Onsite Encoding Requirements

Overview

This document will cover the technical requirements for a successful webcast when streaming

directly from a venue (client office, theater/hall, hotel conference center, or temporary space such as

an open field). If a location (venue) cannot accommodate any items listed, this must be addressed

during the first technical call with all parties.

Technical Requirements for Onsite Streaming Services

- An IP Address for each stream requested. Standard set-up is a primary and secondary

  stream for redundancy purposes which, would mean two (2) assigned IP Addresses on two

  ports. All cabling such as CAT 5/6, is to be provided by a venue representative "cable to table".

- Each IP must have open access to the internet with the below listed requirements in place
  - Publicly accessible, Static IP is preferred over a Dynamic IP - this is preferred but private IPs with QoS will work.

  - Ports 80 and 1935 must be open and remain open for the full duration of any testing or event.

  - Firewall, gatekeeper or other security protocols must be disabled if in place.

  - IP, Alternate IP, Gateway, Subnet Mask, DNS, Alternate DNS.

- Network connectivity – Each encoding unit must have an individual port assigned that travels

  a unique path out to the internet. If this cannot be accommodated, we recommend

traveling

through separate network switch at a minimum.

- Bandwidth requirements are no less than 5 Mbps per connection with standard
  requirements and no less than 10 Mbps per connection for HD requirements.

- Communications port – We recommend a wired third port for a communications laptop.
  This
  is to allow for open communications without impacting any encoding device. Should
  this be
  unavailable then a wireless network may be used in its place with the understanding
  that a
  shared wireless network may have congestion due to usage and image
  communications.

- One (1) dedicated phone line that can make national and/or international phone calls
  with an
  accompanying handset

- Dedicated clean power circuit of 20 AMPs with two (2) power strips/surge protectors
  provided by venue.

Detailed network requirements documentation can be accessed here:

https://webcasts.com/networkresources/

Broadcast Signal Requirements

The Audio Video signal requirements should be shared with any vendor secured by a client.

- Two (2) identical mixed program feeds via HD/SDI with embedded audio is recommend
  as a
  broadcast standard. HDMI as a prosumer source may be accepted due to limitations
  with a
  specific venue or A/V crew.

- One (1) XLR mixed audio feed for audio back up.

- All Cables to be provided by the Audio/Video partner(s).

Location/Venue Logistics & Requirements

- Work area to have one (1) six-foot table with chairs accommodating up to three
  individuals.
  Additional tables and chairs may be required should there be a need for additional
  equipment and/or personnel.

- Venue IT representative to be available at the location for all test times as well as the
  event(s)

- Any restrictions concerning access to location or venue must be communicated on the
  first
  technical call by the client or location (venue) representative.

Glossary

- **IP Address:** A unique string of numbers separated by periods that identifies each
  computer
  using the Internet Protocol to communicate over a network

- **Static IP / Dynamic IP:** When a device is assigned a static IP address, the address
  does not
  change. Most devices use dynamic IP addresses, which are assigned by the network
  when
  they connect and change over time

- **Quality of Service (QoS):** A control mechanism to provide high-quality
  communication over a
  best-effort network by over-provisioning the capacity so that it is sufficient for the
  expected
  peak traffic load

- **Network Switch:** A networking device that connects devices together on a computer network by using packet switching to receive, process, and forward data to the destination
device

- **Megabits per second (Mbps):** A measure of data transfer speed (a megabit is equal to one
million bits)

- **HD/SDI:** High-Definition / Serial Digital Interface

- **HDMI:** High-Definition Multimedia Interface