

PROFESSIONAL CONSULTANT SERVICES AGREEMENT

VECTOR RESOURCES, INC. dba VECTORUSA

Network Refresh Project RFP No. 1926

THIS PROFESSIONAL CONSULTANT SERVICES AGREEMENT (“Agreement”) is made and entered into this 17th day of December, 2019 (“Effective Date”), by and between the CITY OF RIVERSIDE (“City”), a California charter city and municipal corporation, and VECTOR RESOURCES, INC., a California corporation doing business as VECTORUSA (“Consultant”).

1. **Scope of Services.** City agrees to retain and does hereby retain Consultant and Consultant agrees to provide the services more particularly described in Exhibit “A,” “Scope of Services” (“Services”), attached hereto and incorporated herein by reference, in conjunction with E-Rate and Related Technology Services Contract (“Project”).

2. **Term.** This Agreement shall be effective on the date first written above and shall remain in effect until December 31, 2021, unless otherwise terminated pursuant to the provisions herein.

3. **Compensation/Payment.** Consultant shall perform the Services under this Agreement for the total sum not to exceed Two Million Five Hundred Sixty Two Thousand Two Hundred Seventy Eight dollars and Two cents (\$2,562,278.02), payable in accordance with the terms set forth in Exhibit “B.” Said payment shall be made in accordance with City’s usual accounting procedures upon receipt and approval of an itemized invoice setting forth the services performed. The invoices shall be delivered to City at the address set forth in Section 4 hereof.

4. **Notices.** Any notices required to be given, hereunder shall be in writing and shall be personally served or given by mail. Any notice given by mail shall be deemed given when deposited in the United States Mail, certified and postage prepaid, addressed to the party to be served as follows:

To City

Riverside Public Library
City of Riverside
Attn: George Guzman
3581 Mission Inn Avenue
Riverside, CA 92501

To Consultant

Vector Resources, Inc.,
dba VectorUSA
Attn: Skyler Peterson
8647 Ninth Street
Rancho Cucamonga, CA 91730

5. **Prevailing Wage.** If applicable, Consultant and all subcontractors are required to pay the general prevailing wage rates of per diem wages and overtime and holiday wages determined by the Director of the Department of Industrial Relations under Section 1720 et seq. of the California Labor Code and implemented by Resolution No. 13346 of the City Council of the City of Riverside. The Director's determination is available on-line at www.dir.ca.gov/dlsr/DPreWageDetermination.htm and is referred to and made a part hereof; the wage rates therein ascertained, determined, and specified are referred to and made a part hereof as though fully set forth herein.

6. **Contract Administration.** A designee of the City will be appointed in writing by the City Manager or Department Director to administer this Agreement on behalf of City and shall be referred to herein as Contract Administrator.

7. **Standard of Performance.** While performing the Services, Consultant shall exercise the reasonable professional care and skill customarily exercised by reputable members of Consultant's profession practicing in the Metropolitan Southern California Area, and shall use reasonable diligence and best judgment while exercising its professional skill and expertise.

8. **Personnel.** Consultant shall furnish all personnel necessary to perform the Services and shall be responsible for their performance and compensation. Consultant recognizes that the qualifications and experience of the personnel to be used are vital to professional and timely completion of the Services. The key personnel listed in Exhibit "C" attached hereto and incorporated herein by this reference and assigned to perform portions of the Services shall remain assigned through completion of the Services, unless otherwise mutually agreed by the parties in writing, or caused by hardship or resignation in which case substitutes shall be subject to City approval.

9. **Assignment and Subcontracting.** Neither party shall assign any right, interest, or obligation in or under this Agreement to any other entity without prior written consent of the other party. In any event, no assignment shall be made unless the assignee expressly assumes the obligations of assignor under this Agreement, in a writing satisfactory to the parties. Consultant acknowledges that any assignment may, at the City's sole discretion, require City Manager and/or City Council approval. Consultant shall not subcontract any portion of the work required by this Agreement without prior written approval by the responsible City Contract Administrator. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement, including without limitation, the insurance obligations set forth in Section 12. The Consultant acknowledges and agrees that the City is an intended beneficiary of any work performed by any subcontractor for purposes of establishing a duty of care between any subcontractor and the City.

10. **Independent Contractor.** In the performance of this Agreement, Consultant, and Consultant's employees, subcontractors and agents, shall act in an independent capacity as independent contractors, and not as officers or employees of the City of Riverside. Consultant acknowledges and agrees that the City has no obligation to pay or withhold state or federal taxes or to provide workers' compensation or unemployment insurance to Consultant, or to Consultant's employees, subcontractors and agents. Consultant, as an independent contractor, shall be responsible for any and all taxes that apply to Consultant as an employer.

11. Indemnification.

11.1 **Design Professional Defined.** For purposes of this Agreement, “Design Professional” includes the following:

- A. An individual licensed as an architect pursuant to Chapter 3 (commencing with Section 5500) of Division 3 of the Business and Professions Code, and a business entity offering architectural services in accordance with that chapter.
- B. An individual licensed as a landscape architect pursuant to Chapter 3.5 (commencing with Section 5615) of Division 3 of the Business and Professions Code, and a business entity offering landscape architectural services in accordance with that chapter.
- C. An individual registered as a professional engineer pursuant to Chapter 7 (commencing with Section 6700) of Division 3 of the Business and Professions Code, and a business entity offering professional engineering services in accordance with that chapter.
- D. An individual licensed as a professional land surveyor pursuant to Chapter 15 (commencing with Section 8700) of Division 3 of the Business and Professions Code, and a business entity offering professional land surveying services in accordance with that chapter.

11.2 **Defense Obligation For Design Professional Liability.** Consultant agrees, at its cost and expense, to promptly defend the City, and the City’s employees, officers, managers, agents and council members (collectively the “Parties to be Defended”) from and against any and all claims, allegations, lawsuits, arbitration proceedings, administrative proceedings, regulatory proceedings, or other legal proceedings to the extent the same arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of Consultant, or anyone employed by or working under the Consultant or for services rendered to the Consultant in the performance of the Agreement, notwithstanding that the City may have benefited from its work or services and whether or not caused in part by the negligence of an Indemnified Party. Consultant agrees to provide this defense immediately upon written notice from the City, and with well qualified, adequately insured and experienced legal counsel acceptable to City. Consultant will reimburse City for reasonable defense costs for claims arising out of Consultant’s professional negligence based on the percentage of Consultant’s liability. This obligation to defend as set forth herein is binding on the successors, assigns and heirs of Consultant and shall survive the termination of Consultant’s Services under this Agreement.

11.3 **Indemnity For Design Professional Liability.** When the law establishes a professional standard of care for Consultant’s services, to the fullest extent permitted by law, Consultant shall indemnify, protect and hold harmless the City and the City’s employees, officers, managers, agents, and Council Members (“Indemnified Parties”) from and against any and all claim for damage, charge, lawsuit, action, judicial, administrative, regulatory or arbitration proceeding, damage, cost, expense (including counsel and expert fees), judgment, civil fines and

penalties, liabilities or losses of any kind or nature whatsoever to the extent the same arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of Consultant, or anyone employed by or working under the Consultant or for services rendered to the Consultant in the performance of the Agreement, notwithstanding that the City may have benefited from its work or services and whether or not caused in part by the negligence of an Indemnified Party.

11.4 Defense Obligation For Other Than Design Professional Liability.

Consultant agrees, at its cost and expense, to promptly defend the City, and the City's employees, officers, managers, agents and council members (collectively the "Parties to be Defended") from and against any and all claims, allegations, lawsuits, arbitration proceedings, administrative proceedings, regulatory proceedings, or other legal proceedings which arise out of, or relate to, or are in any way connected with: 1) the Services, work, activities, operations, or duties of the Consultant, or of anyone employed by or working under the Consultant, or 2) any breach of the Agreement by the Consultant. This duty to defend shall apply whether or not such claims, allegations, lawsuits or proceedings have merit or are meritless, or which involve claims or allegations that any or all of the Parties to be Defended were actively, passively, or concurrently negligent, or which otherwise assert that the Parties to be Defended are responsible, in whole or in part, for any loss, damage or injury. Consultant agrees to provide this defense immediately upon written notice from the City, and with well qualified, adequately insured and experienced legal counsel acceptable to City. This obligation to defend as set forth herein is binding on the successors, assigns and heirs of Consultant and shall survive the termination of Consultant's Services under this Agreement.

11.5 Indemnity For Other Than Design Professional Liability. Except as to the sole negligence or willful misconduct of the City, Consultant agrees to indemnify, protect and hold harmless the Indemnified Parties from and against any claim for damage, charge, lawsuit, action, judicial, administrative, regulatory or arbitration proceeding, damage, cost, expense (including counsel and expert fees), judgment, civil fine and penalties, liabilities or losses of any kind or nature whatsoever whether actual, threatened or alleged, which arise out of, pertain to, or relate to, or are a consequence of, or are attributable to, or are in any manner connected with the performance of the Services, work, activities, operations or duties of the Consultant, or anyone employed by or working under the Consultant or for services rendered to Consultant in the performance of this Agreement, notwithstanding that the City may have benefited from its work or services. This indemnification provision shall apply to any acts, omissions, negligence, recklessness, or willful misconduct, whether active or passive, on the part of the Consultant or anyone employed or working under the Consultant.

12. Insurance.

12.1 General Provisions. Prior to the City's execution of this Agreement, Consultant shall provide satisfactory evidence of, and shall thereafter maintain during the term of this Agreement, such insurance policies and coverages in the types, limits, forms and ratings required herein. The rating and required insurance policies and coverages may be modified in writing by the City's Risk Manager or City Attorney, or a designee, unless such modification is prohibited by law.

12.1.1 **Limitations.** These minimum amounts of coverage shall not constitute any limitation or cap on Consultant's indemnification obligations under Section 11 hereof.

12.1.2 **Ratings.** Any insurance policy or coverage provided by Consultant or subcontractors as required by this Agreement shall be deemed inadequate and a material breach of this Agreement, unless such policy or coverage is issued by insurance companies authorized to transact insurance business in the State of California with a policy holder's rating of A or higher and a Financial Class of VII or higher.

12.1.3 **Cancellation.** The policies shall not be canceled unless thirty (30) days' prior written notification of intended cancellation has been given to City by certified or registered mail, postage prepaid.

12.1.4 **Adequacy.** The City, its officers, employees and agents make no representation that the types or limits of insurance specified to be carried by Consultant pursuant to this Agreement are adequate to protect Consultant. If Consultant believes that any required insurance coverage is inadequate, Consultant will obtain such additional insurance coverage as Consultant deems adequate, at Consultant's sole expense.

12.2 **Workers' Compensation Insurance.** By executing this Agreement, Consultant certifies that Consultant is aware of and will comply with Section 3700 of the Labor Code of the State of California requiring every employer to be insured against liability for workers' compensation, or to undertake self-insurance before commencing any of the work. Consultant shall carry the insurance or provide for self-insurance required by California law to protect said Consultant from claims under the Workers' Compensation Act. Prior to City's execution of this Agreement, Consultant shall file with City either 1) a certificate of insurance showing that such insurance is in effect, or that Consultant is self-insured for such coverage, or 2) a certified statement that Consultant has no employees, and acknowledging that if Consultant does employ any person, the necessary certificate of insurance will immediately be filed with City. Any certificate filed with City shall provide that City will be given ten (10) days' prior written notice before modification or cancellation thereof.

12.3 **Commercial General Liability and Automobile Insurance.** Prior to City's execution of this Agreement, Consultant shall obtain, and shall thereafter maintain during the term of this Agreement, commercial general liability insurance and automobile liability insurance as required to insure Consultant against damages for personal injury, including accidental death, as well as from claims for property damage, which may arise from or which may concern operations by anyone directly or indirectly employed by, connected with, or acting for or on behalf of Consultant. The City, and its officers, employees and agents, shall be named as additional insureds under the Consultant's insurance policies.

12.3.1 Consultant's commercial general liability insurance policy shall cover both bodily injury (including death) and property damage (including, but not limited to, premises operations liability, products-completed operations liability, independent contractor's liability, personal injury liability, and contractual liability) in an amount not less than \$1,000,000 per occurrence and a general aggregate limit in the amount of not less than \$2,000,000.

12.3.2 Consultant's automobile liability policy shall cover both bodily injury and property damage in an amount not less than \$1,000,000 per occurrence and an aggregate limit of not less than \$1,000,000. All of Consultant's automobile and/or commercial general liability insurance policies shall cover all vehicles used in connection with Consultant's performance of this Agreement, which vehicles shall include, but are not limited to, Consultant owned vehicles, Consultant leased vehicles, Consultant's employee vehicles, non-Consultant owned vehicles and hired vehicles.

12.3.3 Prior to City's execution of this Agreement, copies of insurance policies or original certificates along with additional insured endorsements acceptable to the City evidencing the coverage required by this Agreement, for both commercial general and automobile liability insurance, shall be filed with City and shall include the City and its officers, employees and agents, as additional insureds. Said policies shall be in the usual form of commercial general and automobile liability insurance policies, but shall include the following provisions:

It is agreed that the City of Riverside, and its officers, employees and agents, are added as additional insureds under this policy, solely for work done by and on behalf of the named insured for the City of Riverside.

12.3.4 The insurance policy or policies shall also comply with the following provisions:

- a. The policy shall be endorsed to waive any right of subrogation against the City and its sub-consultants, employees, officers and agents for services performed under this Agreement.
- b. If the policy is written on a claims made basis, the certificate should so specify and the policy must continue in force for one year after completion of the services. The retroactive date of coverage must also be listed.
- c. The policy shall specify that the insurance provided by Consultant will be considered primary and not contributory to any other insurance available to the City and Endorsement No. CG 20010413 shall be provided to the City.

12.4 **Errors and Omissions Insurance.** Prior to City's execution of this Agreement, Consultant shall obtain, and shall thereafter maintain during the term of this Agreement, errors and omissions professional liability insurance in the minimum amount of \$1,000,000 to protect the City from claims resulting from the Consultant's activities.

12.5 **Subcontractors' Insurance.** Consultant shall require all of its subcontractors to carry insurance, in an amount sufficient to cover the risk of injury, damage or loss that may be caused by the subcontractors' scope of work and activities provided in furtherance of this Agreement, including, but without limitation, the following coverages: Workers Compensation, Commercial General Liability, Errors and Omissions, and Automobile liability.

Upon City's request, Consultant shall provide City with satisfactory evidence that Subcontractors have obtained insurance policies and coverages required by this section.

13. **Business Tax.** Consultant understands that the Services performed under this Agreement constitutes doing business in the City of Riverside, and Consultant agrees that Consultant will register for and pay a business tax pursuant to Chapter 5.04 of the Riverside Municipal Code and keep such tax certificate current during the term of this Agreement.

14. **Time of Essence.** Time is of the essence for each and every provision of this Agreement.

15. **City's Right to Employ Other Consultants.** City reserves the right to employ other Consultants in connection with the Project. If the City is required to employ another consultant to complete Consultant's work, due to the failure of the Consultant to perform, or due to the breach of any of the provisions of this Agreement, the City reserves the right to seek reimbursement from Consultant.

16. **Accounting Records.** Consultant shall maintain complete and accurate records with respect to costs incurred under this Agreement. All such records shall be clearly identifiable. Consultant shall allow a representative of City during normal business hours to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Agreement. Consultant shall allow inspection of all work, data, documents, proceedings, and activities related to the Agreement for a period of three (3) years from the date of final payment under this Agreement.

17. **Confidentiality.** All ideas, memoranda, specifications, plans, procedures, drawings, descriptions, computer program data, input record data, written information, and other materials either created by or provided to Consultant in connection with the performance of this Agreement shall be held confidential by Consultant, except as otherwise directed by City's Contract Administrator. Nothing furnished to Consultant which is otherwise known to the Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use City's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television or radio production, website, or other similar medium without the prior written consent of the City.

18. **Ownership of Documents.** All reports, maps, drawings and other contract deliverables prepared under this Agreement by Consultant shall be and remain the property of City. Consultant shall not release to others information furnished by City without prior express written approval of City.

19. **Copyrights.** Consultant agrees that any work prepared for City which is eligible for copyright protection in the United States or elsewhere shall be a work made for hire. If any such work is deemed for any reason not to be a work made for hire, Consultant assigns all right, title and interest in the copyright in such work, and all extensions and renewals thereof, to City, and agrees to provide all assistance reasonably requested by City in the establishment, preservation and enforcement of its copyright in such work, such assistance to be provided at City's expense

but without any additional compensation to Consultant. Consultant agrees to waive all moral rights relating to the work developed or produced, including without limitation any and all rights of identification of authorship and any and all rights of approval, restriction or limitation on use or subsequent modifications.

20. **Conflict of Interest.** Consultant, for itself and on behalf of the individuals listed in Exhibit "C," represents and warrants that by the execution of this Agreement, they have no interest, present or contemplated, in the Project affected by the above-described Services. Consultant further warrants that neither Consultant, nor the individuals listed in Exhibit "C" have any real property, business interests or income interests that will be affected by this project or, alternatively, that Consultant will file with the City an affidavit disclosing any such interest.

21. **Solicitation.** Consultant warrants that Consultant has not employed or retained any person or agency to solicit or secure this Agreement, nor has it entered into any agreement or understanding for a commission, percentage, brokerage, or contingent fee to be paid to secure this Agreement. For breach of this warranty, City shall have the right to terminate this Agreement without liability and pay Consultant only for the value of work Consultant has actually performed, or, in its sole discretion, to deduct from the Agreement price or otherwise recover from Consultant the full amount of such commission, percentage, brokerage or commission fee. The remedies specified in this section shall be in addition to and not in lieu of those remedies otherwise specified in this Agreement.

22. **General Compliance With Laws.** Consultant shall keep fully informed of federal, state and local laws and ordinances and regulations which in any manner affect those employed by Consultant, or in any way affect the performance of services by Consultant pursuant to this Agreement. Consultant shall at all times observe and comply with all such laws, ordinances and regulations, and shall be solely responsible for any failure to comply with all applicable laws, ordinances and regulations. Consultant represents and warrants that Consultant has obtained all necessary licenses to perform the Scope of Services and that such licenses are in good standing. Consultant further represents and warrants that the services provided herein shall conform to all ordinances, policies and practices of the City of Riverside.

23. **Waiver.** No action or failure to act by the City shall constitute a waiver of any right or duty afforded City under this Agreement, nor shall any such action or failure to act constitute approval of or acquiescence in any breach thereunder, except as may be specifically, provided in this Agreement or as may be otherwise agreed in writing.

24. **Amendments.** This Agreement may be modified or amended only by a written agreement and/or change order executed by the Consultant and City.

25. **Termination.** City, by notifying Consultant in writing, shall have the right to terminate any or all of Consultant's services and work covered by this Agreement at any time. In the event of such termination, Consultant may submit Consultant's final written statement of the amount of Consultant's services as of the date of such termination based upon the ratio that the work completed bears to the total work required to make the report complete, subject to the City's rights under Sections 15 and 26 hereof. In ascertaining the work actually rendered through the

termination date, City shall consider completed work, work in progress and complete and incomplete reports and other documents only after delivered to City.

25.1 Other than as stated below, City shall give Consultant thirty (30) days' prior written notice prior to termination.

25.2 City may terminate this Agreement upon fifteen (15) days' written notice to Consultant, in the event:

25.2.1 Consultant substantially fails to perform or materially breaches the Agreement; or

25.2.2 City decides to abandon or postpone the Project.

26. **Offsets.** Consultant acknowledges and agrees that with respect to any business tax or penalties thereon, utility charges, invoiced fee or other debt which Consultant owes or may owe to the City, City reserves the right to withhold and offset said amounts from payments or refunds or reimbursements owed by City to Consultant. Notice of such withholding and offset, shall promptly be given to Consultant by City in writing. In the event of a dispute as to the amount owed or whether such amount is owed to the City, City will hold such disputed amount until either the appropriate appeal process has been completed or until the dispute has been resolved.

27. **Successors and Assigns.** This Agreement shall be binding upon City and its successors and assigns, and upon Consultant and its permitted successors and assigns, and shall not be assigned by Consultant, either in whole or in part, except as otherwise provided in paragraph 9 of this Agreement.

28. **Venue.** Any action at law or in equity brought by either of the parties hereto for the purpose of enforcing a right or rights provided for by this Agreement shall be tried in the Superior Court, County of Riverside, State of California, and the parties hereby waive all provisions of law providing for a change of venue in such proceedings to any other county. In the event either party hereto shall bring suit to enforce any term of this Agreement or to recover any damages for and on account of the breach of any term or condition of this Agreement, it is mutually agreed that each party will bear their own attorney's fees and costs.

29. **Nondiscrimination.** During Consultant's performance of this Agreement, Consultant shall not discriminate on the grounds of race, religious creed, color, national origin, ancestry, age, physical disability, mental disability, medical condition, including the medical condition of Acquired Immune Deficiency Syndrome (AIDS) or any condition related thereto, marital status, sex, genetic information, gender, gender identity, gender expression, or sexual orientation, military and veteran status, in the selection and retention of employees and subcontractors and the procurement of materials and equipment, except as provided in Section 12940 of the California Government Code. Further, Consultant agrees to conform to the requirements of the Americans with Disabilities Act in the performance of this Agreement.

30. **Severability.** Each provision, term, condition, covenant and/or restriction, in whole and in part, of this Agreement shall be considered severable. In the event any provision, term, condition, covenant and/or restriction, in whole and/or in part, of this Agreement is declared

invalid, unconstitutional, or void for any reason, such provision or part thereof shall be severed from this Agreement and shall not affect any other provision, term, condition, covenant and/or restriction of this Agreement, and the remainder of the Agreement shall continue in full force and effect.

31. **Authority.** The individuals executing this Agreement and the instruments referenced herein on behalf of Consultant each represent and warrant that they have the legal power, right and actual authority to bind Consultant to the terms and conditions hereof and thereof.

32. **Entire Agreement.** This Agreement constitutes the final, complete, and exclusive statement of the terms of the agreement between the parties pertaining to the subject matter of this Agreement, and supersedes all prior and contemporaneous understandings or agreements of the parties. Neither party has been induced to enter into this Agreement by and neither party is relying on, any representation or warranty outside those expressly set forth in this Agreement.

33. **Interpretation.** City and Consultant acknowledge and agree that this Agreement is the product of mutual arms-length negotiations and accordingly, the rule of construction, which provides that the ambiguities in a document shall be construed against the drafter of that document, shall have no application to the interpretation and enforcement of this Agreement.

33.1 Titles and captions are for convenience of reference only and do not define, describe or limit the scope or the intent of the Agreement or any of its terms. Reference to section numbers, are to sections in the Agreement unless expressly stated otherwise.

33.2 This Agreement shall be governed by and construed in accordance with the laws of the State of California in effect at the time of the execution of this Agreement.

33.3 In the event of a conflict between the body of this Agreement and Exhibit "A" - Scope of Services hereto, the terms contained in Exhibit "A" shall be controlling.

34. **Exhibits.** The following exhibits attached hereto are incorporated herein to this Agreement by this reference:

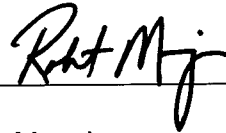
- Exhibit "A" - Scope of Services
- Exhibit "B" - Compensation
- Exhibit "C" - Key Personnel

IN WITNESS WHEREOF, City and Consultant have caused this Agreement to be duly executed the day and year first above written.


CITY OF RIVERSIDE, a California charter city and municipal corporation a California corporation

VECTOR RESOURCES, INC., a California corporation, doing business as VECTORUSA

By: 
City Manager **Lea Deesing**
Assistant City Manager

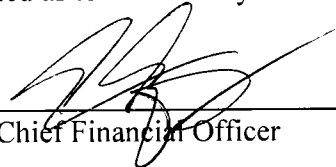
By: 
Robert Messinger


[Printed Name]
Executive Vice President

Attest: 
City Clerk

[Title]

Certified as to Availability of Funds:

By: 
Chief Financial Officer

By: 
Jeffrey Zukerman

[Printed Name]
Executive Vice President and Secretary

Approved as to Form:

By: 
Senior Deputy City Attorney

[Title]

EXHIBIT "A"
SCOPE OF SERVICES

IMPLEMENTATION PLAN / PROPOSED SCOPE OF WORK

Implementation Procedure

Project Meeting - VectorUSA will have a project team, consisting of at least a Project Manager, Sr Solution Architect and lead Network Engineer, meet with City of Riverside IT project team to discuss current and proposed network topology. During this project meeting, vetting of each solution component with the project team is performed to confirm design goals and outcomes. Once the teams are in agreement with City of Riverside desired outcome of the new Network, the Sr Solution Architect and lead Network Engineer will design the network architecture around the agreed upon outcomes.

A design meeting will take place, in order to collaborate on the new network design and once agreed upon, the specifics to each component of the network will be gathered. Multiple discovery sessions will be required, in order to gather all pertinent information to start with the equipment configuration.

Network Infrastructure - VectorUSA will receive all procured equipment at the Torrance facility, where they will be unboxed, inventoried, racked and burned-in. The new hardware will be configured based upon the design architecture agreed upon by the City and VectorUSA. The equipment will be connected and tested to ensure connectivity between devices and that all desired protocols are functioning properly. Configuration for access switches will be dependent upon the type of nodes terminating in each TR. Access switches will be labeled based on assignment and configured accordingly.

A timeframe will be established to deploy all equipment to each site in preparation for a system cutover. Due to the size of City of Riverside, VectorUSA anticipates multiple cutovers with ample time to connect and test the new equipment.

Upon completion of each cutover, testing will be done to ensure all new hardware is reachable, all security and routing protocols are functioning properly and that the site is reachable from the other City network sites. VectorUSA will then provide the City with configuration backup information followed by VectorUSA developing and providing the City with as-built site documentation in hard and soft copy format.

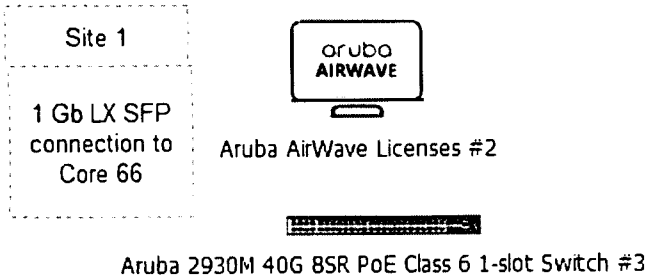
Scope of Work

VectorUSA has proposed to procure, deliver, install & configure the following equipment as outlined below. All existing equipment will be removed, inventoried and returned to City of Riverside IT department.

Site 01:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

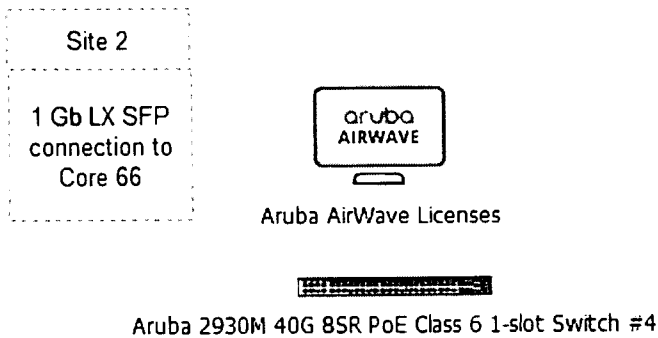
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplink with Core 66.



