



# IT Briefing

8/18/11

## Agenda

- Wireless Certificate Issue
- Back-to-School
- Amcom Upgrade Project
- DWDM Fiber Rings
- AV Consolidation Project
- Security Update
- John Ellis / Alan Cattier
- Alan Cattier
- Felicia Bianchi / Jay Flanagan
- Perry Eidson
- Brad Judy
- Brad Judy



# Wireless Issues

Alan Cattier

John Ellis

## What Happened?

- The certificate verifying Emory Unplugged is expiring
- The certificate is a Verisign certificate
- UTS renewed the certificate with Verisign
- Verisign now requires an intermediary certificate to change frequently for increased security.
- The intermediary certificate requires different wireless profile settings on Windows machines

## What Happened?

- When the new certificate was introduced:
  - Some Windows machine could not authenticate the certificate
  - Some mobile devices required multiple authentications of the certificate
  - Some devices, primarily Mac laptops, accepted the certificate without a problem
  - Range of devices and OS's displayed a range of responses

## So What Did We Do?

- Based on a lack of understanding of the full impact of the Certificate swap, we rolled back to Emory's old certificates at approximately 11:30 last night.
- Users this morning may find they need to accept a certificate for WPA-Radius2.Eu.Emory.Edu, particularly on their mobile devices. Some devices, particularly laptops, should make the transition seamlessly.



# The Plan

- On Board all incoming students to the old certificate knowing that our automated configurators and scripts for allowing them on to EmoryUnplugged do not include the settings required by the new certificate.
- Immediately contact Verisign to determine if there is a way to renew the certificates without forcing profiles changes in the EmoryUnplugged user community.

## Communicating

- We are working to discover a solution that forces the least amount of change for Emory Unplugged users in this busy time of year while still assuring the security of Emory's wireless network.
- We will be communicating regularly and working with the Local support community to provide updates of the character of the looming change.



## Overview

- This is only a temporary fix
- The old certificate will expire on September 9<sup>th</sup> and cannot be extended
- We will have to accommodate and authenticate a new certificate
- Hopefully, this will not require profile configuration changes for Emory Unplugged users, but it may
- We will provide regular updates





# Back-To-School

Alan Cattier

## So What's Happening

- Traditional weekend welcoming students both back and to the Emory network
- Thank you to the many people in this room who make this such a positive experience for those arriving at Emory
- This year we're pushing for a primarily Unplugged experience
- Working with Campus Life, have added over 200 AP's in Atlanta, 20 at Oxford

## Background

- Working to shut off all wired ports in ResNet, except those that are requested and paid for by students
- To facilitate the process, we have hired a wireless intern, recent EC graduate Haynes Chewning, to assist us with student wireless issues
- We have a robust partnership with Campus Life to deliver quality wireless

## Caring for the Student Experience

- Charge of the Student Services group within UTS
- The Clean Room, a Student Services service, is now Student Technology Support
- They are located at the back of the Computing Center at Cox Hall, and available to Emory students
- Update in December on our progress





# Amcom Upgrade Project

Felicia Bianchi


Jay Flanagan



# What is AMCOM?



- SimonWeb
- ENotify
- On Call calendar
- Paging

- 
- OnCall Calendar Admin training  
August 24 and 31
  - Go live 6 am September 8

# Why upgrade?



Our version will no longer be supported.

New enhancements include:

- New features
- Robust security
- New technology
- Greater support
- Increased hardware reliability
- Ability to integrate with other systems



# Key Enhancements



- Receive pages on your smartphone
- Messages will continue to tone until acknowledged
- Paging and corporate directory search and transfer using your speech
- SimonWeb personal profile improvements
- Voice personal configuration
- New reporting providing direct feedback to TEC regarding doctor/patient response

- Online training provided for Simonweb, OnCall Calendar and e.Notify
  - anywhere
  - anytime
- **Formats:**
  - Online short videos (iTunesU)
  - PDF reference material





Users not reviewing training material

Users not used to logging in to access paging

Photo Credit: image by avyfain from <http://www.flickr.com/photos/avyfain/3052213656/sizes/l/in/photostream/>



Questions



# DWDM Fiber Rings

Perry T. Eidson





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- Border Ring
- Core Ring
- Executive Park/EUOSH Ring
- Oxford Point to Point Spur

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### **Potential**

- St Joseph/Perimeter Clinic/Johns Creek
- 235 Peachtree St (Hospitals Business Office)



## Quick History

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- Project conceived in late 1990s but not enough critical mass in any of the independent communications entities
- Restarted in 2001 shortly after creation of NetCom
- Fiber provider and equipment vendor chosen in 2002 – contracts signed
- Fiber construction – late 2002/early 2003
- Cutover in March 2003



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- SONET Ring for TDM voice services

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Initially served the following locations:

- Cox Hall, NDB, Briarcliff, Grady, 56 Marietta, Midtown
- Added Oxford, 59 Exec, White St and EUOSH





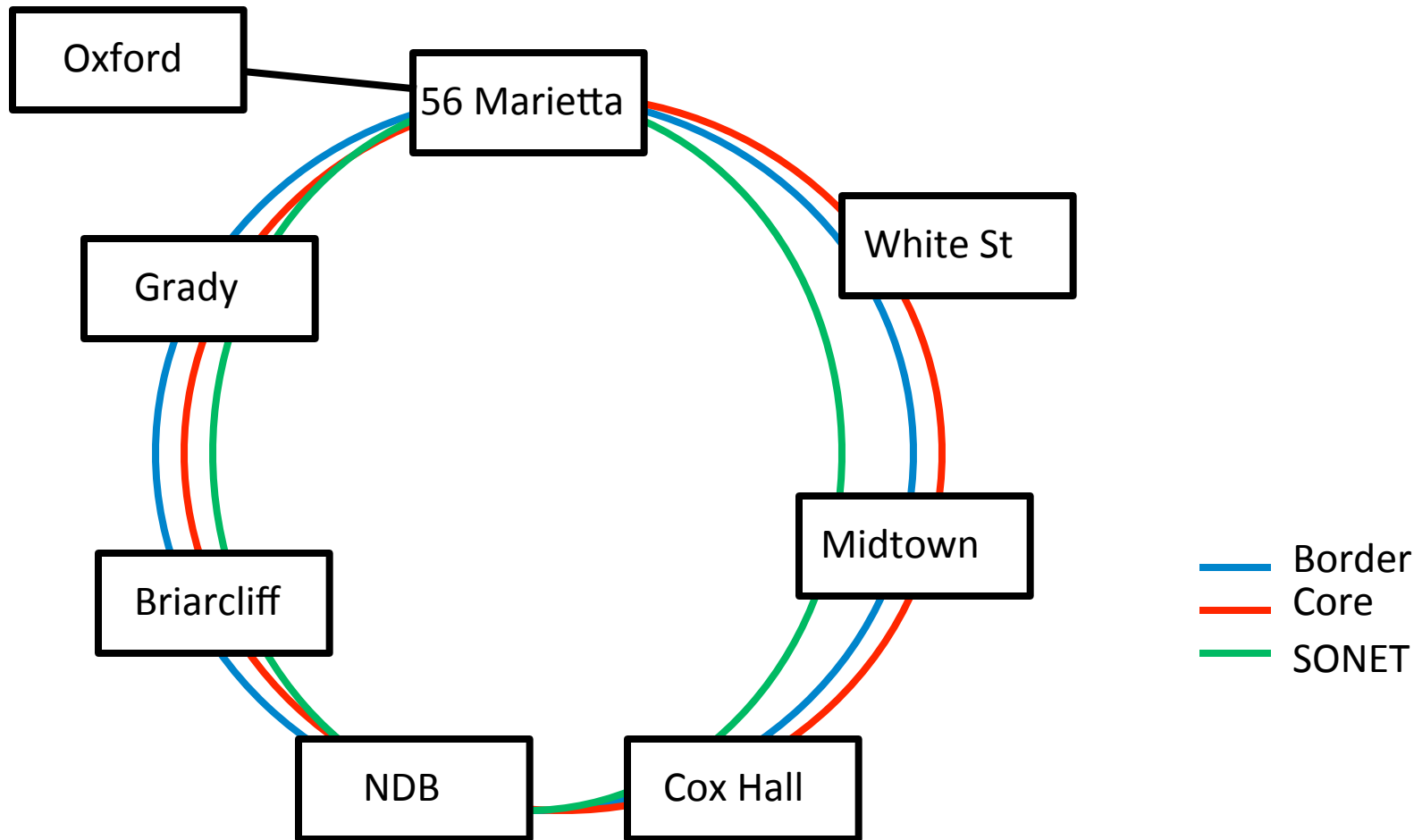
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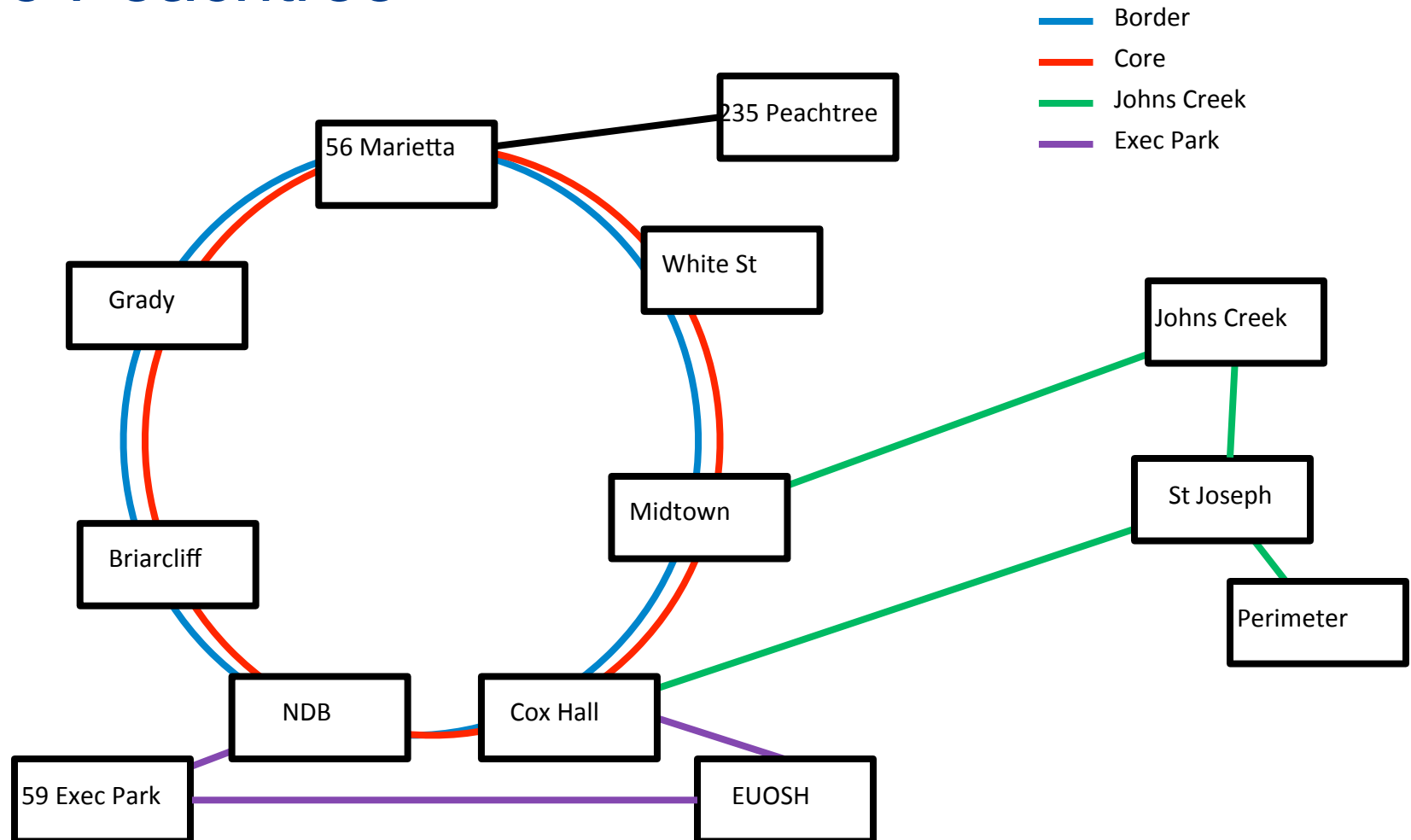
56 Marietta is a Telecom Hotel

