MOOD:

PROFUSION IS/IO PANDORA SITE NETWORK CONSIDERATIONS

IMPORTANT NOTE: This document is informational only and geared toward IT technicians and system administrators. It is not intended to provide or imply any advice regarding network configuration, security, performance or equipment. This document contains basic technical networking information about Mood Media ProFusion iS/i0 platforms and network configuration considerations in order to successfully communicate with Mood Media update servers, client owned update servers, Pandora, and/or internal networks where applicable.

WIRED LAN CONNECTION:

ProFusion i0/iS devices are configured with a standard Ethernet port rated for 10/100 MBps operation.

Accessible RJ45 wall jack rated Category 5 or better located in close proximity of the intended location of the ProFusion device. Alternatively a direct connection to a local network switch can be used. In either case network cables lengths must not exceed 328 Feet (100 meters) in total length from the network switch to the device – this includes wiring between the network switch and the wall jack and the cable from the wall jack to the device and any other cables in between.

INTERNET CONNECTION SPEED REQUIREMENTS

A consistent bandwidth of no less than 150 Kbps is required for Pandora for business streaming services. Higher bandwidth connections will provide more consistent service especially when network traffic loads are greater. Dial up services are not supported.

DEVICE UPDATE BANDWIDTH REQUIREMENTS

ProFusion devices can be throttled as low as 64 KBps to meet required bandwidth limitation s during updates; however a minimum bandwidth of 150 Kbps should be considered the minimum bandwidth for all configurations.

PORTS

Note: Most ProFusion device port assignments are based on generally accepted port standards and are not re-configurable, with the exception of Proxy configuration where the port assignment can be assigned from the ProFusion device.

UPDATE SERVER CONNECTIONS

+ FTP PROTOCOL
  - Port 21 must allowed for FTP connections, as well as an ephemeral port range (actual port range: 1025-65535) to allow data transmission. At the time of this writing ProFusion iS devices only support passive FTP and will not connect via active FTP configurations.
+ SFTP PROTOCOL
  - Port 22 must be allowed for SFTP connections.
+ HTTPS PROTOCOL
  - This protocol must also use a hostname for the update server
  - Ports 443, 80 externally
+ ONLINE CONTROL PANEL (PROFUSION IO ONLY)
  - Port 80 internally
  - For discovery of ProFusion i0 Multicast port 5353 may need to be open – internally only.

+ PANDORA STREAMING SERVICE
  - Ports 443, 80 externally: for the purpose of availability and reliability Pandora utilizes multiple server locations for streaming audio. In order to support these streaming services; ports 80 and 443 should be allowed unimpeded external access.
+ HEARTBEAT FUNCTIONALITY
  - Port 80 externally

WIRELESS LAN (WIFI)

ProFusion devices support only Mood Media qualified WiFi USB adaptors. Use of other adaptors not provided by Mood Media is not supported. Supported adaptors can be ordered from Mood Media customer support.

WiFi Adaptors that are provided by Mood Media support the following WiFi protocols:
+ 802.11b
+ 802.11.g
+ 802.11n

Supported WiFi security protocols:
+ WEP
+ WPA (TKIP)
+ WPA2 (AES)

Devices can be connected to unsecured WiFi networks, however this is not recommended.

WIRELESS RANGE

Wireless range is dependent on many factors and so no exact distance will be given here. A few common examples of factors that affect wireless range are output power and receive sensitivity of the access point (AP) and client WiFi devices, obstructions and materials comprising those obstructions between AP and client, competing signals in the same radio frequency band (2.4GHz) and horizontal placement of AP and client. In general there should be no more than 100 unobstructed meters between a ProFusion Device and Access point – this distance will be reduced depending on the number and composition of obstructions that are in the direct path between the ProFusion and AP. Concrete and metal structures will have a greater negative effect on WiFi range / strength. However, structures such as drywall, glass, and other lighter / less dense materials will have much less of an effect on the WiFi strength.

SERVER ADDRESSES
Seattle Update Server – 66.150.6.130

Charlotte Update Server -199.204.61.120

SUPPORT CONTACT
Phone: 800 929.5407

MOOD: