

Product Overview

This chapter provides an overview of the Cisco IP/TV 3400 Series Servers, and includes the following sections:

- IP/TV Server Components
- Deployment Configurations

IP/TV Server Components

The Cisco IP/TV 3400 Series Servers consist of six servers with preinstalled IP/TV software:

- The IP/TV 3411 Control Server, which comes with IP/TV Control Server software installed, is used to set up and manage scheduled or on-demand programs, channels, recordings, and file transfers among Archive and Broadcast Servers. The 3411 Control Server also sends program listing information to client desktops, allowing viewers to see which programs are scheduled or available on-demand for that day, week, or month.
- The IP/TV 3423 Broadcast Server, which comes with the IP/TV Server software installed, is used primarily for live encoding and serving, as well as for serving a limited number of pre-recorded programs defined in the IP/TV Control Server. The 3423 supports high-quality MPEG2 Full D1, MPEG2 Half D1, MPEG1, and medium- and low-quality H.261 and MPEG4. The 3423 includes video storage for 40 hours of MPEG1 video served at 1.0 Mbps, or 10 hours of MPEG2 served at 6.0 Mbps.
- The IP/TV 3431 Archive Server, which comes with the IP/TV Server software installed, is used primarily for serving video on-demand (VOD) programs, for pre-recorded programs as well as scheduled programs as defined in the IP/TV Control Server. The

3431 supports a wide range of codecs, including high-quality MPEG2, MPEG1, and medium- and low-quality MPEG4. The 3431 can store up to 120 hours of MPEG1 video served at 1.0 Mbps.

- The IP/TV 3415 Starter System offers limited Control Server, Broadcast, and Video on Demand Capabilities. It is designed as an evaluation or small deployment of IP/TV Video Streaming capabilities. The 3415 includes the following:
 - The Control Server, which comes with the IP/TV Server software installed, is used to set up and manage scheduled or on-demand programs, channels, recordings, and file transfers among Archive and Broadcast Servers. The Control Server also sends program listing information to client desktops, allowing viewers to see which programs are scheduled or available on-demand for that day, week, or month.
 - The Broadcast Server, which comes with the IP/TV Server software installed, is used primarily for live encoding and serving, as well as for serving a limited number of pre-recorded programs defined in the IP/TV Control Server. The 3415 is configured with a MPEG1/MPEG2 Half D1 video capture card. A wide range of codecs, including high-quality MPEG2 Half D1 and MPEG1, are supported. The 3415 includes video storage for 30 hours of MPEG1 video served at 1.5 Mbps.

Deployment Configurations

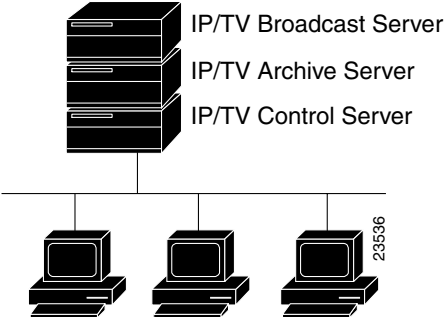
This section describes the types of deployment configurations available with IP/TV 3400 Series Servers, and discusses the following topics:

- Minimal Configuration
- Cluster Configuration

Minimal Configuration

A minimal network configuration using the Cisco IP/TV 3400 Series Servers is illustrated in Figure 1-1.

Figure 1-1 Minimal Network Configuration



Cluster Configuration

A cluster is a group of servers that together form a virtual machine controlled by an IP/TV Control Server. Each cluster has an integrated database that keeps track of program information. Each cluster of servers can have an associated proximity group; that is, a group of IP/TV Viewers that can access the program information.

IP/TV clusters can be configured so that proximity groups can access not only a primary cluster, but also secondary clusters when demand for content on the primary cluster exceeds the cluster’s capacity to serve that content.

Table 1-1 illustrates how different proximity groups might be configured to access content on different clusters. Refer to Figure 1-2 to view the cluster configuration.

Table 1-1 Configuring Access to Content

Proximity Group	Clusters Serving Content	Type of Access
Proximity Group A	Cluster 2	Local Content
	Cluster 1	Nearby Content
Proximity Group B	Cluster 3	Local Content

Deployment Configurations

Proximity Group	Clusters Serving Content	Type of Access
Proximity Group C	Cluster 1	Local Content
	Cluster 2	Nearby Content
	Cluster 3	Nearby Content

In this scenario, viewers in Proximity Group B can only access content to Cluster 3. If Cluster 3 has reached its maximum capacity for serving content, then viewers in Proximity Group B do not have a secondary cluster from which to access content.

Figure 1-2 Cluster Configuration

