DEPLOYMENT GUIDE

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Polycom® Immersive Telepresence (ITP)

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6001 America Center Drive
San Jose, CA 95002
USA

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Before You Begin

The *Polycom® Immersive Telepresence (ITP) Deployment Guide* provides the best practices for configuring multipoint conferences on Polycom® RealPresence® Collaboration Server 4000 and Polycom® RealPresence® Collaboration Server 2000 real-time multimedia conference platforms with the following telepresence solutions:

- Polycom RealPresence OTX Studio
- Polycom RealPresence® Experience (RPX™) 400 Series
- Polycom RPX 200 Series
- Polycom Open Telepresence Experience™ (OTX™) 300
- Polycom OTX 100
- Polycom Telepresence Experience® (TPX®) 306M
- Polycom TPX 204M
- Polycom Architected Telepresence Experience™ (ATX™) HD 300
- Polycom ATX SDK (which supports the ATX 200, ATX 300, and ATX 400 hardware platforms)
- Polycom RealPresence® Immersive Studio 9-seat and 21-seat

This guide is intended for Immersive Telepresence (ITP) administrators and for Polycom RealPresence Collaboration Server 4000 and 2000 administrators who manage telepresence calls. The ITP and RealPresence Collaboration Server administrators should have:

- Prior knowledge and experience with the RealPresence Collaboration Server 4000 and 2000 conference platforms and with the Polycom Multipoint Layout Application (MLA).
- Familiarity with configuring both overall conference settings and with configuring the personal layouts of the conference sites.
- Access to Polycom RealPresence Collaboration Server 4000 and 2000, RPX, OTX, TPX, ATX, MLA, RealPresence Immersive Studio, and RealPresence OTX Studio product documentation.

This guide contains terms, graphical elements, and a few typographic conventions. Familiarizing yourself with these terms, elements, and conventions will help you successfully perform tasks.

User-Initiated Multipoint Dialing

This chapter contains information about user-initiated multipoint dialing.

Note: For information about ITP software and hardware compatibility for software versions newer than 3.1.0, refer to the ITP Release Notes for the specific version or the current Polycom Supported Products matrix located at PolycomService/support/us/support/service_policies.html.

For information about ITP software and hardware compatibility for software versions 3.1.0 and earlier, refer to Appendix C or the ITP Release Notes for the specific version.

You can configure your ITP solution (RPX, OTX, TPX, or ATX) to enable four different types of user-initiated multipoint conferences:

- **Polycom Conferencing for Microsoft Outlook**: Users can view a list of scheduled meetings and join those meetings.
- **Meeting Composer**: Users can launch multipoint calls directly from the ITP room by choosing all of the conference participants. Once the conference is connected, users can add and drop conference participants as needed.
- **Group Dialing or Multipoint Speed Dialing**: Users can launch Polycom RealPresence Collaboration Server calls to multiple sites at one time simply by pressing a Favorite or a Speed Dial button that the administrator has configured to dial a pre-determined list of sites.
- **Single Touch Multipoint**: Users can call a Polycom RealPresence Collaboration Server Virtual Meeting Room (VMR) simply by pressing a Favorite or a Speed Dial button that the administrator has configured to dial into the VMR.

Note: For information about RealPresence Immersive Studio software and hardware compatibility, refer to the RealPresence Immersive Studio Release Notes for the specific version or the current Polycom Supported Products matrix located at PolycomService/support/us/support/service_policies.html.

You can configure your RealPresence Immersive Studio system and RealPresence OTX Studio system to enable three different types of user-initiated multipoint conferences:

- **Polycom Conferencing for Microsoft Outlook**: Users can view a list of scheduled meetings and join those meetings.
- **Meeting Composer**: Users can launch multipoint calls directly from the RealPresence Immersive Studio room or from the RealPresence OTX Studio room by choosing all of the conference participants from Favorites or from the Directory. Once the conference is connected, users can add conference participants as needed. Users can also make a point-to-point call and then add a participant. The end point must have Polycom Distributed Media Application 7000 configured.

- **Single Touch Multipoint**: Users can call a Polycom RealPresence Collaboration Server Virtual Meeting Room (VMR) simply by pressing a Favorite or a Speed Dial button that the administrator has configured to dial into the VMR.

These user-initiated multipoint conference features are available to sites using a RealPresence Collaboration Server without MLA. Two modes are supported:

- **Speaker Priority**: In Speaker Priority mode, each room system reserves screens to provide high visibility according to maximum number of room-screens in the conference, displaying the active speaker in the largest video layout cell available.
- **Voice Activated Room Switching (VARS)**: In VARS mode, the speaker's site is the only site seen by others. The view of the speaker's site is sized to be as large as possible on all of the other participants' displays. The current speaker sees the previous speaker's site (that is, the speaker's layout remains unchanged). While you can also use VARS mode with MLA, Polycom recommends using VARS mode with RealPresence Collaboration Server and without MLA.

These user-initiated multipoint conference features are available to sites using a RealPresence Collaboration Server and the MLA in automatic conference layout mode. MLA supports two types of automatic conference layout modes:

- **Room Continuous Presence**: In this standard mode, the multipoint view is automatically generated either to follow the general principles of Polycom Immersive Telepresence multipoint (that is, all participants are "present" during a multipoint conference) or to fit a custom-set view configured by the conference administrator for the combination of sites in a particular conference.
- **Voice Activated Room Switching (VARS)**: In VARS mode the speaker's site is the only site seen by others. The view of the speaker's site is sized to be as large as possible on all of the other participants' displays. The current speaker sees the previous speaker's site (that is, the speaker's layout remains unchanged). Layouts used in VARS are not customizable. While you can use VARS mode with MLA, Polycom recommends using VARS mode with RealPresence Collaboration Server and without MLA.

Multipoint Best Practices

In Polycom Immersive Telepresence Series suites, the video is delivered using two, three, or four independent Polycom HDX codecs. In Polycom RealPresence Immersive Studio and Polycom RealPresence OTX Studio rooms, the video is delivered using three Polycom RealPresence Group Series codecs. This creates additional multipoint complexity over traditional video conferencing because, from the perspective of the Polycom RealPresence Collaboration Server, all of the codecs in an RPX, OTX, TPX, ATX, or RealPresence Immersive Studio site would typically be treated as though they were separate sites.

Continuous presence transcoding is normally used for telepresence multipoint today. In previous releases, the endpoints in telepresence rooms were “framed” together on the RealPresence Collaboration Server by the multipoint conference platform administrator, using the personal layout control of each conference site. This approach ensured that the rooms appeared properly within the various continuous presence views.

With the introduction of Version 2.0 of the Polycom Multipoint Layout Application (MLA), the process of managing telepresence conferences became greatly simplified. With MLA, layouts are applied automatically for each telepresence site in a conference.

When Speaker Priority mode is selected each room system reserves screens to provide high visibility according to maximum number of room-screens in the conference, displaying the active speaker in the largest video layout cell available.

For VARS mode, Polycom’s suggested best practice is to use RealPresence Collaboration Server to do VARS mode internally without MLA. For more information, refer to the RealPresence Collaboration Server documentation. For Room Continuous Presence mode, Polycom suggests setting up the MLA to configure the telepresence conference layouts automatically. You can also use MLA to define custom layout templates for automatic application. For more information, refer to the *Polycom Multipoint Layout Application User Guide for use with Polycom Telepresence Solutions*.

Calculating and Naming Conference Sites

As the RealPresence Collaboration Server administrator, you must be familiar with configuring both the overall conference settings and the personal layouts of the conference sites. For more information, refer to the *Polycom RealPresence Collaboration Server Administrator’s Guide*.

Calculating Total Conference Sites

To calculate the total site connections required for a multipoint conference, use the following formula:

```
(RPX 200 Series suites * 2) +
(RPX 400 Series suites and ATX 400 sites * 4) +
(OTX 300 sites, TPX 306 sites, and ATX 300 sites * 3) +
(TPX 204 sites and ATX 200 sites *2) +
(OTX 100 and traditional videoconferencing systems * 1) +
```

```
(OTX Studio sites * 3) =
Total conference sites required for the conference
```

Naming Sites

Naming the telepresence sites appropriately in the RealPresence Collaboration Server 4000 and 2000 address book is a critical step towards helping to frame the sites correctly.

When naming the sites, you must follow the naming conventions described in the “Setting Up Naming on the HDX Codecs” section of the *Polycom Immersive Telepresence (ITP) Administrator’s Guide*.

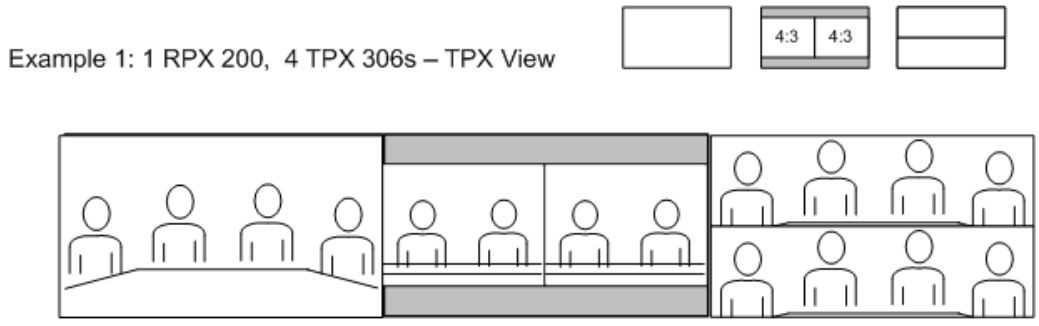
Multipoint with OTX, TPX, and ATX Systems Overview

In Room Continuous Presence multipoint calls, the camera views with OTX, TPX, ATX 200, and ATX 300 systems are handled differently than with RPX, ATX 400, OTX Studio and RealPresence Immersive Studio systems. While OTX, TPX, ATX 200, and ATX 300 systems use one camera to capture the full-room view, RPX, ATX 400, OTX Studio and RealPresence Immersive Studio systems capture a full-room view using all the cameras, with each camera capturing a different portion of the room.

- At sites with TPX systems with Eagle Eye 1080 cameras, the cameras capture only the center four seats, not all six, when showing the full room view. TPX systems with Eagle Eye HD or Eagle Eye II cameras show the outer two seats partially obscured from view. This also applies to ATX sites where the table is placed at 110” (2.79 m).
- When viewing a 3x3 layout on an OTX, TPX, or ATX screen, the video may be shifted slightly to the right side of the screen.

This camera positioning makes multipoint video layouts straightforward. For an OTX, TPX, ATX 200, or ATX 300 site to be seen by another site, it needs only a single window in a continuous presence layout. If there are few sites in the conference, this could even be a single window with full screen layout. The camera view also allows a wide aspect ratio window to be used, such as in the layout illustrated below. For the wide viewing windows, the top and bottom of the OTX, TPX, ATX 200, and ATX 300 view are cropped, but the people are still visible.

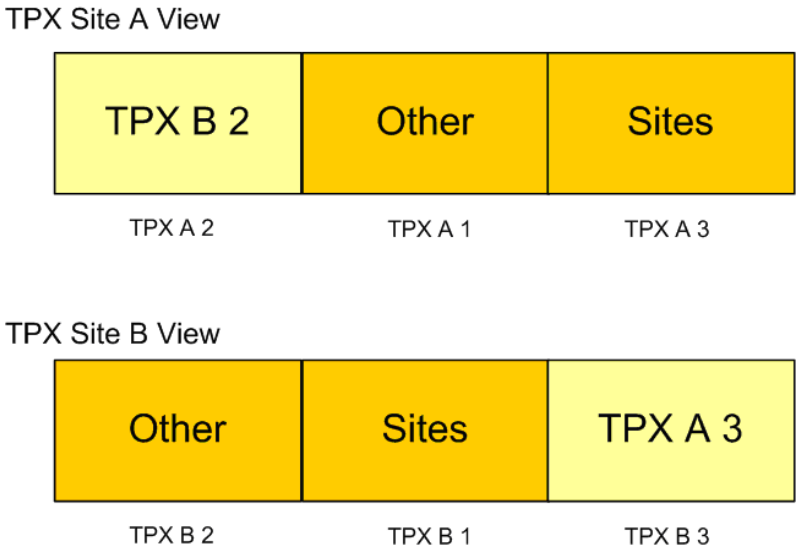
Sample Layout Showing Wide Aspect Ratio Views



You can use any of the cameras in the OTX, TPX, ATX 200, or ATX 300 room as the source for video from the room. However, to achieve optimal eye contact, choose the camera closest to the display where the other site’s people are seen.

