

**Penn State University
Information Technology Services
H.323 Videoconference System
Setup Recommendations for the System Administrator**

Overview

This document recommends a standard setup for h.323 videoconference systems using the Penn State h.323 gatekeeper and directory service.

Terminology

Desktop system	A desktop personal computer equipped with h.323 videoconference capabilities.
E.164 Alias:	E.164 is an ITU-T recommendation for international telecommunication numbering. Penn State uses the E.164 standard for the IP dial plan number assigned to each videoconference system. Each system is assigned a unique 5 digit dial number (E.164 alias) in addition to an IP address.
Gatekeeper	A network gatekeeper provides terminal registration, address resolution, bandwidth control and admission control. Penn State Information Technology Services manages one gatekeeper for h.323 Videoconference Over IP systems.
h.323 extension	Same as E.164 Alias
h.323 Name	This is the name of the system. In Polycom desktop systems this is called the "User Name". In Polycom room systems this is called the "System Name". Generally the h.323 name identifies the location of the room system or the person using a desktop system.
h.323 zone:	At Penn State the h.323 zone includes h.323 end-points and a multipoint conference unit (video bridge) served by one gatekeeper.
h.323	An ITU-T standard that allows videoconferencing systems to interconnect over packet networks such as LANs, WANs and Intranets using the Internet Protocol.
Room System	Videoconference equipment designed to support a conference room or classroom environment.
ViDeNet	ViDeNet is the global, virtual network providing video and voice-over-IP to the Internet, Internet 2, and advanced networking communities. They provide a dial plan for interzone communications between gatekeepers. Penn State uses the ViDeNet Global Dialing Scheme version 3 (GDS) dial plan.

Gatekeeper

In the videoconference system h.323 setup, specify the gatekeeper IP address of 146.186.33.254. This is the Penn State h.323 zone gatekeeper IP address.

H.323 Name

In Polycom room systems, set the "System Name" to Campus Building Room. Abbreviate so that the name does not go over 33 characters.

Example: Delaware Vairo 201E

In Polycom desktops systems, set the "User Name" on the general tab to the PSU access account prefix of the person using the system. Example: RAB23

The system name or user name is displayed in the directory service listing and is displayed as the site name during Video Bridge conferences.

H.323 Extension (e.164)

In Polycom room and desktop systems set the "h.323 extension" to a 5 digit number. The number must be unique from other systems registered in the Penn State gatekeeper h.323 zone. A common technique is to set this number the same as the last 5 digits of the ISDN directory number of the videoconference system or of the phone number within the same room. There is no guarantee that this technique provides a unique h.323 extension. If the h.323 extension is not unique, the gatekeeper will not permit registration. ITS can provide a unique h.323 extension during the [system registration](#) process.

Directory Service

Information Technology Services (ITS) provides an optional directory service. To use the directory service, set the Global Directory (GDS) to IP address 146.186.120.130. The directory listing in the videoconference system is sorted based on the h.323 name. The directory service only supports Polycom systems.

System Registration

ITS requires [system registration](#) for systems using the ITS Scheduled Video Bridge Service. [System registration](#) is optional but recommended for systems using the On-Demand Video Bridge Service. ITS can provide a unique h.323 extension during this process.

Testing

Testing is recommended after system setup is completed. These tests verify gatekeeper registration and system operation.

An IP loop back test service is available by dialing 39344 from the videoconference system. During this test the audio and video of the system being tested is looped back to the system under test.

An IP connection to the Penn State Video Bridge can be tested by dialing 2222test (case sensitive). The first system to connect to the bridge will see a loop back of the system video (no audio). Up to four sites can connect to this test conference for a maximum duration of 31 minutes. The best test of bridge operation is to have three sites connect and communicate with each other. **Note:** Test resources are shared

with all PSU users. Availability is on a first come first serve basis. Please do not stay connected for more than a few minutes.

Help

For **non-video bridge** assistance with **desk-top** videoconference systems, the computer owner can call the ITS HELP DESK at 814-863-2494. The ITS HELP DESK hours of operation are Mon-Fri 9 a.m. to 5 p.m.

Room system registration and video bridge assistance is available by calling the ITS Network Operations Center at 814-865-4662.