Site 02:

VectorUSA will remove existing Cisco switch and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

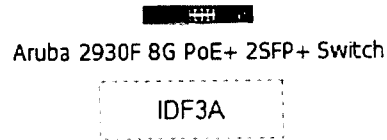
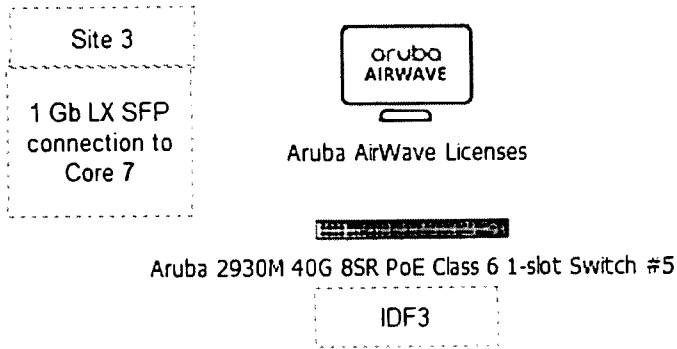
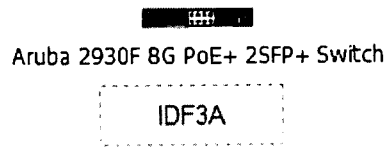
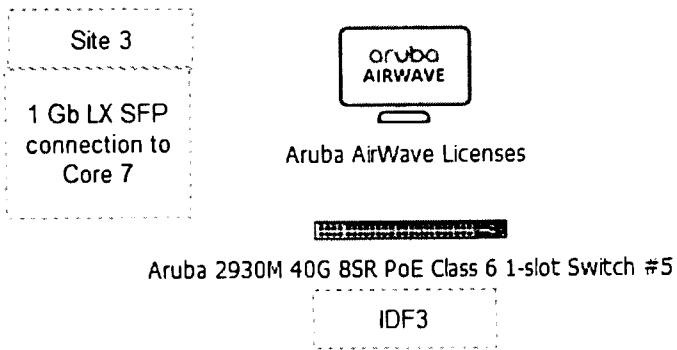
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplink with Core 66.



Site 03:

VectorUSA will remove existing Cisco switch and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

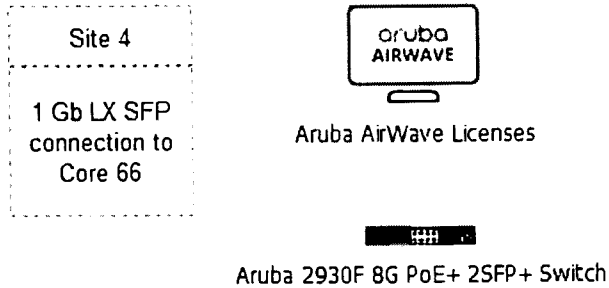
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplink with Core 7.



Site 04:

VectorUSA will remove existing Cisco switch and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplink with Core 7.

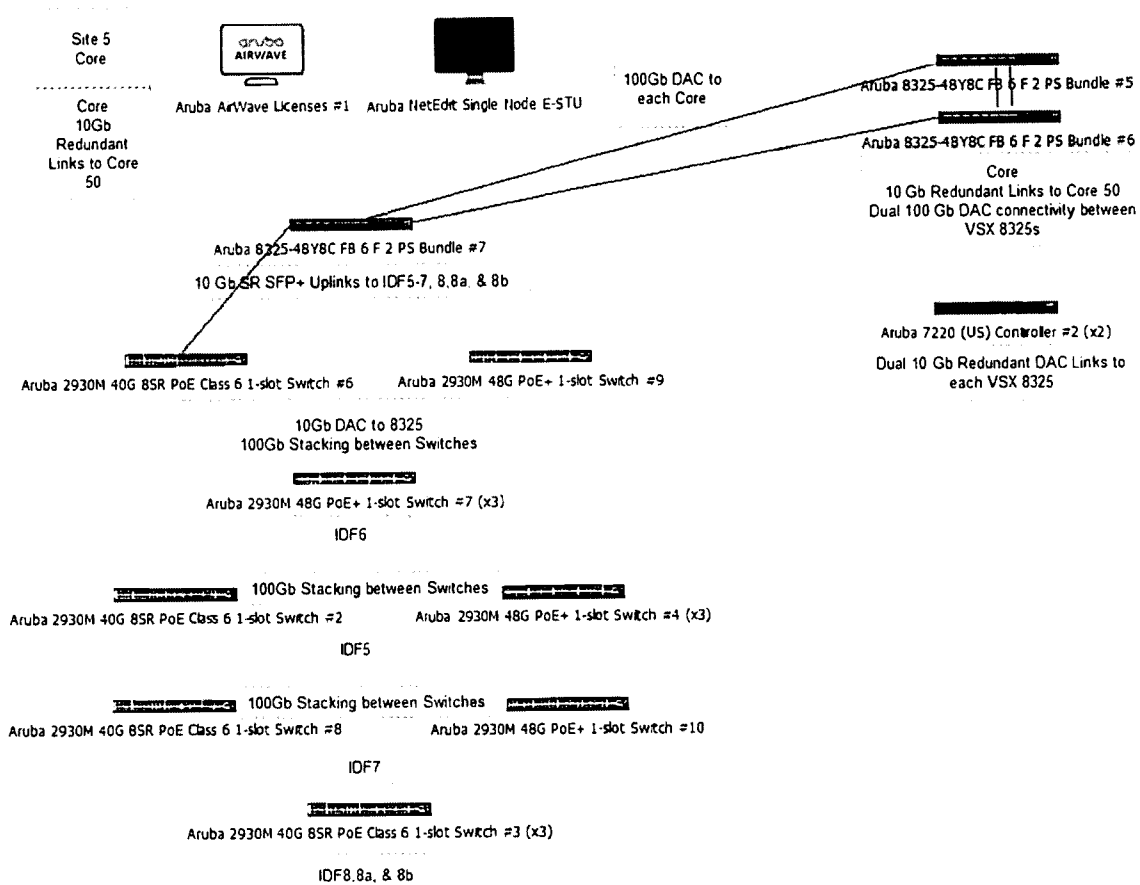


Site 05:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM4 – SM Fiber Optic patch cables will be provided and installed for the 10Gb uplinks with Core 50.

City of Riverside – RFP No. 1926, Data Network Refresh

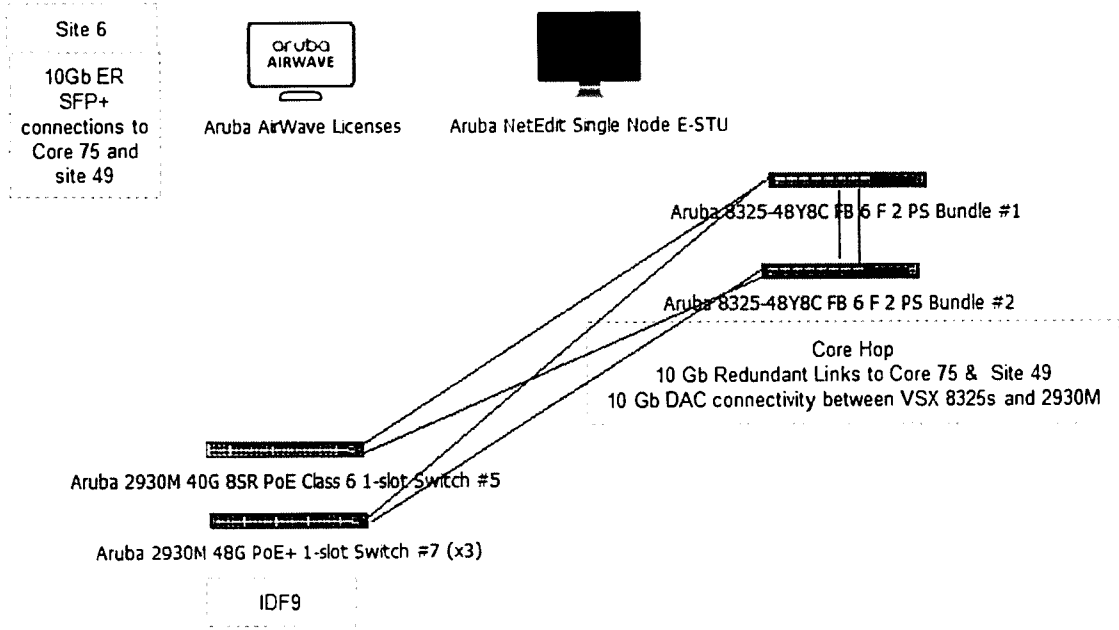


Site 06:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM4 – SM Fiber Optic patch cables will be provided and installed for the 10Gb uplinks with Core 75 & Site 49.

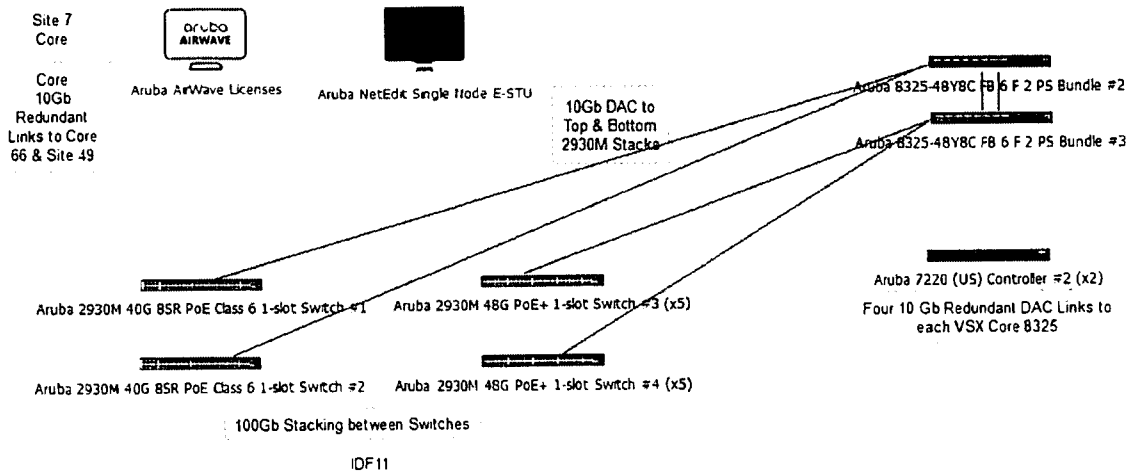
City of Riverside – RFP No. 1926, Data Network Refresh



Site 07:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

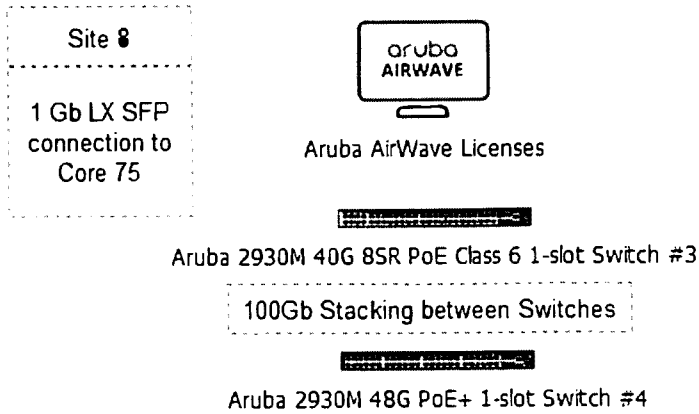
New OM4 – SM Fiber Optic patch cables will be provided and installed for the redundant 10Gb uplinks with Core 7 and Sites 66 & 49.



Site 08:

VectorUSA will remove existing switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

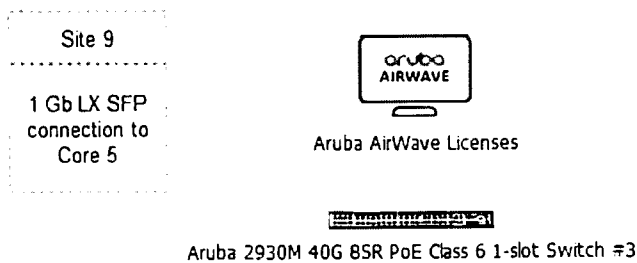
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 75.



Site 09:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

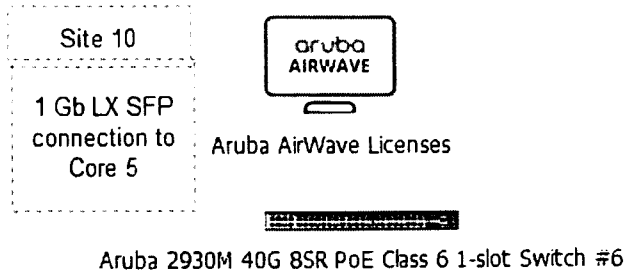
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 5.



Site 10:

VectorUSA will remove existing two Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

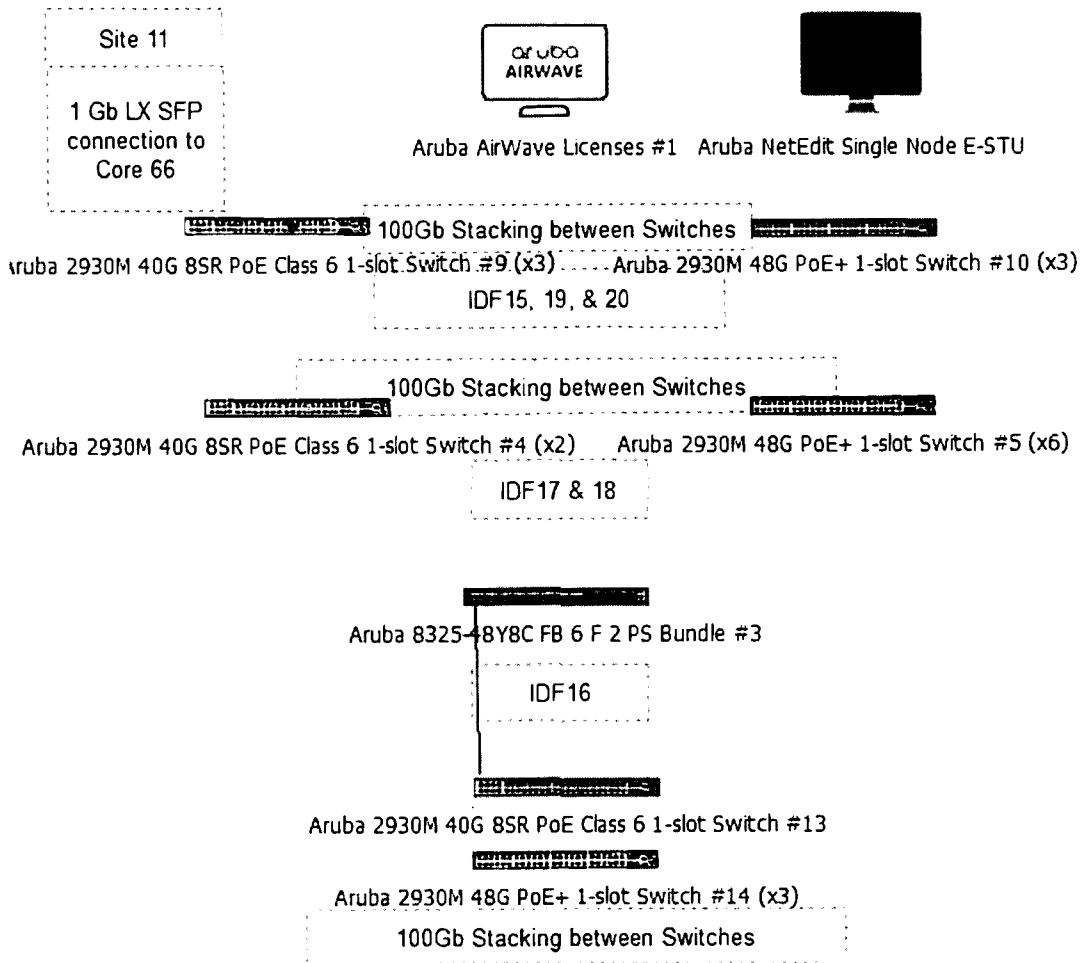
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 5.



Site 11:

VectorUSA will remove existing two Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.

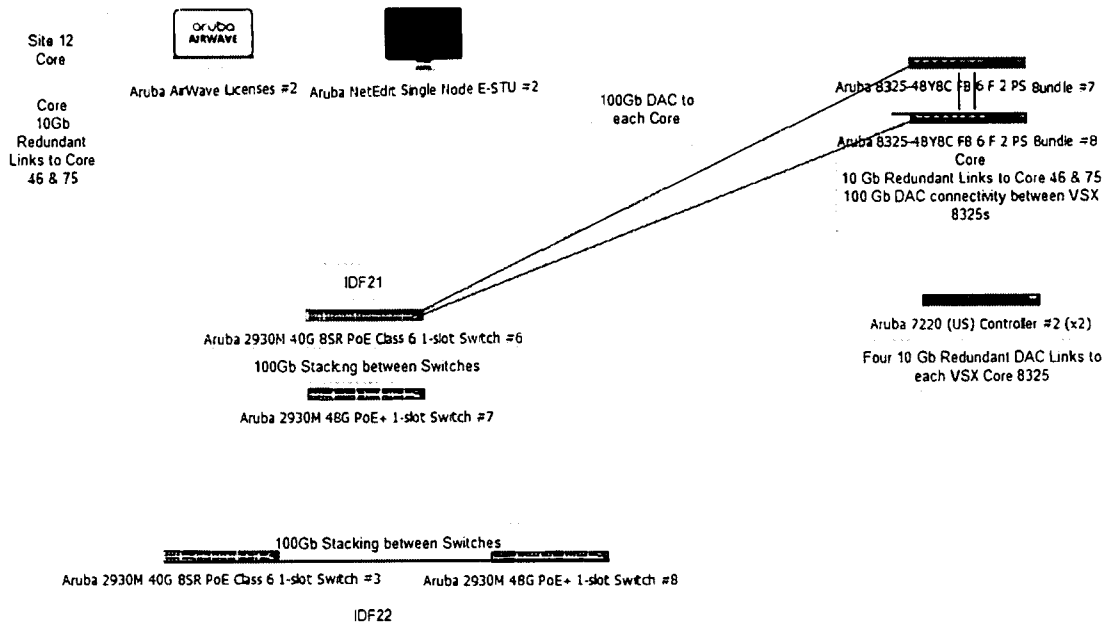


Site 12:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM4 – SM Fiber Optic patch cables will be provided and installed for the 10Gb uplinks with Cores 46 & 75.

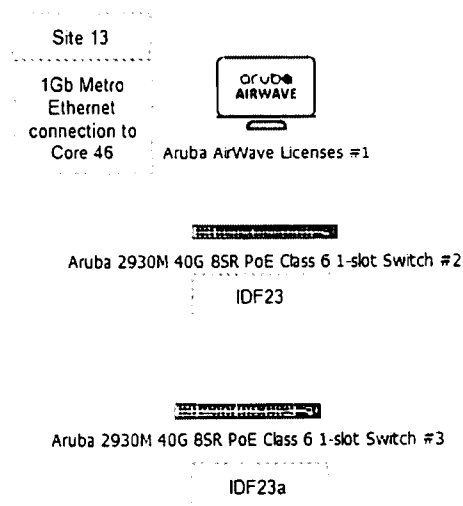
City of Riverside – RFP No. 1926, Data Network Refresh



Site 13:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 46.



Site 14:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 12.

Site 14
1 Gb LX SFP connection to Core 12



Aruba AirWave Licenses #1



Aruba NetEdit Single Node E-STU

Aruba 8325-48Y8C FB 6 F 2 PS Bundle #3

IDF27

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #5

Aruba 2930M 48G PoE+ 1-slot Switch #6

100Gb Stacking between Switches

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #4 (x19)

IDF24 - 25, 28, 33 - 42g

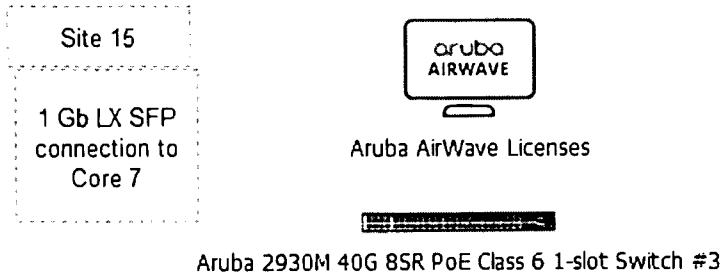
Aruba 2930F 8G PoE+ 25FP+ Switch (x5)

IDF26, 29 - 32

Site 15:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

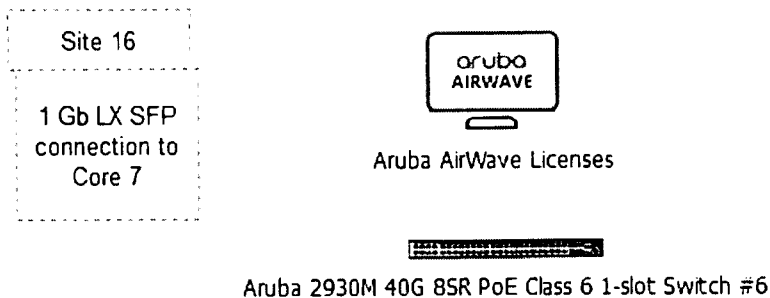
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 7.



Site 16:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

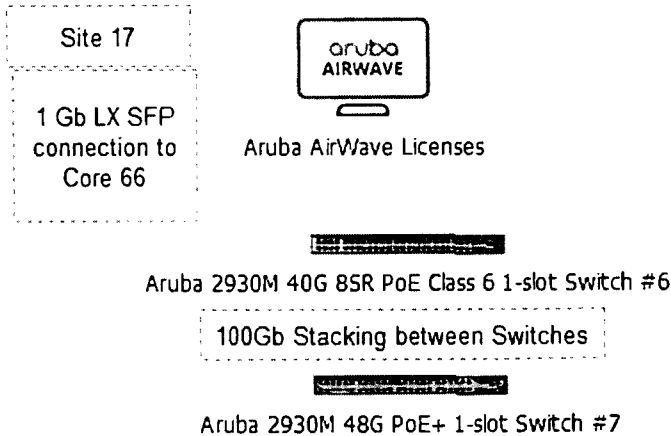
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 7.



Site 17:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

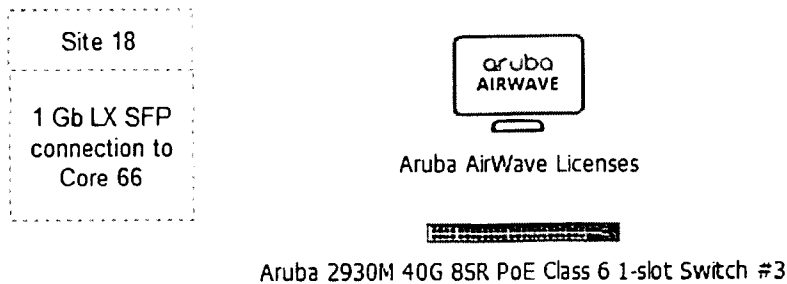
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.



Site 18:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.

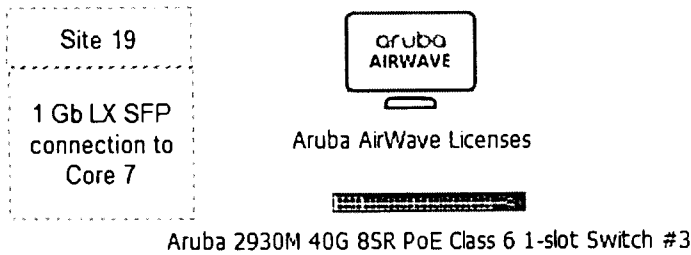


Site 19:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT.

All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

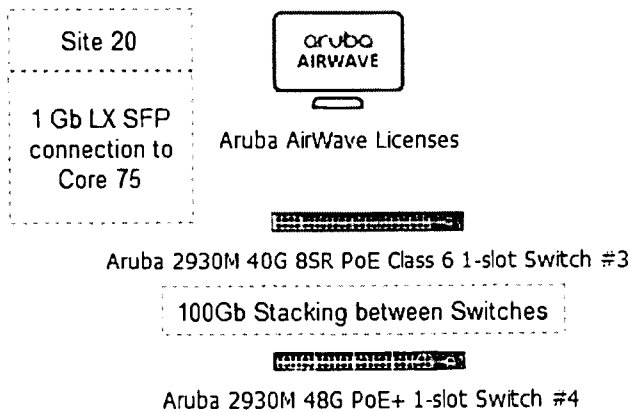
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 7.



Site 20:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 75.



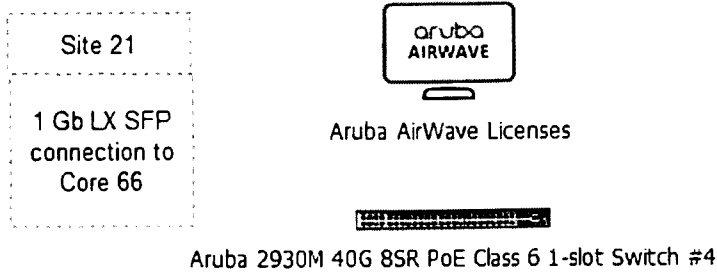
Site 21:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT.

City of Riverside – RFP No. 1926, Data Network Refresh

All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

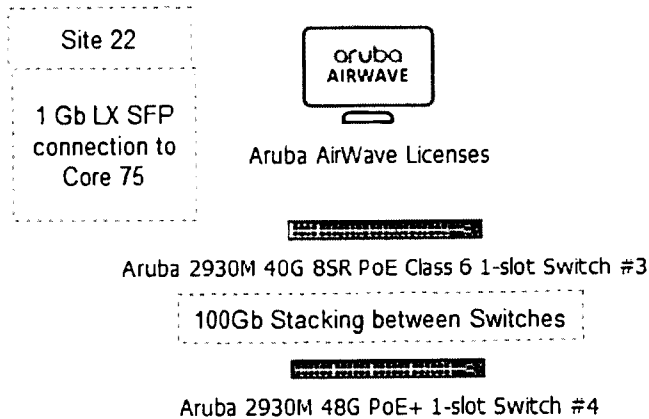
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.



Site 22:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

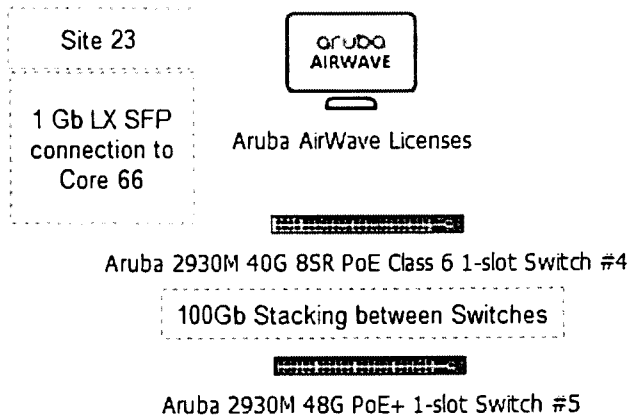
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 75.