For example, suppose TPX site A is viewing site B on the left display (codec number 2). When choosing the layout for site B, use the video from the right camera (codec number 3) in the TPX room because camera 3 is closest to display 2.

TPX 306M Framing Example Illustrating Optimal Eye Contact



Recording Telepresence Conferences

With MLA, you can use the Polycom RSS™ 2000 Single Point Recording feature with the RealPresence Collaboration Server 4000 or 2000 to easily record ITP conferences.

When an ITP conference that is under management by the MLA has recording enabled, the recorded video on the RSS 2000 will feature the layout view normally sent to a one-screen, traditional video conferencing system. The remaining sites in the conference will see the layout that they would typically see if recording was not enabled.

Multiple Cascade Links

Multi-codec telepresence conferences are not supported across cascaded RealPresence Collaboration Server links. However, an RealPresence Collaboration Server 4000 or 2000 that is hosting a telepresence conference can be cascaded to another RealPresence Collaboration Server 4000 or 2000 conference with traditional endpoints. From the perspective of the telepresence conference, the video source from the cascaded link will be treated as a traditional endpoint. Note that this feature is not currently supported in DMA.

Other Considerations

Note the following considerations regarding multipoint conferences:

- When participants drop out of a multipoint call, the remaining sites must be re-framed to account for the change in the number of codecs. If you have configured the MLA to automatically apply layouts for your conference, MLA will re-frame the sites for you.
- If one of the HDX codecs at a telepresence site inadvertently becomes disconnected from a multipoint call, you may have to disconnect all of the remaining HDX codecs from that site in order to reconnect properly. This is because the system can be configured to disallow incoming calls to the HDX codecs when one or more of the codecs is in a call. For more information, refer to the Do Not Disturb timer information in the *Polycom Immersive Telepresence (ITP) Administrator's Guide*.
- When using the MLA user interface with an ATX 200 or ATX 400 system:
  - The MLA treats ATX 200 systems the same way as TPX 204 systems. Therefore, the MLA user interface will display ATX 200 systems as site type **TPX 204**. Additionally, if you create a layout template for an ATX 200 system, you must select **TPX 204** as the Type.
  - The MLA treats ATX 400 systems the same way as RPX 400 systems. Therefore, the MLA user interface will display ATX 400 systems as site type **RPX 400**. Additionally, if you create a layout template for an ATX 400 system, you must select **RPX 400** as the Type.

Configuring RealPresence Collaboration Server Settings for ITP Systems

This chapter lists the RealPresence Collaboration Server settings for:

- 1080p HD video
- 720p/60 HD video
- 720p/30 HD video

In addition, this chapter lists the other RealPresence Collaboration Server settings that you should configure, as well as the settings you should configure for large conferences.

For ITP systems using HDX codecs, the ITP Meeting Composer dialing mechanism does not take advantage of DMA load balancing with a pool of RealPresence Collaboration Servers. The ITP endpoint is pre-configured to use a particular RealPresence Collaboration Server. Refer to the *Polycom DMA 7000 System Getting Started Guide* or the *Polycom DMA 7000 System Operations Guide* for more information.

For ITP systems using RealPresence Group Series codecs, the system uses DMA for Meeting Composer and load balancing is supported.

Configuring the RealPresence Collaboration Server Settings for 1080p HD Video

1080p HD video requires MPMRx hardware for RealPresence Collaboration Server running software version 8.6 or MPMx hardware for RealPresence Collaboration Server running software version 8.5. In addition, you must use one of the RealPresence Collaboration Server versions shown in the Polycom Immersive Telepresence (ITP) Release Notes or Polycom RealPresence Immersive Studio Release Notes.

You must also use one of the HDX software versions shown in the Polycom Immersive Telepresence (ITP) Release Notes or one of the Group Series software versions shown in the Polycom RealPresence Immersive Studio Release Notes.

By configuring the RealPresence Collaboration Server settings as described in this section, the RealPresence Collaboration Server will send the following:

- 1080p HD resolution continuous presence video to endpoints that support 1080 resolution.
- 720p/30 HD resolution continuous presence video to endpoints that support 720 resolution. Lower resolution is provided to lower resolution endpoints.

Note: You might see occasional video stuttering (jerkiness) when using this conference profile on a RealPresence Collaboration Server with MPMx or MPMRx hardware.

1080p HD Video Conference Profile Settings

This setting....		Should be set to...
General	Line Rate	4096 Kbps (3072 Kbps for MPMRx if all ITP systems in the call are enabled for H.264 High Profile)
	High Definition Video Switching	Unchecked
	Operator Conference	Unchecked
Advanced	LPR	Checked
	Encryption	Optional
	Auto Terminate	Optional
	Echo Suppression	Checked
	Keyboard Suppression	Optional
Gathering Settings	Enable Gathering	Optional
Video Quality	People Video: Video Quality	Motion
	People Video: Video Clarity	Unchecked
	Content Video: Content Settings	Optional
	Content Video: Content Protocol	Up to H.264 high profile
Video Settings	Telepresence Mode	Auto
	Telepresence Layout Mode	Continuous Presence
	All other check boxes	Unchecked
Skins		Not Applicable
IVR	(If desired, create an IVR service that disables the video splash screen and audio greetings. **NOTE:** If you are planning to include OTX, TPX, or ATX systems, you must create an IVR service that disables the video splash screen and audio greetings. There is a known issue where the interaction of IVR and 16:9 displays results in video with an incorrect aspect ratio on the 16:9 display.)	
	Conference Requires Chairperson	Optional
Recording		Optional

When configuring the RealPresence Collaboration Server settings for 1080p HD video, note the following:

- The system flag, ITP_CERTIFICATION, must be set to **YES**. Note that in order for the RealPresence Collaboration Server to support ITP, the customer must purchase the RealPresence Collaboration Server Telepresence License.

  For more information about configuring RealPresence Collaboration Server system flags, refer to the *Polycom RealPresence Collaboration Server Administrator's Guide*.

- You should validate that the parameter Maximum CP Resolution (system wide) and Maximum Resolution (conference profile) are set to **HD1080** for the 1080p HD profile. (HD1080 is the default setting.)

  For more information about setting this flag for large conferences, see Configuring RealPresence Collaboration Server Settings for Large Conferences.

Configuring the RealPresence Collaboration Server Settings for 720p/60 HD Video

720p/60 HD video MPMRx hardware for RealPresence Collaboration Server running software version or 8.6 or MPMx hardware for RealPresence Collaboration Server running software version 8.5. In addition, you must use one of the RealPresence Collaboration Server versions shown in the *Polycom Immersive Telepresence (ITP) Release Notes or Polycom RealPresence Immersive Studio Release Notes*.

You must also use one of the HDX or RealPresence Group Series software versions as shown in the *Polycom Immersive Telepresence (ITP) Release Notes or Polycom RealPresence Immersive Studio Release Notes*.

By configuring the RealPresence Collaboration Server settings as described in this section, the RealPresence Collaboration Server will send the following:

- 720p/60 HD resolution continuous presence video to ITP sites with HDX 8000 Series codecs and with RealPresence Group Series codecs.
- SD/60 resolution continuous presence video to ITP sites with HDX 9004 codecs (RPX sites receive 4SIF 4:3 aspect ratio at 60 fps; TPX sites receive 720x400 16:9 aspect ratio at 60 fps).

Note: You might see occasional video stuttering (jerkiness) when using this conference profile on a RealPresence Collaboration Server with MPMx or MPMRx hardware.

720p/60 HD Video Conference Profile Settings

This setting...		Should be set to...
General	Line Rate	4096 Kbps (3072 Kbps for MPMRx if all ITP systems in the call are enabled for H.264 High Profile)
	High Definition Video Switching	Unchecked
	Operator Conference	Unchecked
Advanced	LPR	Checked
	Encryption	Optional
	Auto Terminate	Optional
	Echo Suppression	Checked
	Keyboard Suppression	Optional
Gathering Settings	Enable Gathering	Optional
Video Quality	People Video: Video Quality	Motion
	Content Video: Content Settings	Optional
	Content Video: Content Protocol	Up to H.264 high profile
Video Settings	Telepresence Mode	Auto
	Telepresence Layout Mode	Continuous Presence
	All other check boxes	Unchecked
Skins		Not Applicable

This setting...		Should be set to...
IVR	(If desired, create an IVR service that disables the video splash screen and audio greetings. **NOTE:** If you are planning to include OTX, TPX, or ATX systems, you must create an IVR service that disables the video splash screen and audio greetings. There is a known issue where the interaction of IVR and 16:9 displays results in video with an incorrect aspect ratio on the 16:9 display.)	
	Conference Requires Chairperson	Optional
Recording		Optional

When configuring the RealPresence Collaboration Server settings for 720p/60 HD video, note the following:

- The system flag, ITP_CERTIFICATION, must be set to **YES**.

  For more information about configuring RealPresence Collaboration Server system flags, refer to the *Polycom RealPresence Collaboration Server Administrator's Guide*.
- You should validate that the parameter Maximum CP Resolution (system wide) and Maximum Resolution (conference profile) are set to either **HD720** or **HD1080** for the 720p/60 HD conference profile.

  For more information about setting this flag for large conferences, see Configuring RealPresence Collaboration Server Settings for Large Conferences.

Configuring the RealPresence Collaboration Server Settings for 720p/30 HD Video

720p/30 HD video is supported on all RealPresence Collaboration Server hardware platforms. However, you must use one of the RealPresence Collaboration Server versions shown in the *Polycom Immersive Telepresence (ITP) Release Notes or Polycom RealPresence Immersive Studio Release Notes*.

You must also use one of the HDX or RealPresence Group Series software versions shown in the *Polycom Immersive Telepresence (ITP) Release Notes or Polycom RealPresence Immersive Studio Release Notes*.

By configuring the RealPresence Collaboration Server settings as described in this section, the RealPresence Collaboration Server will send the following:

- 720p/30 HD resolution continuous presence to all ITP sites except those described in the following bullet.
- 1080p/30 video to H.264 High Profile-enabled ITP sites connecting to the RealPresence Collaboration Server.

720p/30 HD Video Conference Profile Settings

This setting...		Should be set to...
General	Line Rate	1920 Kbps
	High Definition Video Switching	Unchecked
	Operator Conference	Unchecked
Advanced	LPR	Checked
	Encryption	Optional
	Auto Terminate	Optional
	Echo Suppression	Checked
	Keyboard Suppression	Optional
Gathering Settings	Enable Gathering	Optional
Video Quality	People Video: Video Quality	Sharpness
	People Video: Video Clarity	Unchecked
	Content Video: Content Settings	Optional
	Content Video: Content Protocol	Up to H.264 high profile

This setting...		Should be set to...
Video Settings	Telepresence Mode	Auto
	Telepresence Layout Mode	Continuous Presence
	All other check boxes	Unchecked
Skins		Not Applicable
IVR	(If desired, create an IVR service that disables the video splash screen and audio greetings. **NOTE:** If you are planning to include OTX, TPX, or ATX systems, you must create an IVR service that disables the video splash screen and audio greetings. There is a known issue where the interaction of IVR and 16:9 displays results in video with an incorrect aspect ratio on the 16:9 display.)	
	Conference Requires Chairperson	Optional
Recording		Optional

When configuring the RealPresence Collaboration Server settings for 720p/30 HD video, note the following:

- The system flag, ITP_CERTIFICATION, must be set to **YES**.

