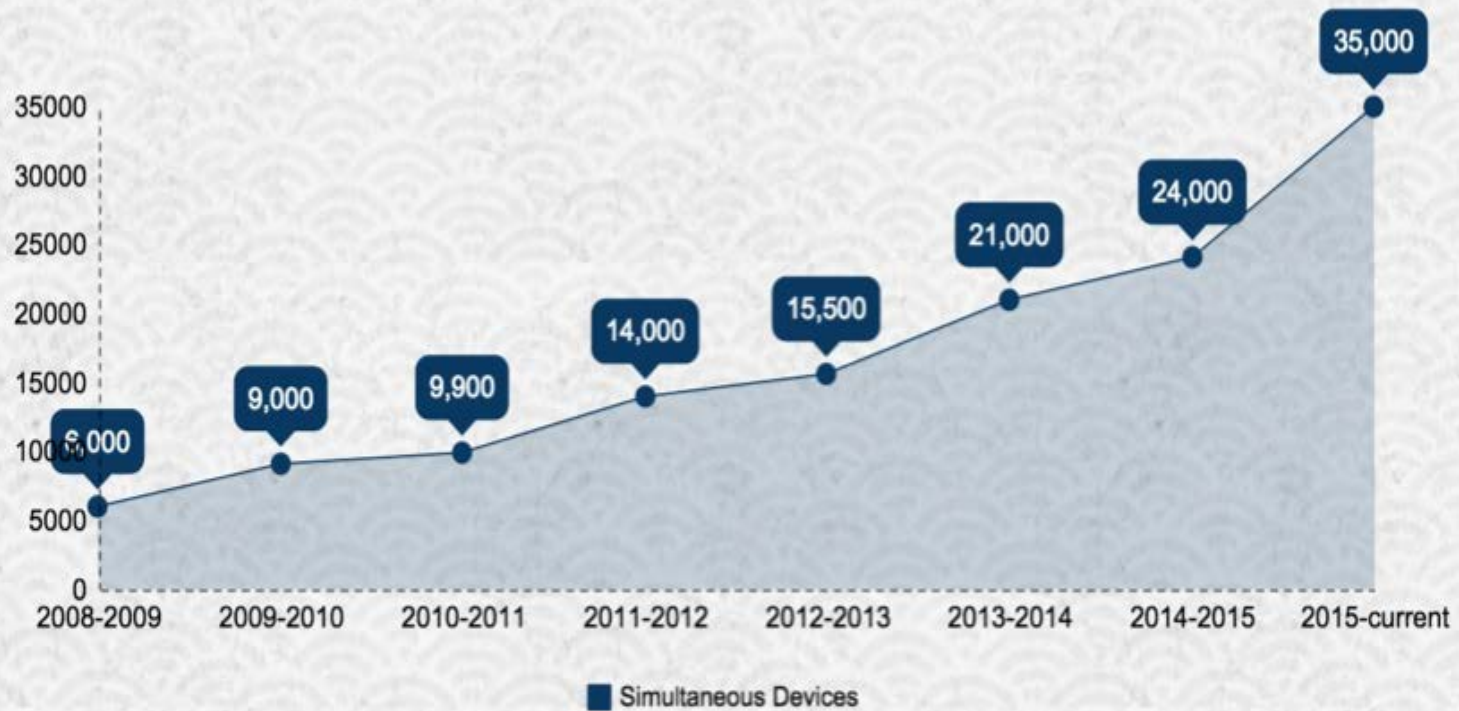
Wireless Infrastructure

- 99% of all academic/administrative buildings
- All residential buildings ‘wall to wall’
- 6600 wireless access points deployed
- 70% can support 802.11ac
- Expanding outdoor wireless
- NAT upgrade – ‘carrier grade’
 - Up to 40Gbps of traffic
 - Millions of translations