- Multiple Internet Service Providers
- Multiple Fiber Providers
- No/Low Cost Interconnection to Providers
- “Meet Me” Room for Interconnection
- Emory Has Two Cabinets in Meet Me Room
- Meet Voice and Data Providers
- Meet Fiber Provider for Link to Oxford

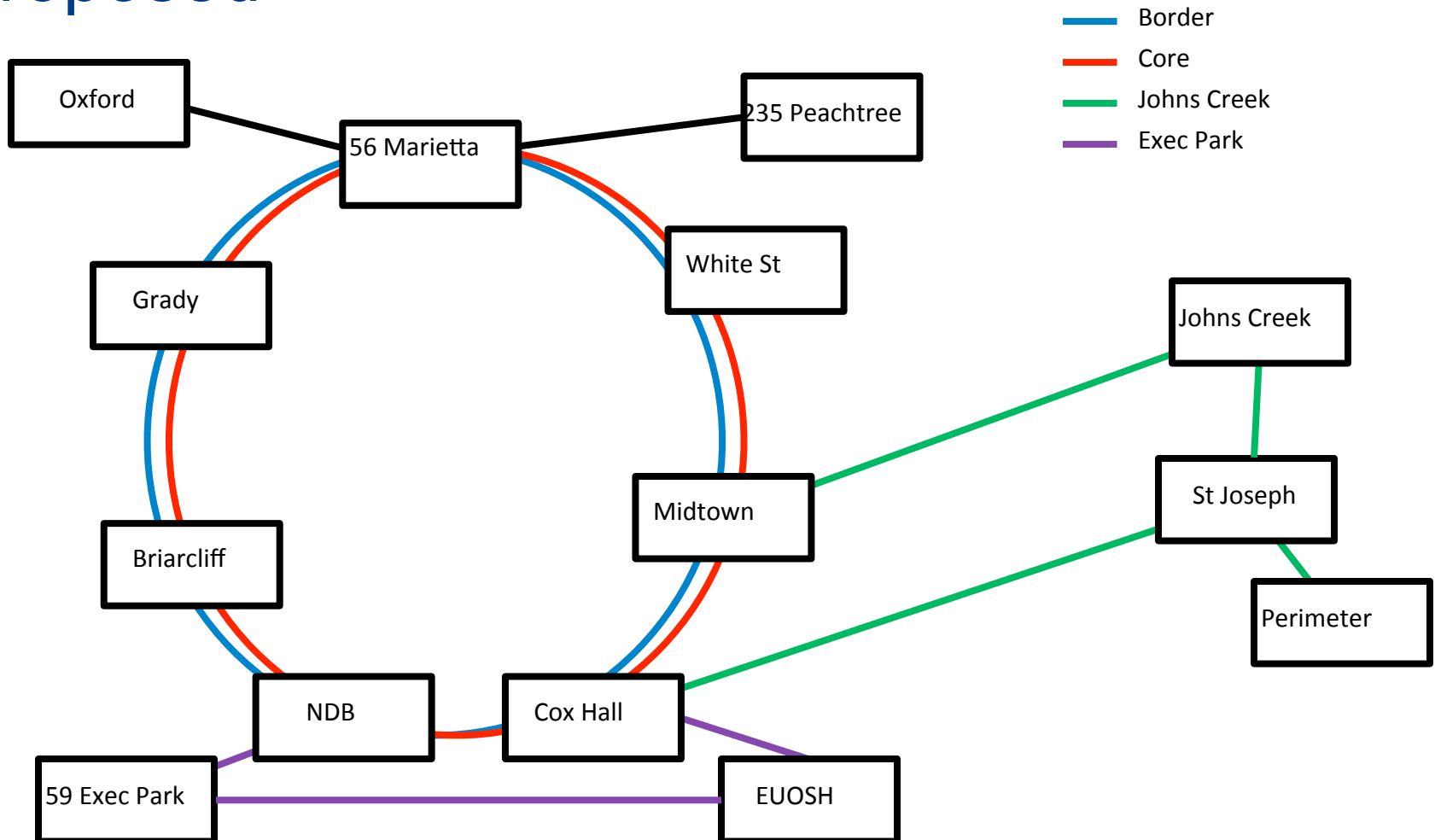
## Ring Layout – Border, Core, SONET



## Ring Layout – Exec Park, Johns Creek, 235 Peachtree



## Ring Layout – All Nodes Current and Proposed

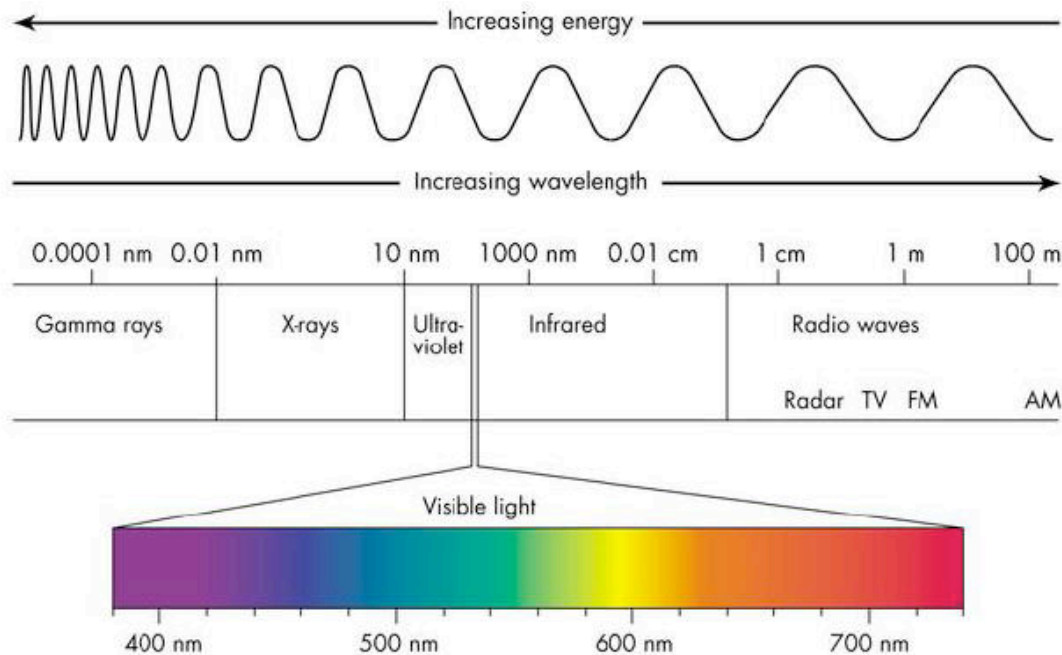


## What Is DWDM?

DWDM = Dense Wave Division Multiplexing

Wavelength = Lambda =  $\lambda$

Operates in Infrared Spectrum





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- Single Mode Optical Signal @ 1310nm Converted to Electrical Pulses and Then Converted to Assigned Wavelength Such As 1555.52nm
- Highly Accurate Prisms Are Used to Add/Drop Wavelength
- May Be Any Speed From 10 Meg to 100 Meg to 1G to 10G to 40G to 100G (not commercially deployed yet)