  For more information about configuring RealPresence Collaboration Server system flags, refer to the *Polycom RealPresence Collaboration Server Administrator's Guide* or *Polycom RealPresence Immersive Studio Administrator's Guide.*

- You should validate that the system flag Maximum CP Resolution (system wide) and Maximum Resolution (conference profile) are set to either **HD720** or **HD1080** for the 720p/30 HD conference profile. You can limit some of the conferences to CIF/SD if the limitation is only at conference profile.

  For more information about setting this flag for large conferences, see Configuring RealPresence Collaboration Server Settings for Large Conferences.

Configuring Other RealPresence Collaboration Server Settings

This section lists other RealPresence Collaboration Server settings that you should set.

RealPresence Collaboration Server Settings

This setting...		Should be set to...
RealPresence Collaboration Server LAN connection to network switch or router		1 Gbps (not 100 Mbps)
HDX LAN connection to network switch or router		100 Mbps or 1 Gbps
Address Book	Name	Use the naming convention described in the Naming Sites section on page 8, with a common name for each HDX codec at a telepresence site followed by the numeral 1, 2, 3, or 4
IVR (If desired, create an IVR service that disables the video splash screen and audio greetings.)	Enable Welcome Messages	Unchecked
	Enable Chairperson Messages	Unchecked
	Enable Password Messages	Unchecked
	Enable Roll Call	Unchecked
	Click & View	Unchecked

Optionally, if you do not want the “on hold” music to be heard at the participating sites, set the system flag IVR_MUSIC_VOLUME to **0**, and the music will not be heard.

When configuring the RealPresence Collaboration Server settings for Immersive Telepresence systems with MLA, note the following:

- The system flag, PRESERVE_PARTY_CELL_ON_FORCE_LAYOUT should be set to **YES**. This flag indicates that forced parties in personal layouts will display as blank cells if video stops.

  For more information about configuring RealPresence Collaboration Server system flags, refer to the *Polycom RealPresence Collaboration Server Administrator’s Guide.*

Configuring RealPresence Collaboration Server Settings for Large Conferences

For very large conferences, with the total number of ITP participants approaching the resource capacity limits, you will need to configure the RealPresence Collaboration Server to use a lower video resolution. For more information on resource capacity refer to the RealPresence Collaboration Server hardware guides at support.polycom.com.

Configure the RealPresence Collaboration Server as described in the previous sections except for the following:

- For SD30 resolution, use the parameter Maximum CP Resolution = **SD30**.

  Additionally in the conference profile, set Video Quality = **Sharpness** and Line Rate = **384Kbps**. Higher line rates may result in the RealPresence Collaboration Server sending 2CIF instead of SD30.
- For CIF resolution, use the parameter Maximum CP Resolution = **CIF**.

  Content video will have a low frame rate.

Multipoint Framing Scenarios for Immersive Telepresence

This appendix contains diagrams that illustrate many supported framing combinations for multipoint conferences on an RealPresence Collaboration Server 4000 or 2000 multimedia conference platform with RPX, OTX, TPX, and ATX suites in the same conference. All of these scenarios are currently supported by the automatic layout features in MLA. All scenarios are supported at:

- 1080p/30, 720p/60, or 720p/30 when running on RealPresence Collaboration Server 4000 or 2000 with MPM+ and MPMx. Note that MPM+ is only supported with RealPresence Collaboration Server versions earlier than 8.1 and is not supported with RealPresence Immersive Studio.

With the introduction of additional ITP system models such as TPX HD 204M, OTX, ATX, and RealPresence Immersive Studio, the number of multipoint framing combinations involving all types of telepresence suites increased dramatically. Therefore, every framing scenario is not shown in this appendix. For example, every scenario that includes a TPX HD 306M has not been updated to show corresponding TPX HD 204M layout views.

When framing combinations that are not shown in this appendix, you should follow these Polycom principles of multipoint design:

1. Every seat should be seen at all times.
2. You should try to align the most important sites around middle of the screens to provide the best possible eye contact for those sites.

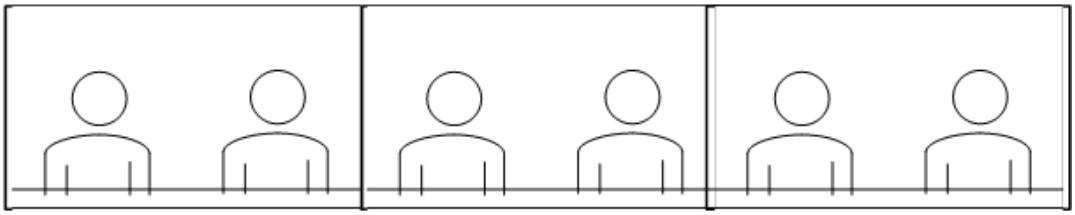
These principles have been adopted by MLA when automatically generating multipoint layouts for scenarios not listed in this appendix.

Notes:

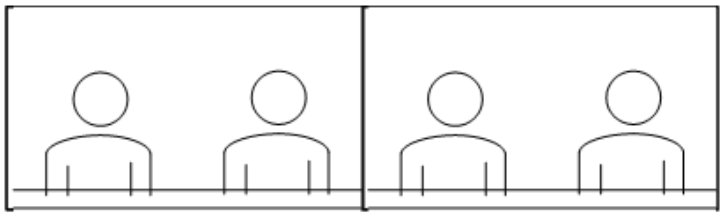
- Many of the scenarios listed in this appendix include a representative full room view of a TPX system. However, TPX systems with Eagle Eye 1080 cameras capture only the center four seats, not all six, when showing the full room view. TPX systems with Eagle Eye HD or Eagle Eye II cameras show the outer two seats partially obscured from view.
- Although some ITP systems are not shown in this appendix, the scenarios shown for RPX 400 systems are equivalent to ATX 400 systems, TPX 306M systems are equivalent to OTX 300 and ATX 300 systems, TPX 204 systems are equivalent to ATX 200 systems, and OTX 100 systems are equivalent to HDX systems.

Category A: TPX PARTICIPANTS

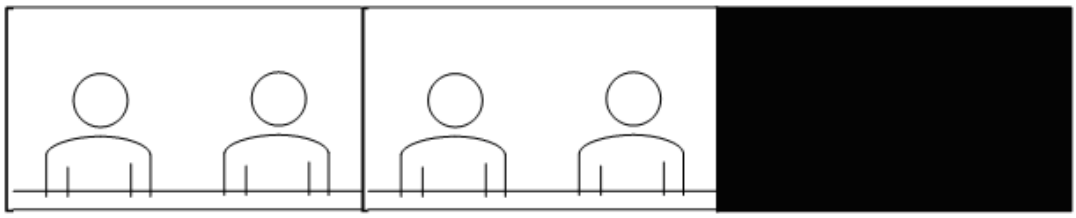
Scenario 1a: 2 TPX 306 – point to point, no MCU



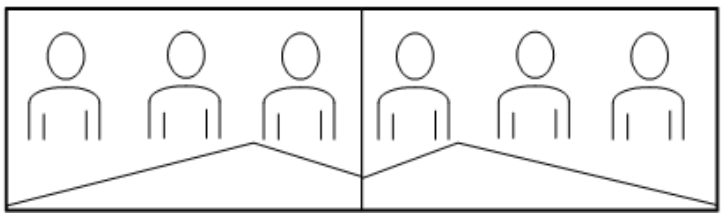
Scenario 1b: 2 TPX 204s – point to point, no MCU



Scenario 1c: TPX 306 to TPX 204 – point to point, no MCU – TPX 306 view



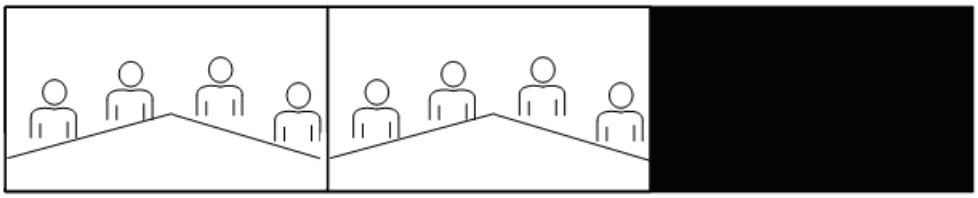
TPX 204 view



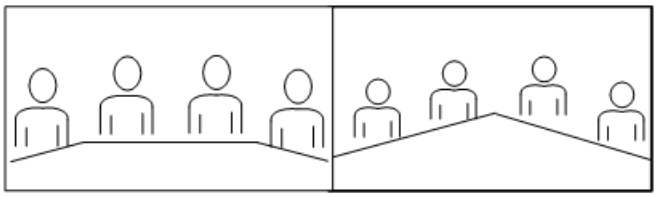
Category A: TPX PARTICIPANTS

Scenario 2: 3 TPXs – 306 view

NOTE: The participants shown in scenario 2 include 1 TPX 306 and 2 TPX 204s. Any combination ot 3 TPXs would result in a generalized layout structure similar to what is seen below

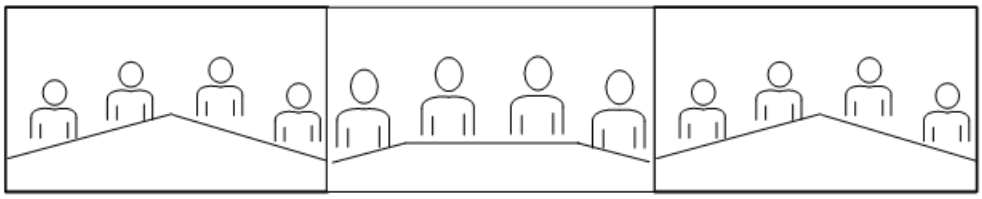


204 view

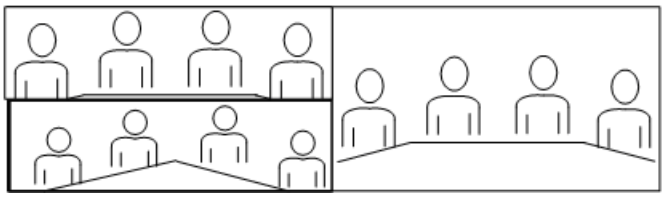


Scenario 3: 4 TPXs – 306 view

NOTE: The participants shown in scenario 3 include 2 TPX 306s and 2 TPX 204s. Any combination ot 4 TPXs would result in a generalized layout structure similar to what is seen below



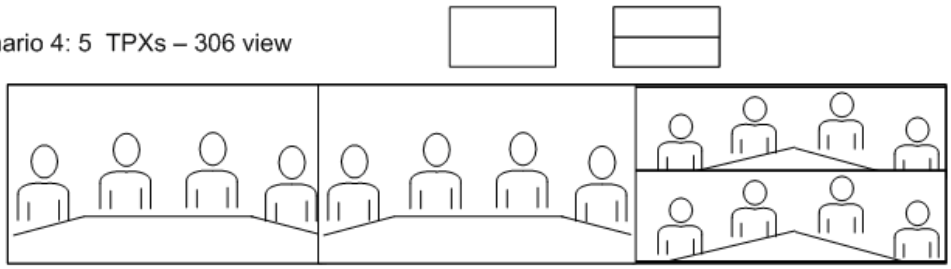
204 view



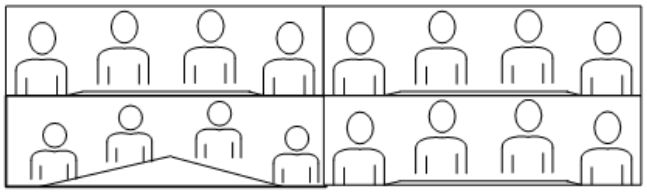
Category A: TPX PARTICIPANTS

NOTE: The participants shown in scenario 4 include 3 TPX 306s and 2 TPX 204s. Any combination ot 5 TPXs would result a generalized layout structure similar to what is seen below