Site 23:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

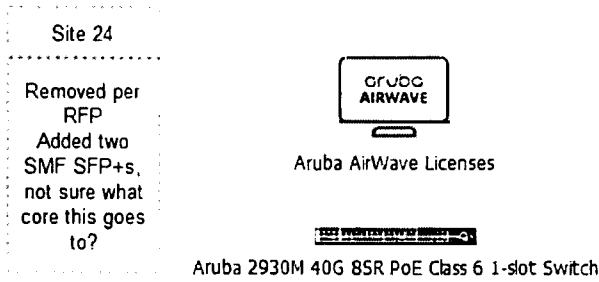
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.



Site 24:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

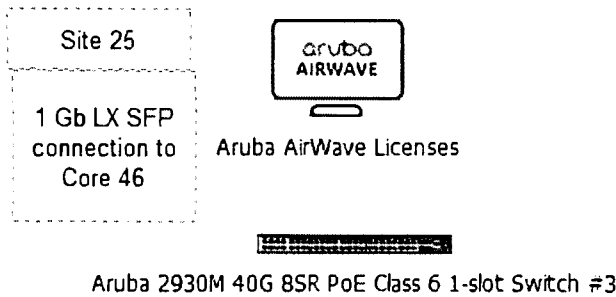
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core XX.



Site 25:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

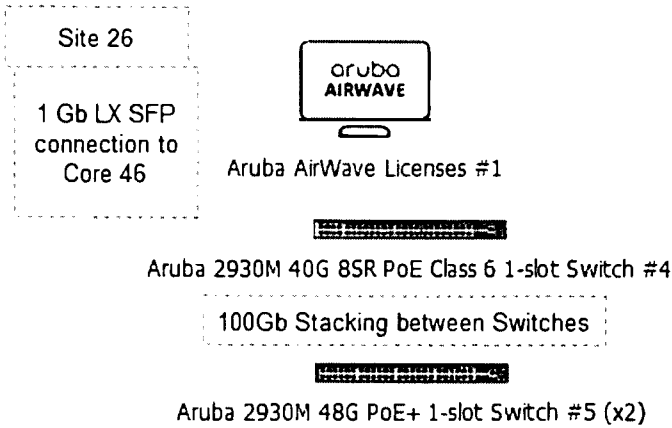
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 46.



Site 26:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

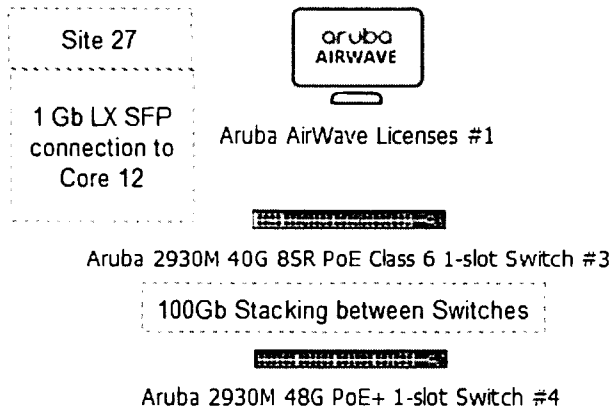
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 46.



Site 27:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

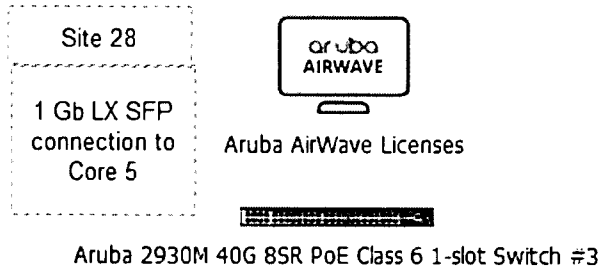
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 12.



Site 28:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

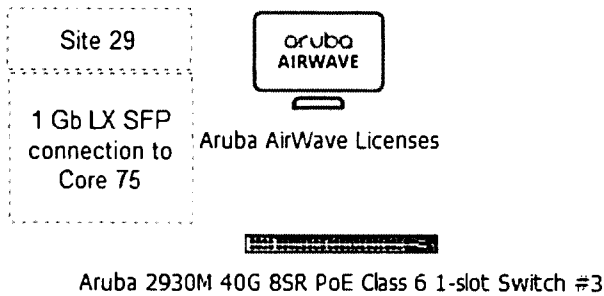
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 5.



Site 29:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

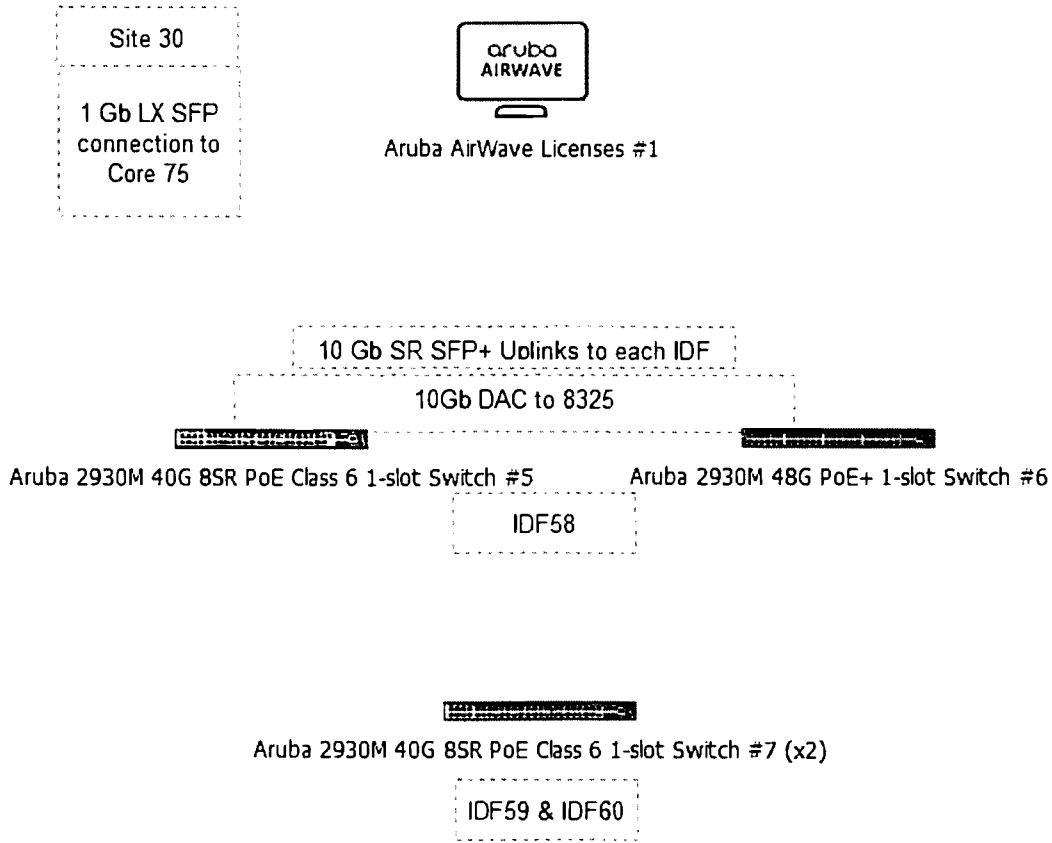
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 75.



Site 30:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

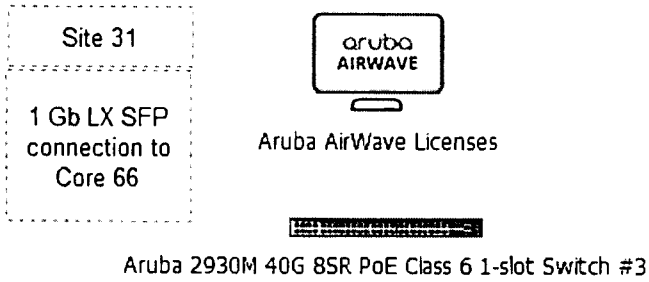
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 75.



Site 31:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

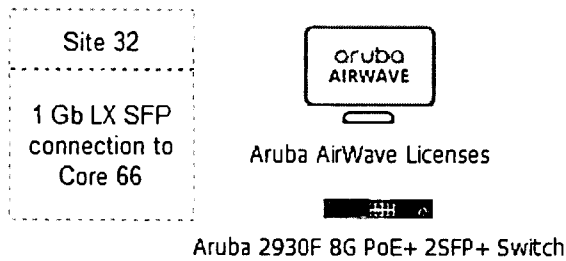
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.



Site 32:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. existing station side patch cables will be replaced with new Category 6.

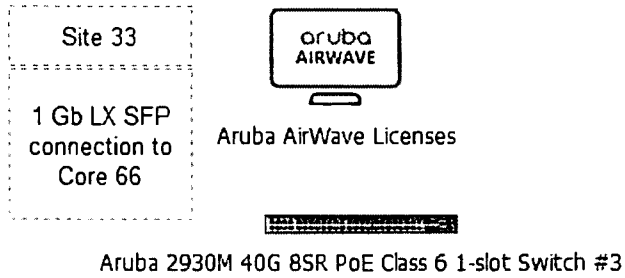
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.



Site 33:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

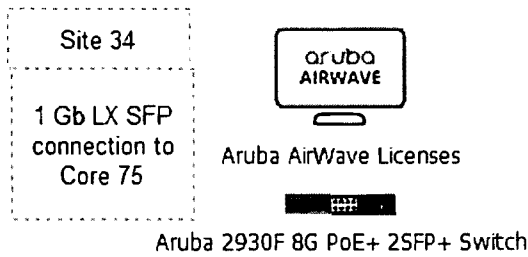
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.



Site 34:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

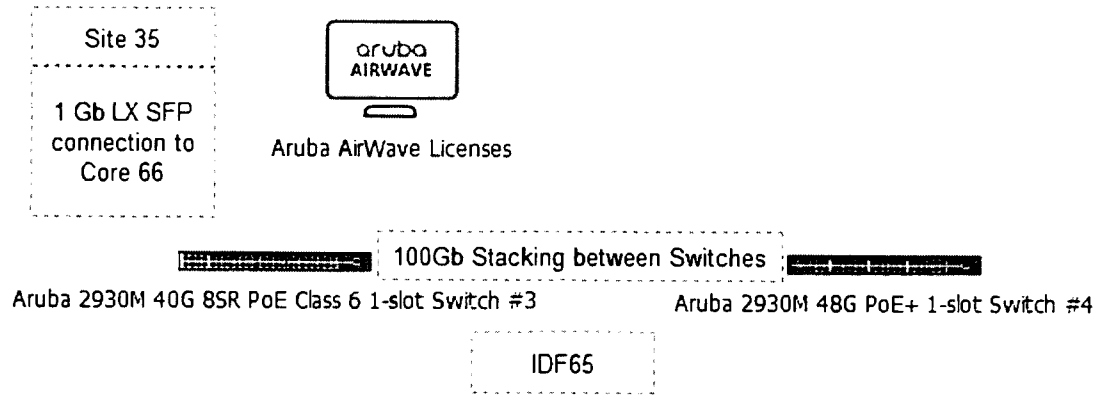
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 75.



Site 35:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

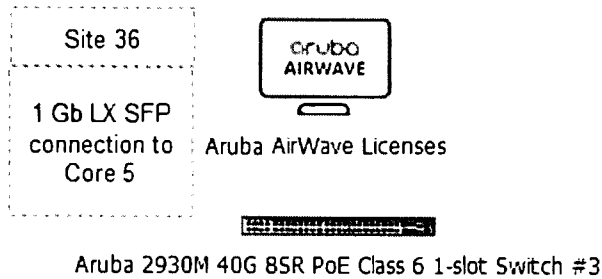
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.



Site 36:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

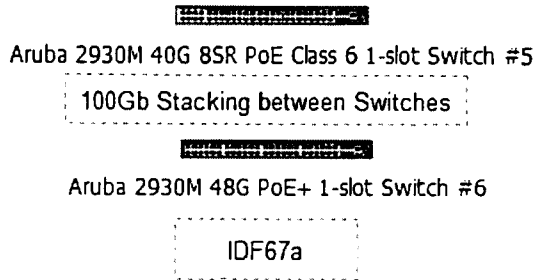
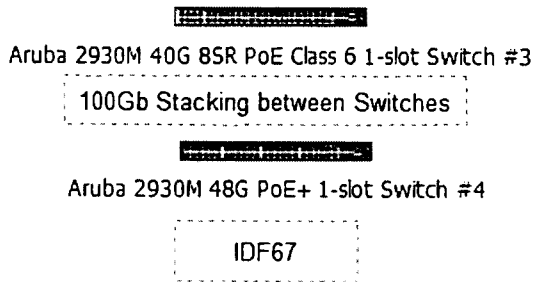
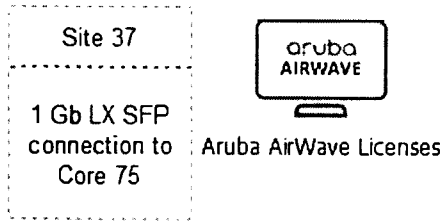
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 5.



Site 37:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 75.



Site 38:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 7

Site 38
1 Gb LX SFP
connection to
Core 7



Aruba AirWave Licenses #1

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #14
100Gb Stacking between Switches

Aruba 2930M 48G PoE+ 1-slot Switch #15

IDF68

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #16

IDF69

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #17

100Gb Stacking between Switches

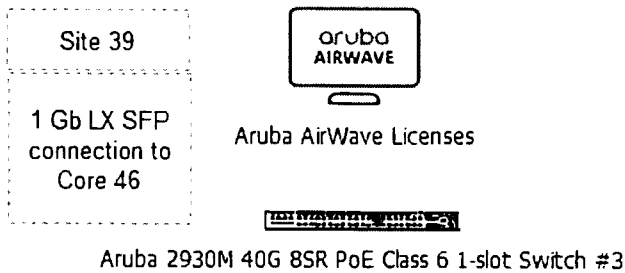
Aruba 2930M 48G PoE+ 1-slot Switch #18

IDF70

Site 39:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

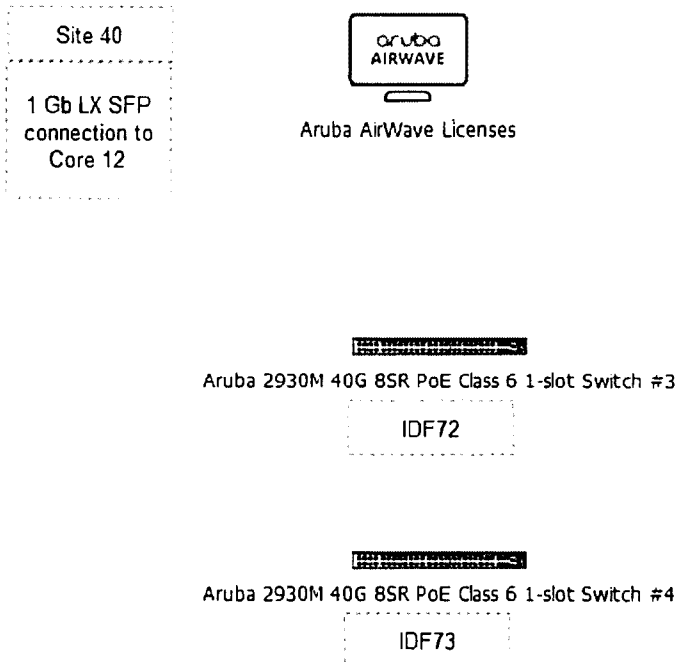
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 46.



Site 40:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables.. All existing station side patch cables will be replaced with new Category 6.

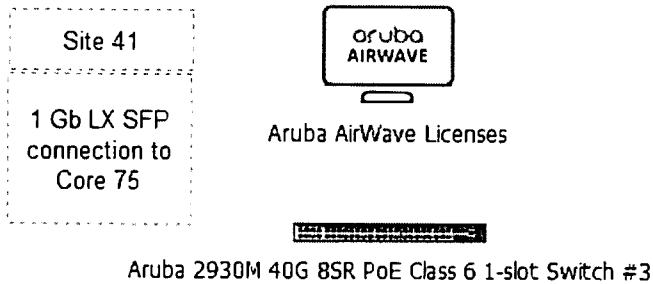
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 12.



Site 41:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

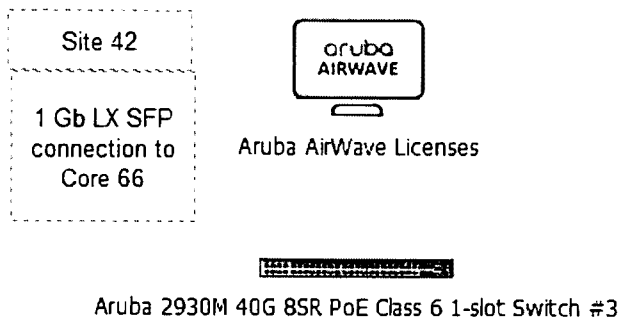
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 75.



Site 42:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

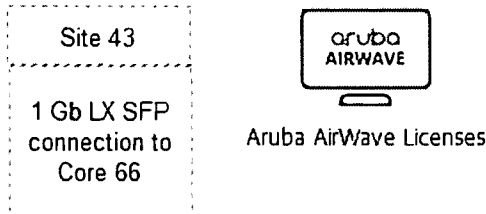
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 75.

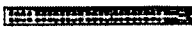


Site 43:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.




Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

IDF76

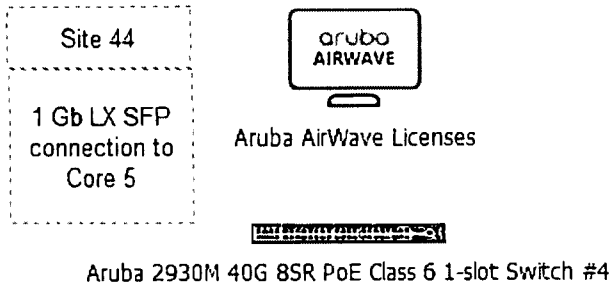

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #4

IDF77

Site 44:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

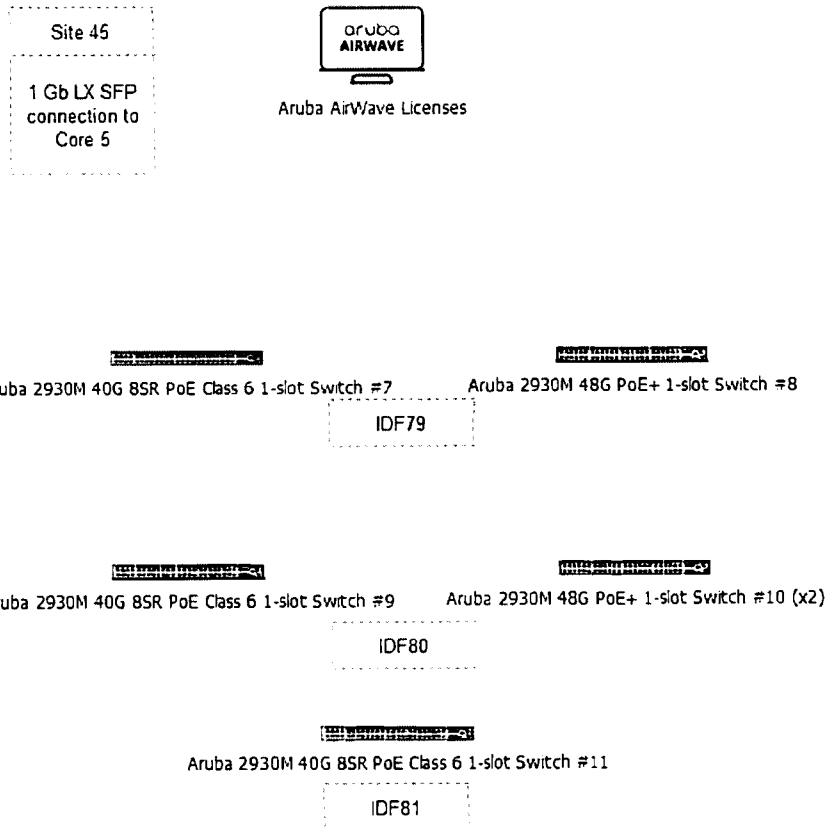
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 5.



Site 45:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 5.

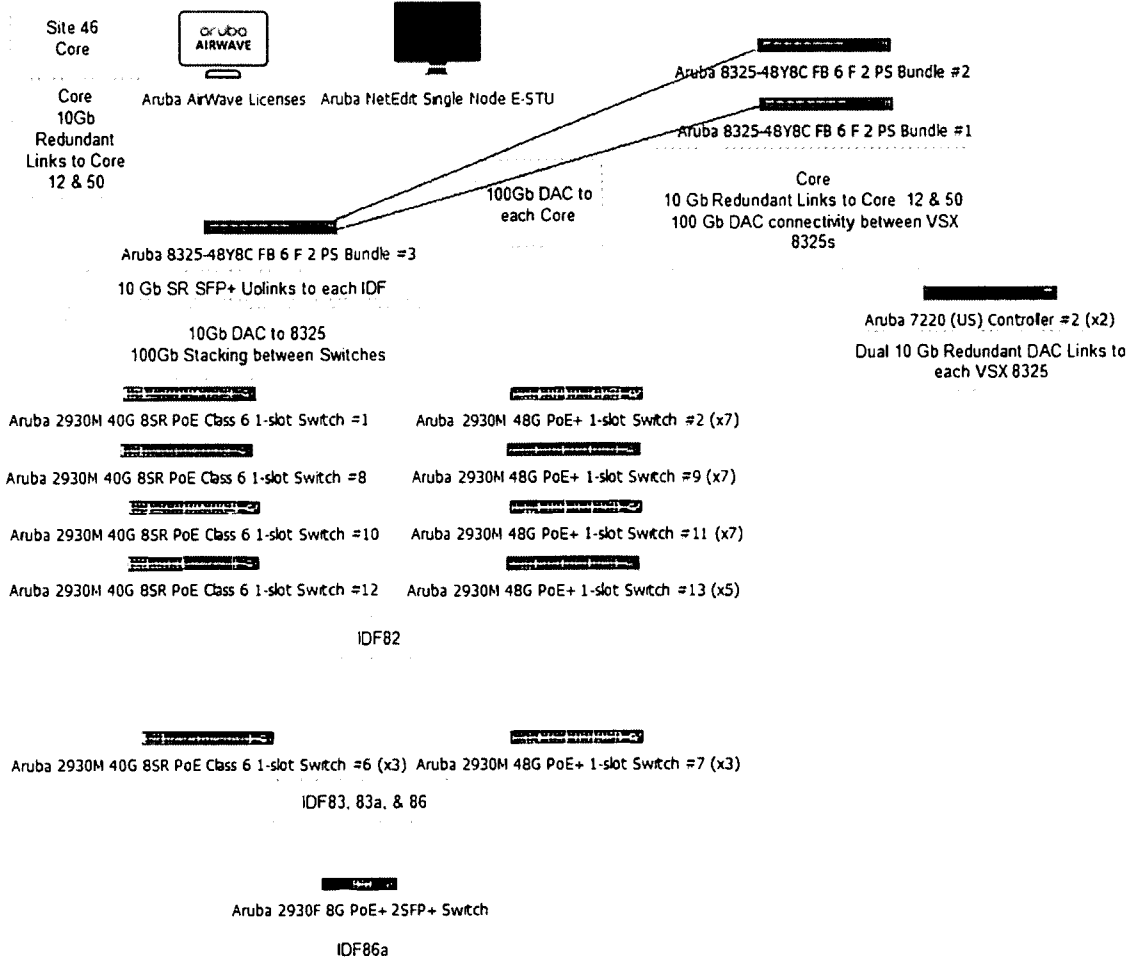


City of Riverside – RFP No. 1926, Data Network Refresh

Site 46:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

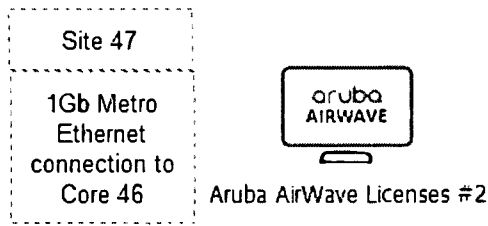
New OM4 – SM Fiber Optic patch cables will be provided and installed for the 10Gb uplinks with Cores 12 & 50.



Site 47:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. existing station side patch cables will be replaced with new Category 6.

New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 46.

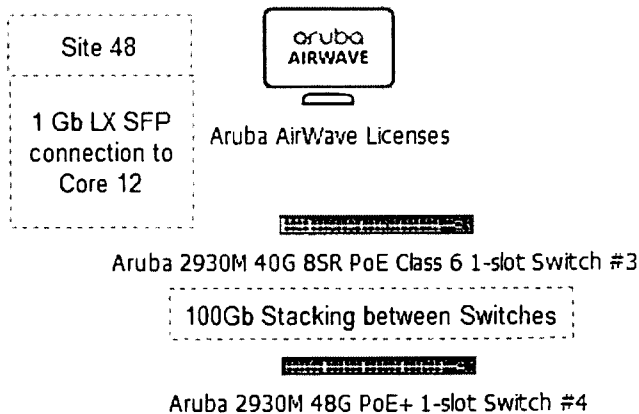


Aruba 2930M 40G BSR PoE Class 6 1-slot Switch #2

Site 48:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

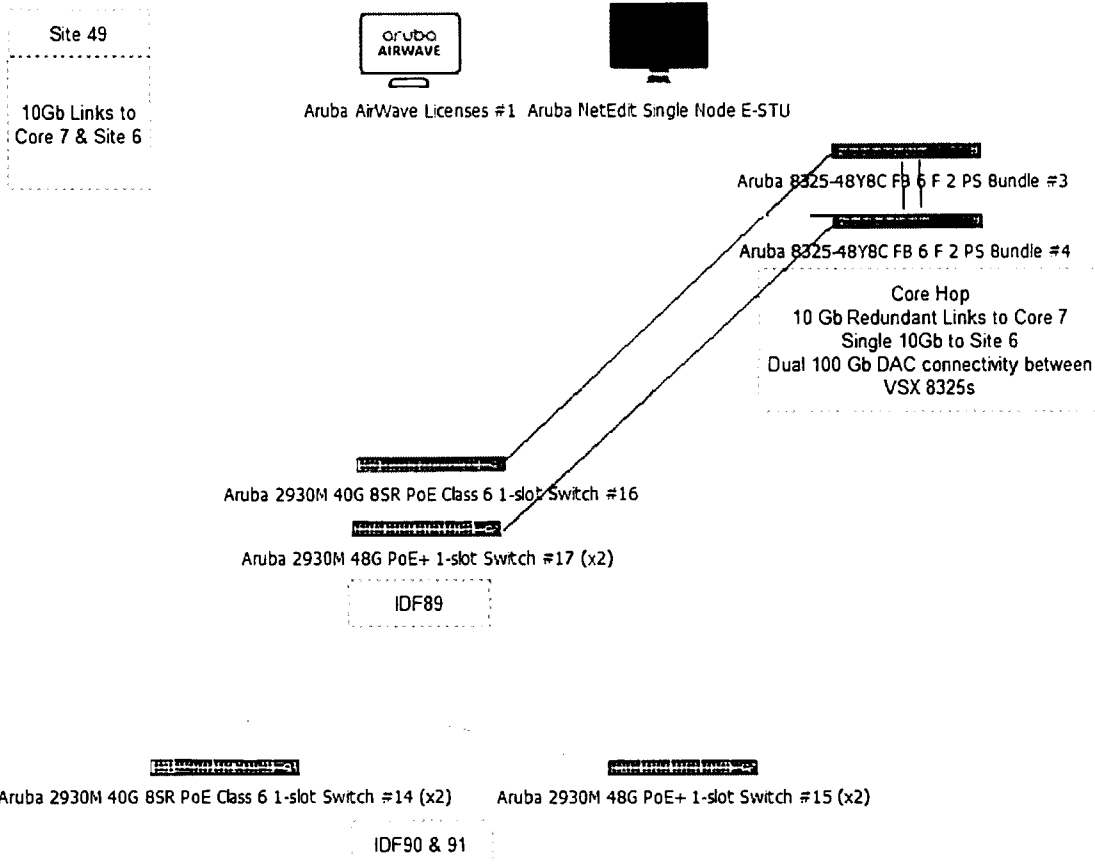
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 12.