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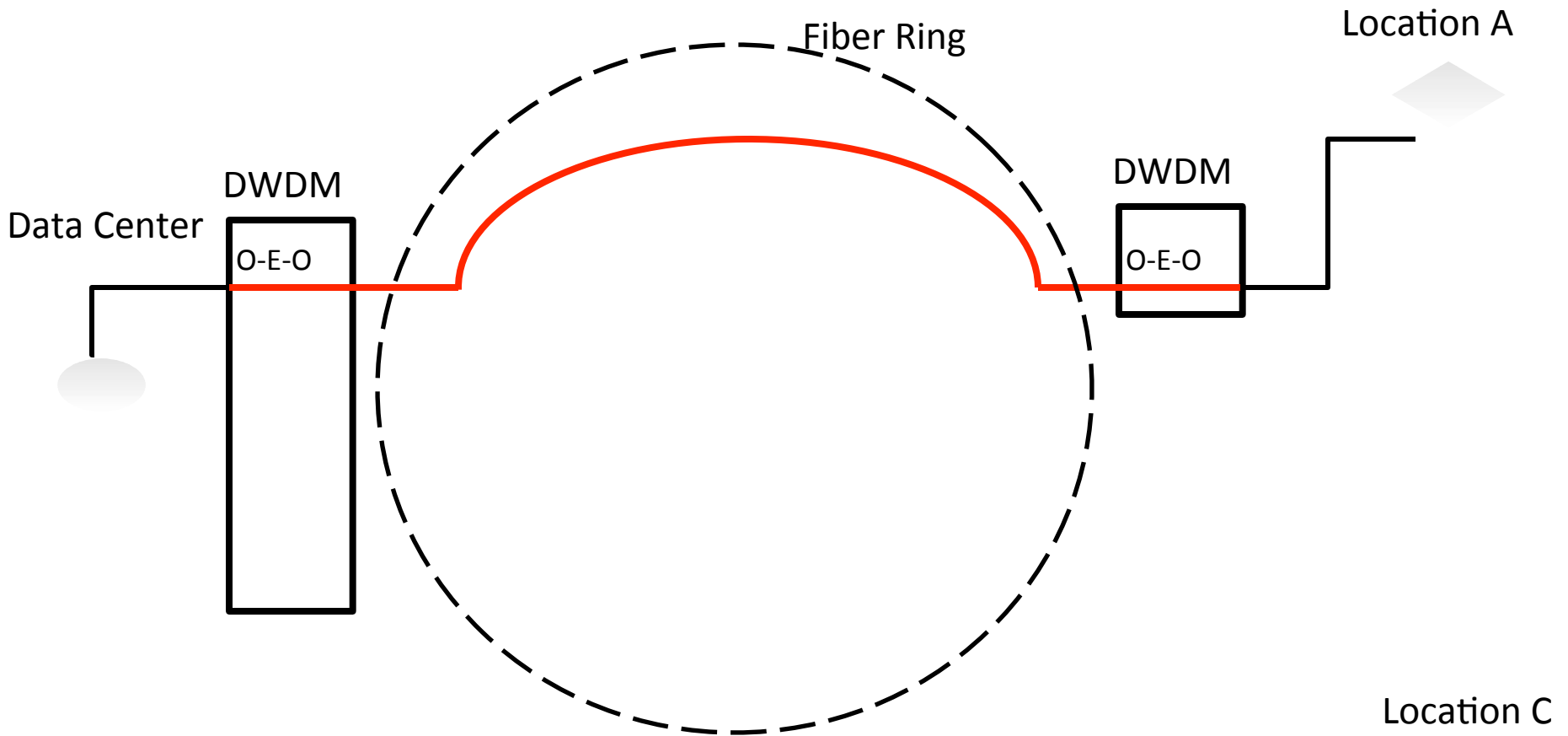
Location A