Scenario 4: 5 TPXs – 306 view

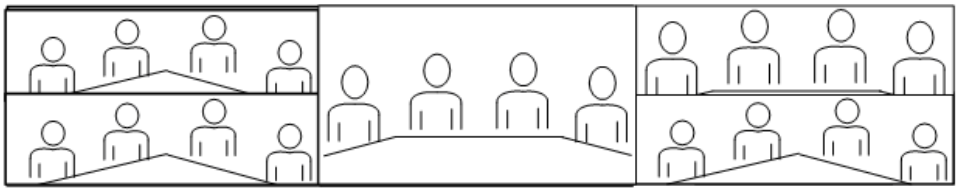


204 view

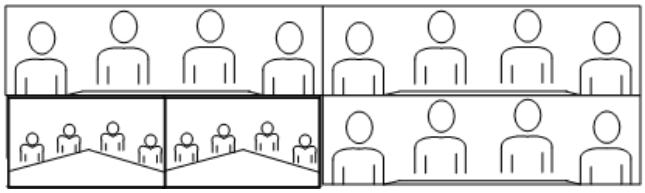


NOTE: The participants shown in scenario 5 include 3 TPX 306s and 3 TPX 204s. Any combination ot 6 TPXs would result in a generalized layout structure similar to what is seen below

Scenario 5: 6 TPXs – 306 view

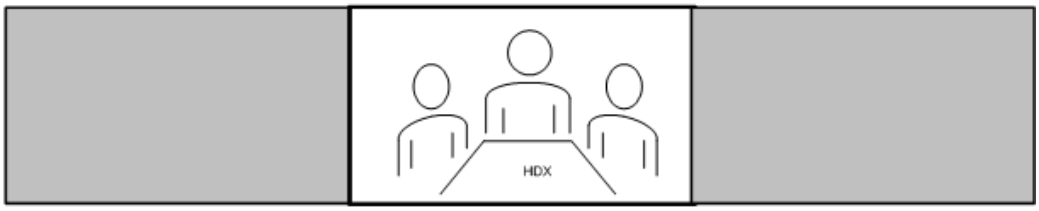


204 view

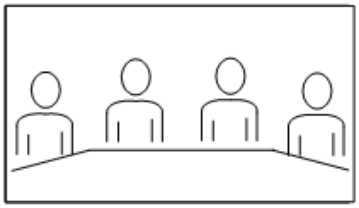


Category B: TPX and HDX

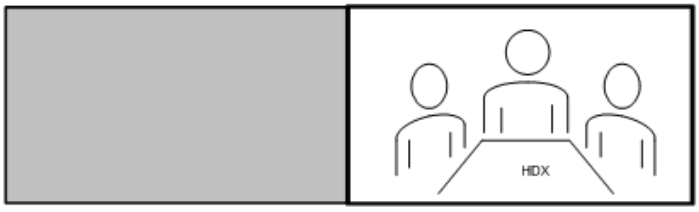
Scenario 1a: Point to Point TPX 306 to HDX – (no MCU)



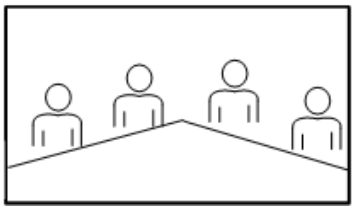
HDX view



Scenario 1b: Point to Point TPX 204 to HDX – (no MCU)



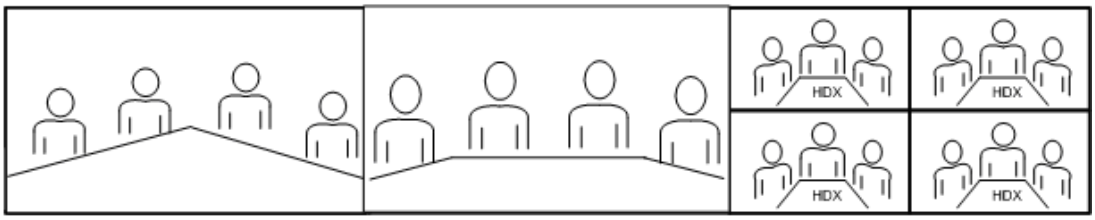
HDX view



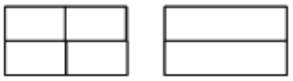
Category B: TPX and HDX

NOTE: The participants shown in scenario 2 include 2 TPX 306s, and 1 TPX 204. Any combination ot 3 TPXs would result in a generalized layout structure similar to what is seen below

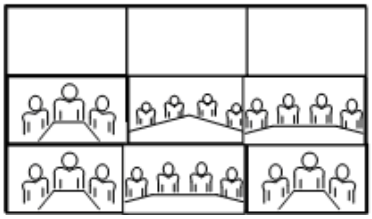
Scenario 2: Up to 3 TPXs, up to 4 HDXs – TPX 306 View



204 view



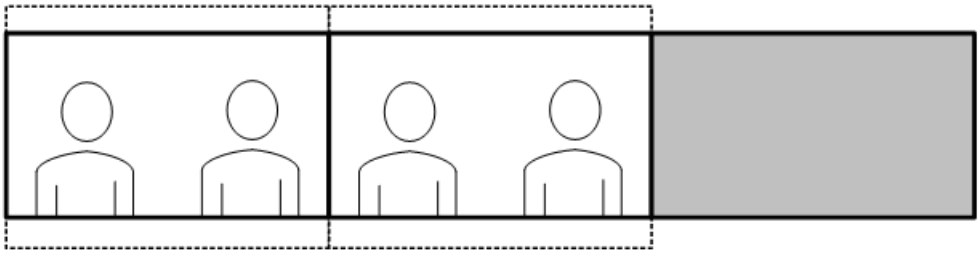
HDX view



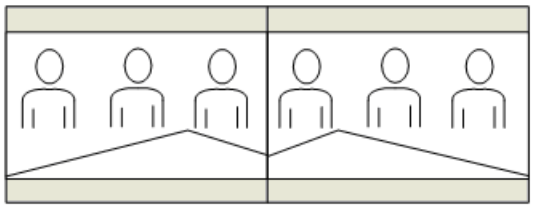
Category C: TPX and RPX Point to Point

Scenario 1a: Point to Point TPX 306 to RPX 200 (TPX View)

RPX participant video is zoomed and cropped to fill screen as seen below

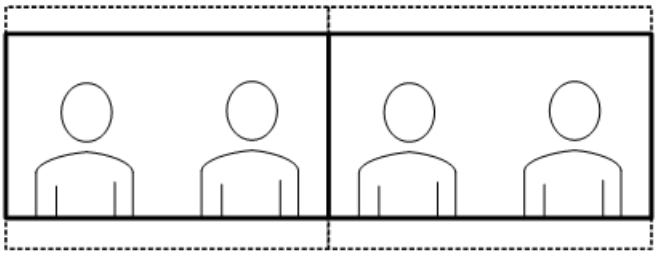


RPX 200 view

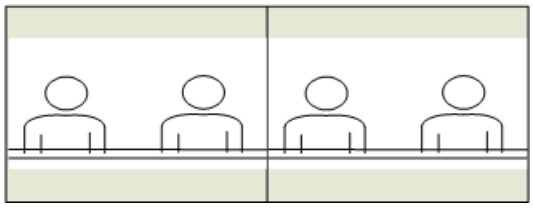


Scenario 1b: Point to Point TPX 204 to RPX 200 (TPX View)

RPX participant video is zoomed and cropped to fill screen as seen below



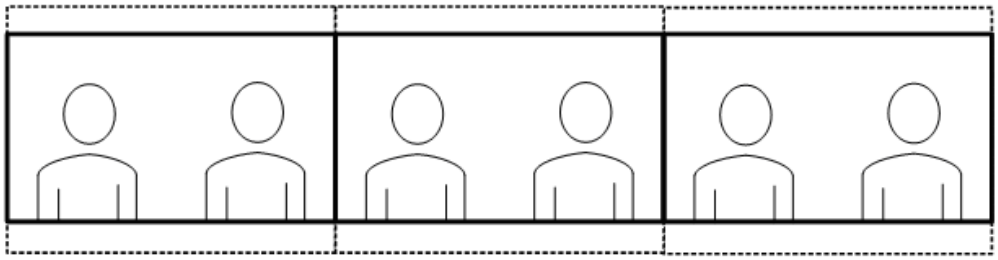
RPX 200 view



Category C: TPX and RPX Point to Point

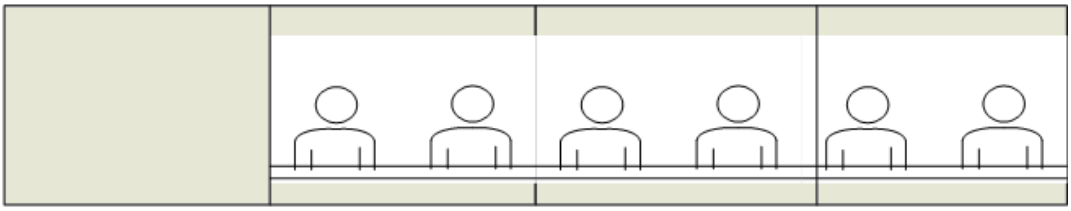
Scenario 2a: Point to Point TPX 306 to RPX 400 (TPX View)

RPX participant video is zoomed and cropped to fill screen as seen below



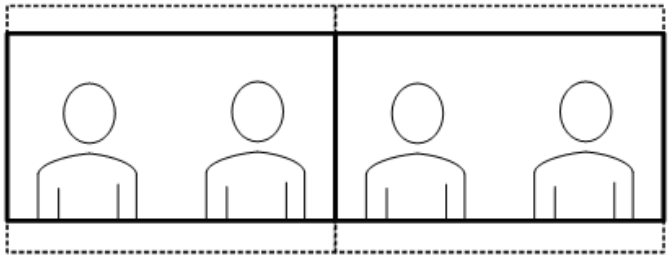
Far left side of RPX 400 room not seen

RPX 400 view



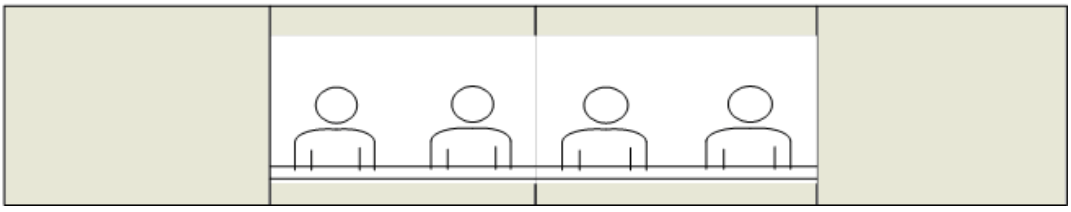
Scenario 2b: Point to Point TPX 204 to RPX 400 (TPX View)

RPX participant video is zoomed and cropped to fill screen as seen below



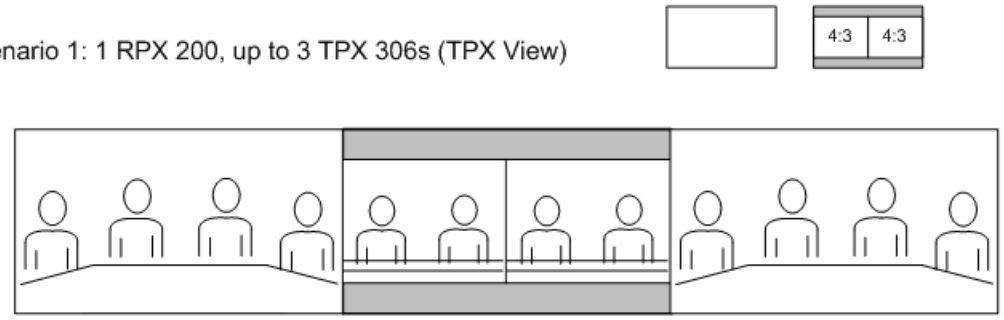
Far left amd far right sides of RPX 400 room not seen

