

**REQUEST FOR PROPOSAL**

**IEEE 802.11 WIRELESS NETWORK AND SUPPORT SERVICES**

**FY16-805-69**

**MANCHESTER • BOSTON REGIONAL AIRPORT**

## Table of Contents

LEGAL NOTICE .....	3
ABSTRACT .....	4
GENERAL PROPOSAL CONDITIONS.....	5
PROCESS DEADLINE .....	6
PROPOSAL CONTENT .....	7
CONTRACT REQUIREMENTS.....	11
SUPPLEMENTAL .....	19

## LEGAL NOTICE

### REQUEST FOR PROPOSAL IEEE 802.11 WIRELESS NETWORK AND SUPPORT SERVICES MANCHESTER • BOSTON REGIONAL AIRPORT FY16-805-69

The City of Manchester, Department of Aviation, Manchester, New Hampshire requests interested companies to submit a proposal for **IEEE 802.11 Wireless Network and Support Services**. Request for Proposal packages are available beginning Friday, April 22, 2016 from Mr. Toni Westbrook, Manchester • Boston Regional Airport (MHT) by calling (603) 624-6539, ext. 129, or by email at [twestbrook@flymanchester.com](mailto:twestbrook@flymanchester.com).

Services being solicited include design assistance, migration, and installation of a new on-premise controlled IEEE 802.11 wireless network to replace the current system, in addition to ongoing product and service support.

Proposals are due at the Manchester • Boston Regional Airport Administration Office no later than **4:00 P.M., Friday, May 13, 2016**. The selected company will be notified by Tuesday, May 31, 2016.

## **SECTION I ABSTRACT**

### **1.1 Overview**

This document serves as a Request for Proposal (RFP) by Manchester • Boston Regional Airport for the design assistance, migration, and installation of a new on-premise controlled IEEE 802.11 wireless network to replace the current system, in addition to ongoing product and service support. Manchester • Boston Regional Airport requires fifty-nine (59) 802.11ac wireless access points and associated controller infrastructure, as well as the necessary software and licensing to provide both client access and point-to-point bridge wireless networks.

Further details and specific requirements are outlined in section V.

## SECTION II

### GENERAL PROPOSAL CONDITIONS

- 2.1 This RFP is not an offer to contract. Acceptance of a Proposal neither commits Manchester • Boston Regional Airport to award a contract to any vendor, even when all requirements stated in this RFP are met, nor limits our right to negotiate a contract in our best interest. Manchester • Boston Regional Airport reserves the right (i) to accept the vendor it deems most suitable and beneficial, (ii) to reject any or all Proposals for any reason, and (iii) to waive any of the requirements of the Proposal procedures explained in this document. Manchester • Boston Regional Airport will thoroughly evaluate each Proposal for best pricing, proposed approach, vendor information, references, etc. Relative scoring weight of each criterion is documented in the header of each section, 4.1.3 – 4.1.8.
- 2.2 Proposals are to be made in good faith, without fraud, collusion or connection of any kind with any other vendor for the same work. All vendors must complete Proposals in their own interest and in their own behalf. If you are subcontracting any portion of this agreement, you must identify all subcontractors in your Proposal and agree that all subcontractors are bound by all terms and conditions of this RFP.
- 2.3 The vendor will absorb all costs incurred in the preparation and presentation of the Proposal.
- 2.4 Any requests by the vendor for nondisclosure of confidential, proprietary information, trade secrets - or assertions by the vendor that information in its Proposal, or the entire Proposal, is confidential, proprietary or a trade secret - shall be examined by Manchester • Boston Regional Airport to determine the validity of the request or assertion. The vendor must provide these requests or assertions in writing prior to Proposal submission. If Manchester • Boston Regional Airport does not authorize part or all of this request, the vendor shall be informed in writing. Manchester • Boston Regional Airport will handle in strictest confidence all Proposal-related materials designated confidential, proprietary information, or trade secret.
- 2.5 All equipment must be onsite and configured no later than July 31, 2016. Invoiced amounts will not be paid until totality of work per associated contract item has been completed, as agreed upon by both the vendor and Manchester • Boston Regional Airport.
- 2.6 At the sole discretion of Manchester • Boston Regional Airport, vendor presentations may be requested before award of the contract. Manchester • Boston Regional Airport may also request the opportunity to conduct an on-site review of the vendor's facility and/or other locations where these services are provided, or a demonstration of the proposed technology.
- 2.7 All vendors who submit Proposals will be notified of the results of the selection process.

**SECTION III  
PROCESS DEADLINE**

Item	Date
RFP Package Distribution <sup>3.1</sup>	04/22/2016
Vendor Questions Due <sup>3.2</sup>	04/29/2016
Proposal Due <sup>3.3</sup>	05/13/2016
Vendor Answers Due <sup>3.4</sup>	05/27/2016
Proposal Chosen <sup>3.5</sup>	05/31/2016

**3.1 RFP Package Distribution**

The RFP package will be available from Manchester • Boston Regional Airport on this date.

**3.2 Vendor Questions Due**

Vendors must submit all questions regarding the RFP to Manchester • Boston Regional Airport by 4:00 PM, April 29, 2016. Questions must be sent via email to [twestbrook@flymanchester.com](mailto:twestbrook@flymanchester.com). Questions, and their respective answers, will be distributed via email to all participating vendors.

**3.3 Proposal Due**

All proposals must be received in their entirety by 4:00 PM, May 13, 2016 per the requirements and guidelines outlined in section IV.

**3.4 Vendor Answers Due**

Vendors must answer all proposal questions submitted by Manchester • Boston Regional Airport by 4:00 PM, May 27, 2016.

**3.5 Proposal Chosen**

Manchester • Boston Regional Airport will begin contract negotiations with the selected vendor on May 31, 2016 to finalize details. This date is subject to change if presentations or site visits are warranted. All vendors will be notified of the selected vendor. Draft of contract should be supplied by the vendor. Until contract execution, there is no guarantee of award.

## SECTION IV PROPOSAL CONTENT

### 4.1 Requirements

Your proposal should include the following information. Please organize and tab the proposal into the following sections:

#### 4.1.1 Letter of Transmittal

The Letter of Transmittal should include an introduction of the vendor's company; name, address, and telephone number of the person to be contacted; and any others who are authorized to represent the company in dealing with this RFP. It should also include an expression of the vendor's ability and desire to meet the requirements of this RFP.

#### 4.1.2 Executive Summary

An Executive Summary briefly describes the vendor's approach to the proposal and clearly indicates any options or alternatives. It should also indicate any major requirements that cannot be met by the vendor. Specific requirements that cannot be completely met should be detailed in section 4.1.5.1. This summary should also highlight the major features of the proposal and identify any supporting information considered pertinent.

In short, the reader should be able to determine the essence of the proposal and generally how well it meets the requirements by reading the executive summary.

For the following sections, please maintain the numbering scheme when providing answers. A copy of this RFP will also be provided in Microsoft Word format to vendors who wish to fill in values inline:

#### 4.1.3 Vendor Information (10% - see section 1.1)

- 4.1.3.1 What is the legal name of your company?
- 4.1.3.2 How many years has your company been in business?
- 4.1.3.3 Are you a subsidiary, affiliate, or franchise? If yes, what is the name of your parent company?
- 4.1.3.4 What is the address, phone number, and website or your organization's headquarters, and of any parent companies?

- 4.1.3.5 How many employees do you have worldwide? In North America? Locally?
- 4.1.3.6 Please provide your total number of office locations and identify key local offices that would be involved in managing this project.
- 4.1.3.7 Does your company operate on a local, regional, national, or international level?
- 4.1.3.8 Please attach a copy of your most recent annual report. If your firm does not issue an annual report, please provide audited financial statements for the past two years.
- 4.1.3.9 Does your company show consideration toward green and environmentally sound practices? If so, how?