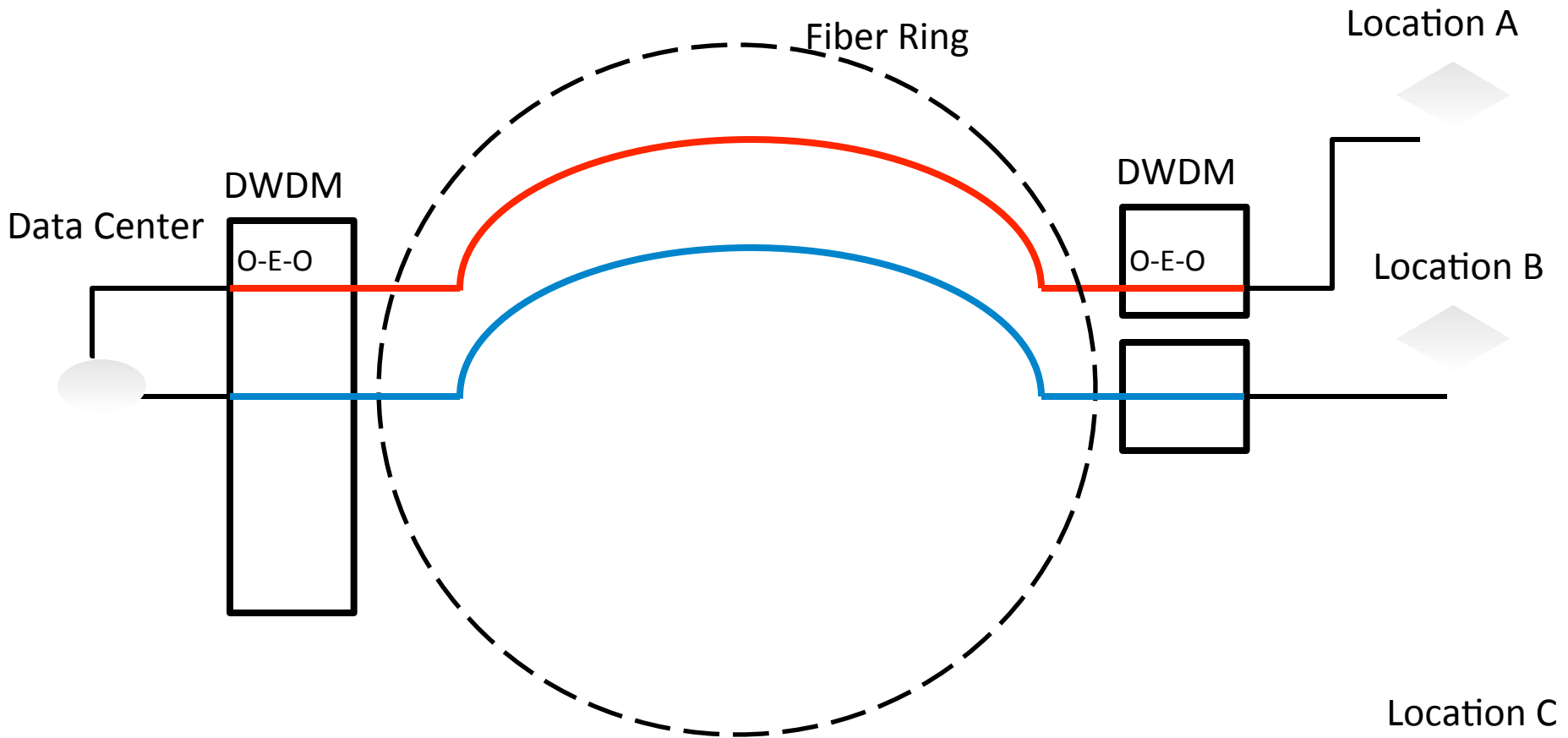
Data Center



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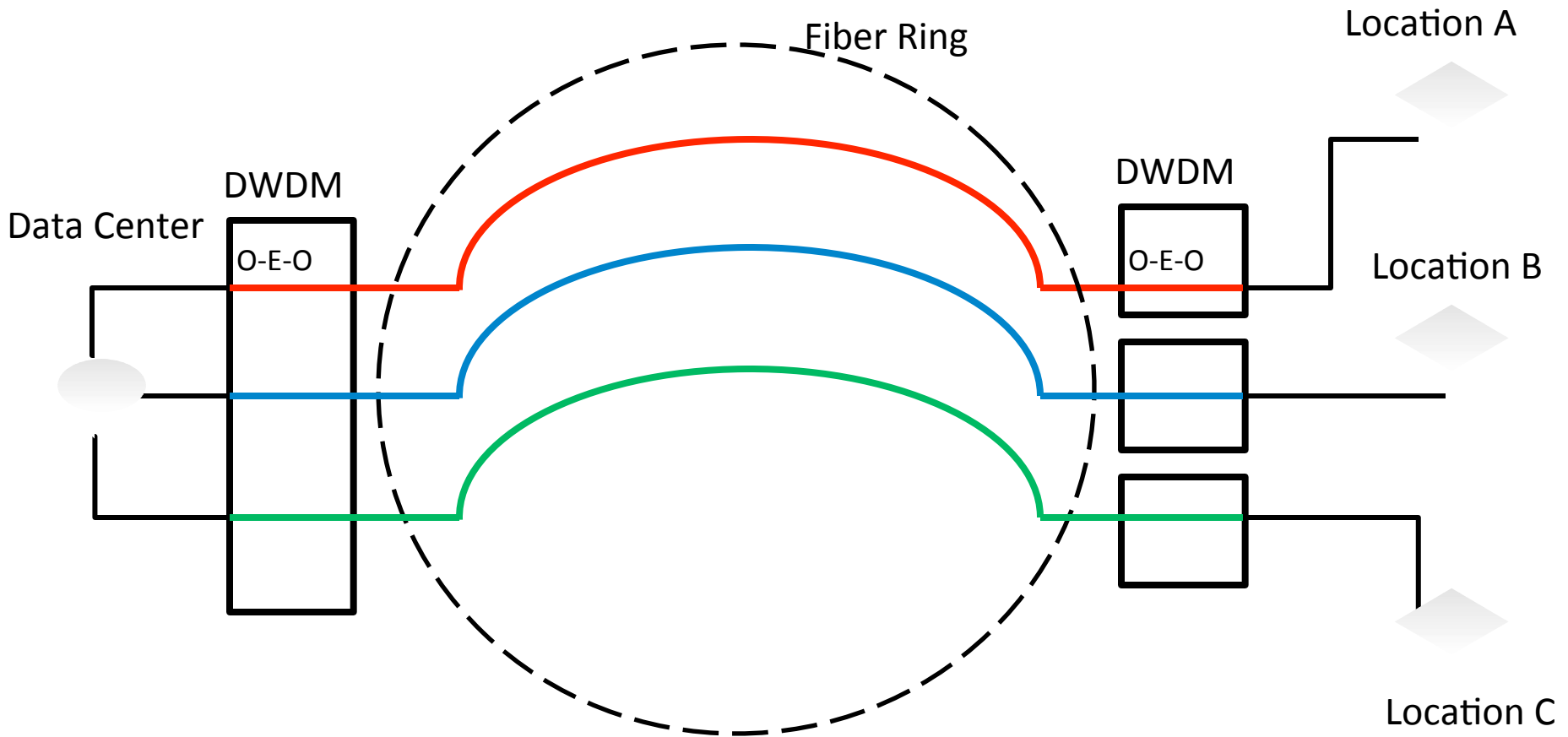