Site 49:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables.. All existing station side patch cables will be replaced with new Category 6.

New OM4 – SM Fiber Optic patch cables will be provided and installed for the 10Gb uplinks with Core 7 & Site 6.

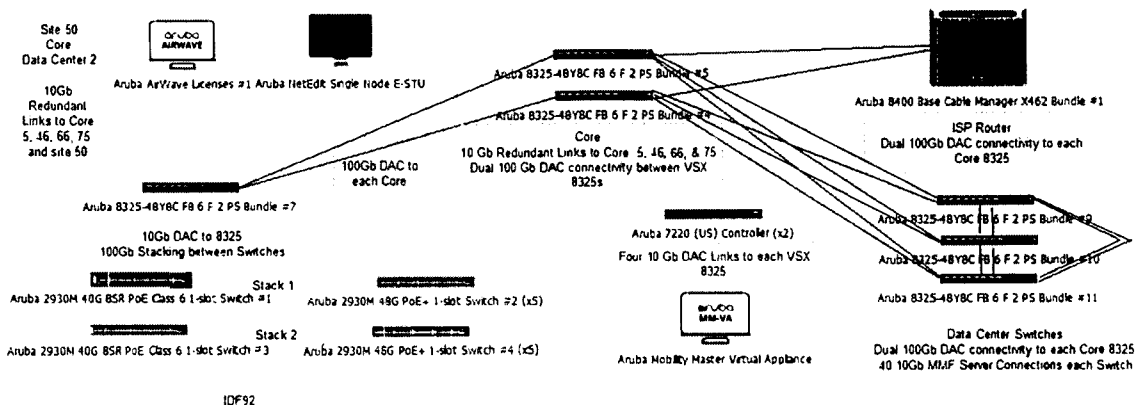


Site 50:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM4 – SM Fiber Optic patch cables will be provided and installed for the 10Gb uplinks with Cores 5, 46, 66, 75 and Site 50.

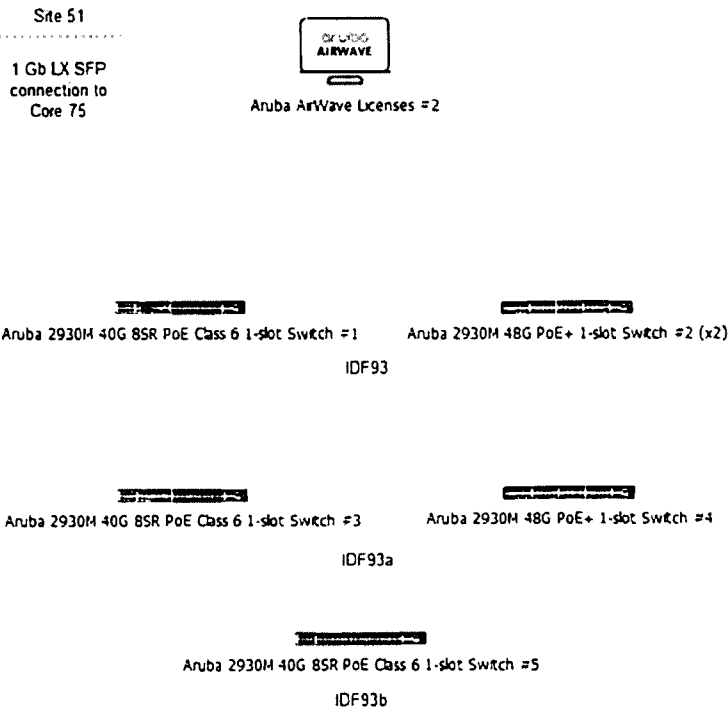
City of Riverside – RFP No. 1926, Data Network Refresh



Site 51:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 75.



VECTOR USA AND THE VECTOR USA WORDMARK ARE REGISTERED TRADEMARKS OF VECTOR RESOURCES, INC.

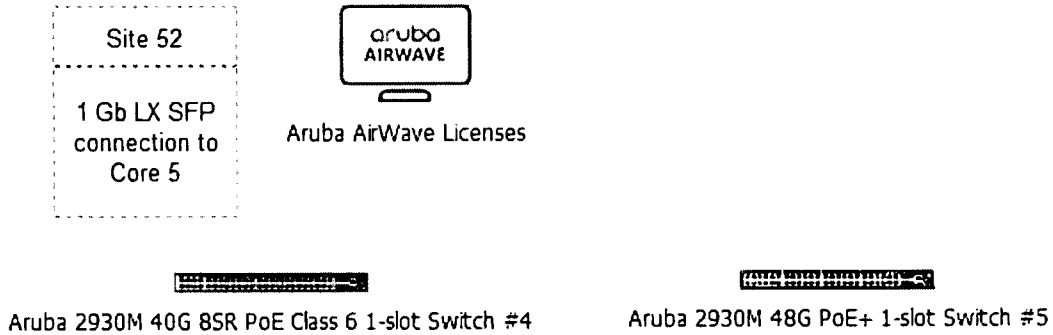
Version 1.0 Created 6/12/2019

Exhibit A-034

Site 52:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

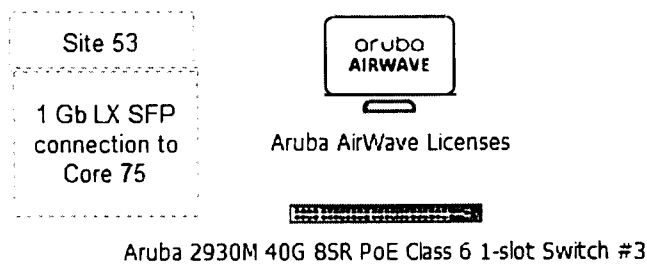
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 5.



Site 53:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

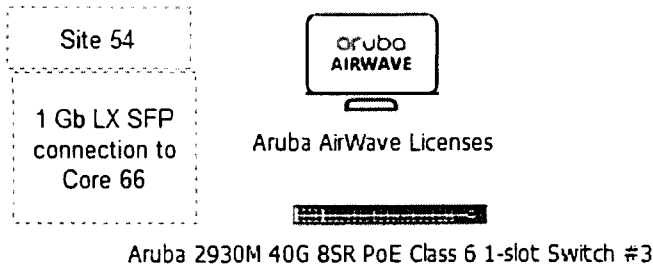
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 75.



Site 54:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

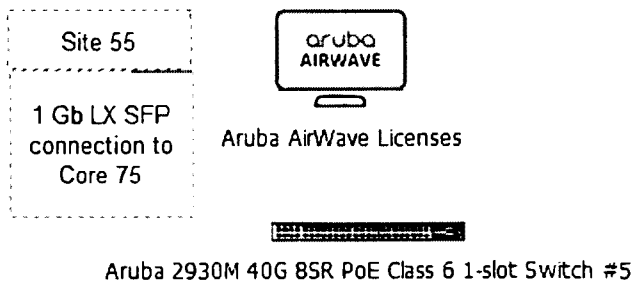
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.



Site 55:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

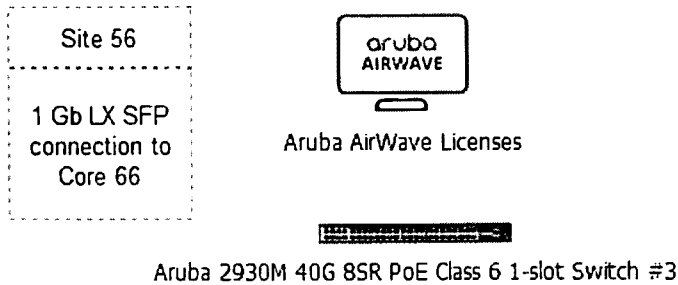
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 75.



Site 56:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

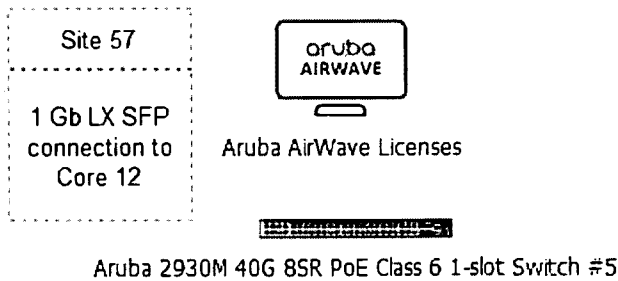
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.



Site 57:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

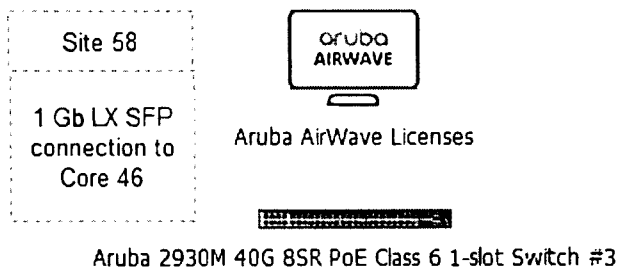
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 12.



Site 58:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

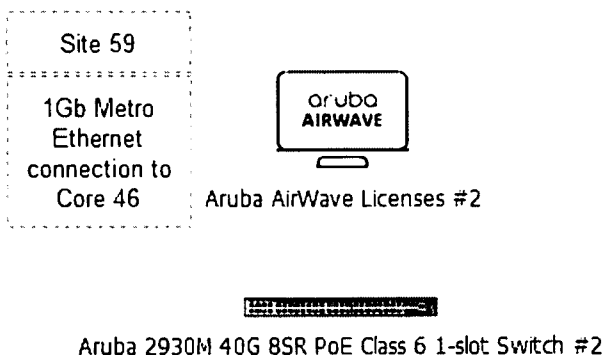
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 46.



Site 59:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

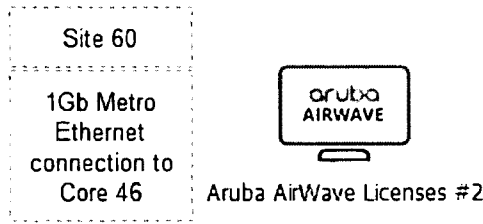
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 46.



Site 60:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 46.

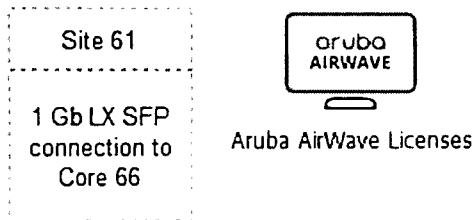



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #2

Site 61:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.

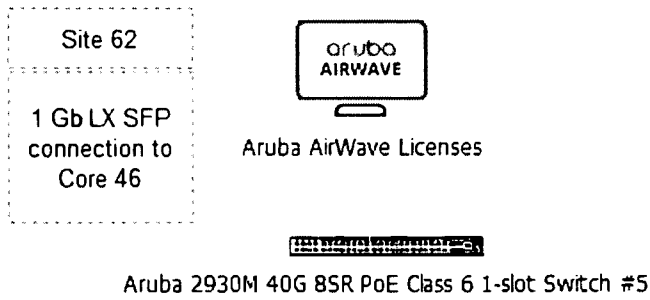



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

Site 62:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

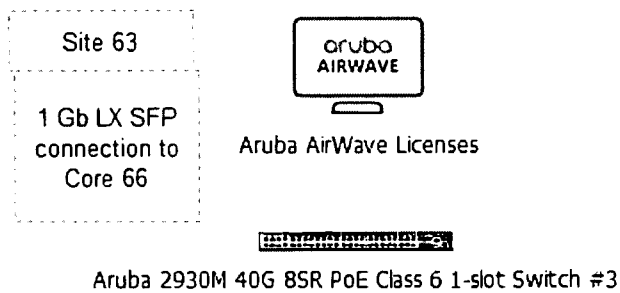
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 46.



Site 63:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

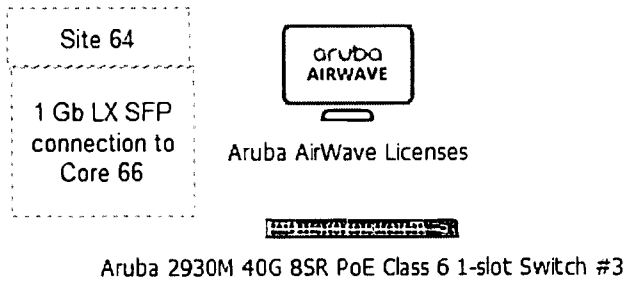
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.



Site 64:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

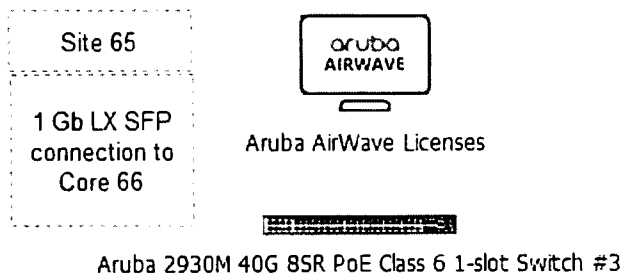
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.



Site 65:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.

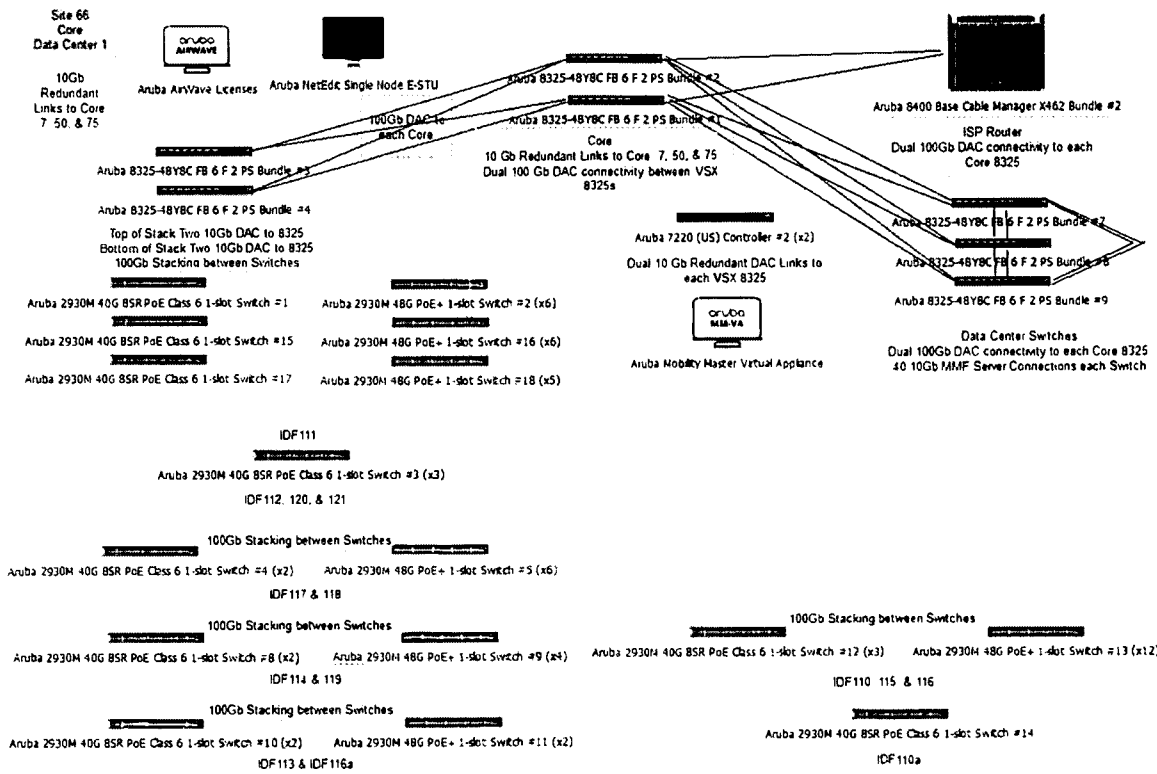


Site 66:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM4 – SM Fiber Optic patch cables will be provided and installed for the 10Gb uplinks with Cores 7, 50 & 75.

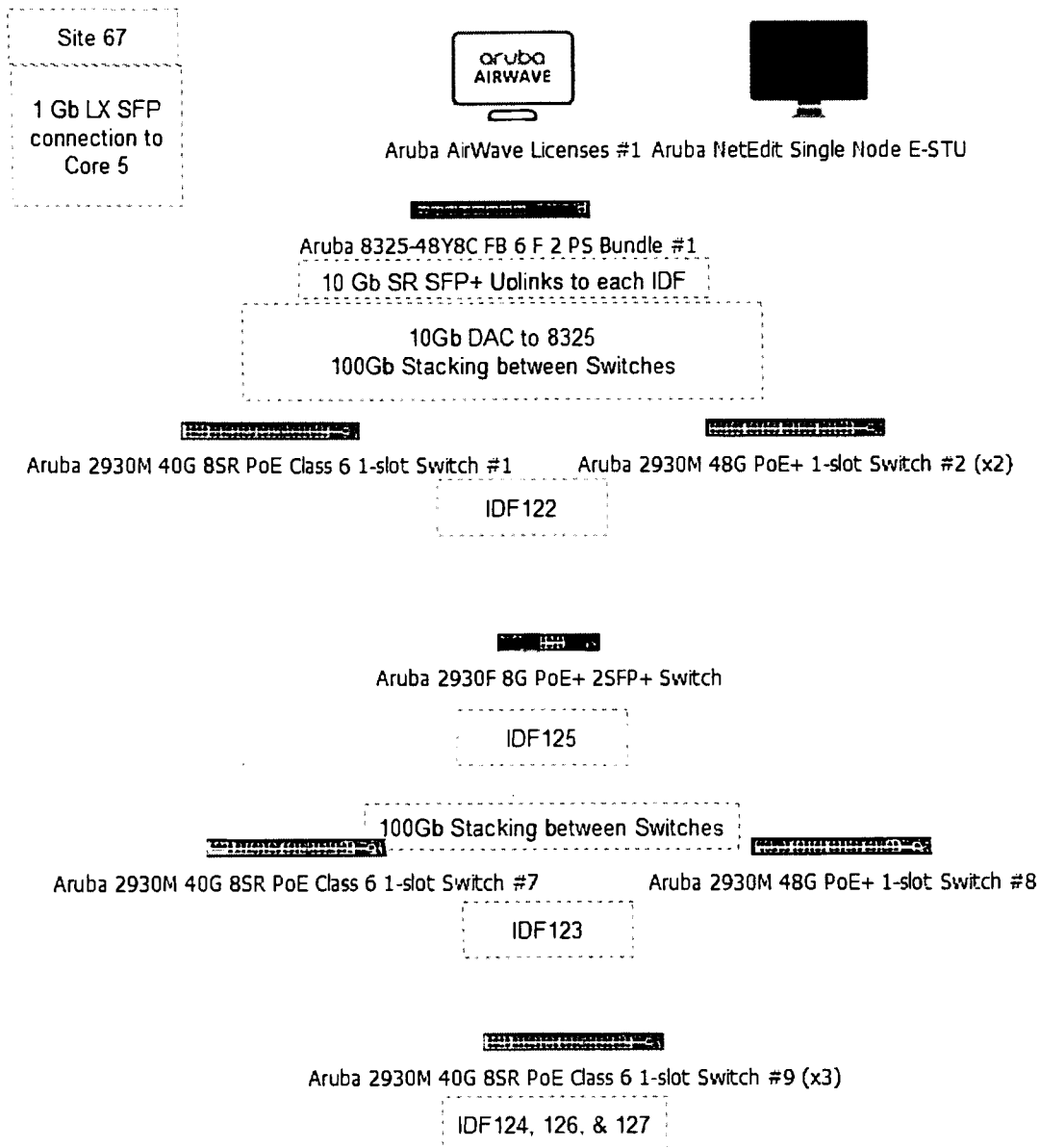
City of Riverside – RFP No. 1926, Data Network Refresh



Site 67:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

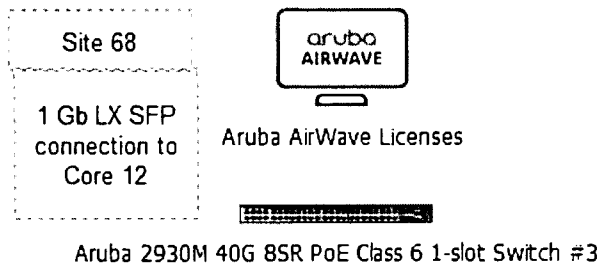
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 5.



Site 68:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

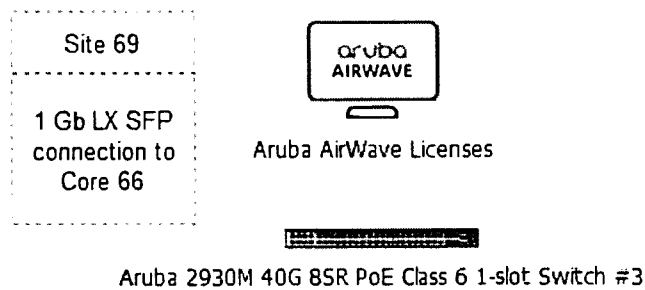
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 12.



Site 69:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

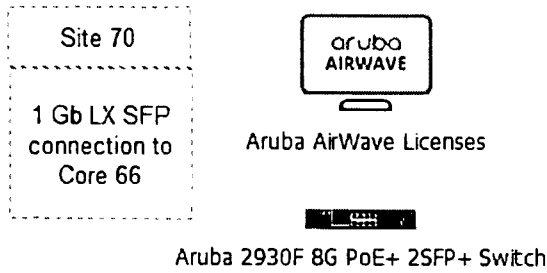
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.



Site 70:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

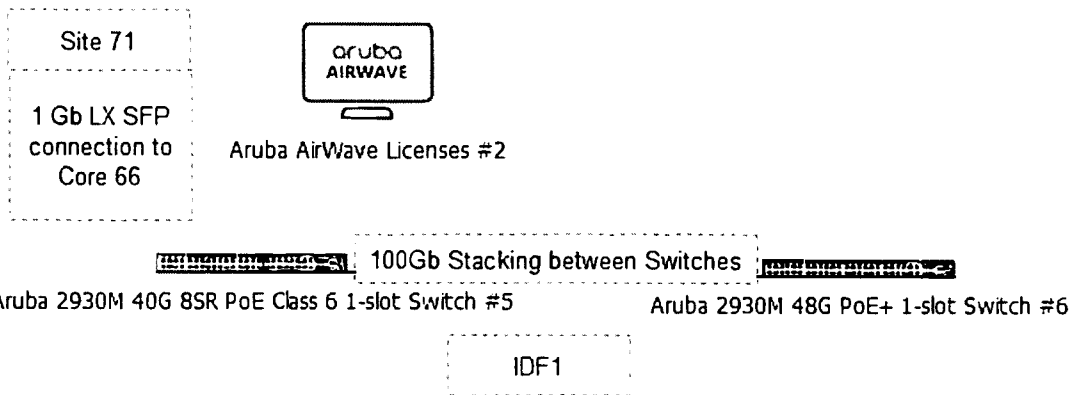
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.



Site 71:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

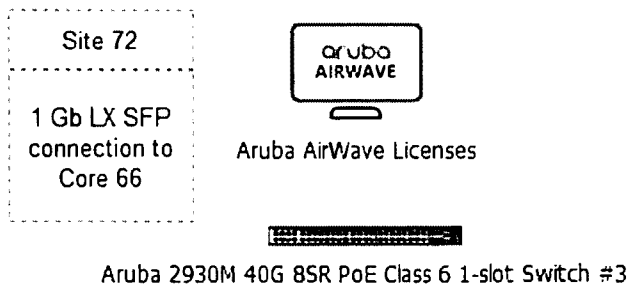
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.



Site 72:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. existing station side patch cables will be replaced with new Category 6.

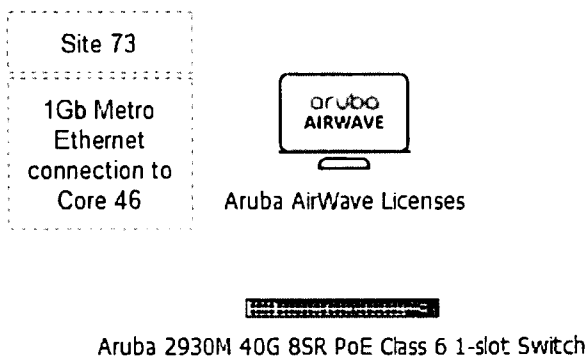
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 66.



Site 73:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

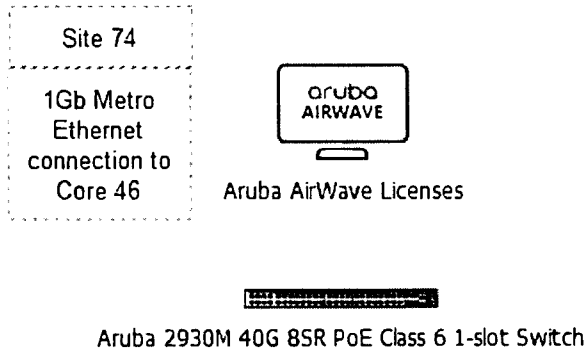
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 46.



Site 74:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

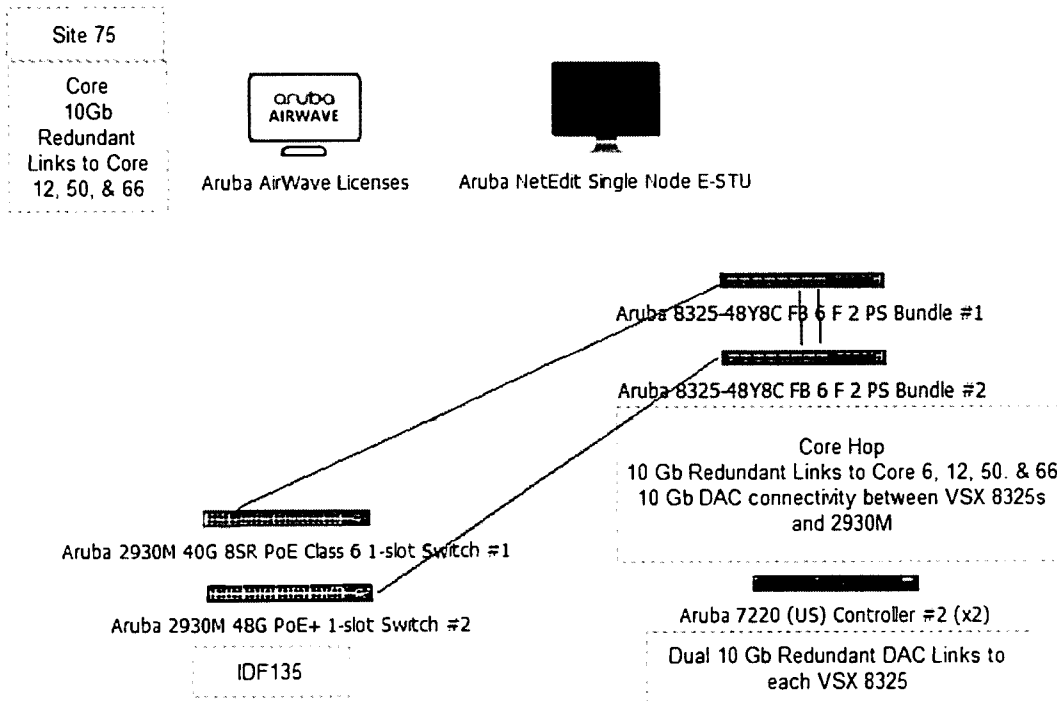
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 1Gb uplinks with Core 46.