#### 4.1.4 Capabilities and Account Management Approach (10% - see section 1.1)

- 4.1.4.1 Please describe your company's core capabilities and business approach.
- 4.1.4.2 What differentiates your company from the competition?
- 4.1.4.3 How is your organization structured locally, and how does this structure support your ability to provide the services you are proposing - especially in regards to account management and technical support services?
- 4.1.4.4 Will your organization provide break/fix service on the equipment, or is it subcontracted to a distributor or third party?
- 4.1.4.5 Will your organization provide technical support on middleware or other provided software, or is this support handled by the developer, publisher, distributor, and/or third party?
- 4.1.4.6 Describe how your organization will continue to support the provided equipment and software should the OEM or developer end support (due to equipment End of Life or the OEM/developer dissolving)
- 4.1.4.7 Please describe your overall technical support structure
- 4.1.4.8 Please describe the escalation procedure when service technicians are unable to resolve an issue.
- 4.1.4.9 Please describe the process for backup when a technician is not available.
- 4.1.4.10 Please describe the process to resolve recurrent issues or faulty equipment.

#### 4.1.5 Proposed Approach (25% - see section 1.1)

- 4.1.5.1 Please describe any items from Section V that cannot be completely accomplished by your proposal (**exceptions must clearly include the RFP index number of the associated requirement**).



- 4.1.5.2 Please describe the notable elements of your proposed equipment. Highlight major features and functionality that differentiate this equipment from the competition's.
- 4.1.5.3 Please document the full equipment schedule, identifying the proposed manufacturer, models, and any other specifications for equipment. Please provide overview documentation for software, middleware, and SDKs relevant to proposal.
- 4.1.5.4 Describe your product line's longevity in the market.

#### 4.1.6 Transition and Implementation (10% - see section 1.1)

- 4.1.6.1 Describe your transition and implementation plan in regards to Manchester • Boston Regional Airport. Include relevant time lines and milestones, keeping in mind required completion date.
- 4.1.6.2 Describe the members of your implementation team.

#### 4.1.7 References (10% - see section 1.1)

Please provide three (3) references of organizations with a similar size, usage and scope as Manchester • Boston Regional Airport. Include contact name, phone number, and email address.

#### 4.1.8 Pricing Considerations (35% - see section 1.1)

- 4.1.8.1 Please provide pricing, assuming all items from section V are met (except those items which are outlined in section 4.1.5.1). Please itemize when possible, and separate ongoing service contract pricing from capital costs.
- 4.1.8.2 What payment options are available (e.g. check, credit card, ACH, EFT, etc)

## 4.2 Submission

- 4.2.1 Please submit one complete electronic copy of your proposal in a single PDF file as an email attachment to [twestbrook@flymanchester.com](mailto:twestbrook@flymanchester.com). Electronic copy must be identical to hard copy. If PDF file is greater than 10 megabytes (10485760 bytes), electronic copy must instead be included on physical media (CD, DVD or USB key) with hard copies.
- 4.2.2 Please submit two complete hard copies of your proposal, hand delivered or with delivery confirmation, to:

Mr. Toni Westbrook  
Manchester • Boston Regional Airport  
One Airport Road, Suite 300  
Manchester, NH 03103

## SECTION V CONTRACT REQUIREMENTS

5.1 By submitting a proposal, you agree to meet all the requirements as stated below should your organization be awarded the contract, unless otherwise stated in section 4.1.5.1 of your proposal. This RFP, your accepted proposal document, and all addenda created during the negotiation process, will be incorporated by reference in the contract as if fully rewritten therein. The terms of the RFP requirements, your accepted proposal document, and all addenda created during the negotiation process, supersede any terms, written or inferred, in this and all renewal contracts, except where prohibited by federal, state, or local law.