Wireless Traffic Daily Maximums



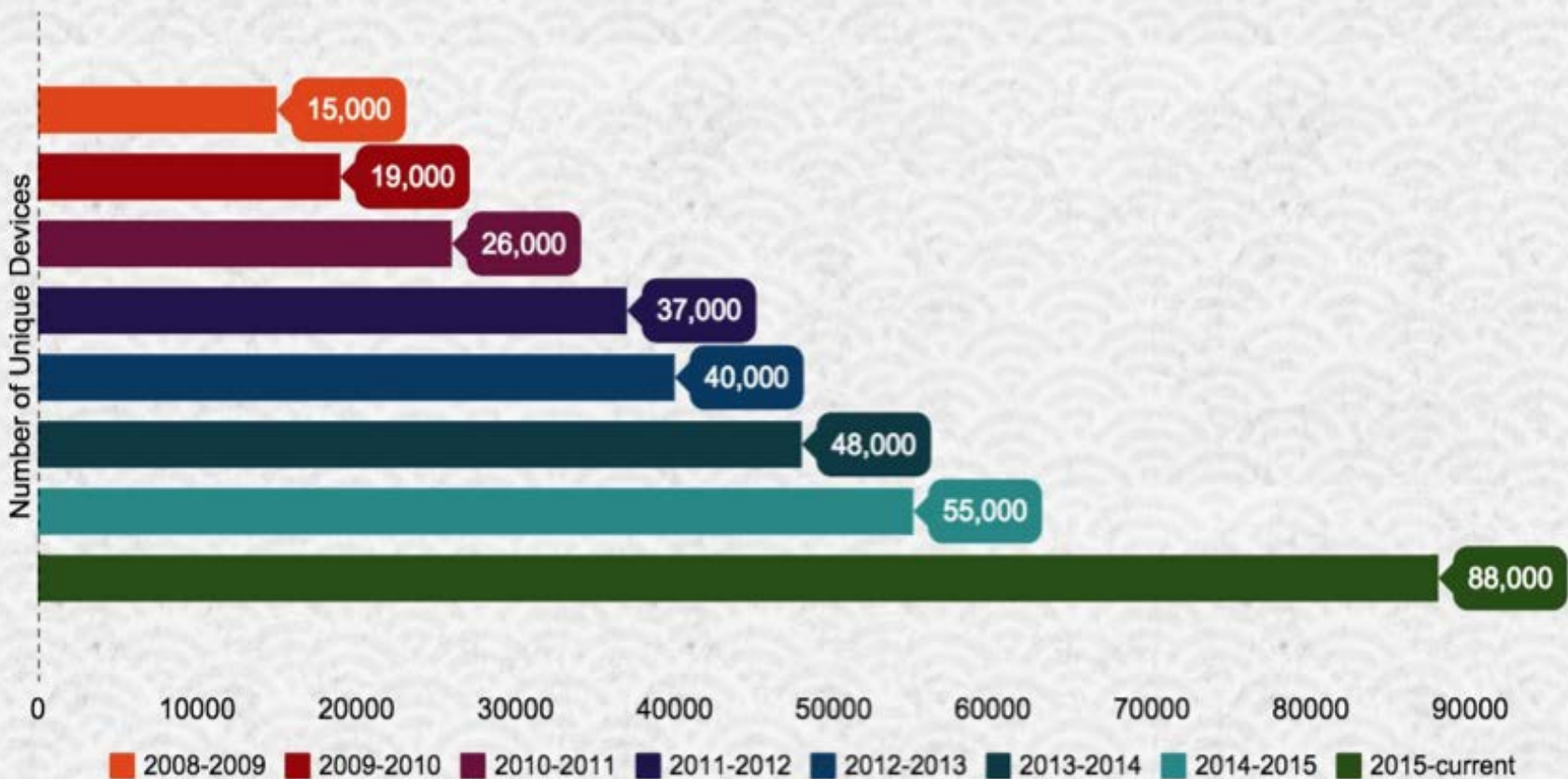
How VT Network Data shows the increase in devices



Peak Number of Simultaneous Devices



Increase in connected devices has increased close to 500% over the 8 year period



Total Number of Unique Devices



Increase in connected devices has increased close to 500% from 15,000 in 2008-2009 to 88,000 in 2015-current