Site 75:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

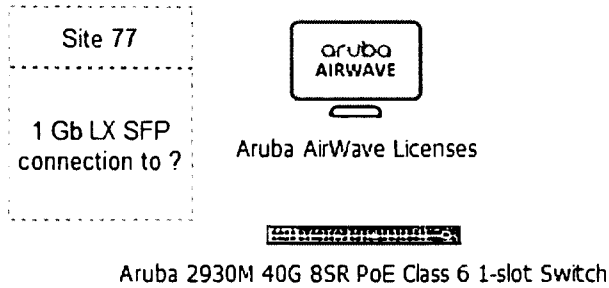
New OM4 – SM Fiber Optic patch cables will be provided and installed for the 10Gb uplinks with Cores 12, 50 & 66.



Site 77:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

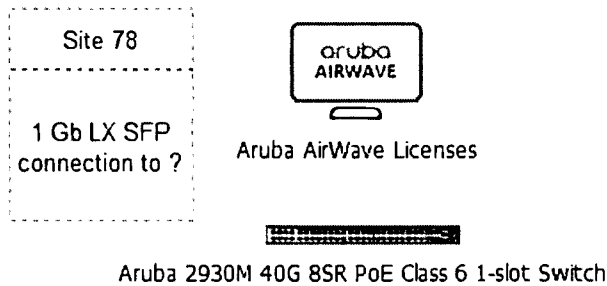
New OM3 – SM Fiber Optic patch cables will be provided and installed for the 10Gb uplinks with XX.



Site 78:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT. All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM3 – SM Fiber Optic patch cables will be provided and installed for the 10Gb uplinks with XX.

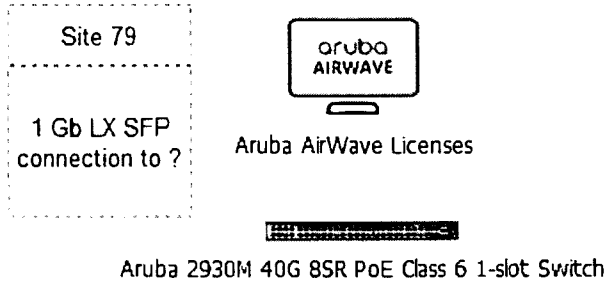


Site 79:

VectorUSA will remove existing Cisco switches and replace with new HPE –Aruba Components as shown below. All existing gear will be inventoried, documented and returned to City of Riverside IT.

All existing patch cables between the patch panels and LAN switches will be replaced with new Category 6 patch cables. All existing station side patch cables will be replaced with new Category 6.

New OM3 – SM Fiber Optic patch cables will be provided and installed for the 10Gb uplinks with XX.



30 Day Test & Acceptance:

Upon completion of a site cutover, whether it's core, data center or edge, each site is subject to an Acceptance Period. Acceptance criteria shall include passing specific tests identified by the City and the Vendor by means of a written checklist, and closure of all identified Day 1 trouble tickets and issues at each site. The Acceptance Period shall consist of thirty (30) consecutive days of normal traffic load with no major component failures and no major alarms, defined as:

- Any core, distribution, or access layer switch, router, or component processing failure
- Any issue escalated to a major alarm status by the City. The City shall have sole discretion in identifying a major alarm.
 - a. **Major alarm would be: An outage or issue impacting users and/or daily business functions due to new network implementation, or changes made as a part of the Network Refresh**

In the event of failure of any product, feature, function, configuration, or integration, the Vendor shall receive sufficient time to remediate the failed item prior to retesting. Upon successful completion of the Acceptance Period, the City shall accept the site after the Vendor provides a signed letter of official system certification with successful acceptance test results and as-built documentation.

30 Day Post Acceptance Support:

VectorUSA will provide a resident network engineer at no additional cost for a total of 30 days, following project acceptance. In addition, during the project, and during 30 day post acceptance, if an after-hours emergency associated with the Network Refresh occurs, VectorUSA will commit to be onsite within four (4) hours from the time the incident is reported to them, if onsite support is determined by either party to be required.

Quarterly Inspection:

VectorUSA will provide a network engineer at no additional cost, once every quarter for the first year following project acceptance. The service is made up of logging in remotely and confirming the switched network is online. No work will be done onsite.

High-Level Design Tasks:

Refer to pages Exhibit A-051 to Exhibit A-141.

High Level Project Scope for Wireless and OnGuard:

Wireless Upgrade

- Installation for up to 145 Aruba Access Points
- In order for the AX wireless to work the following will need to be upgraded
 - Airwave will need to be upgraded to the latest version 8.x
 - Controllers will need to be upgraded to the latest version 8.x
 - Mobility Masters will need to be configured and installed
 - Wireless network will be tested

OnGuard

- VectorUSA will meet with Riverside to review the requirements needed for OnGuard
- VectorUSA will schedule a maintenance window to deploy the OnGuard software add on
- VectorUSA will test OnGuard on up to 10 devices or users
- VectorUSA will work with CoR to fine tune OnGuard settings for best experience
- VectorUSA will work with CoR to determine how OnGuard should be configured
- Determine any other network dependencies I.e. controllers, ClearPass etc., must be at version XXXXX

High-Level Design Tasks

Vector will:

- Revise the SOW for the High-Level Design changes.
- Conduct formal kickoff
- Provide data collection forms
- Network engineering planning discussions – High level design approach
- Migration planning, Change Management, design reviews, security framework, discussion on test validation for mutually agreed to steps.
- Configuration and network connectivity readiness for leveraging ClearPass
- Delivery of High-Level Design Summary
- Engineering Documentation review for High Level

City will:

- Provide diagrams and network documentation, SNMP/SSH access, existing configurations, complete data forms
- Define Business Security Policy framework requirements.
- Coordination and testing of fiber strand usage with Riverside Public Utilities (RPU)
- Approve high level design

Low-Level Design & Deliverables

Network

Vector will:

- Revise the SOW for the Low-Level Design changes.
- Network overview illustrations and scope of work/functional description:
 - Detailed migration plan, to include, core sites, data centers, and edge IDF and site migrations
 - Network diagrams reflecting the physical and logical traffic flow.
 - Detailed, hierarchical network drawings and tables.
 - Component slot/port assignments.
 - Key Ethernet Routing Switch and Virtual Platform Switch component mappings and attribute values.
 - Network management IP addressing scheme/address allocation.
 - Network management hardware/software platform specifications and associated configuration parameters.
 - Multilink Trunking (MLT) assignments for switch-to-switch links for (Split Multi-Link Trunk) MLT/SMLT/LACP (Link Aggregation Control Protocol).
 - Spanning Tree Protocol (STP) assignments for user- and trunk-based links.
 - Layer 3 address plans for the Open Shortest Path First (OSPF) internal routing protocol.
 - Enhanced Interior Gateway Routing Protocol (EIGRP) to OSPF route distribution migration strategy
 - Virtual Router Redundancy Protocol (VRRP) or Routed Split Multi-Link Trunk (RSMLT) configuration(s)

- Virtual LAN (VLAN) assignments for port-based and/or protocol-based VLANs, IP addressing and routing design.
 - Quality of Service specification (Basic QoS-Core/Trusted port setting).
 - Multi-cast configuration
 - Access Control List configurations and organized methodology for deployment
 - Develop Test Plans to be utilized for site verification. These Test Plans will detail the testing of multiple site connectivity types including but not limited to LAN, MAN, and WAN connectivity over private fiber, Metro Ethernet, Ethernet over Copper, and 4G LTE.
 - Vector will identify locations with internal firewalls and complete any configuration as required
- Vector will provide the following details as it pertains to any application subject to PCI DSS requirements:
 - Data flow documentation so City staff can open up required firewall ports.
 - Data flow associated with the application call flow being developed.
 - Documentation with the name, location, description, and the format of the log files, so the City can import the logs into their central log server.
 - List of files and directories that should not change such as critical system application files, so the City can configure file integrity monitoring.
 - List of Windows services, ports, proprietary applications, and executables that need to run, so the City can configure Active Directory group policy and Windows firewall.
 - Documentation for a secure application configuration guide for any settings the City needs to configure operationally.
 - List of any insecure protocols in use and the business justification for using them (HTTP, telnet, FTP, etc).

City will:

- Provide existing networking documentation as required by Vector during the design tasks, such as network topology maps, design documents, past audit/assessment reports, bandwidth and resource utilization reports.
- Provide information required to customize the logical network design so that it conforms to City's specific standards.
- Identify locations with external firewalls and complete any configuration as required
- Identify usage cases for network requirements.
- Work with RPU to identify fiber runs and specific strands, live and dark
- Identify any carrier circuits and connectivity requirements.
- Provide definition and specifications for configuration of all device credentials such as community strings, passwords, and account names on all network devices.

ClearPass

Vector will:

- Perform Design Services for modifying the framework for the ClearPass System with the input from the City. The City will be responsible to supply the information regarding security policies per business requirements and Active Directory Authentication information.

City of Riverside – RFP No. 1926, Data Network Refresh

- Hold engineering and planning discussions with the City to understand the security framework requirements for access control and development the rules/policies for user/device authentication.
- ClearPass Security policies planning, implementation steps and migration plans will be discussed during the Engineering and planning sessions with the customer.
- Documentation of identity parameters as configured (Policy rules and Authentication Configurations)
- Define User and Device related Security Access Policies including any inbound/outbound attributes based on the defined specifications.
- Provide no-charge access to Aruba's script library and assist with customizing scripts to fit the City of Riverside requirements.

City will:

- Define active directory service account and user accounts necessary for Remote Authentication Dial-In User Service ("RADIUS") for network device management.
- Define Business Security Policy framework requirements
- Perform workstation/device supplicant 802.1x related configurations

Site BOM and Drawing Redraft

- 1.9 The RFP requires two network drawings to be included with each proposal. Can the City please elaborate on detailed requirements of each drawing?
- Detailed logical and physical drawings of each site, the connectivity to each, as well as holistic drawing of the entire network. MS Excel documentation of all equipment in said drawings.

Site 1

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 1
1 Gb LX SFP connection to Core 66



Aruba AirWave Licenses #2



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

Site 2

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 2
1 Gb LX SFP connection to Core 66



Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #4

Site 3

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	2
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	2
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	1
2.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	JL258A	Aruba 2930F 8G PoE+ 2SFP+ Switch	1
3.1	JL258A ABA	INCLUDED: Power Cord - U.S. localization	1
3.2	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	1

Site 3
1 Gb LX SFP connection to Core 7



Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #5

IDF3



Aruba 2930F 8G PoE+ 2SFP+ Switch

IDF3A

Site 4

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	JL258A	Aruba 2930F 8G PoE+ 2SFP+ Switch	1
2.1	JL258A ABA	INCLUDED: Power Cord - U.S. localization	1
2.2	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 4
1 Gb LX SFP connection to Core 66



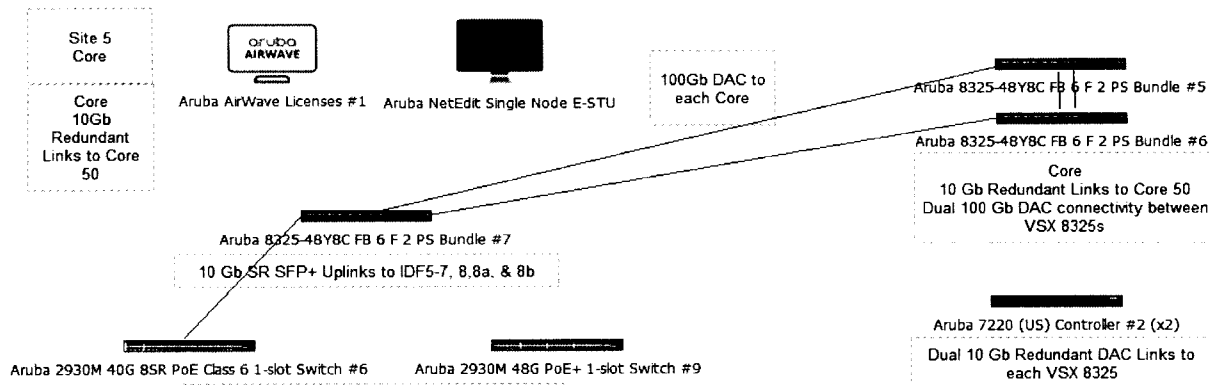
Aruba AirWave Licenses



Aruba 2930F 8G PoE+ 2SFP+ Switch

Site 5

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	19
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	19
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	2
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	2
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	2
2.3	JL325A	Aruba 2930 2-port Stacking Module	2
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	2
2.5	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	2
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	7
4.0	J9735A	Aruba 2920/2930M 1m Stacking Cable	4
5.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	3
5.1	JL087A	Aruba X372 54VDC 1050W Power Supply	3
5.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	3
5.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	3
5.4	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	3
6.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	8
6.1	JL087A	Aruba X372 54VDC 1050W Power Supply	8
6.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	8
6.3	JL325A	Aruba 2930 2-port Stacking Module	8
6.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	8
7.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	2
7.1	JL624A ABA	INCLUDED: Power Cord - U.S. localization	2
7.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	2
7.3	JL482B	Aruba X472 2-post Rack Kit	2
7.4	J9153D	Aruba 10G SFP+ LC ER 40km SMF Transceiver	2
7.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	10
8.0	JL307A	Aruba 100G QSFP28-QSFP28 3m DAC Cable	2
9.0	RO225A	Aruba 100G QSFP28 to QSFP28 1m DAC Cable	2
10.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
10.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
10.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
10.3	JL325A	Aruba 2930 2-port Stacking Module	1
10.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
11.0	JL640AAE	Aruba NetEdit Single Node 3yr Sub E-STU	6
12.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	1
12.1	JL624A ABA	INCLUDED: Power Cord - U.S. localization	1
12.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	1
12.3	JL482B	Aruba X472 2-post Rack Kit	1
12.4	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	6
13.0	J9281D	Aruba 10G SFP+ to SFP+ 1m DAC Cable	1
14.0	JW752A	Aruba 7220 (US) 4p 10GBase-X (SFP+) 2p Dual Pers (10/100/1000BASE-T or SFP) Controller	2
14.1	HF9M4E	Aruba 5Y FC NBD Exch HW7220 Cntrl SVC [for JW752A]	2
14.2	JW657A	Aruba PSU-350-AC 7200 Series S3500-24T S3500-48T and S3500-24F 350W AC Power Supply	2
14.3	H6SD1E	Aruba 5Y FC NBD Exch PSU-350-AC SVC [for JW657A]	2
14.4	JW124A	PC-AC-NA North America AC Power Cord	4
14.5	JW472AAE	Aruba LIC-AP Controller per AP Capacity License E-LTU	50
14.6	H2YV0E	Aruba 5Y FC 24x7 Ctrl perAP Cap ELTU SVC [for JW472AAE]	50
14.7	JW473AAE	Aruba LIC-PEF Controller Policy Enforcement Firewall Per AP License E-LTU	50
14.8	H2XY0E	Aruba 5Y FC 24x7 License PEF Cn SVC [for JW473AAE]	50
15.0	J9283D	Aruba 10G SFP+ to SFP+ 3m DAC Cable	8



10Gb DAC to 8325
100Gb Stacking between Switches

Aruba 2930M 48G PoE+ 1-slot Switch #7 (x3)

IDF6

100Gb Stacking between Switches

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #2

Aruba 2930M 48G PoE+ 1-slot Switch #4 (x3)

IDF5

100Gb Stacking between Switches

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #8

Aruba 2930M 48G PoE+ 1-slot Switch #10

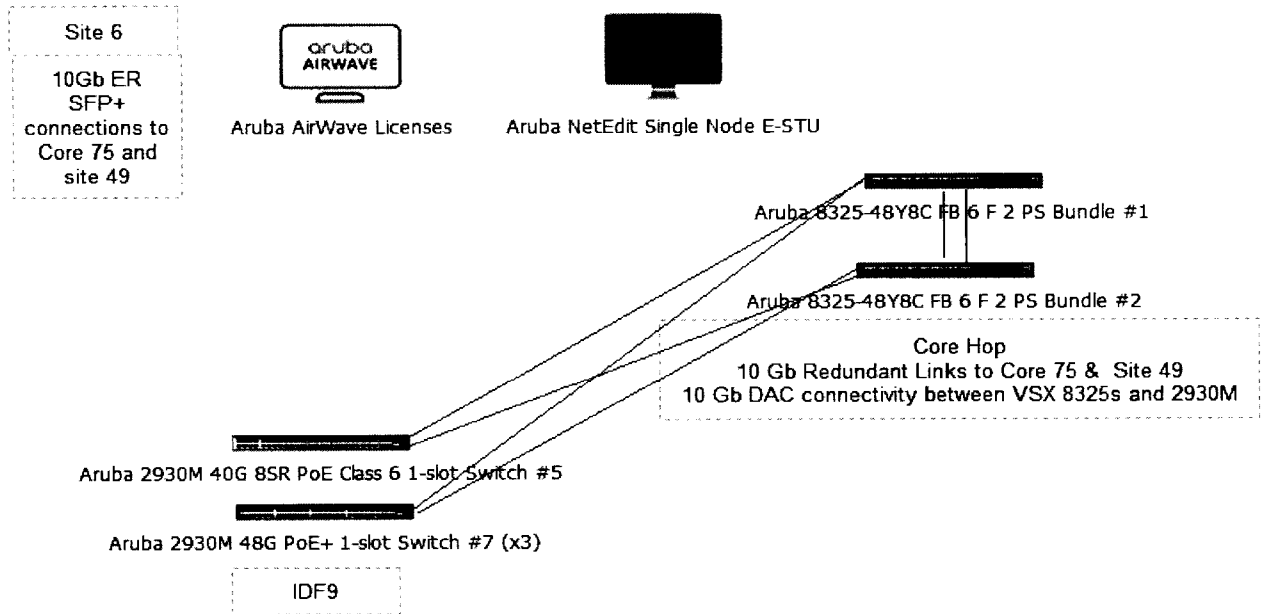
IDF7

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3 (x3)

IDF8.8a, & 8b

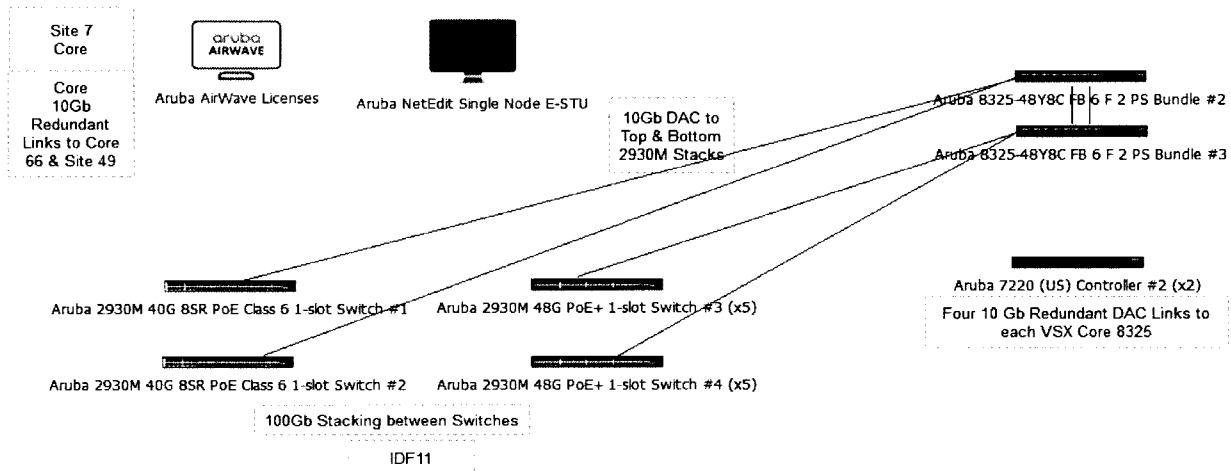
Site 6

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	6
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	6
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	HG0C0E	HPE 5Y FC NBD Exch HWA Aruba 2930MSRPOE SVC [for R0M67A]	1
2.2	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.3	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.4	JL325A	Aruba 2930 2-port Stacking Module	1
2.5	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	3
4.0	J9735A	Aruba 2920/2930M 1m Stacking Cable	1
5.0	J9283D	Aruba 10G SFP+ to SFP+ 3m DAC Cable	4
6.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	3
6.1	JL087A	Aruba X372 54VDC 1050W Power Supply	3
6.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	3
6.3	JL325A	Aruba 2930 2-port Stacking Module	3
6.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	3
7.0	JL640AAE	Aruba NetEdit Single Node 3yr Sub E-STU	4
8.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	2
8.1	JL624A ABA	INCLUDED: Power Cord - U.S. localization	2
8.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	2
8.3	JL482B	Aruba X472 2-post Rack Kit	2
8.4	J9153D	Aruba 10G SFP+ LC ER 40km SMF Transceiver	4
9.0	R0Z25A	Aruba 100G QSFP28 to QSFP28 1m DAC Cable	2



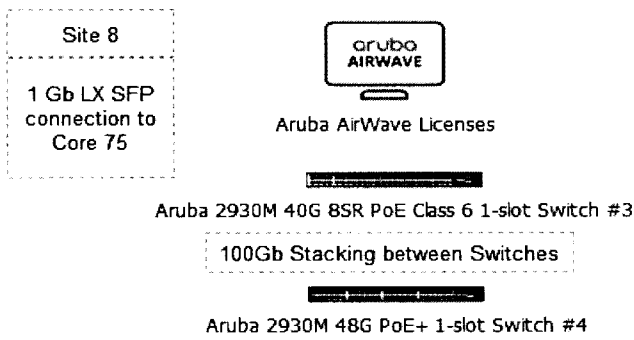
Site 7

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	16
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	16
2.0	JL640AAE	Aruba NetEdit Single Node 3yr Sub E-STU	4
3.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	1
3.1	JL624A ABA	INCLUDED: Power Cord - U.S. localization	1
3.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	1
3.3	JL482B	Aruba X472 2-post Rack Kit	1
3.4	J9153D	Aruba 10G SFP+ LC ER 40km SMF Transceiver	2
3.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	4
4.0	ROZ25A	Aruba 100G QSFP28 to QSFP28 1m DAC Cable	2
5.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	2
5.1	JL087A	Aruba X372 54VDC 1050W Power Supply	2
5.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	2
5.3	JL325A	Aruba 2930 2-port Stacking Module	2
5.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	2
6.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	15
7.0	J9735A	Aruba 2920/2930M 1m Stacking Cable	3
8.0	J9283B	HPE X242 10G SFP+ to SFP+ 3m DAC Cable [discontinued]	4
9.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	1
9.1	JL624A ABA	INCLUDED: Power Cord - U.S. localization	1
9.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	1
9.3	JL482B	Aruba X472 2-post Rack Kit	1
9.4	J9153D	Aruba 10G SFP+ LC ER 40km SMF Transceiver	2
9.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	3
10.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	10
10.1	JL087A	Aruba X372 54VDC 1050W Power Supply	10
10.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	10
10.3	JL325A	Aruba 2930 2-port Stacking Module	10
10.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	10
11.0	JW752A	Aruba 7220 (US) 4p 10GBase-X (SFP+) 2p Dual Pers (10/100/1000BASE-T or SFP) Controller	2
11.1	HF9M4E	Aruba 5Y FC NBD Exch HW7220 Cntrl SVC [for JW752A]	2
11.2	JW657A	Aruba PSU-350-AC 7200 Series S3500-24T S3500-48T and S3500-24F 350W AC Power Supply	2
11.3	H65D1E	Aruba 5Y FC NBD Exch PSU-350-AC SVC [for JW657A]	2
11.4	JW124A	PC-AC-NA North America AC Power Cord	4
11.5	JW472AAE	Aruba LIC-AP Controller per AP Capacity License E-LTU	50
11.6	H2YV0E	Aruba 5Y FC 24x7 Ctrl perAP Cap ELTU SVC [for JW472AAE]	50
11.7	JW473AAE	Aruba LIC-PEF Controller Policy Enforcement Firewall Per AP License E-LTU	50
11.8	H2XY0E	Aruba 5Y FC 24x7 License PEF Cn SVC [for JW473AAE]	50
12.0	J9283D	Aruba 10G SFP+ to SFP+ 3m DAC Cable	8



Site 8

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	2
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	2
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL325A	Aruba 2930 2-port Stacking Module	1
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	2
4.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	1
4.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
4.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
4.3	JL325A	Aruba 2930 2-port Stacking Module	1
4.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1



Site 9

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 9
1 Gb LX SFP
connection to
Core 5



Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

Site 10

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 10
1 Gb LX SFP
connection to
Core 5



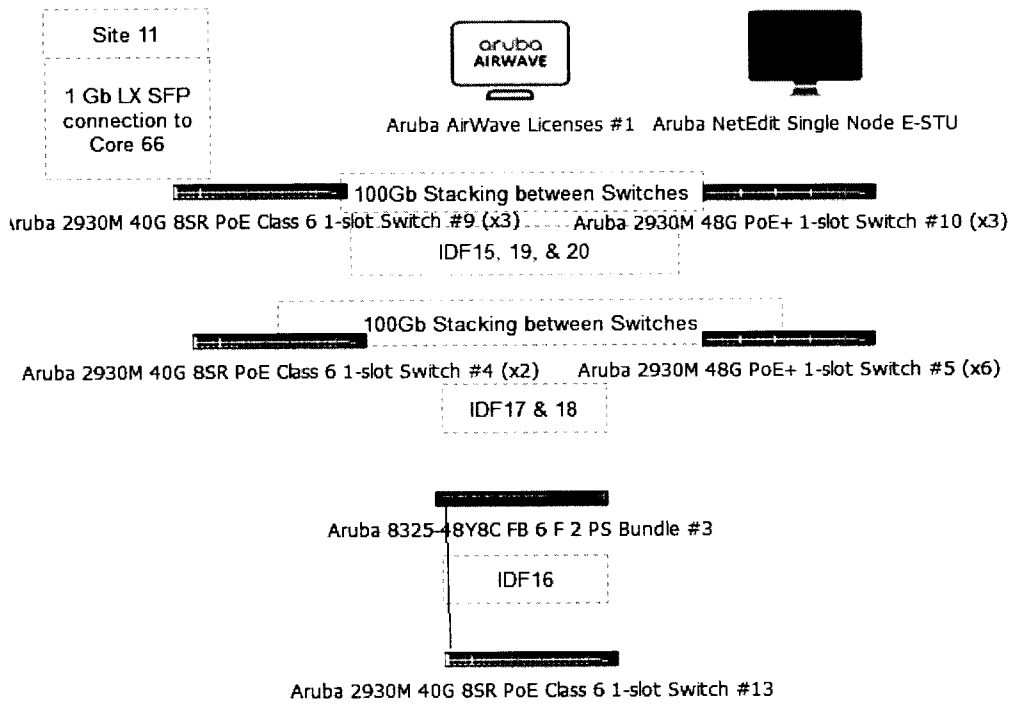
Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #6