### 5.1.1 General Requirements

5.1.1.1 The following items will be provided by Manchester • Boston Regional Airport:

5.1.1.1.1 Electrical and Uninterruptable Power Supplies

5.1.1.1.2 Network infrastructure, including:

5.1.1.1.2.1 Network switches providing PoE

5.1.1.1.2.2 1000base connectivity between switches, and to all access points and controllers

5.1.1.1.3 Rack space to accommodate controller hardware

5.1.1.1.4 Heat map (Terminal, AOA) of existing coverage

5.1.1.2 Migration and installation must address all associated requirements for a functional system, including wiring, equipment, software, consumables, etc, except for those items listed in section 5.1.1.1

5.1.1.3 Equipment will be purchased and not leased

5.1.1.4 All equipment, attachments, and accessories are new and unused

5.1.1.5 Removal, transport, and disposal of all equipment, cabling, and parts from the existing wireless network

5.1.1.6 Vendor shall perform AP alignment for proper coverage and wireless bridge connectivity

5.1.1.7 8x5 regular support with same day access to OEM senior engineer

5.1.1.8 24x7 emergency support (service down) with 1 hour access to OEM senior engineer

- 5.1.1.9 Upon project completion, the vendor shall be responsible for recording and providing a heat map of all Terminal and AOA areas shown in the existing heat maps
- 5.1.1.10 Any actions involved in the migration process that disrupt connectivity to critical systems may require the process be performed during early morning hours
- 5.1.1.11 All actions associated with the migration and installation process must be authorized by the IT Manager and Building Superintendent to ensure compliance with airport standards and requirements.
- 5.1.1.12 The vendor shall be responsible for securing all federal, state, and local permits, licenses, and approvals necessary to implement the proposed solution.
- 5.1.1.13 The vendor shall be responsible for applying for and obtaining security badges should personnel require extended access to secure areas for installation and/or support purposes

#### 5.1.2 Financial Requirements

- 5.1.2.1 Installation cost includes parts, software licensing, labor, and travel
- 5.1.2.2 Service contract cost includes phone support, onsite support, labor, and travel
- 5.1.2.3 Payment of invoices shall be made within the normal payment cycle of Manchester • Boston Regional Airport in accordance with standard policy:
  - 5.1.2.3.1 Invoices representing a true and accurate detail of expenses and work performed will be approved.
  - 5.1.2.3.2 Invoices approved by the 25<sup>th</sup> will be paid on the 15<sup>th</sup> of the month following.
  - 5.1.2.3.3 Invoices will be approved within up to 10 business days from receipt.
  - 5.1.2.3.4 Invoices shall be accompanied by supporting documentation as required by The City of Manchester.
- 5.1.2.4 The vendor may not charge interest or fees on late payments per City of Manchester policy.

#### 5.1.3 Functional Requirements

- 5.1.3.1 Wireless controller hardware and associated software are locally hosted on-site

- 5.1.3.2 System is designed and implemented to support the coverage and capacity as outlined in section VI, with room for growth and/or reconfiguration
- 5.1.3.3 System must continue to function (barring malfunction) in the absence of an active support or licensing agreement
- 5.1.3.4 Access point (AP) requirements:
  - 5.1.3.4.1 Integrated antennas
  - 5.1.3.4.2 IEEE 802.11a/b/g/n/ac Wave 2
  - 5.1.3.4.3 4X4:3 (4 transmit, 4 receive, 3 spatial streams) SU-MIMO
  - 5.1.3.4.4 4X4:4 (4 transmit, 4 receive, 4 spatial streams) MU-MIMO
  - 5.1.3.4.5 Bands: 2.5GHz, 5GHz
  - 5.1.3.4.6 802.11b modulation types: BPSK, QPSK, CCK
  - 5.1.3.4.7 802.11a/g/n/ac modulation types: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
  - 5.1.3.4.8 Channel widths: 20MHz, 40MHz, 80MHz
  - 5.1.3.4.9 Transmit beamforming
  - 5.1.3.4.10 802.3af (15.4W) PoE. MHT switches do not support 802.3at PoE+ (25.5W)
  - 5.1.3.4.11 1000Base-T Ethernet interface
  - 5.1.3.4.12 Integrated Bluetooth Low Energy (power class 2 or less)
  - 5.1.3.4.13 ICMP (responds to ping)
  - 5.1.3.4.14 SNMP polling (directly, not through controller), supports querying uptime, interface statistics, and temperature
- 5.1.3.5 Controller requirements:
  - 5.1.3.5.1 Two controllers
  - 5.1.3.5.2 Clustering between controllers (active-active or automated active-passive failover)
  - 5.1.3.5.3 256 or greater APs
  - 5.1.3.5.4 6 or greater SSIDs
  - 5.1.3.5.5 VLAN IDs 1-1024 or greater
  - 5.1.3.5.6 2 or greater 10GbE Ethernet connectivity
  - 5.1.3.5.7 2 or greater 1000Base-T Ethernet interfaces
  - 5.1.3.5.8 802.3ad (LACP)
  - 5.1.3.5.9 ICMP (responds to ping)
  - 5.1.3.5.10 SNMP polling, supports querying uptime, interface statistics, temperature, and relevant resource metrics (CPU, memory if available)
  - 5.1.3.5.11 NTP