Wireless Service Enhancement Project

- Simplify and improve the overall wireless service experience
 - Reduce wireless naming confusion
 - Eliminate service redundancy
 - Increase customer satisfaction
 - Improve the guest enrollment experience
 - Meet customer needs


Project Overview

- 4 discrete sub-projects
 1. Promotion of '**eduroam**' as the primary SSID for VT wireless subscribers
 2. Implement SSID '**VirginiaTech**' for client onboarding to eduroam, guest access and web based login
 3. Decommission VT-Wireless, CONNECTtoVT-Wireless
 4. Implement methods for registering and connecting 'commodity' devices

SSID changes

Spring 2016	Summer 2016
eduroam	eduroam
VT-Wireless	
CONNECTtoVT-Wireless	VirginiaTech

eduroam to replace VT-Wireless

- What the heck is eduroam? The eduroam logo consists of a stylized blue signal icon above the word "eduroam" in a bold, blue, sans-serif font.
 - Same technologies and infrastructure as VT-Wireless, just doesn't say VT
 - Duplicate services cause overhead, confusion and support issues
 - Access to wireless networks at thousands of participating universities around the world
 - Home institution authenticates the user

May 17th

★ make the

SWITCH TO

eduroam

The VT-Wireless network will be deactivated on May 17, 2016

To configure your device for eduroam, initially select the CONNECTtoVT-Wireless network and run through the XpressConnect wizard. Or, connect directly to the eduroam network with the username *yourPID@vt.edu* and your network password.