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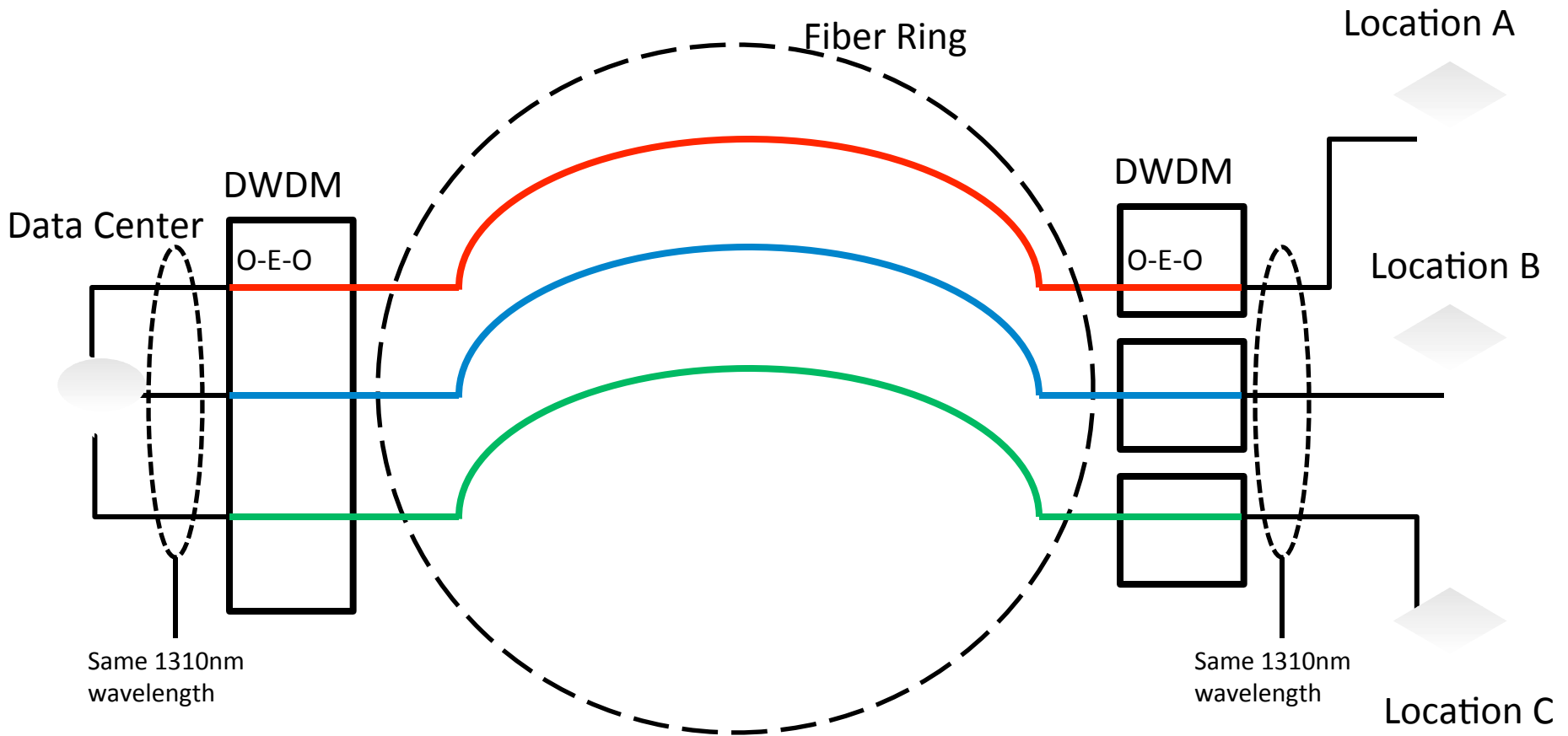
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# DWDM Fiber Rings