5.1.3.5.12 Configuration backup/restore from a file

5.1.3.5.13 Rack mountable, 1U

#### 5.1.3.6 Operation and service requirements:

5.1.3.6.1 Security: Open, WPA2 PSK, WPA2 Enterprise

5.1.3.6.2 AAA (both client authentication and web management)/802.1x via  
RADIUS: EAP, EAP-TSL, EAP-MS-CHAPv2, PEAP

5.1.3.6.3 MAC filtering via RADIUS / NPS policy

5.1.3.6.4 Automated channel selection

5.1.3.6.5 RF reporting, including signal strength, signal-to-noise ratio, and other  
interference monitoring

5.1.3.6.6 Intrusion Management, supporting:

5.1.3.6.6.1 Rogue AP detection and containment

5.1.3.6.6.2 Automated attack (DoS) blacklisting

5.1.3.6.6.3 Automated authentication failure blacklisting

5.1.3.6.6.4 Manual client blacklisting

5.1.3.6.6.5 Real-time monitoring of intrusion related statistics, clients, and  
APs

5.1.3.6.7 Traffic analytics, supporting and reporting the following:

5.1.3.6.7.1 Deep packet inspection of traffic (OSI layer 3+),  
usage/bandwidth per application type

5.1.3.6.7.2 Usage/bandwidth per AP

5.1.3.6.7.3 Usage/bandwidth per authenticated username

5.1.3.6.7.4 Usage/bandwidth per SSID

5.1.3.6.8 Location-aware analytics and integration:

5.1.3.6.8.1 API for 3<sup>rd</sup> party integration of Wifi/Bluetooth beacon data with  
location-based push-notifications and advertising

5.1.3.6.8.2 Device presence statistics per physical location

5.1.3.6.8.3 List of approved application development partners (if required)

5.1.3.6.9 Captive portal, supporting:

5.1.3.6.9.1 Unfiltered HTML (Google Analytics and other javascript/jquery  
blocks must not be filtered out)

5.1.3.6.9.2 Able to redirect both HTTP and HTTPS traffic seamlessly

5.1.3.6.10 Management of both client-access and bridge APs

5.1.3.6.11 Web based management

#### 5.1.4 Warranty Requirements

The vendor shall warrant to Manchester • Boston Regional Airport that the equipment and software to be delivered shall conform to all items noted in section V. The vendor shall warrant that all equipment and software is free from defects in materials and workmanship, and that all equipment is new and unused unless expressly noted otherwise.

#### 5.1.5 Insurance Requirements Vendor Agreement

##### 5.1.5.1 Indemnification

The Vendor covenants and agrees to indemnify and hold harmless the City of Manchester (City) and the Manchester-Boston Regional Airport (Airport), their directors, officers, agents and employees, from and against any and all claims for damages or injuries, including death, to persons or property arising out of or incident to (i) Vendor's installation, or (ii) the use and occupancy of, the portion of Airport premises related to Vendor's operation at Airport (Premises) during the term of this Agreement, by Vendor, its contractors, agents, invitees, servants, subtenants or employees. The City and Airport shall give to Vendor prompt written notice of any such claim or action and Vendor shall have the right to investigate, compromise and defend the same. This section shall not apply, however, to the negligent or willful acts or omissions of the parties indemnified hereunder.