Site 11

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	19
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	19
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	5
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	5
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	5
2.3	JL325A	Aruba 2930 2-port Stacking Module	5
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	5
2.5	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	5
3.0	J9735A	Aruba 2920/2930M 1m Stacking Cable	3
4.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	15
5.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	12
5.1	JL087A	Aruba X372 54VDC 1050W Power Supply	12
5.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	12
5.3	JL325A	Aruba 2930 2-port Stacking Module	12
5.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	12
6.0	JL640AAE	Aruba NetEdit Single Node 3yr Sub E-STU	2
7.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
7.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
7.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
7.3	JL325A	Aruba 2930 2-port Stacking Module	1
7.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
8.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	1
8.1	JL624A ABA	INCLUDED: Power Cord - U.S. localization	1
8.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	1
8.3	JL482B	Aruba X472 2-post Rack Kit	1
8.4	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	5
8.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
9.0	J9281D	Aruba 10G SFP+ to SFP+ 1m DAC Cable	1
Quote Total			

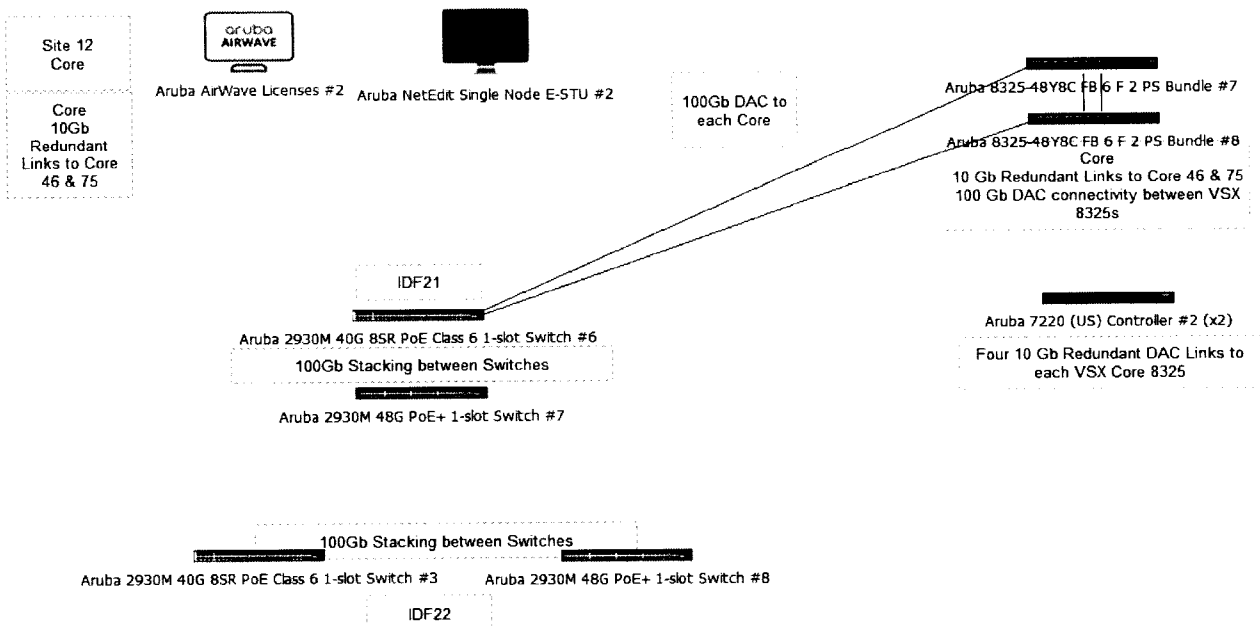


Aruba 2930M 48G PoE+ 1-slot Switch #14 (x3)

100Gb Stacking between Switches

Site 12

Line#	Part Number	Description	Quantity
1.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	2
1.1	JL087A	Aruba X372 54VDC 1050W Power Supply	2
1.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	2
1.3	JL325A	Aruba 2930 2-port Stacking Module	2
1.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	2
1.5	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	2
2.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	4
3.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	8
3.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	8
4.0	JL640AAE	Aruba NetEdit Single Node 3yr Sub E-STU	4
5.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	1
5.1	JL624A ABA	INCLUDED: Power Cord - U.S. localization	1
5.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	1
5.3	JL482B	Aruba X472 2-post Rack Kit	1
5.4	J9153D	Aruba 10G SFP+ LC ER 40km SMF Transceiver	2
5.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	3
6.0	ROZ25A	Aruba 100G QSFP28 to QSFP28 1m DAC Cable	2
7.0	J9283D	Aruba 10G SFP+ to SFP+ 3m DAC Cable	10
8.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	2
8.1	JL087A	Aruba X372 54VDC 1050W Power Supply	2
8.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	2
8.3	JL325A	Aruba 2930 2-port Stacking Module	2
8.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	2
9.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	1
9.1	JL624A ABA	INCLUDED: Power Cord - U.S. localization	1
9.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	1
9.3	JL482B	Aruba X472 2-post Rack Kit	1
9.4	J9153D	Aruba 10G SFP+ LC ER 40km SMF Transceiver	2
9.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	2
10.0	JW752A	Aruba 7220 (US) 4p 10GBase-X (SFP+) 2p Dual Pers (10/100/1000BASE-T or SFP) Controller	2
10.1	HF9M4E	Aruba 5Y FC NBD Exch HW7220 Cntrl SVC [for JW752A]	2
10.2	JW657A	Aruba PSU-350-AC 7200 Series S3500-24T S3500-48T and S3500-24F 350W AC Power Supply	2
10.3	H65D1E	Aruba 5Y FC NBD Exch PSU-350-AC SVC [for JW657A]	2
10.4	JW124A	PC-AC-NA North America AC Power Cord	4
10.5	JW472AAE	Aruba LIC-AP Controller per AP Capacity License E-LTU	50
10.6	H2YV0E	Aruba 5Y FC 24x7 Ctrl perAP Cap ELTU SVC [for JW472AAE]	50
10.7	JW473AAE	Aruba LIC-PEF Controller Policy Enforcement Firewall Per AP License E-LTU	50
10.8	H2XY0E	Aruba 5Y FC 24x7 License PEF Cn SVC [for JW473AAE]	50
Quote Total			



Site 13

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	2
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	2
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.3.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	1
2.5	J8177D	Aruba 1G SFP RJ45 T 100m Cat5e Transceiver	1
3.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
3.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
3.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
3.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
3.3.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	1
Quote Total			

Site 13
1Gb Metro Ethernet connection to Core 46



Aruba AirWave Licenses #1

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #2

IDF23

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

IDF23a

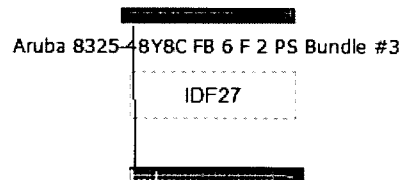
Site 14

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	27
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	27
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	19
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	19
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	19
2.3	JL325A	Aruba 2930 2-port Stacking Module	19
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	19
2.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	19
3.0	JL640AAE	Aruba NetEdit Single Node 3yr Sub E-STU	2
4.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
4.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
4.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
4.3	JL325A	Aruba 2930 2-port Stacking Module	1
4.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
5.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	2
6.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	1
6.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
6.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
6.3	JL325A	Aruba 2930 2-port Stacking Module	1
6.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
7.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	1
7.1	JL624A ABA	INCLUDED: Power Cord - U.S. localization	1
7.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	1
7.3	JL482B	Aruba X472 2-post Rack Kit	1
7.4	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	24
7.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
8.0	J9281D	Aruba 10G SFP+ to SFP+ 1m DAC Cable	1
9.0	JL258A	Aruba 2930F 8G PoE+ 2SFP+ Switch	5
9.1	JL258A ABA	INCLUDED: Power Cord - U.S. localization	5
9.2	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	5
Quote Total			

Site 14
1 Gb LX SFP connection to Core 12



Aruba AirWave Licenses #1 Aruba NetEdit Single Node E-STU



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #5

Aruba 2930M 48G PoE+ 1-slot Switch #6

100Gb Stacking between Switches

████████████████████
Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #4 (x19)

IDF24 - 25, 28, 33 - 42g

████████████████████
Aruba 2930F 8G PoE+ 2SFP+ Switch (x5)

IDF26, 29 - 32

Site 15

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
Quote Total			

Site 15
 1 Gb LX SFP
 connection to
 Core 7



Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

Site 16

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
Quote Total			

Site 16
 1 Gb LX SFP
 connection to
 Core 7



Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #6

Site 17

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	2
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	2
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL325A	Aruba 2930 2-port Stacking Module	1
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	2
4.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	1
4.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
4.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
4.3	JL325A	Aruba 2930 2-port Stacking Module	1
4.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
Quote Total			

Site 17
1 Gb LX SFP connection to Core 66



Aruba AirWave Licenses

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #6

100Gb Stacking between Switches

Aruba 2930M 48G PoE+ 1-slot Switch #7

Site 18

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
Quote Total			

Site 18

1 Gb LX SFP connection to Core 66



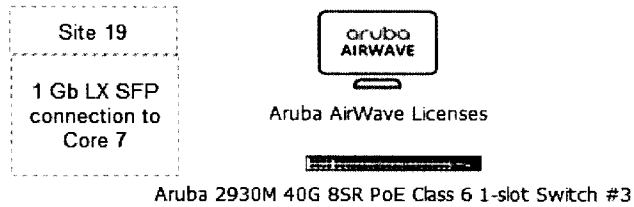
Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

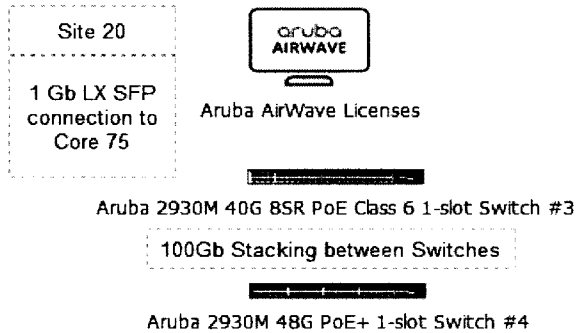
Site 19

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	2
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	2
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
Quote Total			



Site 20

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	2
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	2
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL325A	Aruba 2930 2-port Stacking Module	1
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	2
4.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	1
4.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
4.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
4.3	JL325A	Aruba 2930 2-port Stacking Module	1
4.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
Quote Total			



Site 21

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 21
1 Gb LX SFP connection to Core 66



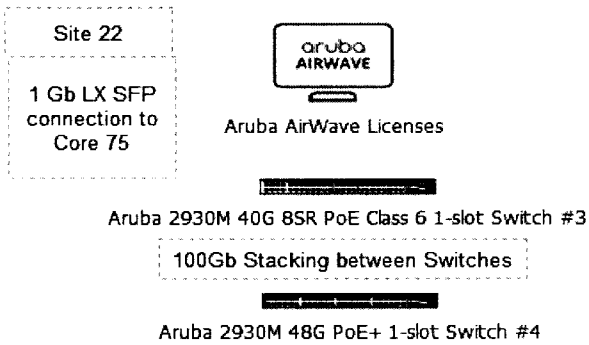
Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #4

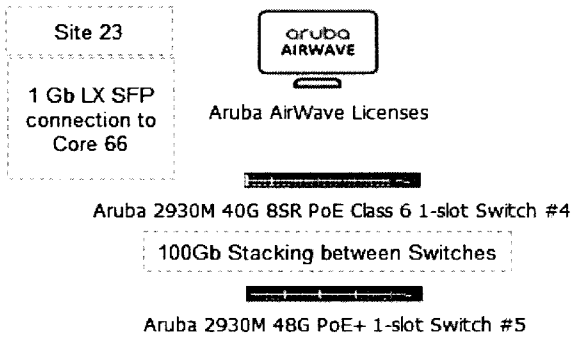
Site 22

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	2
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	2
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL325A	Aruba 2930 2-port Stacking Module	1
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	2
4.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	1
4.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
4.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
4.3	JL325A	Aruba 2930 2-port Stacking Module	1
4.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1



Site 23

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	2
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	2
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL325A	Aruba 2930 2-port Stacking Module	1
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	2
4.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	1
4.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
4.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
4.3	JL325A	Aruba 2930 2-port Stacking Module	1
4.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1



Site 24

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	2

Site 24

Removed per RFP

Added two SMF SFP+s, not sure what core this goes to?



Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch

Site 25

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 25
 1 Gb LX SFP
 connection to
 Core 46



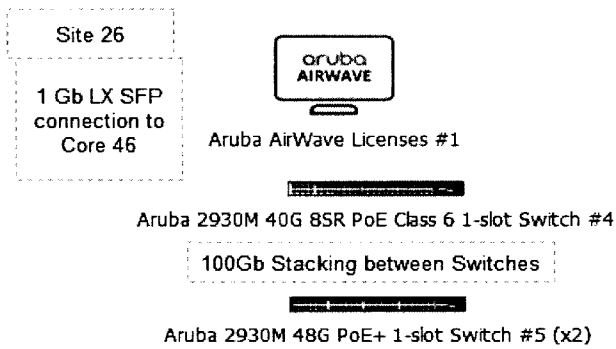
Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

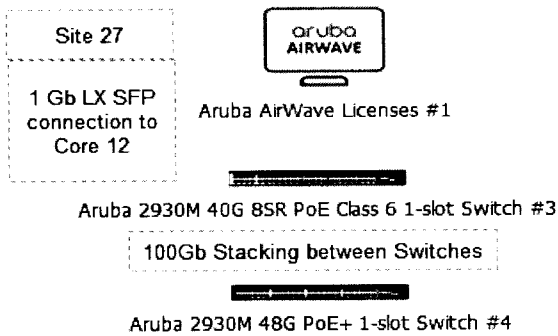
Site 26

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	2
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	2
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL325A	Aruba 2930 2-port Stacking Module	1
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	3
4.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	2
4.1	JL087A	Aruba X372 54VDC 1050W Power Supply	2
4.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	2
4.3	JL325A	Aruba 2930 2-port Stacking Module	2
4.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	2



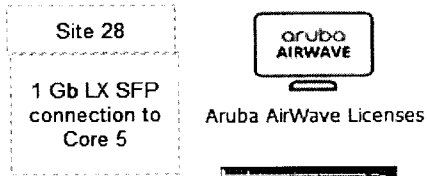
Site 27

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	2
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	2
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL325A	Aruba 2930 2-port Stacking Module	1
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	2
4.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	1
4.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
4.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
4.3	JL325A	Aruba 2930 2-port Stacking Module	1
4.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1



Site 28

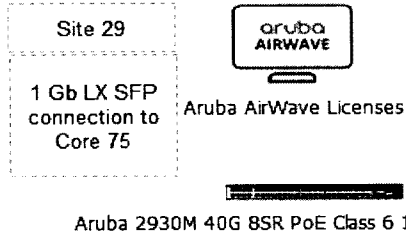
Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

Site 29

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1



Site 30

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	4
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	4
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL325A	Aruba 2930 2-port Stacking Module	1
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	2
2.4.2	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	2
4.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	1
4.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
4.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
4.3	JL325A	Aruba 2930 2-port Stacking Module	1
4.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
5.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	2
5.1	JL087A	Aruba X372 54VDC 1050W Power Supply	2
5.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	2
5.3	JL325A	Aruba 2930 2-port Stacking Module	2
5.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	2
5.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	2

Site 30
1 Gb LX SFP connection to Core 75



Aruba AirWave Licenses #1

10 Gb SR SFP+ Uplinks to each IDF

10Gb DAC to 8325

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #5

Aruba 2930M 48G PoE+ 1-slot Switch #6

IDF58

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #7 (x2)

IDF59 & IDF60

Site 31

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 31
 1 Gb LX SFP
 connection to
 Core 66



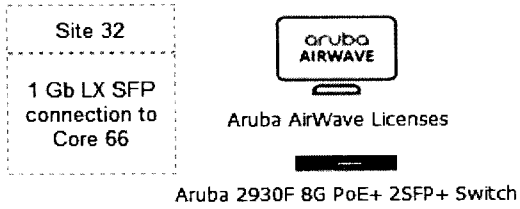
Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

Site 32

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	JL258A	Aruba 2930F 8G PoE+ 2SFP+ Switch	1
2.1	JL258A ABA	INCLUDED: Power Cord - U.S. localization	1
2.2	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1



Site 33

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 33
 1 Gb LX SFP
 connection to
 Core 66



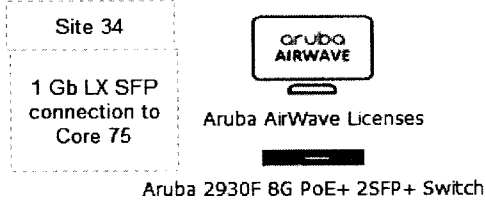
Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

Site 34

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	JL258A	Aruba 2930F 8G PoE+ 2SFP+ Switch	1
2.1	JL258A ABA	INCLUDED: Power Cord - U.S. localization	1
2.2	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1



Site 35

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	2
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	2
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL325A	Aruba 2930 2-port Stacking Module	1
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	2
4.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	1
4.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
4.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
4.3	JL325A	Aruba 2930 2-port Stacking Module	1
4.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1

Site 35
1 Gb LX SFP
connection to
Core 66



Aruba AirWave Licenses

100Gb Stacking between Switches

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

Aruba 2930M 48G PoE+ 1-slot Switch #4

IDF65

Site 36

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 36
1 Gb LX SFP
connection to
Core 5



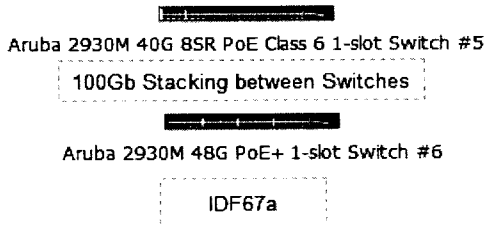
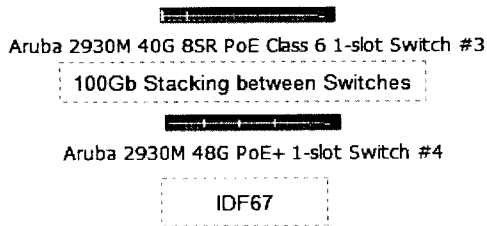
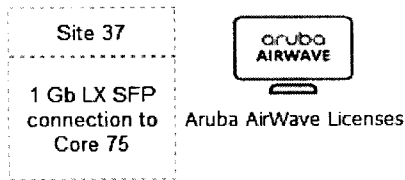
Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

Site 37

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	4
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	4
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL325A	Aruba 2930 2-port Stacking Module	1
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	1
2.4.2	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	4
4.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	2
4.1	JL087A	Aruba X372 54VDC 1050W Power Supply	2
4.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	2
4.3	JL325A	Aruba 2930 2-port Stacking Module	2
4.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	2
5.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
5.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
5.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
5.3	JL325A	Aruba 2930 2-port Stacking Module	1
5.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
5.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	1



Site 38

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	6
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	6
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL325A	Aruba 2930 2-port Stacking Module	1
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	2
2.4.2	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	4
4.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	2
4.1	JL087A	Aruba X372 54VDC 1050W Power Supply	2
4.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	2
4.3	JL325A	Aruba 2930 2-port Stacking Module	2
4.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	2
5.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	2
5.1	JL087A	Aruba X372 54VDC 1050W Power Supply	2
5.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	2
5.3	JL325A	Aruba 2930 2-port Stacking Module	2
5.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	2
5.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	2

Site 38
1 Gb LX SFP connection to Core 7



Aruba AirWave Licenses #1

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #14
100Gb Stacking between Switches

Aruba 2930M 48G PoE+ 1-slot Switch #15

IDF68

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #16

IDF69

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #17
100Gb Stacking between Switches

Aruba 2930M 48G PoE+ 1-slot Switch #18

IDF70

Site 39

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 39
1 Gb LX SFP
connection to
Core 46



Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

Site 40

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	2
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	2
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL325A	Aruba 2930 2-port Stacking Module	1
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	1
2.4.2	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
3.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
3.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
3.3	JL325A	Aruba 2930 2-port Stacking Module	1
3.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
3.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	1

Site 40

1 Gb LX SFP
connection to
Core 12



Aruba AirWave Licenses

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

IDF72

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #4

IDF73

Site 41

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 41
 1 Gb LX SFP
 connection to
 Core 75



Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

Site 42

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 42
 1 Gb LX SFP
 connection to
 Core 66



Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

Site 43

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	2
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	2
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL325A	Aruba 2930 2-port Stacking Module	1
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	1
2.4.2	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
3.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
3.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
3.3	JL325A	Aruba 2930 2-port Stacking Module	1
3.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
3.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	1

Site 43
 1 Gb LX SFP connection to Core 66



Aruba AirWave Licenses

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

IDF76

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #4

IDF77

Site 44

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 44
 1 Gb LX SFP
 connection to
 Core 5



Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #4

Site 45

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	6
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	6
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.2	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.3	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.4	JL325A	Aruba 2930 2-port Stacking Module	1
2.5	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	2
2.4.2	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	5
4.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	3
4.1	JL087A	Aruba X372 54VDC 1050W Power Supply	3
4.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	3
4.3	JL325A	Aruba 2930 2-port Stacking Module	3
4.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	3
5.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	2
5.1	JL087A	Aruba X372 54VDC 1050W Power Supply	2
5.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	2
5.3	JL325A	Aruba 2930 2-port Stacking Module	2
5.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	2
5.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	2

Site 45
1 Gb LX SFP connection to Core 5



Aruba AirWave Licenses

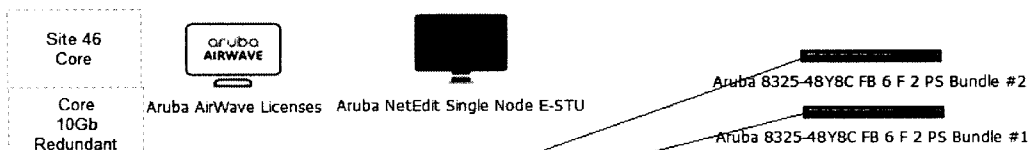
Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #7 Aruba 2930M 48G PoE+ 1-slot Switch #8
IDF79

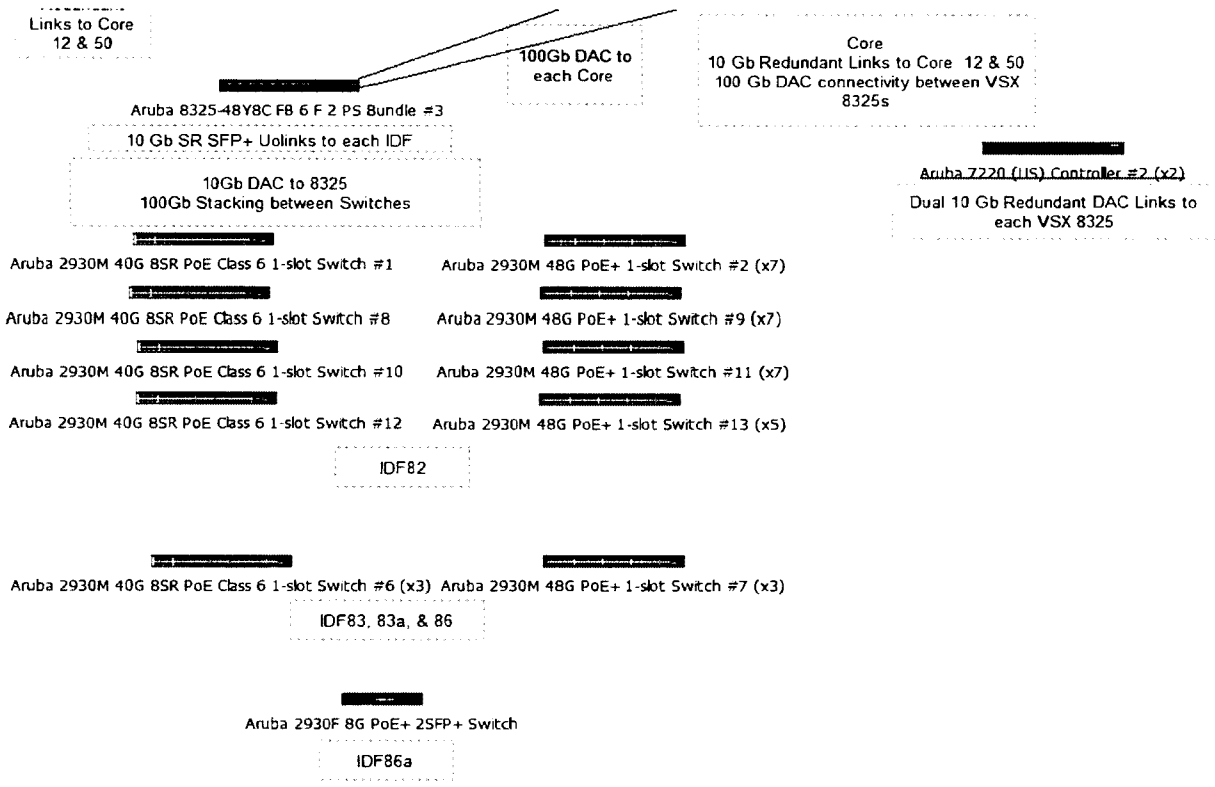
Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #9 Aruba 2930M 48G PoE+ 1-slot Switch #10 (x2)
IDF80

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #11
IDF81

Site 46

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	40
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	40
2.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	1
2.1	JL624A ABA	INCLUDED: Power Cord - U.S. localization	1
2.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	1
2.3	JL483B	Aruba X474 4-post Rack Kit	1
2.4	J8177D	Aruba 1G SFP RJ45 T 100m Cat5e Transceiver	3
2.5	J9153D	Aruba 10G SFP+ LC ER 40km SMF Transceiver	2
2.6	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	2
3.0	JL307A	Aruba 100G QSFP28-QSFP28 3m DAC Cable	2
4.0	R0225A	Aruba 100G QSFP28 to QSFP28 1m DAC Cable	2
5.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	1
5.1	JL624A ABA	INCLUDED: Power Cord - U.S. localization	1
5.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	1
5.3	JL483B	Aruba X474 4-post Rack Kit	1
5.4	J8177D	Aruba 1G SFP RJ45 T 100m Cat5e Transceiver	3
5.5	J9153D	Aruba 10G SFP+ LC ER 40km SMF Transceiver	2
5.6	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	3
6.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	1
6.1	JL624A ABA	INCLUDED: Power Cord - U.S. localization	1
6.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	1
6.3	JL483B	Aruba X474 4-post Rack Kit	1
6.4	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	4
7.0	J9281D	Aruba 10G SFP+ to SFP+ 1m DAC Cable	2
8.0	J9283D	Aruba 10G SFP+ to SFP+ 3m DAC Cable	11
9.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	4
9.1	JL087A	Aruba X372 54VDC 1050W Power Supply	4
9.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	4
9.3	JL325A	Aruba 2930 2-port Stacking Module	4
9.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	4
9.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	16
10.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	28
11.0	J9735A	Aruba 2920/2930M 1m Stacking Cable	4
12.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	29
12.1	JL087A	Aruba X372 54VDC 1050W Power Supply	29
12.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	29
12.3	JL325A	Aruba 2930 2-port Stacking Module	29
12.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	29
13.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	3
13.1	JL087A	Aruba X372 54VDC 1050W Power Supply	3
13.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	3
13.3	JL325A	Aruba 2930 2-port Stacking Module	3
13.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	3
13.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	3
14.0	JL640AAE	Aruba NetEdit Single Node 3yr Sub E-STU	6
15.0	JL258A	Aruba 2930F 8G PoE+ 2SFP+ Switch	1
15.1	JL258A ABA	INCLUDED: Power Cord - U.S. localization	1
15.2	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	1
16.0	JW752A	Aruba 7220 (US) 4p 10GBase-X (SFP+) 2p Dual Pers (10/100/1000BASE-T or SFP) Controller	2
16.1	HF9M4E	Aruba 5Y FC NBD Exch HW7220 Cntrl SVC [for JW752A]	2
16.2	JW657A	Aruba PSU-350-AC 7200 Series S3500-24T S3500-48T and S3500-24F 350W AC Power Supply	2
16.3	H6SD1E	Aruba 5Y FC NBD Exch PSU-350-AC SVC [for JW657A]	2
16.4	JW124A	PC-AC-NA North America AC Power Cord	4
16.5	JW472AAE	Aruba LIC-AP Controller per AP Capacity License E-LTU	50
16.6	H2YV0E	Aruba 5Y FC 24x7 Ctrl per AP Cap ELTU SVC [for JW472AAE]	50
16.7	JW473AAE	Aruba LIC-PEF Controller Policy Enforcement Firewall Per AP License E-LTU	50
16.8	H2XY0E	Aruba 5Y FC 24x7 License PEF Cn SVC [for JW473AAE]	50





Site 47

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J8177D	Aruba 1G SFP RJ45 T 100m Cat5e Transceiver	1

Site 47
1Gb Metro Ethernet connection to Core 46



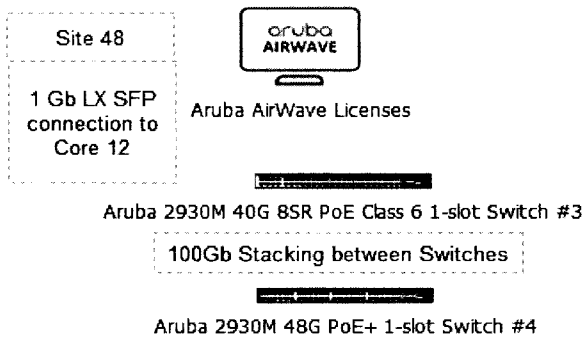
Aruba AirWave Licenses #2



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #2

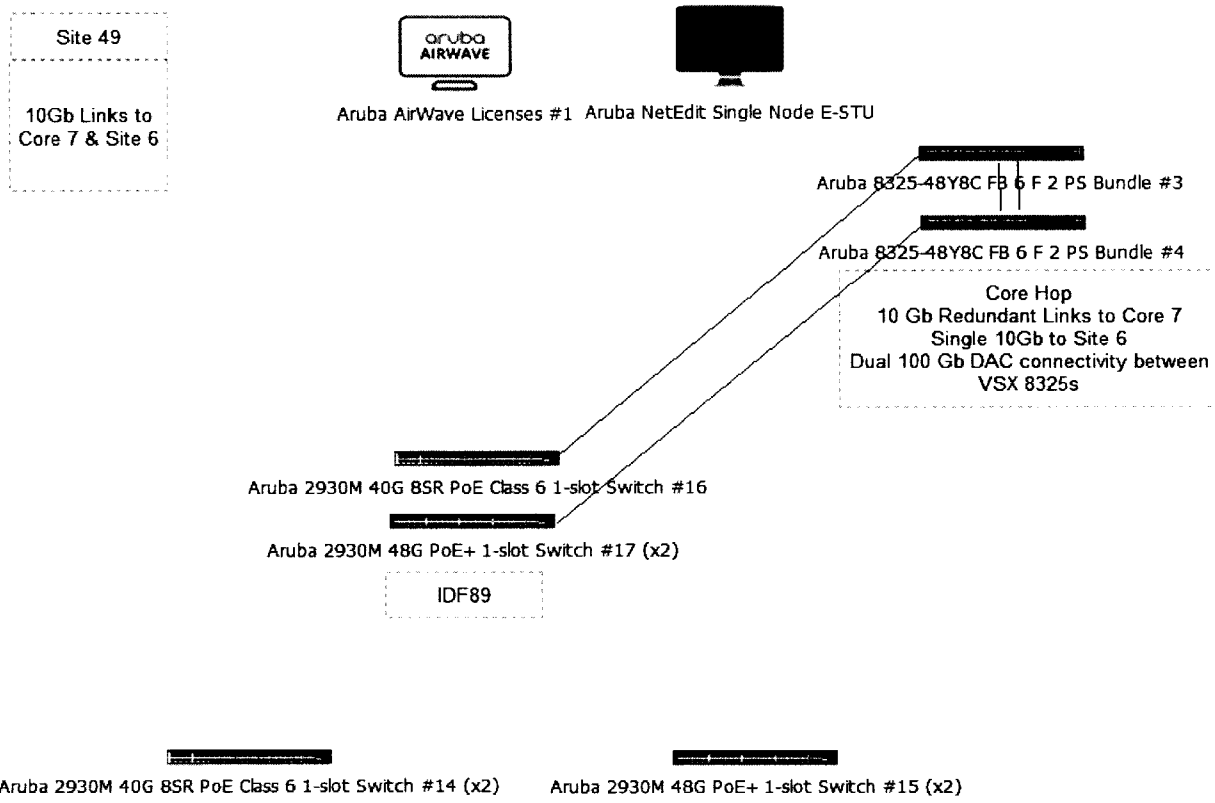
Site 48

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	2
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	2
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL325A	Aruba 2930 2-port Stacking Module	1
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	2
4.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	1
4.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
4.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
4.3	JL325A	Aruba 2930 2-port Stacking Module	1
4.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1



Site 49

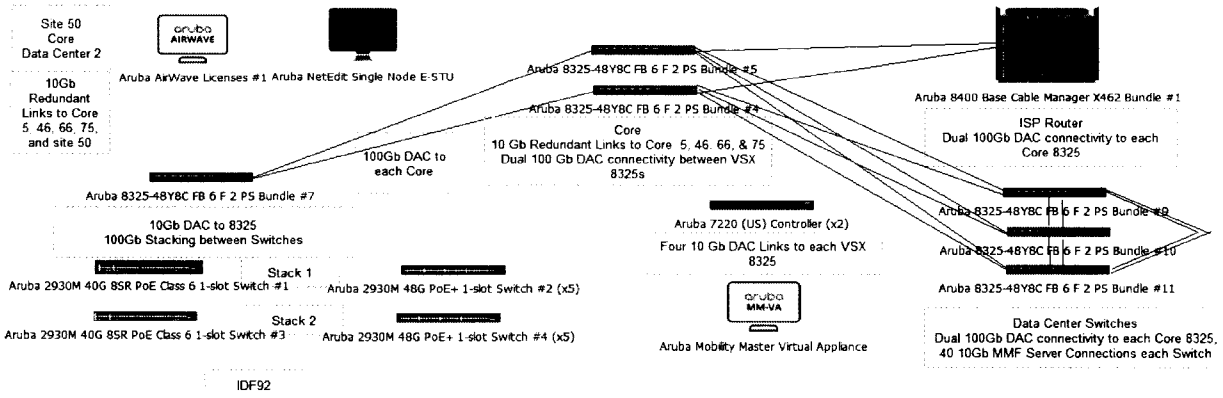
Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	9
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	9
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	2
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	2
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	2
2.3	JL325A	Aruba 2930 2-port Stacking Module	2
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	2
2.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	2
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	5
4.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	4
4.1	JL087A	Aruba X372 54VDC 1050W Power Supply	4
4.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	4
4.3	JL325A	Aruba 2930 2-port Stacking Module	4
4.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	4
5.0	JL640AAE	Aruba NetEdit Single Node 3yr Sub E-STU	4
6.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
6.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
6.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
6.3	JL325A	Aruba 2930 2-port Stacking Module	1
6.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
6.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	2
7.0	J9283D	Aruba 10G SFP+ to SFP+ 3m DAC Cable	2
8.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	2
8.1	JL624A ABA	INCLUDED: Power Cord - U.S. localization	2
8.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	2
8.3	JL482B	Aruba X472 2-post Rack Kit	2
8.4	J9153D	Aruba 10G SFP+ LC ER 40km SMF Transceiver	4
9.0	ROZ25A	Aruba 100G QSFP28 to QSFP28 1m DAC Cable	2



IDF90 & 91

Site 50

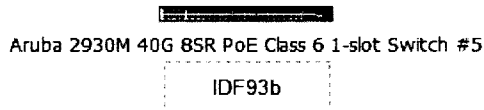
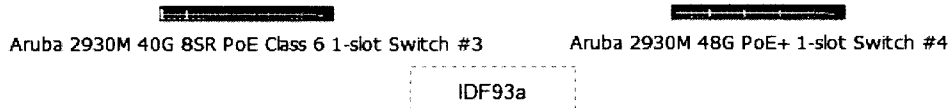
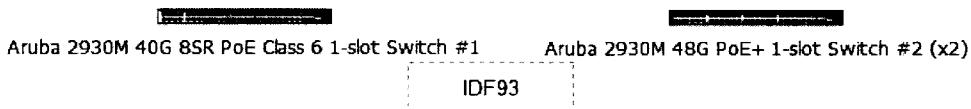
Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	22
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	22
2.0	JL375A	Aruba 8400 8-slot Chassis/3xFan Trays/18xFans/Cable Manager/X462 Bundle	1
2.1	HT6N4E	Aruba 5Y FC 4H Exch 8400 Swt SVC [for JL375A]	1
2.2	H8XE6E	HPE Aruba 8400 Install HPN ChassisSwtsVC [for JL375A]	1
2.3	JL372A	Aruba X382 54VDC 2750W AC Power Supply	4
2.4	JL372A B2E	INCLUDED: NEMA 6-20 220V NA Power Cord	4
2.5	JL363A	Aruba 8400X 32p 10G SFP/SFP+ MACsec Advanced Module	1
2.5.1	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	2
2.6	JL366A	Aruba 8400X 6p 40G/100G QSFP28 Advanced Module	1
2.7	JL368A	Aruba 8400 Management Module	2
2.8	JL367A	Aruba 8400X 7.2Tbps Fabric Module	3
3.0	JL307A	Aruba 100G QSFP28-QSFP28 3m DAC Cable	24
4.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	2
4.1	JL624A ABA	INCLUDED: Power Cord - U.S. Localization	2
4.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	2
4.3	JL483B	Aruba X474 4-post Rack Kit	2
4.4	J9153D	Aruba 10G SFP+ LC ER 40km SMF Transceiver	8
5.0	R0225A	Aruba 100G QSFP28 to QSFP28 1m DAC Cable	8
6.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	1
6.1	JL624A ABA	INCLUDED: Power Cord - U.S. Localization	1
6.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	1
6.3	JL483B	Aruba X474 4-post Rack Kit	1
6.4	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	5
7.0	J9281D	Aruba 10G SFP+ to SFP+ 1m DAC Cable	1
8.0	J9283D	Aruba 10G SFP+ to SFP+ 3m DAC Cable	129
9.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	2
9.1	JL087A	Aruba X372 54VDC 1050W Power Supply	2
9.2	JL087A ABA	INCLUDED: Power Cord - U.S. Localization	2
9.3	JL325A	Aruba 2930 2-port Stacking Module	2
9.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	2
10.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	10
11.0	J9735A	Aruba 2920/2930M 1m Stacking Cable	2
12.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	10
12.1	JL087A	Aruba X372 54VDC 1050W Power Supply	10
12.2	JL087A ABA	INCLUDED: Power Cord - U.S. Localization	10
12.3	JL325A	Aruba 2930 2-port Stacking Module	10
12.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	10
13.0	JL640AAE	Aruba NetEdit Single Node 3yr Sub E-STU	14
14.0	JW752A	Aruba 7220 (US) 4p 10GBase-X (SFP+) 2p Dual Pers (10/100/1000BASE-T or SFP) Controller	2
14.1	HF9M4E	Aruba 5Y FC NBD Exch HW7220 Cntrl SVC [for JW752A]	2
14.2	JW657A	Aruba PSU-350-AC 7200 Series S3500-24T S3500-48T and S3500-24F 350W AC Power Supply	2
14.3	H65D1E	Aruba 5Y FC NBD Exch PSU-350-AC SVC [for JW657A]	2
14.4	JW124A	PC-AC-NA North America AC Power Cord	4
14.5	JW472AAE	Aruba LIC-AP Controller per AP Capacity License E-LTU	50
14.6	H2YV0E	Aruba 5Y FC 24x7 Ctrl perAP Cap ELTU SVC [for JW472AAE]	50
14.7	JW473AAE	Aruba LIC-PEF Controller Policy Enforcement Firewall Per AP License E-LTU	50
14.8	H2XY0E	Aruba 5Y FC 24x7 License PEF Cn SVC [for JW473AAE]	50
15.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	3
15.1	JL624A ABA	INCLUDED: Power Cord - U.S. Localization	3
15.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	3
15.3	JL483B	Aruba X474 4-post Rack Kit	3
16.0	JY897AAE	Aruba MM-VA-5K Mobility Master SW E-LTU	1
16.1	H5UG6E	Aruba 5Y FC 24x7 MM-VA-5K ELTU SVC [for JY897AAE]	1



Site 51

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	6
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	6
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL325A	Aruba 2930 2-port Stacking Module	1
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	2
2.4.2	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	5
4.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	3
4.1	JL087A	Aruba X372 54VDC 1050W Power Supply	3
4.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	3
4.3	JL325A	Aruba 2930 2-port Stacking Module	3
4.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	3
5.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	2
5.1	JL087A	Aruba X372 54VDC 1050W Power Supply	2
5.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	2
5.3	JL325A	Aruba 2930 2-port Stacking Module	2
5.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	2
5.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	2

Site 51
1 Gb LX SFP connection to Core 75



Site 52

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	2
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	2
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL325A	Aruba 2930 2-port Stacking Module	1
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4.1	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	2
4.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	1
4.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
4.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
4.3	JL325A	Aruba 2930 2-port Stacking Module	1
4.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1

Site 52
1 Gb LX SFP connection to Core 5



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #4

Aruba 2930M 48G PoE+ 1-slot Switch #5

Site 53

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 53
1 Gb LX SFP connection to Core 75



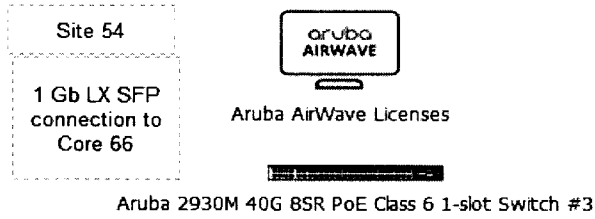
Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

Site 54

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1



Site 55

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 55
1 Gb LX SFP connection to Core 75



Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #5

Site 56

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 56
 1 Gb LX SFP
 connection to
 Core 66



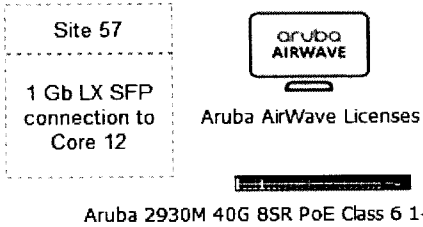
Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

Site 57

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1



Site 58

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 58
 1 Gb LX SFP
 connection to
 Core 46



Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

Site 59

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J8177D	Aruba 1G SFP RJ45 T 100m Cat5e Transceiver	1

Site 59
 1Gb Metro Ethernet connection to Core 46



Aruba AirWave Licenses #2



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #2

Site 60

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J8177D	Aruba 1G SFP RJ45 T 100m Cat5e Transceiver	1

Site 60
1Gb Metro Ethernet connection to Core 46



Aruba AirWave Licenses #2



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #2

Site 61

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 61
 1 Gb LX SFP connection to Core 66



Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

Site 62

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 62
 1 Gb LX SFP
 connection to
 Core 46



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #5

Site 63

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 63
1 Gb LX SFP connection to Core 66



Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

Site 64

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 64
 1 Gb LX SFP
 connection to
 Core 66



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

Site 65

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 65
 1 Gb LX SFP
 connection to
 Core 66



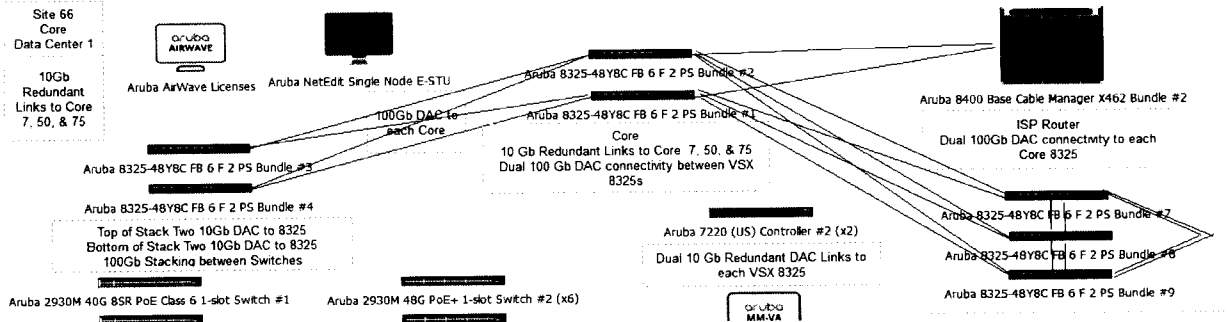
Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

Site 66

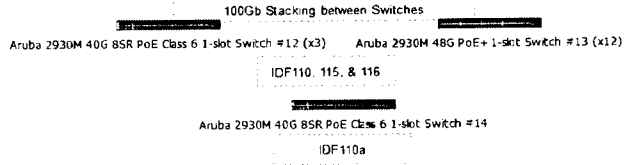
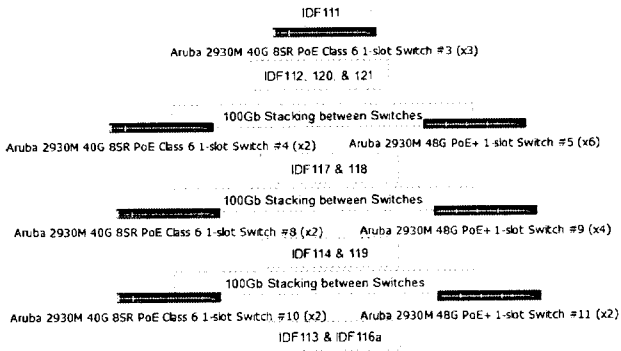
Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	51
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	51
2.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	1
2.1	JL624A ABA	INCLUDED: Power Cord - U.S. localization	1
2.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	1
2.3	JL483B	Aruba X474 4-post Rack Kit	1
2.4	J9153D	Aruba 10G SFP+ LC ER 40km SMF Transceiver	3
2.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	12
3.0	JL307A	Aruba 100G QSFP28-QSFP28 3m DAC Cable	24
4.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	1
4.1	JL624A ABA	INCLUDED: Power Cord - U.S. localization	1
4.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	1
4.3	JL483B	Aruba X474 4-post Rack Kit	1
4.4	J9153D	Aruba 10G SFP+ LC ER 40km SMF Transceiver	3
4.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	11
5.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	2
5.1	JL624A ABA	INCLUDED: Power Cord - U.S. localization	2
5.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	2
5.3	JL483B	Aruba X474 4-post Rack Kit	2
5.4	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	22
6.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	3
6.1	JL087A	Aruba X372 54VDC 1050W Power Supply	3
6.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	3
6.3	JL325A	Aruba 2930 2-port Stacking Module	3
6.4	JL083A	Aruba 3810M/2930M 45FP+ MACsec Module	3
7.0	J9281D	Aruba 10G SFP+ to SFP+ 1m DAC Cable	12
8.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	43
9.0	J9735A	Aruba 2920/2930M 1m Stacking Cable	10
10.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	41
10.1	JL087A	Aruba X372 54VDC 1050W Power Supply	41
10.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	41
10.3	JL325A	Aruba 2930 2-port Stacking Module	41
10.4	JL083A	Aruba 3810M/2930M 45FP+ MACsec Module	41
11.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	13
11.1	JL087A	Aruba X372 54VDC 1050W Power Supply	13
11.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	13
11.3	JL325A	Aruba 2930 2-port Stacking Module	13
11.4	JL083A	Aruba 3810M/2930M 45FP+ MACsec Module	13
11.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	26
12.0	JL640AAE	Aruba NetEdit Single Node 3yr Sub E-STU	16
13.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	3
13.1	JL624A ABA	INCLUDED: Power Cord - U.S. localization	3
13.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	3
13.3	JL483B	Aruba X474 4-post Rack Kit	3
14.0	ROZ25A	Aruba 100G QSFP28 to QSFP28 1m DAC Cable	12
15.0	JL488A	Aruba 25G SFP28 to SFP28 3m DAC Cable	40
16.0	J9283D	Aruba 10G SFP+ to SFP+ 3m DAC Cable	88
17.0	JL375A	Aruba 8400 8-slot Chassis/3xFan Trays/18xFans/Cable Manager/X462 Bundle	1
17.1	HT6N4E	Aruba 5Y FC 4H Exch 8400 Swt SVC [for JL375A]	1
17.2	H8XE6E	HPE Aruba 8400 Install HPN ChassisSwtSVC [for JL375A]	1
17.3	JL372A	Aruba X382 54VDC 2750W AC Power Supply	4
17.4	JL372A B2E	INCLUDED: NEMA 6-20 220V NA Power Cord	4
17.5	JL363A	Aruba 8400X 32p 10G SFP/SFP+ MACsec Advanced Module	1
17.5.1	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	2
17.6	JL366A	Aruba 8400X 6p 40G/100G QSFP28 Advanced Module	1
17.7	JL368A	Aruba 8400 Management Module	2
17.8	JL367A	Aruba 8400X 7.2Tbps Fabric Module	3
18.0	JY897AAE	Aruba MM-VA-5K Mobility Master SW E-LTU	1
18.1	HSUG6E	Aruba 5Y FC 24x7 MM-VA-5K ELTU SVC [for JY897AAE]	1
19.0	JW752A	Aruba 7220 (US) 4p 10GBase-X (SFP+) 2p Dual Pers (10/100/1000BASE-T or SFP) Controller	2
19.1	HF9M4E	Aruba 5Y FC NBD Exch HW7220 Cntrl SVC [for JW752A]	2
19.2	JW657A	Aruba PSU-350-AC 7200 Series S3500-24T S3500-48T and S3500-24F 350W AC Power Supply	2
19.3	H6SD1E	Aruba 5Y FC NBD Exch PSU-350-AC SVC [for JW657A]	2
19.4	JW124A	PC-AC-NA North America AC Power Cord	4
19.5	JW472AAE	Aruba LIC-AP Controller per AP Capacity License E-LTU	50
19.6	H2YV0E	Aruba 5Y FC 24x7 Ctrl perAP Cap ELTU SVC [for JW472AAE]	50
19.7	JW473AAE	Aruba LIC-PEF Controller Policy Enforcement Firewall Per AP License E-LTU	50
19.8	H2XY0E	Aruba 5Y FC 24x7 License PEF Cn SVC [for JW473AAE]	50



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #15 Aruba 2930M 48G PoE+ 1-slot Switch #16 (x6)
 Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #17 Aruba 2930M 48G PoE+ 1-slot Switch #18 (x5)

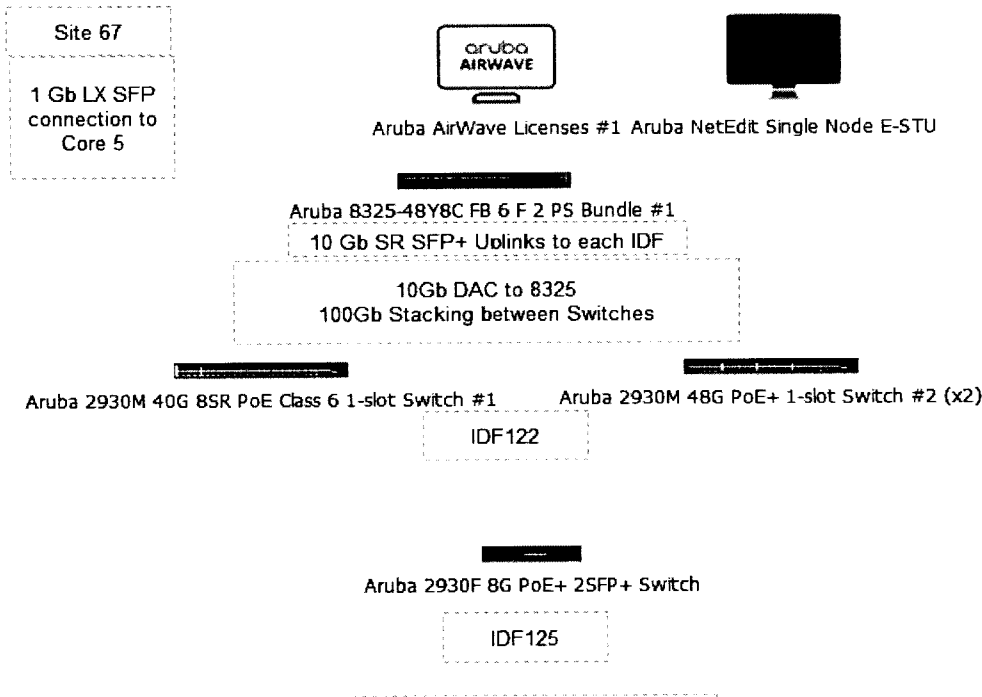
Aruba Mobility Master Virtual Appliance

Data Center Switches
 Dual 100Gb DAC connectivity to each Core 8325
 40 10Gb MMF Server Connections each Switch



Site 67

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	11
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	11
2.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	1
2.1	JL624A ABA	INCLUDED: Power Cord - U.S. localization	1
2.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	1
2.3	JL483B	Aruba X474 4-post Rack Kit	1
2.4	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	5
2.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
3.1	JL087A	Aruba X372 54VDC 1050W Power Supply	2
3.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	2
3.3	JL325A	Aruba 2930 2-port Stacking Module	1
3.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
4.0	J9281D	Aruba 10G SFP+ to SFP+ 1m DAC Cable	1
5.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	5
6.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	3
6.1	JL087A	Aruba X372 54VDC 1050W Power Supply	3
6.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	3
6.3	JL325A	Aruba 2930 2-port Stacking Module	3
6.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	3
7.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	4
7.1	JL087A	Aruba X372 54VDC 1050W Power Supply	4
7.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	4
7.3	JL325A	Aruba 2930 2-port Stacking Module	4
7.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	4
7.4.1	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	4
8.0	JL640AAE	Aruba NetEdit Single Node 3yr Sub E-STU	2
9.0	JL258A	Aruba 2930F 8G PoE+ 2SFP+ Switch	1
9.1	JL258A ABA	INCLUDED: Power Cord - U.S. localization	1
9.2	J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	1



100Gb Stacking between Switches

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #7

Aruba 2930M 48G PoE+ 1-slot Switch #8

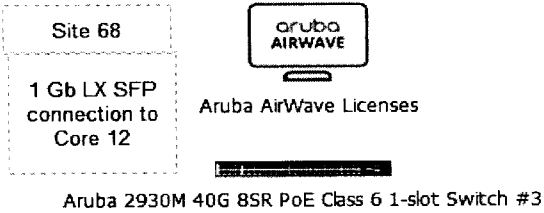
IDF123

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #9 (x3)

IDF124, 126, & 127

Site 68

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1



Site 69

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1

Site 69
 1 Gb LX SFP
 connection to
 Core 66



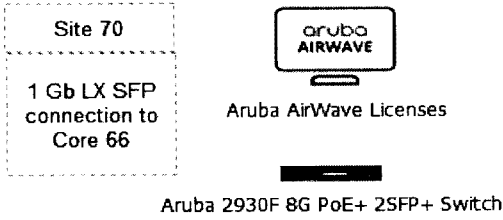
Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch #3

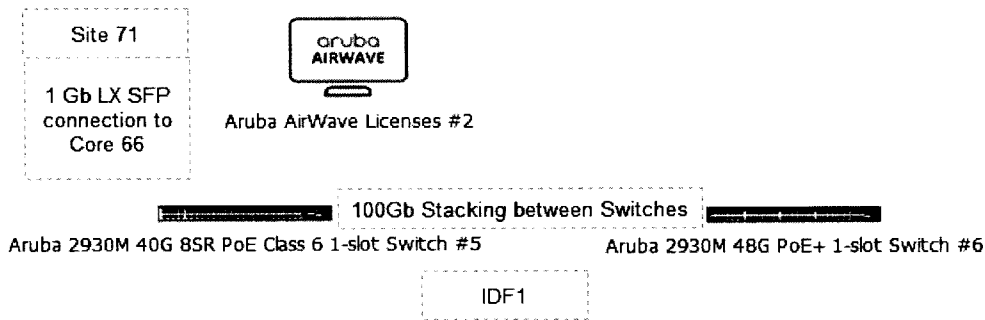
Site 70

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	JL258A	Aruba 2930F 8G PoE+ 2SFP+ Switch	1
2.1	JL258A ABA	INCLUDED: Power Cord - U.S. localization	1
2.2	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1



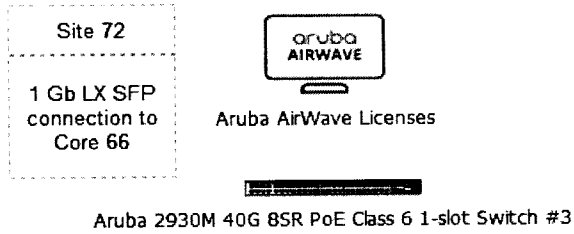
Site 71

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	2
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	2
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL325A	Aruba 2930 2-port Stacking Module	1
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.5	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	2
4.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	1
4.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
4.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
4.3	JL325A	Aruba 2930 2-port Stacking Module	1
4.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1



Site 72

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	1



Site 73

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J8177D	Aruba 1G SFP RJ45 T 100m Cat5e Transceiver	1

Site 73
 1Gb Metro
 Ethernet
 connection to
 Core 46



Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch

Site 74

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J8177D	Aruba 1G SFP RJ45 T 100m Cat5e Transceiver	1

Site 74
1Gb Metro Ethernet connection to Core 46



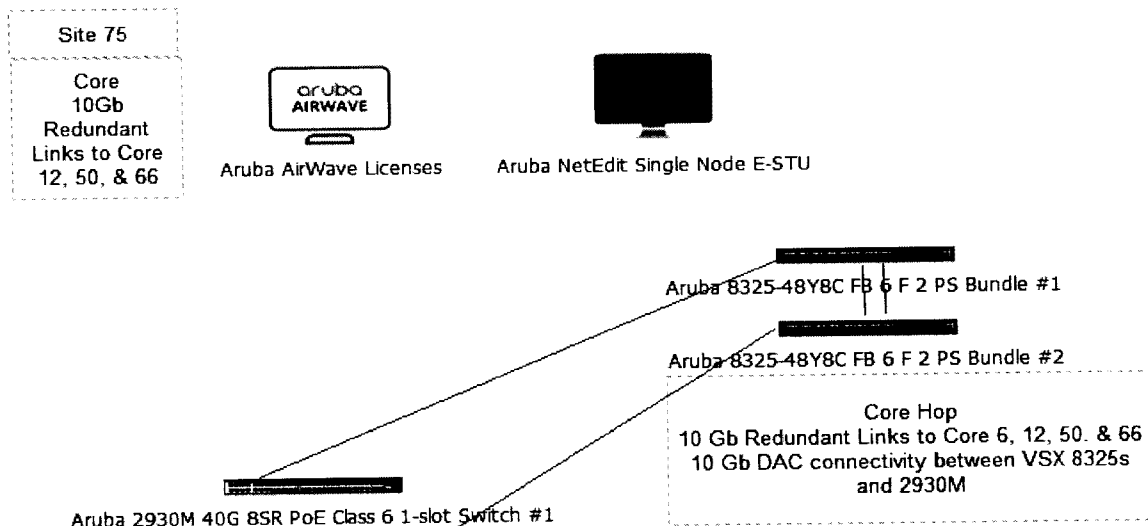
Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch

Site 75

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	6
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	6
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL325A	Aruba 2930 2-port Stacking Module	1
2.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4.1	J9151D	Aruba 10G SFP+ LC LR 10km SMF Transceiver [discontinued]	2
3.0	J9734A	Aruba 2920/2930M 0.5m Stacking Cable	2
4.0	JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	1
4.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
4.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
4.3	JL325A	Aruba 2930 2-port Stacking Module	1
4.4	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
5.0	JL640AAE	Aruba NetEdit Single Node 3yr Sub E-STU	4
6.0	JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	2
6.1	JL624A ABA	INCLUDED: Power Cord - U.S. localization	2
6.2	HC7H8E	HPE 5Y FC 4H Exch Aruba 8325-48 SVC [for JL624A]	2
6.3	JL482B	Aruba X472 2-post Rack Kit	2
6.4	J9153D	Aruba 10G SFP+ LC ER 40km SMF Transceiver	8
7.0	R0Z25A	Aruba 100G QSFP28 to QSFP28 1m DAC Cable	2
8.0	J9281D	Aruba 10G SFP+ to SFP+ 1m DAC Cable	2
9.0	JW752A	Aruba 7220 (US) 4p 10GBase-X (SFP+) 2p Dual Pers (10/100/1000BASE-T or SFP) Controller	2
9.1	HF9M4E	Aruba 5Y FC NBD Exch HW7220 Cntrl SVC [for JW752A]	2
9.2	JW657A	Aruba PSU-350-AC 7200 Series S3500-24T S3500-48T and S3500-24F 350W AC Power Supply	2
9.3	H6SD1E	Aruba 5Y FC NBD Exch PSU-350-AC SVC [for JW657A]	2
9.4	JW124A	PC-AC-NA North America AC Power Cord	4
9.5	JW472AAE	Aruba LIC-AP Controller per AP Capacity License E-LTU	50
9.6	H2YV0E	Aruba 5Y FC 24x7 Ctrl perAP Cap ELTU SVC [for JW472AAE]	50
9.7	JW473AAE	Aruba LIC-PEF Controller Policy Enforcement Firewall Per AP License E-LTU	50
9.8	H2XY0E	Aruba 5Y FC 24x7 License PEF Cn SVC [for JW473AAE]	50
10.0	J9283D	Aruba 10G SFP+ to SFP+ 3m DAC Cable	8



Aruba 2930M 48G PoE+ 1-slot Switch #2

IDF135

Aruba 7220 (US) Controller #2 (x2)

Dual 10 Gb Redundant DAC Links to
each VSX 8325

Site 76 intentionally omitted

Site 77

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	ROM67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	2

Site 77
 1 Gb LX SFP
 connection to ?



Aruba AirWave Licenses

Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch

Site 78

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	2

Site 78
 1 Gb LX SFP
 connection to ?



Aruba AirWave Licenses



Aruba 2930M 40G 8SR PoE Class 6 1-slot Switch

Site 79

Line#	Part Number	Description	Quantity
1.0	JW546AAE	Aruba LIC-AW Aruba Airwave with RAPIDS and VisualRF 1 Device License E-LTU	1
1.1	H2YW0E	Aruba 5Y FC 24x7 Airwave 1 Dev E-LTU SVC [for JW546AAE]	1
2.0	R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	1
2.1	JL087A	Aruba X372 54VDC 1050W Power Supply	1
2.2	JL087A ABA	INCLUDED: Power Cord - U.S. localization	1
2.3	JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	1
2.4	J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	2

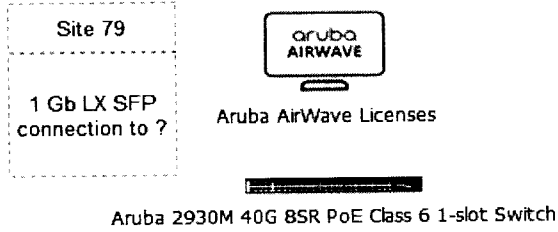


EXHIBIT "B"
COMPENSATION

Exhibit B - Compensation

Network Refresh Project - Payment Schedule

PHASE	OBJECTIVE	MILESTONE DELIVERABLE	%	AMOUNT
1	Detailed Project Plan with low-level design documentation Change Management Plan Configuration Mgmt Plan Training Plan Services Cutover Plan	All Objectives Met; Requirements Definition for Complete Network Solution	10%	\$256,227.80
2	Core Equipment delivered to staging location	Serial numbers provided and asset tags applied	20%	\$512,455.60
3	Installation of Core Components at two main data centers and aggregation switches for core of networking switch fabric	All Objectives Met; System Test and Acceptance Results Core Acceptance Certificate	25%	\$640,569.51
4	<u>Individual site cutovers</u>	All Objectives Met;		
4a	1/3 of the non-core sites complete	Individual Site Completion Certificates	10%	\$256,227.80
4b	1/3 of the non-core sites complete		10%	\$256,227.80
4c	1/3 of the non-core sites complete		10%	\$256,227.80
5	Wireless Upgrade and Onguard	All Objectives Met	5%	\$128,113.90
6	Retention Payment	Final Acceptance Documents	10%	\$256,227.80
TOTALS:			100.00%	\$2,562,278.02

Pricing Response - Data Network Summary Pricing Matrix

A Line #	B Description	C Quantity	D List Price (Optional)	E Client Price	F = C * E Equipment Total	G Installation	H = F + G Total One-Time Charges	I Maintenance/Support (total, **)	H + I Total Cost
Data Center / Core Sites									
1	Data Center Core Routers	0			-	-	-	-	-
2	Data Center Core Switches	2		36,494.70	72,989.40	-	72,989.40	51,632.40	124,621.80
4	Centralized Controllers	14		6,003.80	84,053.20	-	84,053.20	27,350.40	111,403.60
5	Software Licenses	352		52.65	18,532.80	-	18,532.80	33,446.40	51,979.20
6	Miscellaneous/Other				-	-	-	-	-
7	Fiber Optics	86		124.68	10,722.48	-	10,722.48	-	10,722.48
				DC Subtotal:	186,297.88	-	186,297.88	112,429.20	298,727.08
Access Layer (LAN-Site to Closet) Equipment									
8	MDF / Aggregation HW	32		8,116.76	259,736.32	-	259,736.32	150,497.40	410,233.72
9	Closet Switches	536		1,484.12	795,488.32	-	795,488.32	-	795,488.32
10	Software Licenses	0			-	-	-	-	-
11	Miscellaneous/Other	1		104,462.47	104,462.47	-	104,462.47	-	104,462.47
12	Fiber Optics	694		239.39	166,136.66	-	166,136.66	-	166,136.66
				LAN Subtotal:	1,325,823.77	-	1,325,823.77	150,497.40	1,476,321.17
Security									
13	Security Hardware				-	-	-	-	-
14	Software Licenses	350		16.50	5,775.00	-	5,775.00	10,710.00	16,485.00
15	Miscellaneous/Other	1		60,750.00	60,750.00	-	60,750.00	45,913.05	106,663.05
				Security Subtotal:	66,525.00	-	66,525.00	56,623.05	123,148.05
System Management									
16	Management Hardware				-	-	-	-	-
17	Software Licenses	405		17.42	7,055.10	-	7,055.10	10,312.20	17,367.30
18	Miscellaneous/Other				-	-	-	-	-
				SM Subtotal:	7,055.10	-	7,055.10	10,312.20	17,367.30
Professional Services									
19	Installation	1		516,658.17	516,658.17	-	516,658.17	-	516,658.17
20	Project Management	1		61,656.25	61,656.25	-	61,656.25	-	61,656.25
21	Training	1		68,400.00	68,400.00	-	68,400.00	-	68,400.00
				Prof Services Subtotal:	646,714.42	-	646,714.42	-	646,714.42
				Grand Total:	2,232,416.17	-	2,232,416.17	329,861.85	2,562,278.02

Data Network Pricing Detail - Hardware and Software Capital Costs

This sheet must be completed in the format shown, providing the equivalent information to any subsequent Bill of Materials (BOM). Add rows as necessary to complete the table; do not remove the formulas in Column E, and make sure the final total is shown. Do not paste in output from an external source that drops the formulas or changes the presentation of information.

Part Number	Item Description	Quantity	Per Item Price	Total Price
J4859D	Aruba 1G SFP LC LX 10km SMF Transceiver	137	\$160.60	\$22,002.20
J8177D	Aruba 1G SFP RJ45 T 100m Cat5e Transceiver	12	\$63.80	\$765.60
J9150D	Aruba 10G SFP+ LC SR 300m MMF Transceiver	172	\$239.80	\$41,245.60
J9153D	Aruba 10G SFP+ LC ER 40km SMF Transceiver	44	\$2,079.00	\$91,476.00
J9281D	Aruba 10G SFP+ to SFP+ 1m DAC Cable	21	\$23.10	\$485.10
J9283D	Aruba 10G SFP+ to SFP+ 3m DAC Cable	308	\$33.00	\$10,164.00
J9734A	Aruba 2920/2930M 0.5m Stacking Cable	182	\$35.20	\$6,406.40
J9735A	Aruba 2920/2930M 1m Stacking Cable	27	\$44.00	\$1,188.00
J9736A	Aruba 2920/2930M 3m Stacking Cable	4	\$69.30	\$277.20
JL083A	Aruba 3810M/2930M 4SFP+ MACsec Module	292	\$291.50	\$85,118.00
JL087A	Aruba X372 54VDC 1050W Power Supply	293	\$216.70	\$63,493.10
JL258A	Aruba 2930F 8G PoE+ 2SFP+ Switch	12	\$369.60	\$4,435.20
JL307A	Aruba 100G QSFP28-QSFP28 3m DAC Cable	52	\$138.60	\$7,207.20
JL322A	Aruba 2930M 48G PoE+ 1-slot Switch	147	\$1,465.20	\$215,384.40
JL325A	Aruba 2930 2-port Stacking Module	244	\$235.40	\$57,437.60
JL363A	Aruba 8400X 32p 10G SFP/SFP+ MACsec Advanced	2	\$8,083.90	\$16,167.80
JL366A	Aruba 8400X 6p 40G/100G QSFP28 Advanced Mod	2	\$5,773.90	\$11,547.80
JL367A	Aruba 8400X 7.2Tbps Fabric Module	6	\$2,310.00	\$13,860.00
JL368A	Aruba 8400 Management Module	4	\$3,465.00	\$13,860.00
JL372A	Aruba X382 54VDC 2750W AC Power Supply	8	\$693.00	\$5,544.00
JL372A B2E	INCLUDED: NEMA 6-20 220V NA Power Cord	8	\$0.00	\$0.00
JL375A	Aruba 8400 8-slot Chassis/3xFan Trays/18xFans/C	2	\$6,004.90	\$12,009.80
JL482B	Aruba X472 2-post Rack Kit	32	\$20.90	\$668.80
JL624A	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	32	\$8,094.90	\$259,036.80
JW124A	PC-AC-NA North America AC Power Cord	28	\$1.10	\$30.80
JW472AAE	Aruba LIC-AP Controller per AP Capacity License E	350	\$16.50	\$5,775.00
JW657A	Aruba PSU-350-AC 7200 Series S3500-24T S3500	14	\$114.40	\$1,601.60
JW752A	Aruba 7220 (US) 4p 10GBase-X (SFP+) 2p Dual Po	14	\$5,889.40	\$82,451.60
JY897AAE	Aruba MM-VA-5K Mobility Master SW E-LTU	2	\$6,378.90	\$12,757.80
R0M67A	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	145	\$2,494.80	\$361,746.00
R0Z25A	Aruba 100G QSFP28 to QSFP28 1m DAC Cable	34	\$103.40	\$3,515.60
				\$0.00
TOTAL				\$1,407,659.00

Data Network Pricing Detail - Professional Services for Implementation (Including Sys Admin Training)

This sheet must be completed in the format shown, providing the equivalent information to any subsequent Bill of Materials (BOM) Add rows as necessary to complete the table; do not remove the formulas in Column E, and make sure the final total is shown. Do not paste in output from an external source that drops the formulas or changes the presentation of information. For the Quantity Column, show the number of hours where applicable

Category	Item Description	Quantity	Per Item Price	Total Price
HW&SW	SM LC-LC 3MTR Fiber Cord Rack	137	\$5.67	\$776.33
HW&SW	OM4 LC-LC 3MTR Fiber Cord Rack	228	\$5.67	\$1,292.00
HW&SW	CAT6 BLUE P-CORD W/ BTS 1FT Rack	3000	\$5.67	\$17,000.00
HW&SW	CAT6 BLUE P-CORD W/ BTS 3FT Rack	3000	\$5.67	\$17,000.00
HW&SW	CAT6 BLUE P-CORD W/ BTS 5FT Rack	3000	\$5.67	\$17,000.00
HW&SW	CAT6 Blu P-CORD W/ BTS 10FT Station Side	9000	\$11.19	\$100,725.00
HW&SW	Documentation & Staging	2356	\$7.33	\$17,277.33
HW&SW	Equipment Delivery Services	77	\$27.50	\$2,117.50
HW&SW	Travel Expenses Site to site	154	\$37.50	\$5,775.00
HW&SW	Pro Services - Hardware Installation	354	\$42.50	\$15,045.00
HW&SW	Pro Services - 48 port Switch Configuration	292	\$300.00	\$87,600.00
HW&SW	Pro Services - 8 Port Switch Configuration	12	\$300.00	\$3,600.00
HW&SW	Pro Services - 8325 Configuration	32	\$780.00	\$24,960.00
HW&SW	Pro Services - Controller Configuration	14	\$1,560.00	\$21,840.00
HW&SW	Pro Services - 8400 Switch Configuration	2	\$3,120.00	\$6,240.00
HW&SW	Pro Services - Mobility Master	2	\$3,200.00	\$6,400.00
HW&SW	Pro Services - AirWave Configuration	1	\$16,000.00	\$16,000.00
HW&SW	Pro Services - 30 Day Resident Engineer	1	\$24,000.00	\$24,000.00
HW&SW	Pro Services - Test & Acceptance NE	1	\$24,000.00	\$24,000.00
HW&SW	Pro Services - Test & Acceptance Comm Tech	1	\$13,600.00	\$13,600.00
HW&SW	Pro Services - Solution Architect	1	\$9,000.00	\$9,000.00
HW&SW	Pro Services - Project Management	1	\$61,656.25	\$61,656.25
				\$0.00
HW&SW	Pro Services - 10Gb Fiber Testing	24	\$170.00	\$4,080.00
HW&SW	Pro Services - Network Documentation	1	\$3,120.00	\$3,120.00
HW&SW	Pro Services - CAD	1	\$880.00	\$880.00
Training	HPE Aruba WW Education Tech Training SVC	48	\$190.00	\$9,120.00
Training	HPE Aruba WW Education Tech Training SVC	128	\$190.00	\$24,320.00
Training	HPE Aruba WW Education Tech Training SVC	72	\$190.00	\$13,680.00
Training	HPE Aruba WW Education Tech Training SVC	64	\$190.00	\$12,160.00
Training	HPE Aruba WW Education Tech Training SVC	48	\$190.00	\$9,120.00
HW&SW	Pro-Services - ClearPass Engineer	1	\$61,250.00	\$61,250.00
	TOTAL			\$630,634.42

Data Network Pricing Detail - Network Options / Hardware & Software Capital Costs

This sheet must be completed in the format shown, providing the equivalent information to any subsequent Bill of Materials (BOM) Add rows as necessary to complete the table; do not remove the formulas in Column E, and make sure the final total is shown. Do not paste in output from an external source that drops the formulas or changes the presentation of information. Show the parts added and the parts removed to reflect the impact of the pricing change and carry forward to the summary.

Distribution Layer

Parts ADDED:

Part Number	Item Description	Quantity	Per Item Price	Total Price
	TEST LAB OPTION		\$0.00	\$0.00
	Aruba 10G SFP+ to SFP+ 1m DAC Cable	4	\$22.05	\$88.20
	Aruba 2920/2930M 0.5m Stacking Cable	2	\$33.60	\$67.20
	Aruba 3810M/2930M 4SFP+ MACsec Module	2	\$278.25	\$556.50
	Aruba X372 54VDC 1050W Power Supply	2	\$206.85	\$413.70
	Aruba 2930F 8G PoE+ 2SFP+ Switch	1	\$352.80	\$352.80
	Aruba 2930 2-port Stacking Module	2	\$224.70	\$449.40
	Aruba X472 2-post Rack Kit	2	\$19.95	\$39.90
	Aruba 8325-48Y8C FB 6 F 2 PS Bundle	2	\$7,726.95	\$15,453.90
	Aruba NetEdit Single Node 3yr Sub E-STU	4	\$21.00	\$84.00
	Aruba 2930M 40G 8SR PoE Class 6 1s Switch	2	\$2,381.40	\$4,762.80
	Aruba 100G QSFP28 to QSFP28 1m DAC Cable	2	\$98.70	\$197.40
	Pro Services	1	\$2,335.33	\$2,335.33
	Sub-Total			\$24,801.13

Parts REMOVED:

Part Number	Item Description	Quantity	Per Item Price	Total Price
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
	Sub-Total			\$0.00

TOTAL Impact to change to 10 Gig (Distribution Layer) \$24,801.13

Access Layer

Parts ADDED:

Part Number	Item Description	Quantity	Per Item Price	Total Price
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
Sub-Total				\$0.00

Parts REMOVED:

Part Number	Item Description	Quantity	Per Item Price	Total Price
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
Sub-Total				\$0.00

TOTAL Impact to change to 10 Gig (Access Layer)

\$0.00

Access Layer

Parts ADDED:

Part Number	Item Description	Quantity	Per Item Price	Total Price
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
Sub-Total				\$0.00

Parts REMOVED:

Part Number	Item Description	Quantity	Per Item Price	Total Price
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
Sub-Total				\$0.00

TOTAL Impact to change to 10 Gig (Access Layer)

\$0.00

Access Layer

Parts ADDED:

Part Number

Item Description	Quantity	Per Item Price	Total Price
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
Sub-Total			\$0.00

Parts REMOVED:

Part Number

Item Description	Quantity	Per Item Price	Total Price
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
		\$0.00	\$0.00
Sub-Total			\$0.00

TOTAL Impact to change to 10 Gig (Access Layer)

\$0.00

Access Layer
Maint for Parts ADDED:

Part Number	Item Description	Quantity	Per Item Price	Total Price
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
Sub-Total				\$0.00

Maint for Parts REMOVED:

Part Number	Item Description	Quantity	Per Item Price	Total Price
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
			\$0.00	\$0.00
Sub-Total				\$0.00

TOTAL Impact to change to 10 Gig (Access Layer)

\$0.00

Data Network Pricing Detail - Inside Wiring (Capital Cost)

This sheet must be completed in the format shown, providing the equivalent information to any subsequent Bill of Materials (BOM). Add rows as necessary to complete the table. Do not paste in output from an external source that drops the formulas or changes the presentation of information.

Large Wiring Job Rates

Please provide Material and Labor rates for a typical job involving 200 drops in a single building, with an average run of 150'.

Provide material rates on a per item basis

Part Number	Item Description	Quantity per Drop	Per Item Price
9C6P4-E2-06ARXA	CAT6 4 Pair Plenum Cable Blue	30000	\$0.34
MX6-F06	CAT6 Max Insert Blue	200	\$4.69
MX-FP-S-02-02	2 Port Max Faceplate White	200	\$2.07
HD6-24	24 Port CAT6 Loaded Patch Panel	9	\$165.00
CAT32HP4Z34	2IN J Hook w/Multifunction Clip	600	\$3.84
IWP 1008	1/4IN Pencil Rod	1200	\$0.58
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00

Provide labor rates for the various tasks. Add roles as needed.

Labor Category	Item Description	Quantity	Per Item Price
Cablers	Innovative Infrastructure	383.8	\$85.00
Foremen			\$0.00
Project managers	Project Manager	32	\$125.00
			\$0.00
			\$0.00

Data Network Pricing Detail - Inside Wiring (Capital Cost)

This sheet must be completed in the format shown, providing the equivalent information to any subsequent Bill of Materials (BOM) Add rows as necessary to complete the table; do not remove the formulas in Column E, and make sure the final total is shown. Do not paste in output from an external source that drops the formulas or changes the presentation of information.

Small Wiring Job Rates

Please provide Material and Labor rates for a typical small job involving 20 drops in a single building, with an average run of 150'.

Provide material rates on a per item basis

Part Number	Item Description	Quantity per Drop	Per Item Price
9C6P4-E2-06ARXA	CAT6 4 Pair Plenum Cable Blue	3000	\$0.34
MX6-F06	CAT6 Max Insert Blue	20	\$4.69
MX-FP-S-02-02	2 Port Max Faceplate White	20	\$2.07
HD6-24	24 Port CAT6 Loaded Patch Panel	1	\$165.00
CAT32HP4Z34	2IN J Hook w/Multifunction Clip	60	\$3.84
IWP 1008	1/4IN Pencil Rod	120	\$0.58
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00

Provide labor rates for the various tasks. Add roles as needed.

Labor Category	Item Description	Quantity	Per Item Price
Cablers	Innovative Infrastructure	41.2	\$85.00
Foremen			\$0.00
Project managers	Project Manager	2	\$125.00
			\$0.00
			\$0.00

EXHIBIT "C"
KEY PERSONNEL

Exhibit C – Key Personnel

Name	Title / Role	Email	Phone Number
Skyler Peterson	Regional Sales Manager	speterson@vectorusa.com	(909) 303-7739
John Kuchta	Service Manager	jkuchta@vectorusa.com	(310) 436-1049
William Higgins	Sales Engineer	whiggins@vectorusa.com	(310) 436-6276
Ken Beck	Network Architect	kbeck@vectorusa.com	(310) 436-1106
Paul Hartwell	Operations Vice President	phartwell@vectorusa.com	(909) 303-7739
Scott Jamison	Network Architect	sjamison@vectorusa.com	(909) 303-7739
Michael Hubbard	Network Engineer	mhubbard@vectorusa.com	(909) 303-7739
Alex Velez	Network Engineer	avelez@vectorusa.com	(909) 303-7739