

IPTV Network Requirements

The information contained in this document is intended to provide general guidance with respect to IP (Internet Protocol) network requirements necessary to support a LodgeNet IPTV solution. Before installing an IPTV system, LodgeNet requires that it have an opportunity to fully evaluate the customer's IP network to determine its ability to support IPTV. A customer will be required at its expense to correct any IP network deficiencies prior to installation of an IPTV system. LodgeNet utilizes both MPEG2 and MPEG4 streams at 8 Mbps to 19.4 Mbps.

A customer may contact our Professional Solutions Group for information regarding IP network hardware that has been tested by LodgeNet. Whether specific hardware will perform adequately in a customer environment depends on many factors, including but not limited to network architecture and the setup, configuration and maintenance of all network components.

Our general IP network testing leads us to recommend that an IP network in an IPTV system environment must have the following minimum characteristics:

Mandatory Requirements

- Support Protocol Independent Multicast routing
- Support IGMP v3
- Support IGMP snooping
- Support IGMP immediate-leave or an equivalent
- Provide QOS mechanisms at layer2 and layer3
- Provide Layer3 and layer4 access control lists (ACL)
- Provide ability to rewrite the COS, DSCP
- Provide Etherchannel port bonding or equivalent

Optional Requirements

- Redundant power capable
- Support SNMP v2

Other Recommendations

- The equipment must be able to isolate the devices on each port from each other using VLAN privacy, Switchport Protected (or other methods achieving the same isolation result).
- Based on current IPTV bandwidth requirements, at least 1 Gbps trunk between the core MDF switch and the edge IDF switch for every 48 TVs.
- Core to Edge Switch Cabling: LodgeNet recommends using fiber.



- Edge Switch to Room Cabling: LodgeNet recommends Category 6 (Cat6) cabling in new installations. If Cat5e is already installed you do not need to remove it and install Cat6. Cat5e will work with the current bandwidth needs of today's applications and services.
- In-room Switches: If considering in-room switches, please consult with LodgeNet's Professional Solutions Group.

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