##### 5.1.5.2 Vendor's Insurance

5.1.5.2.1 Beginning with the execution of the Contract (Agreement), the Vendor shall maintain or cause to be maintained in force, with respect to the Premises, with responsible insurers licensed to do business in the State of New Hampshire the following kinds and the following amounts of insurance, with such variations as shall reasonably be required to conform to applicable standard or customary New Hampshire insurance provisions, to wit:

5.1.5.2.1.1 public and other comprehensive commercial general liability insurance of such character and amount as shall be reasonably adequate to insure the City and Airport, and the Vendor against risks to which the City and Airport and/or the Vendor may reasonably be or become subject in the use of the Premises, but the Vendor shall not be required to maintain any such insurance to the extent that such insurance is carried for the benefit of the Vendor and the City and Airport by any subtenant or other person operating, occupying or using any part of the Premises or by contractors (except by Vendor's own contractors or subcontractors). Initially, such insurance shall provide coverage of not less than \$1,000,000 for injury to or death of a person or persons in any one occurrence as well as for damage to property in any one accident, and a \$1,000,000 products-completed operations aggregate for:

5.1.5.2.1.1.1 Premises and operations

5.1.5.2.1.1.2 Products and completed operations

5.1.5.2.1.1.3 Contractual liability for the liability assumed by Vendor

5.1.5.2.1.2 Excess Liability Insurance coverage in the amount of \$1,000,000 each occurrence with a retention rate not to exceed \$50,000 where no underlying coverage exists.

5.1.5.2.1.3 Worker's compensation or employer's liability insurance in the following amounts:

Coverage A - Statutory Requirement

Coverage B - \$100,000 per Occurrence

Coverage C - \$100,000/100,000 Accident and/or Disease

5.1.5.2.1.4 Comprehensive Automobile Liability Insurance with a \$1,000,000 combined single limit bodily injury and property damage for each occurrence for all owned, non-owned, and hired vehicles used by the Vendor while performing operations in connection with this Agreement.

5.1.5.2.2 All policies evidencing insurance maintained or caused to be maintained in force by the Vendor with respect to the Premises and this Agreement shall be issued by the home office of the insurer(s) or by a duly authorized agent of the insurer(s) and shall name the City of Manchester



and the Manchester-Boston Regional Airport as additionally insured, as their interests shall appear, and shall be deposited with the Vendor but subject to inspection and examination by the City and Airport. The City and Airport shall have the right and is hereby authorized in their own name to demand and sue, collect and receipt for claims monies hereunder if Vendor fails to do so.

### 5.1.5.3 Miscellaneous Insurance Covenants

- 5.1.5.3.1 The Vendor at the commencement of this Agreement and not later than the first day of January in each year during the term hereof, nor later than thirty (30) days prior to the expiration of current policies, whichever is earlier, shall file or cause to be filed with the Airport a certificate of insurance with respect to the Premises and this Agreement then in effect pursuant to the requirements of Section 5.1.5.2 hereof. Such certificate will certify that the Airport will be given thirty (30) prior written notice of non-renewal, cancellation, or other material change.
- 5.1.5.3.2 Vendor's obligation under Section 5.1.5.2 shall not affect its right to carry additional insurance solely for its own account provided such additional insurance does not impair the insurance required to be maintained by this Agreement.
- 5.1.5.3.3 In the event the Vendor fails to maintain or cause to be maintained the full insurance coverage required by this Agreement, the Airport may (but shall be under no obligation to) obtain the required insurance coverage and pay the premiums for the same; and all amounts so advanced therefor by the Airport shall become additional fees and charges payable by the Vendor to the Airport, which amounts the Vendor agrees to pay upon demand. It shall not be a default under this subsection (c) if the Airport at the request of Vendor agrees to provide in a separate instrument a portion of the insurance required pursuant to Section 5.1.5.2 under its blanket coverage policy at the Airport.
- 5.1.5.3.4 All liability insurance policies shall include a severability of interest clause with respect to claims, demands, suits, judgments, costs, charges, and expenses arising out of, or in connection with any loss, damage, or injury resulting from the negligence or other fault of the Vendor, Vendor's agents, representatives, and employees.
- 5.1.5.3.5 Vendor understands that the City's and Airport's insurance does not extend to cover injury or loss to Vendor or its employees, servants, agents, or assigns, and Vendor expressly waives any claims against the City and Airport for such injury or loss.