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Questions



# AV Consolidation project

Brad Judy

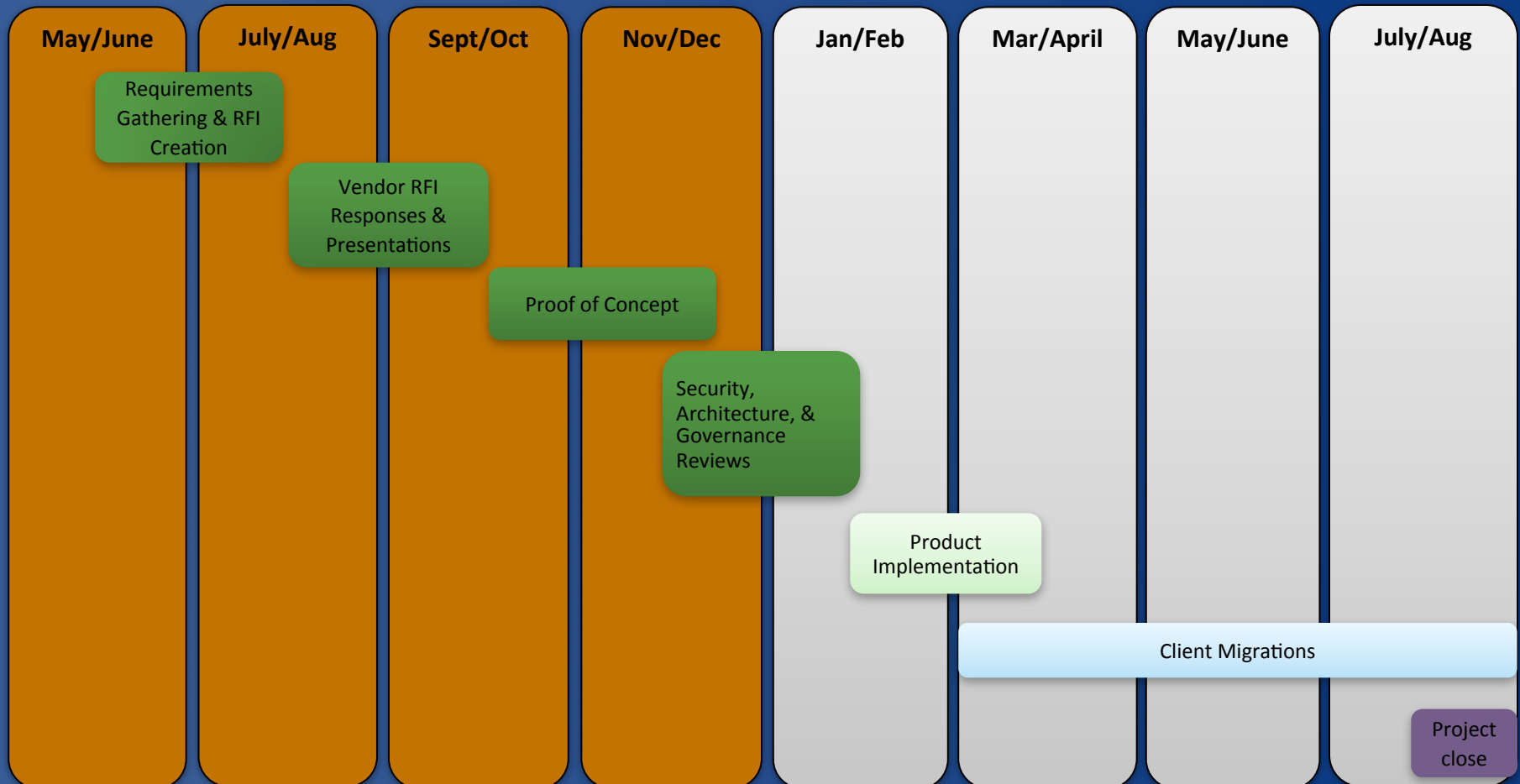
## Goal

- Select and deploy a consolidated endpoint security solution for University and Healthcare

## Motivations

- Reduce overall licensing costs
- Improved effectiveness and incident response
- Consistent user experience for bridge users

## High Level Schedule: May 2011 – Aug 2012



- Search for AV in the OIT wiki - <https://wiki.service.emory.edu/>
- Team email: AVCONSOLIDATION-L@LISTSERV.CC.EMORY.EDU
- More updates in future briefings



Questions





# Security Update

Brad Judy

## Living in “the Cloud”

Keep a backup of your files

Pay attention to privacy settings



## Next month: Password security



## SQL Injection vulnerabilities

- OIT Security did some searching for potentially vulnerable sites
- 33 out of 34 identified vulnerable sites have been fixed
- Likely more undiscovered vulnerabilities out there

A large, bold, orange question mark is centered on the slide, partially overlapping the word "Questions".

# Questions



# Thank you for coming!

*Thank  
You*