RPX 400 view



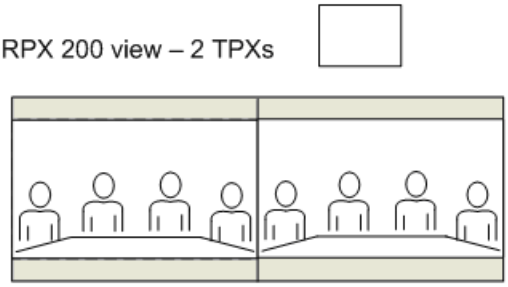
Category D: TPX 306 and RPX 200 PARTICIPANTS

Scenario 1: 1 RPX 200, up to 3 TPX 306s (TPX View)

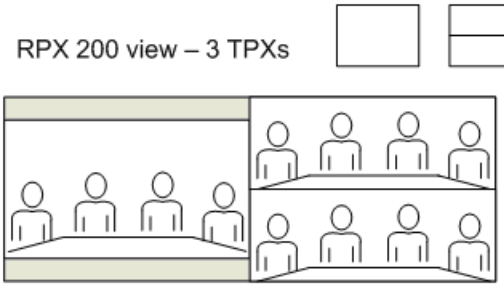


Right side is blank if 2 TPX 306s

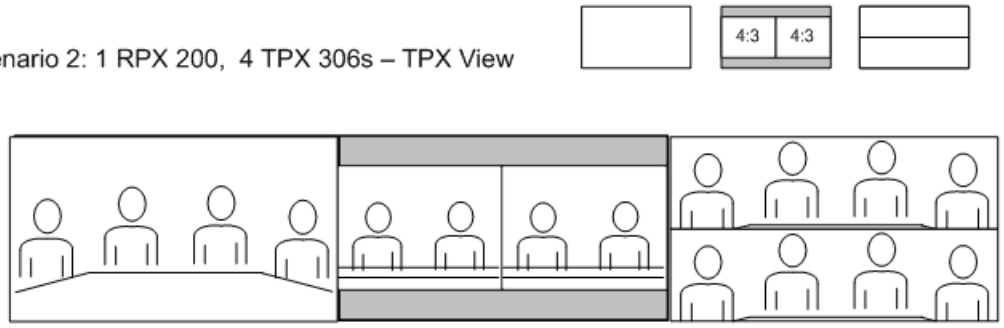
RPX 200 view – 2 TPXs



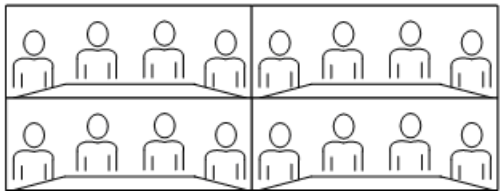
RPX 200 view – 3 TPXs



Scenario 2: 1 RPX 200, 4 TPX 306s – TPX View

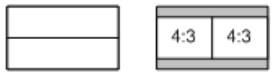


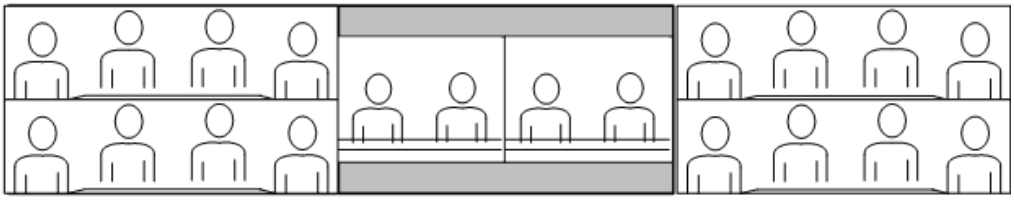
RPX 200 View – 4 TPX 306s



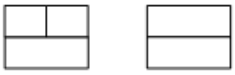
Category D: TPX 306 and RPX 200 PARTICIPANTS

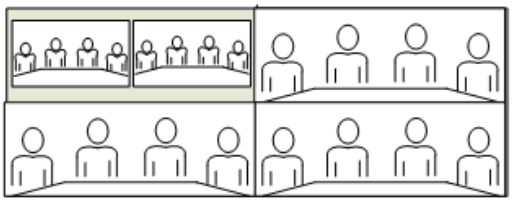
Scenario 3: 1 RPX 200, 5 TPX 306s – TPX View



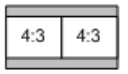


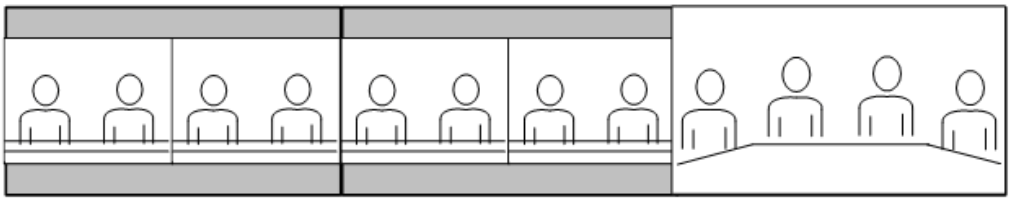
RPX 200 View – 5 TPXs



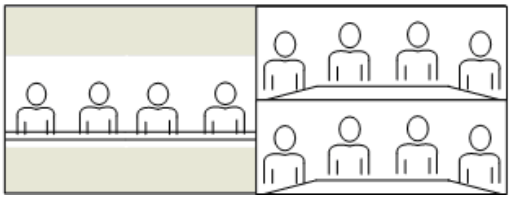


Scenario 4: 2 RPX 200s, 2 TPX 306s - TPX View



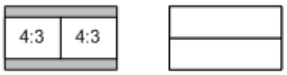


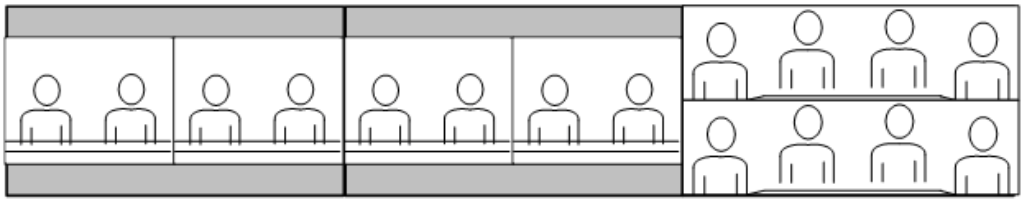
RPX 200 View



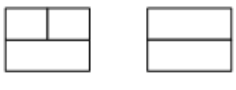
Category D: TPX 306 and RPX 200 PARTICIPANTS

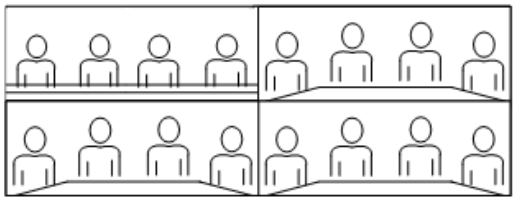
Scenario 5: 2 RPX 200s, 3 TPX 306s – TPX View



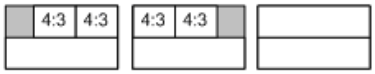


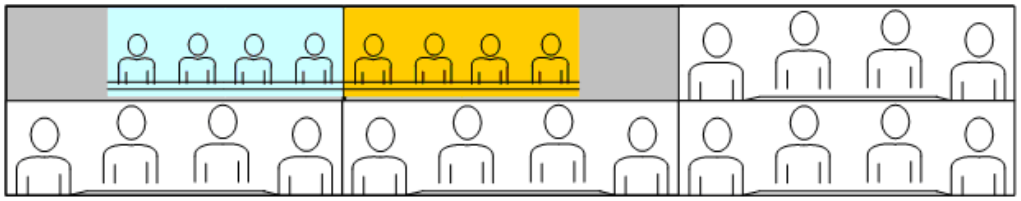
RPX 200 View



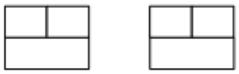


Scenario 6: 2 RPX 200s, 4 or 5 TPX 306s – TPX View

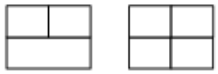


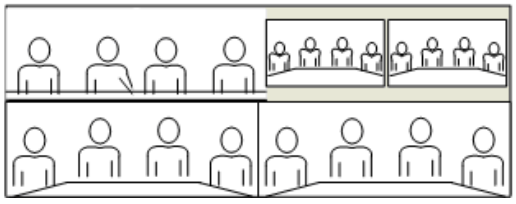


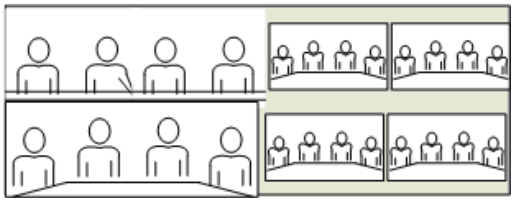
RPX 200 View – 4 TPXs



5 TPXs

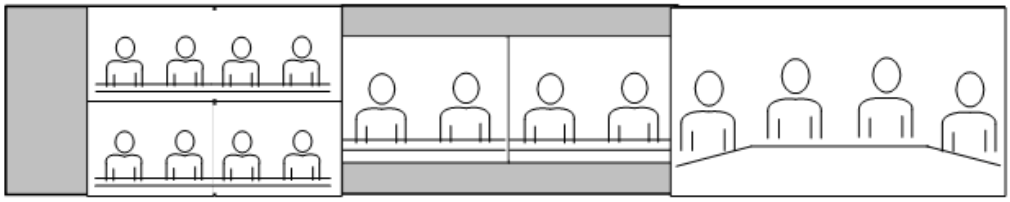




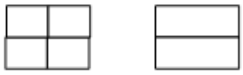


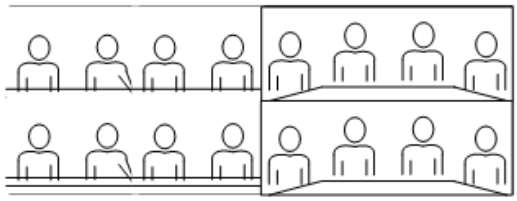
Category D: TPX 306 and RPX 200 PARTICIPANTS

Scenario 7: 3 RPX 200s, 2 TPX 306s – TPX View

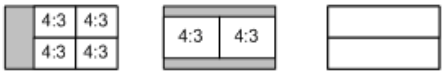


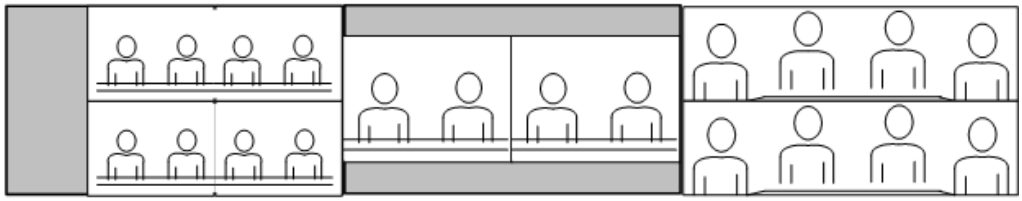
RPX 200 view



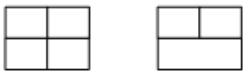


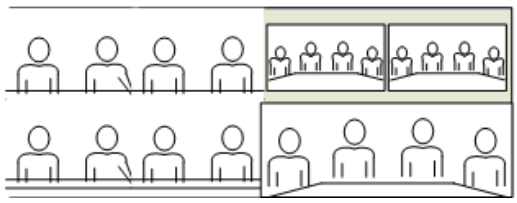
Scenario 8: 3 RPX 200s, 3 TPX 306ss – TPX View





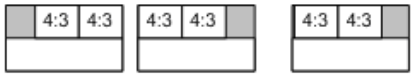
RPX 200 view

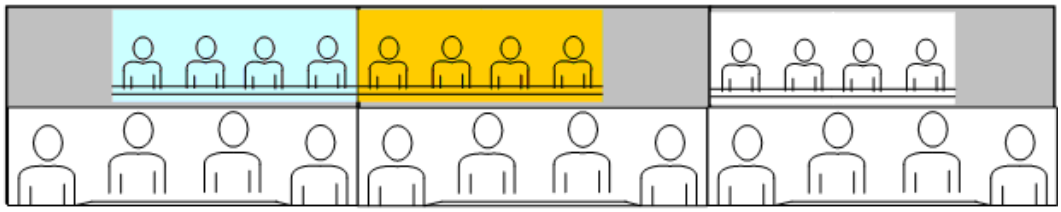




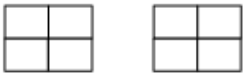
Category D: TPX 306 and RPX 200 PARTICIPANTS

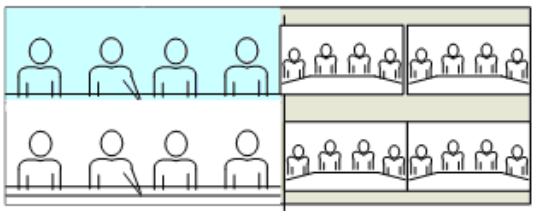
Scenario 9: 3 RPX 200s, 4 TPX 306s – TPX View





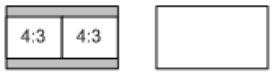
RPX 200 view

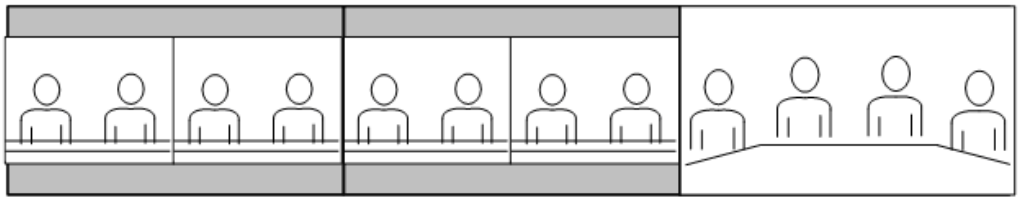




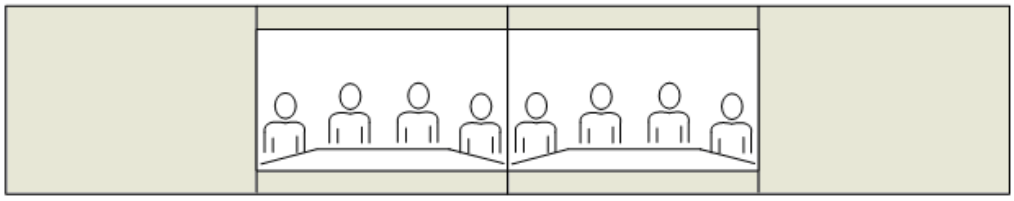
Category E: TPX 306 and RPX 400 PARTICIPANTS

Scenario 1: 1 RPX 400, 2 TPX 306s – TPX View

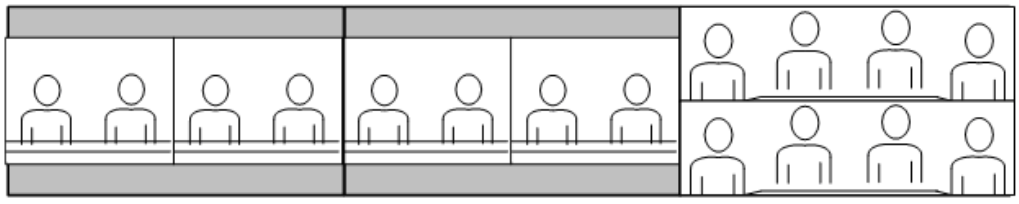




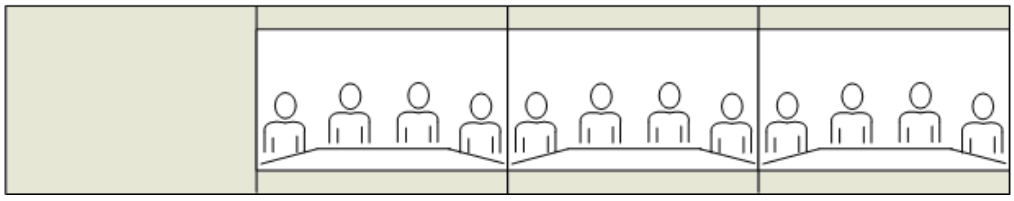
RPX 400 View



Scenario 2: 1 RPX 400, 3 TPX 306s – TPX View

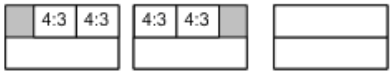


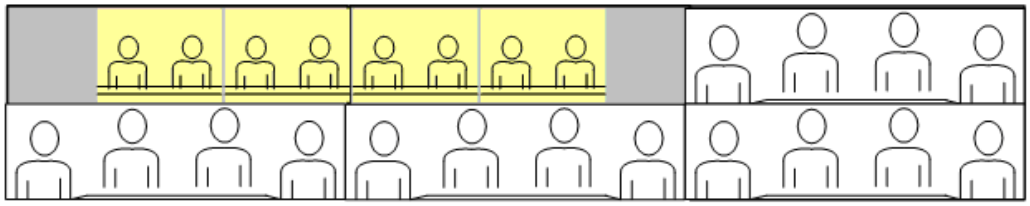
RPX 400 View



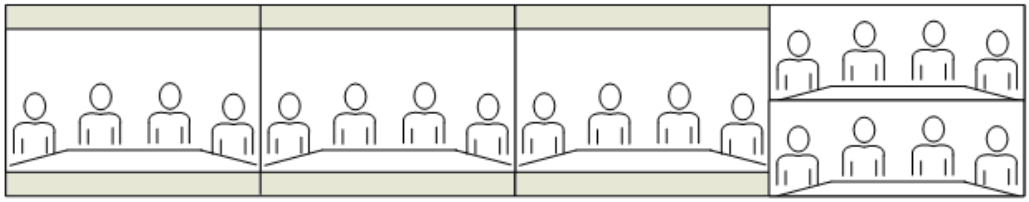
Category E: TPX 306 and RPX 400 PARTICIPANTS

Scenario 3: 1 RPX 400, 4 or 5 TPX 306s – TPX View

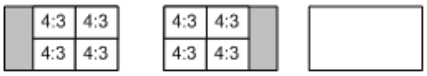


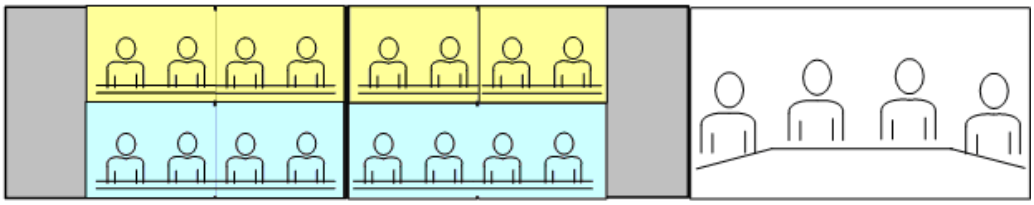


RPX 400 View

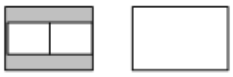


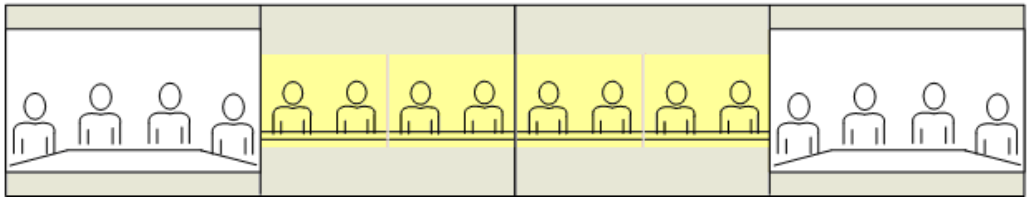
Scenario 4: 2 RPX 400s, 2 TPX 306s– TPX View





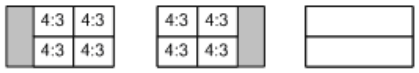
RPX 400 view

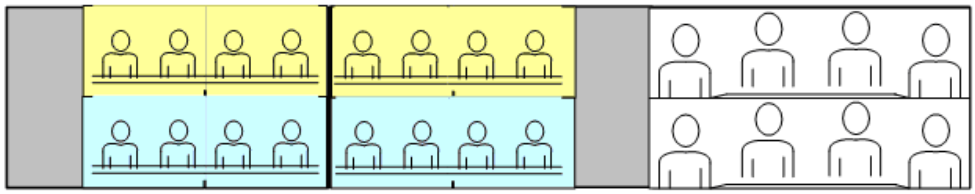




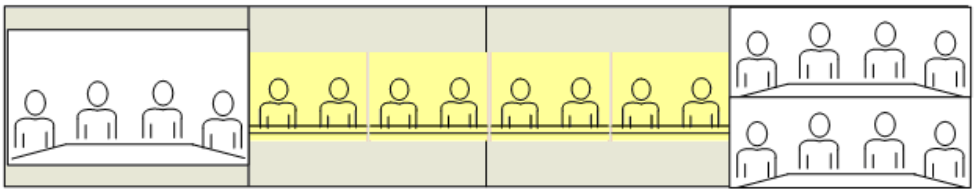
Category E: TPX 306 and RPX 400 PARTICIPANTS

Scenario 5: 2 RPX 400s, 3 TPX 306s – TPX View

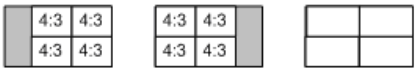


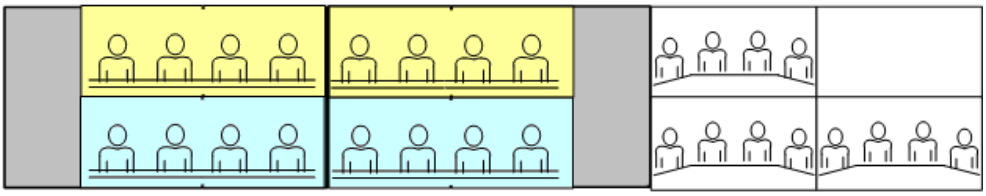


RPX 400 view

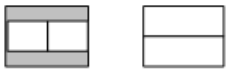


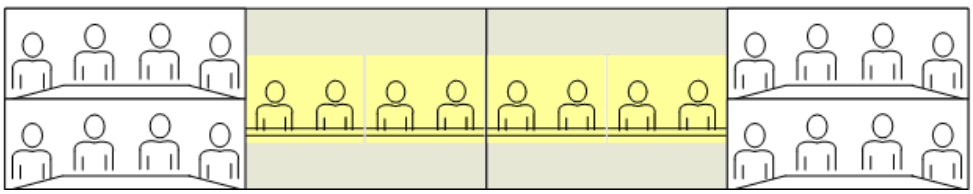
Scenario 6: 2 RPX 400s, 4 TPX 306s – TPX View





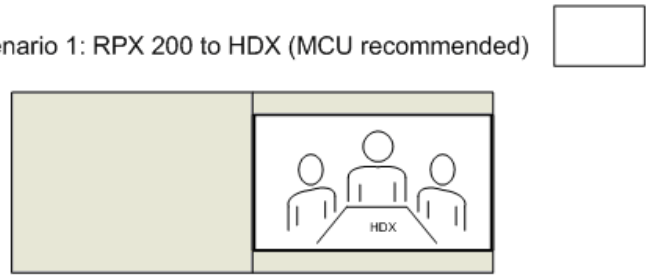
RPX 400 view



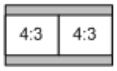


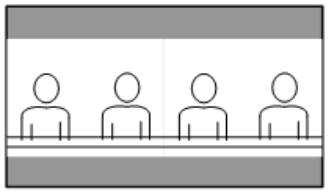
Category F: RPX 200 PARTICIPANTS

Scenario 1: RPX 200 to HDX (MCU recommended)

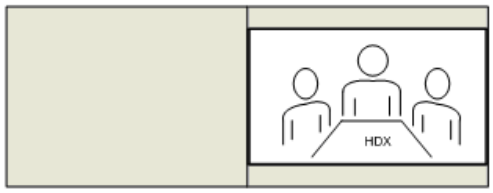


HDX View

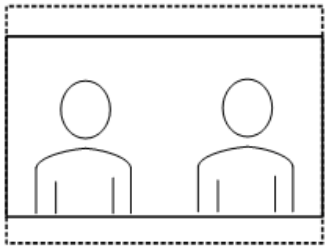




Scenario 1a: RPX 200 to HDX (no MCU – point to point call)

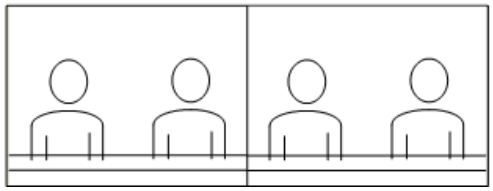


HDX View



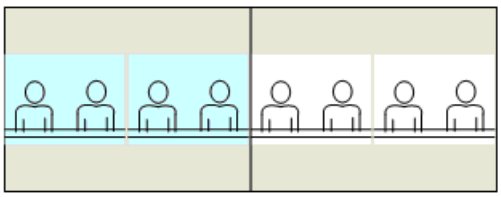
Left side of RPX 200 room not seen

Scenario 2: 2 RPX 200s (point to point call, no MCU)

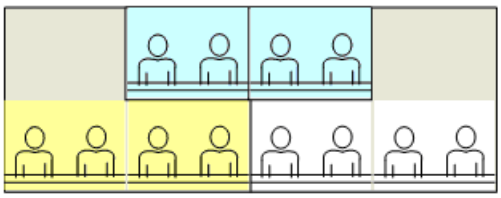


Category F: RPX 200 PARTICIPANTS

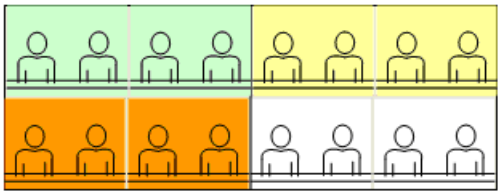
Scenario 3: 3 RPX 200s



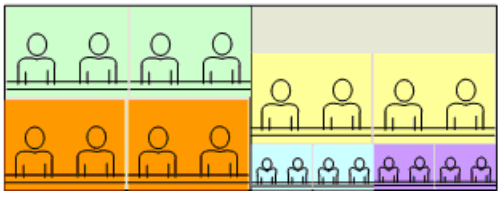
Scenario 4: 4 RPX 200s



Scenario 5: 5 RPX 200s

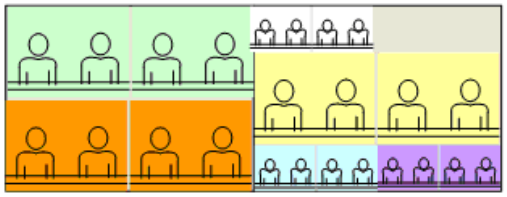


Scenario 6: 6 RPX 200s

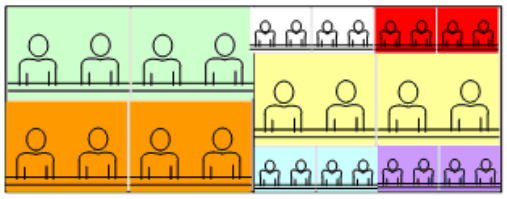


Category F: RPX 200 PARTICIPANTS

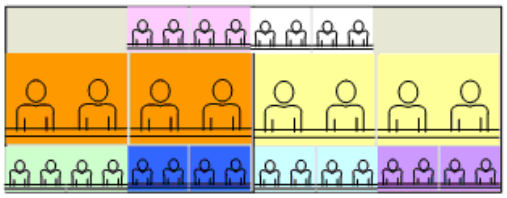
Scenario 7: 7 RPX 200s



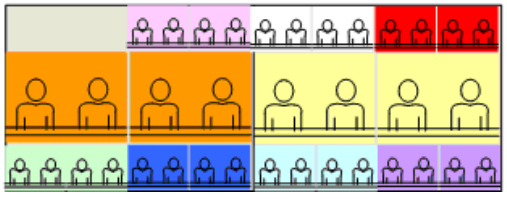
Scenario 8: 8 RPX 200s



Scenario 9: 9 RPX 200s

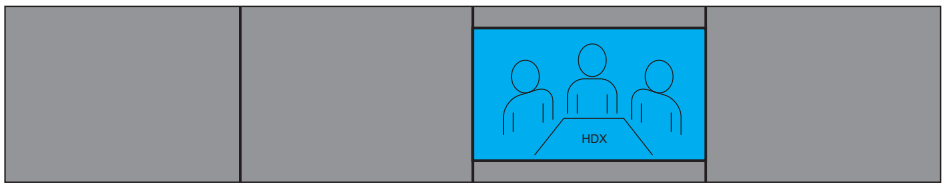


Scenario 10: 10 RPX 200s

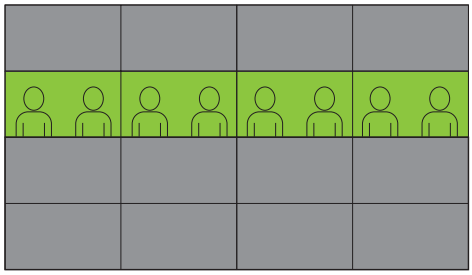


Category G: RPX 400 PARTICIPANTS

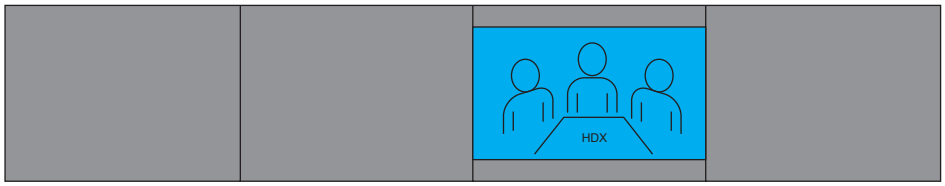
Scenario 1: RPX 400 to HDX - MCU recommended



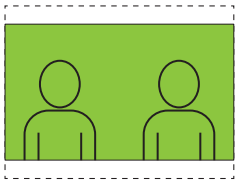
HDX View



Scenario 1a: RPX 400 to HDX - point to point, no MCU

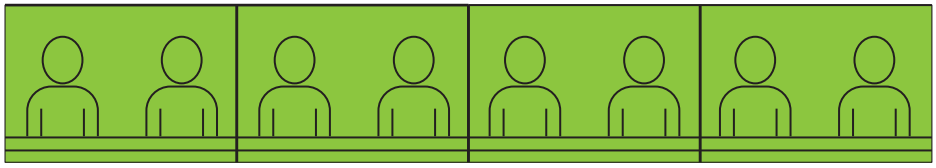


HDX View



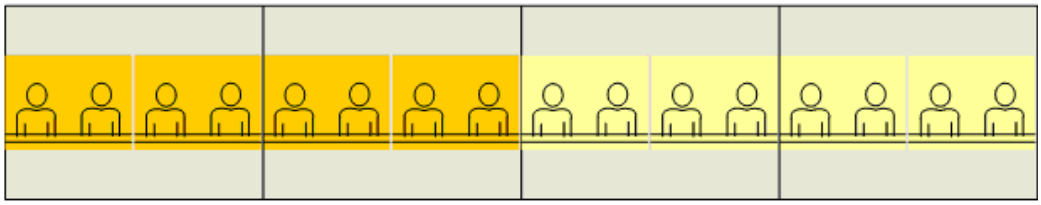
Only center right side of RPX 400 room seen

Scenario 2: 2 RPX 400s - point to point; no MCU

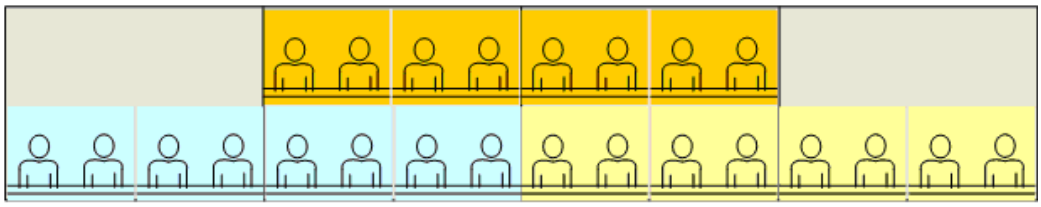


Category G: RPX 400 PARTICIPANTS

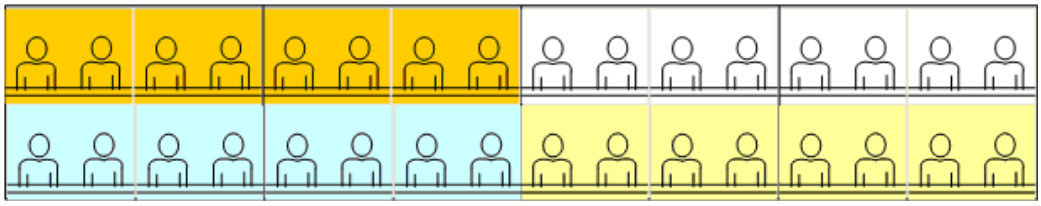
Scenario 3: 3 RPX 400s



Scenario 4: 4 RPX 400s



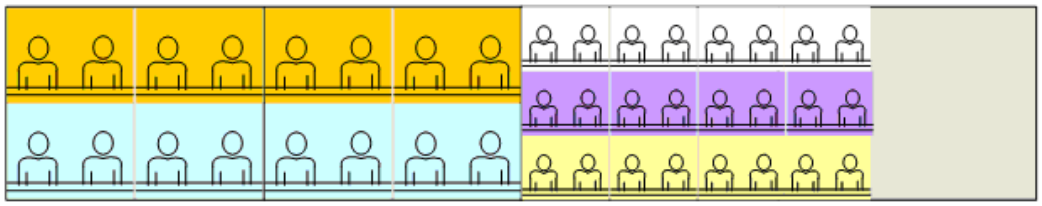
Scenario 5: 5 RPX 400s



Category G: RPX 400 PARTICIPANTS

Scenario 6: 6 RPX 400s

Note that the participants appearing within the 3x3 personal layout may not be aligned correctly across layout panes. This limitation will be addressed in an upcoming release of the RMX 2000



Scenario 7: 7 RPX 400s

Scenario 8: 8 RPX 400s

Layout scenarios 6 through 10 are available in 720p/30 HD on RealPresence Collaboration Server with MPM+ only. Layout Scenario 11 is available at SD on RealPresence Collaboration Server with MPM+. Layout scenarios 6 through 11 can be used at SD/15fps on RealPresence Collaboration Server with MPM.