5.1.5.3.6 The City and Airport agree to maintain in force during the term of this Agreement fire, extended coverage and vandalism/malicious damage insurance on the Terminal and any additions, alterations, or modifications thereto, and on all contents owned by the City and Airport and incidental to the Terminal for an amount not less than ninety percent (90%) of the full replacement cost thereof. Vendor shall purchase similar insurance on any of its owned property which have not assumed the nature of real estate improvements. The City and Airport and Vendor hereby mutually release and discharge each other from all claims or liabilities arising from or caused by fire and other casualty covered by the aforementioned insurance on the Terminal, Premises, contents, and personal property. All such policies shall include a waiver of subrogation with respect to the provisions of this agreement.

## SECTION VI SUPPLEMENTAL

Manchester • Boston Regional Airport is seeking 59 access points (53 replacements and 6 new). Specific existing AP locations, as well as detailed floor plans and heat maps, will be provided upon contract execution. APs indicating type “Client” currently broadcast 3 SSIDs. Average concurrent client connections are 500±150.

AP	Existing	Type	Master
mht-ap1	Existing	Client	
mht-ap2	Existing	Client	
mht-ap3	Existing	Client	
mht-ap4	Existing	Client	
mht-ap5	Existing	Client	
mht-ap6	Existing	Client	
mht-ap7	Existing	Client	
mht-ap8	Existing	Client	
mht-ap10	Existing	Client	
mht-ap11	Existing	Client	
mht-ap13	Existing	Client	
mht-ap14	Existing	Client	
mht-ap15	Existing	Client	
mht-ap16	Existing	Client	
mht-ap17	Existing	Client	
mht-ap18	Existing	Client	
mht-ap19	Existing	Client	
mht-ap20	Existing	Client	
mht-ap21	Existing	Client	
mht-ap22	Existing	Client	
mht-ap23	Existing	Client	
mht-ap24	Existing	Client	
mht-ap25	Existing	Client	
mht-ap26	Existing	Client	
mht-ap27	Existing	Client	
mht-ap28	Existing	Client	
mht-ap29	Existing	Bridge (M)	
mht-ap30	Existing	Bridge (S)	mht-ap29
mht-ap31	Existing	Client	
mht-ap32	Existing	Bridge (S)	mht-ap29

AP	Existing	Type	Master
mht-ap33	Existing	Client	
mht-ap34	Existing	Client	
mht-ap35	Existing	Bridge (S)	mht-ap42
mht-ap36	Existing	Bridge (S)	mht-ap42
mht-ap37	Existing	Bridge (S)	mht-ap42
mht-ap38	Existing	Bridge (S)	mht-ap39
mht-ap39	Existing	Bridge (M)	
mht-ap40	Existing	Client	
mht-ap41	Existing	Client	
mht-ap42	Existing	Bridge (M)	
mht-ap43	Existing	Client	
mht-ap44	Existing	Client	
mht-ap45	Existing	Client	
mht-ap46	Existing	Client	
mht-ap47	Existing	Client	
mht-ap48	Existing	Client	
mht-ap49	Existing	Client	
mht-ap50	Existing	Bridge (M)	
mht-ap51	Existing	Bridge (S)	mht-ap50
mht-ap52	Existing	Client	
mht-ap53	Existing	Client	
mht-ap54	Existing	Bridge (S)	mht-ap39
mht-ap55	Existing	Client	
mht-ap9	new	Client	
mht-ap11	new	Client	
mht-ap56	new	Client	
mht-ap57	new	Client	
mht-ap58	new	Client	
mht-ap59	new	Client	