questions? need help?
4help.vt.edu

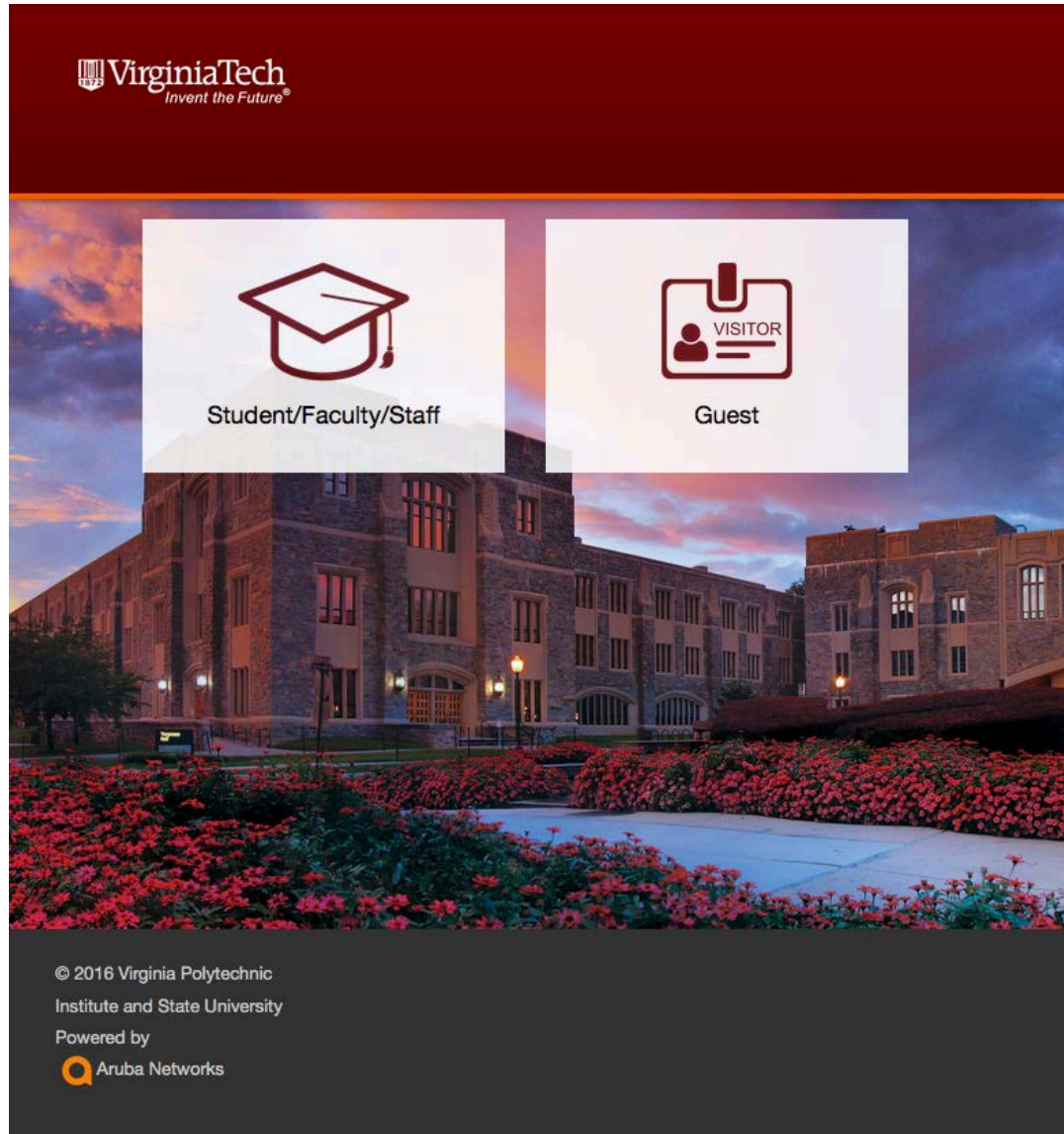
Guest Wireless Services

- 2 services
 - **Sponsored** long-term access
 - 24 hour active accounts
 - Very few if any restrictions
 - Sponsor initiated
 - **Non-sponsored** short-term access
 - 9 hour active accounts
 - Limit to 2 devices
 - Self registration only
- Design for mobile devices
- Design for guest and sponsor simplicity/efficiency


Non-sponsored guests

- Self registration process
- Requires SMS for receiving credentials
 - Otherwise support from VT Information Center or departmental sponsors
- Supported by Virginia Tech Information Center

“VirginiaTech” launch page



Guests

 **GUEST**


If you were given a username and password or have already created one for yourself:

[Login as Guest](#)

If you do not have a guest account:

[Create a guest account](#)

[Close](#)

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Guest registration page



Please complete the form below to gain access to the network.

*** Your Name:**

Please enter your full name.

Phone Number:

Your network password will be sent to this number.

*** Email Address:**

Please enter your email address.

This will become your username to log into the network.

*** Confirm:**

I accept the terms of use

* required field

Already have an account? [Sign In](#)

Sponsored Guests

- Departments create accounts for their guests
 - Single accounts
 - Walk-ins, last minute arrivals
 - Pre-generated accounts
 - Vendors, contractors, expected guests
 - Bulk creation of generic accounts
 - Expecting a lot of people, but do not know who they are
 - Bulk upload of account information
 - Conference attendance lists

Departments manage their guests

GUEST ACCOUNT MANAGEMENT

Use the commands below to manage your network's guest user accounts.



Create New Guest Account

Set up a new account for guest access to your network.



Create Multiple Guest Accounts

Create multiple guest accounts, each with a randomly-assigned username and password.



Manage Guest Accounts

View a list of all current guest accounts. You can modify and remove individual user accounts here.



Edit Multiple Guest Accounts

View a list of all current guest accounts. You can modify and remove one or more user accounts here.



Active Sessions

View active accounting sessions and disconnect or change authorization for sessions.



Import Guest Accounts

Import a list of guests from a text file and create a guest account for each entry in the list.

Departmental Operators

- Enterprise Directory (ED) groups for each dept
- Departments manage membership
- Who can be an Operator?
 - Customer facing staff
 - Reception
 - Event staff
 - IT staff
 - Whatever makes sense

So, how much will this cost?

- This is NOT free Wi-Fi
- Licensed application based on number of guest devices
- There are operational, licensing and support costs

Acceptable methods of payment



*Coming Soon

Really? How's this going to work?

- Business model in development
- No per guest transactional costs
- Costs will be at the university or unit/department level
- Service limitations may be enabled to deter abuse
- Stay tuned

Questions?