

Incident #:109203Customer Reference #:7070Site Name:Fortis Institute - ScrantonSite Contact:Madeline Levy CruzAddres:517 Ash Street

Scranton Pennsylvania

ia 18509

Site Phone:

Please call (281) 668-3211 immediately apon arrival to check in. Scheduled Date and Time: 11/9/2020 10:00:00 AM

Scope of Work:

Fortis Institute - Scranton 517 Ash Street Scranton,PA 18509 *****UPDATED SOW****\ Complete pick up of 8 por switch at Forty Fort, PA proceeed with installation of switch, testing and removal of old AP's

SOW Introduction

Technicians are required to complete low voltage cabling based on survey results and Tech Americas Wi-Fi software recommendations per location. The number of runs, distances and distribution of APs will vary per site according to the findings of the survey and the algorithm-based software. The installation will be verified by local personnel (institute director) and supported by a SAT team that will complete provisioning and firmware updates to all WAPs and switches being installed. A separate document referred as Windstream MOP (Method of Procedure) may also be attached to this work order for more specific details.

Upon Arrival/RMA Process

As soon as you arrive to the location, you will be required to locate the boxes of equipment to be installed. These boxes should contain a set number of Meraki MR36 access points, (1) MR50 access point and a set number of Meraki MS120 (with multiple port density).

For some locations, Windstream shipped out a larger number of devices (APs and switches) which will require to be returned. A list of serial numbers of the devices to be returned (highlighted in red) will be provided by Tech Americas so you can use return labels provided by our POC on site. Those boxes need to be set aside with their corresponding return labels in the manager's office so they can be picked up by FedEx at a later date. Once the boxes to be returned include their corresponding return labels, take a picture of the boxes and contact Tech Americas (Rafael Mayen) so he can coordinate pick up with FedEx.

For this site, the total number of Aps to install is 9. See the list below for a breakdown of this number:

Meraki MR36s APs: 8 Meraki MR50 APs: 1

Meraki MS120 (24) port switches: 1

The number of runs to complete in this location are:

200ft Run(s): 2 300ft Run(s): 2

(Note: Due to the higher signal range of the Meraki MR50, we will always look for the closest mounting location to the parking lot in the diagram provided. This DOESN'T mean that we will MOVE the mounting location to the nearest parking lot exit but just choosing which is closer to the parking lot area to install the MR50).

Switch Configuration with SAT

Even though all APs have been preconfigured, each site will see the involvement of a Windstream SAT technician complete switches configuration, run remote testing and firmware updates. After identifying the devices to install, you will be required to stage all switches in their final locations and at least 4 WAPs for testing. The equipment should be staged in the network room identified during the survey process. WAPs will be connected to switches using small

Tech Americas USA, Inc. 22503 Katy Freeway, Katy, Texas 77450 Support Center: 281-668-3211 Fax: 281-898-7870

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TECH AMERICAS

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patch cords.

DHCP

When ready, please call the SAT support line provided by Tech Americas. Once the SAT team gives you the go ahead, cabling duties can begin and the SAT team will remain available to contact in case any assistance is required or after the entire installation is complete for a final verification process to make sure all WAPs and switches are visible on the customer's end.

Most installations with less than 10 APs should be finished on single visit. Locations between 11 and 20 + APs to install are considered large installations. In those instances, the SAT call should take place on the 2nd day of installation. We strongly suggest that all cabling duties to be finished on the 1st day of installation and leave the 2nd day for AP mounting and testing.

Note: if you are bringing a helper, please have him/her start with cabling while the SAT process is ongoing. Below you will find the process SAT team will reference during installation:

1. Tech crew arrives on site

2. Unpack Meraki switch communicate serial number of unit to SAT and bring it up on the dashboard via port 24 to LAN1 on VCE or designated port on firewall for non SDWAN site.

3. Cross-connect to the VCE or Firewall and uplink student and admin LAN to Meraki (drawing attached)

4. Connect one AP directly to the Meraki switch – local bench connection no need for any wiring to be completed

5. Configure the Meraki for traffic flow and bring up a temporary SSID for the three networks

a. Confirm SSID passwords, VLAN assignments (1 admin, 20 student) and guest direct access with

b. Change VCE 20-student VLAN to include LAN2 and LAN3

c. Change VCE LAN2 to include 20-student on trunk port

6. Local EA contact tests SSID to confirm data flow and programming

7. Cabling continues and APs continue to be connected

8. Cabling completed and APs all attached

9. If same day of cut COB no later than 5pm EST contact bridge for testing with local contact and proceed to step 11. 10. If wiring is completed past COB 5pm EST then testing takes place at a re-scheduled date/time TBD then proceed to step 11. * If completion is close call in at 5PM EST to discuss with bridge and see if we can still do same day cut based on availability of team.

11. Bring down Xirrus radios

- 12. Change Meraki SSIDs
- 13. Test SSIDs and coverage
- 14. Customer Acceptance
- 15. Xirrus and PoE injectors are removed

Cabling

All cabling duties need to be completed making sure all areas are left clean and free of debris. We will always prioritize a cable path that will leave each run unexposed or concealed within any available structure. All cables need to be terminated and tested to CAT5 standards to a patch panel available (or provided by the tech). We will use CAT5E plenum rated cable color blue. Each cable needs to have a picture of the cable tester (passed) as part of the deliverables package.

Please bring a labeling machine so we can tag each WAP we install according to the distribution provided by Tech Americas. The number to be used on each WAP will need to correspond to the number found in the floorplans per floor.

Note: Any deviations in terms of number of cables, amount of APs or coverage in staff-only areas should only be approved by Tech Americas via email and local management/IT personnel are not authorized to approve any of these.

On-Site Walkthrough and Final steps

After all cabling, AP mounting and testing is complete, a final walkthrough with the local IT person and/or general manager will need to happen to make sure the distribution of APs meets the required coverage. ALL PRIORITY LOCATIONS within each institution will need to have technicians capture screenshots of the signal strength registered using an application called WIFI Optimizer (available for Android or IOS devices).

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| The screenshots should show information · Signal strength · Available SSIDs A screen capture with the information spe installed. | | be taken and sent to Tec | h Americas for each | access point | |
| Also, access to particular sites on each of ADMIN: • Exchange • CampusVue • Internet: www.ipmonkey.com – outside STUDENT: • Internet access: www.google.com other • www.ipmonkey.com – note outside IP ac GUEST: | P IP address should b | e the White Marsh publi | c IP address | | |
| Internet access: www.google.com other www.ipmonkey.com – note outside IP ac | | e fine | | | |
| IMPORTANT: By signing your work orde accessible and that all priority locations h | | | are confirming all w | ebsites are | |
| ****Escalation Process*** Any special circumstances or escalations to Tech Americas with Jonathan Lopez or educationaffiliates@tech-americas.com We will immediately reach out our partne confirmation from Tech Americas. | Rafael Mayen using | g a dedicated email distri | ibution list for this p | project: | |
| Technician Name: | Arrival Time: | | | | |
| Service Date: | | Departure Tim | ne: | | |
| I certify that all work w | as completed as des | cribed by the Scope of V | Vork above. | | |
| I will submit all photos and d | - | • | | | |
| Technician Signature: | | - | | | |
| | | | | | |

Customer Signature: