Network Overview

• 2 x 1 Gb/s link to Bright House Networks
• Legacy loaned space (production network) - 130.129.0.0/16 & 2001:df8::/32
• RIPE space (Bits & Bytes) – 31.130.239.0/24 & 2001:67ffc:1230:c000::/50
• IETF network extended to Caribe Royale guest rooms via 1Gb/s copper link
New on the IETF Network

- Cisco 1142 a/b/g/n WAP’s.
  - Lower power requirements
  - Integrated antennas
  - Smaller form-factor
- Juniper MX80 routers
  - Increased performance
  - Provides Ethernet switching services
Hotel VLAN Solution

- Issue: Existing infrastructure configured with separate VLAN per Room
- Solution: Individual guest room VLANs bridged and aggregated at the core
- Functionality provided by Juniper MX-series
External Traffic

Aggregate External Traffic (basic)

- Inbound from Brighthouse (RtrA)
- Inbound from Brighthouse (RtrB)
- Outbound to Brighthouse (RtrA)
- Outbound to Brighthouse (RtrB)
External Traffic (cont.)

**rtra - Traffic - ge-1/1/1 (BRIGHTHOUSE)**

- Inbound: Current: 17.82 M, Average: 20.38 M, Maximum: 103.22 M
- 95th Percentile (74.71 mbit in+out)

**rtrb - Traffic - ge-1/1/1 (BRIGHTHOUSE)**

- Outbound: Current: 12.58 k, Average: 134.99 k, Maximum: 11.00 M
- 95th Percentile (65.08 mbit in+out)
RPKI @ IETF86

- Performing route origin validation
- Signed address space under test trust-anchor
- Experienced use-case scenario with upstream turn-up
  - LOA requirement caused turn-up delays
  - Ubiquitous RPKI deployment would help mitigate this type of issue
Guestroom Usage

**Graph 1:**
- **sw-guestroom-vlan - Traffic - Gi0/1**
- Inbound Current: 8.53 M, Average: 17.45 M, Maximum: 131.84 M
- Outbound Current: 44.16 M, Average: 50.51 M, Maximum: 349.56 M

**Graph 2:**
- **Active MAC Addresses on Guest Room Network (irbmac)**
- From 2013-Mar-12 14:08:38 To 2013-Mar-13 14:08:38
- Wired MAC Addresses: Current: 132, Average: 142, Maximum: 192
- Total: Current: 560, Average: 733, Maximum: 1k
Wireless Associations

Aggregate 802.11 2.4/5.0 Associations (bora)


802.11 5Ghz associations  802.11 2.4Ghz associations

Max associations: 1087
Current associations: 1019
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