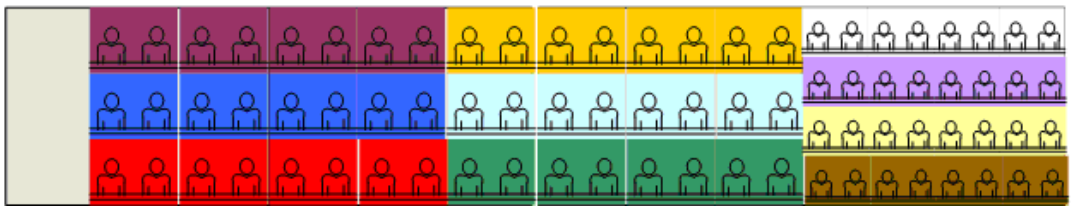
Category G: RPX 400 PARTICIPANTS

Scenario 9: 9 RPX 400s

Note that the participants appearing within the 3x3 personal layout may not be aligned correctly across layout panes. This limitation will be addressed in an upcoming release of the RMX 2000

Scenario 10: 10 RPX 400s

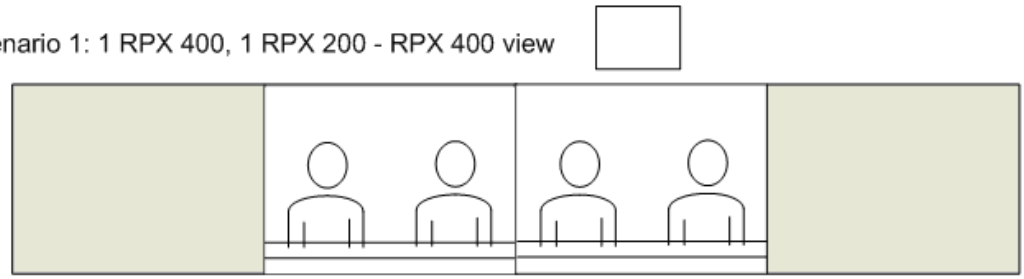
Scenario 11: 11 RPX 400s



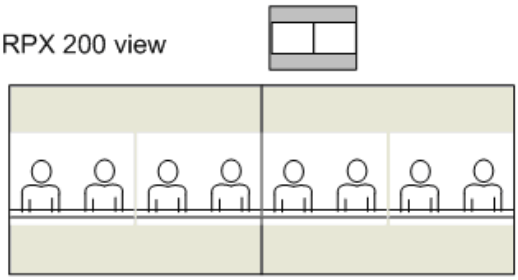
Layout scenarios 6 through 10 are available in 720p/30 HD on RealPresence Collaboration Server with MPM+ only. Layout Scenario 11 is available at SD on RealPresence Collaboration Server with MPM+. Layout scenarios 6 through 11 can be used at SD/15fps on RealPresence Collaboration Server with MPM.

Category H: RPX 200 and 400 PARTICIPANTS

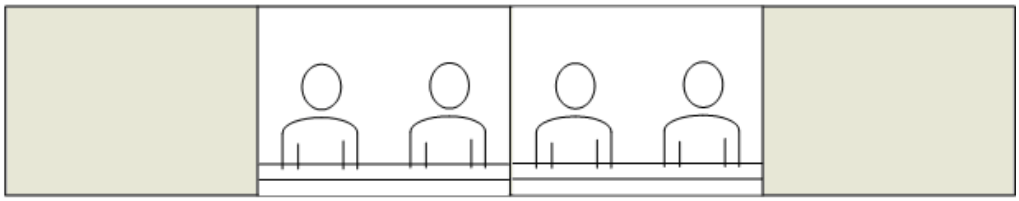
Scenario 1: 1 RPX 400, 1 RPX 200 - RPX 400 view



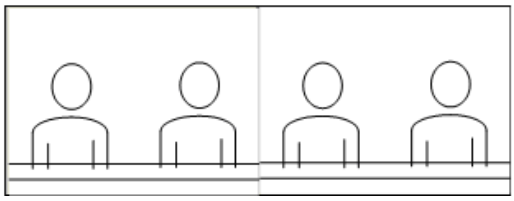
RPX 200 view



Scenario 1a: 1 RPX 400, 1 RPX 200 point to point – no MCU



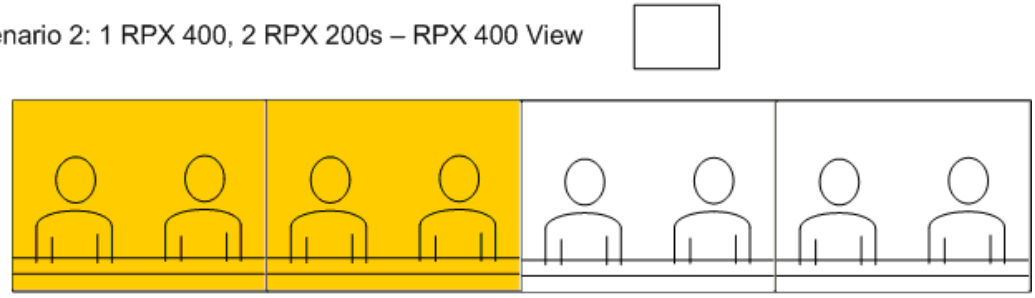
RPX 200 view



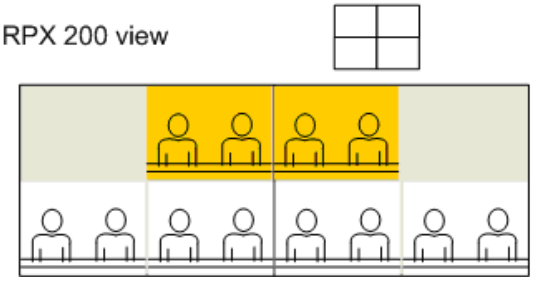
Far left and far right side of RPX 400 room are not seen

Category H: RPX 200 and 400 PARTICIPANTS

Scenario 2: 1 RPX 400, 2 RPX 200s – RPX 400 View

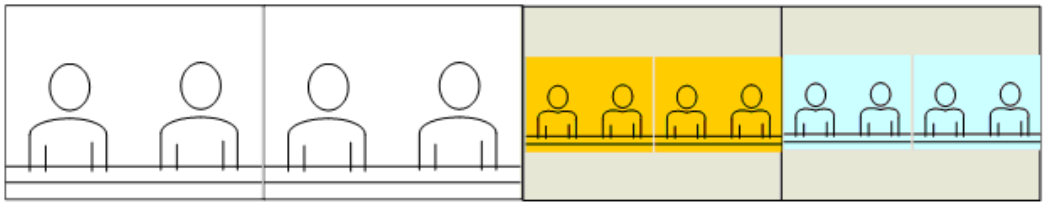


RPX 200 view

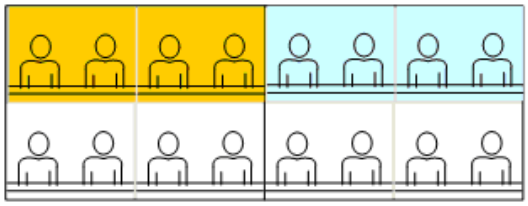


Category H: RPX 200 and 400 PARTICIPANTS

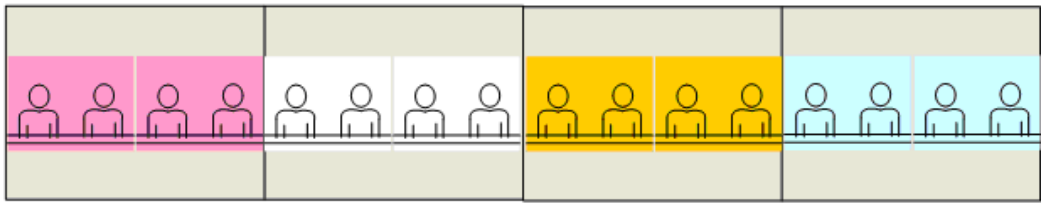
Scenario 3: 1 RPX 400, 3 RPX 200s – RPX 400 View



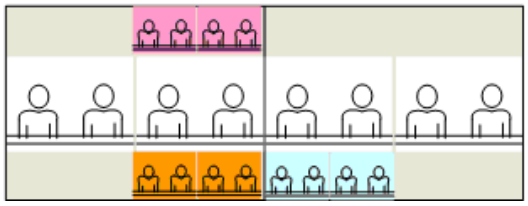
RPX 200 view



Scenario 4: 1 RPX 400, 4 RPX 200s – RPX 400 View

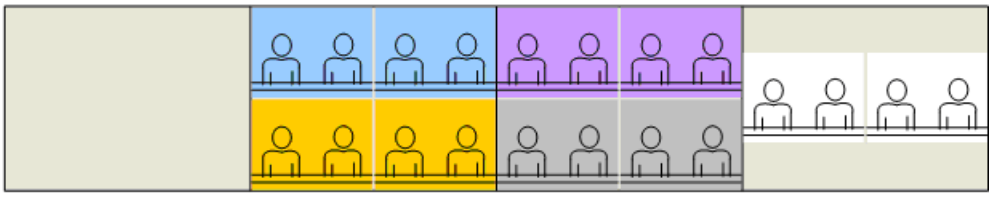


RPX 200 view

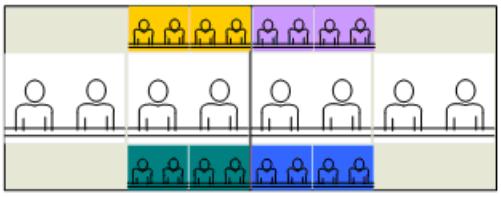


Category H: RPX 200 and 400 PARTICIPANTS

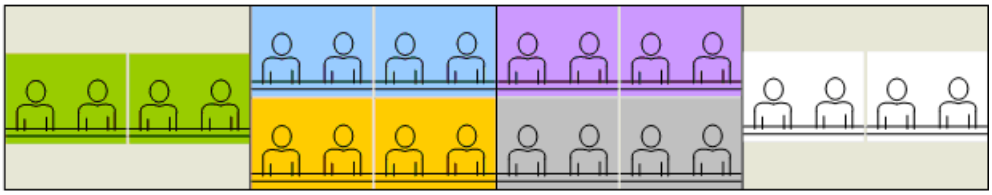
Scenario 5: 1 RPX 400, 5 RPX 200s – 400 view



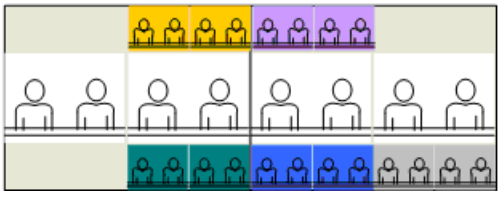
200 view



Scenario 6: 1 RPX 400, 6 RPX 200s – 400 view

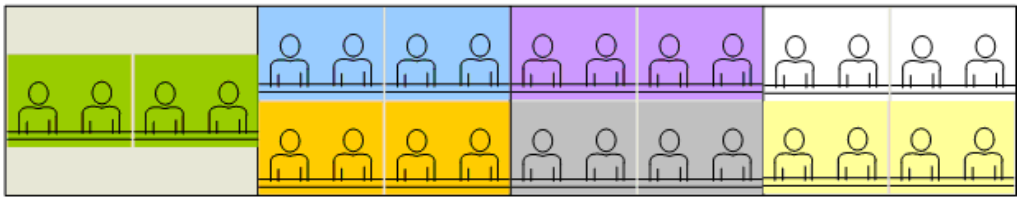


200 view

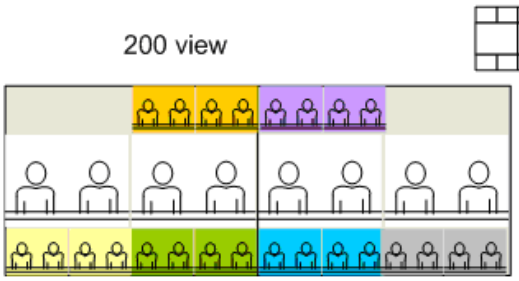


Category H: RPX 200 and 400 PARTICIPANTS

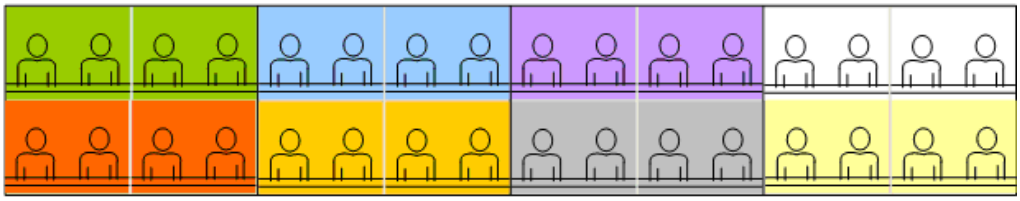
Scenario 7: 1 RPX 400, 7 RPX 200s – 400 view



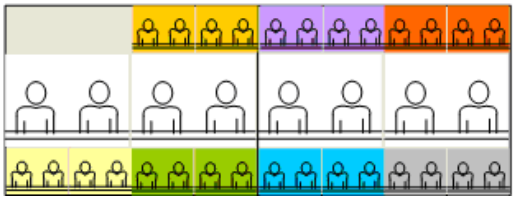
200 view



Scenario 8: 1 RPX 400, 8 RPX 200s – 400 view

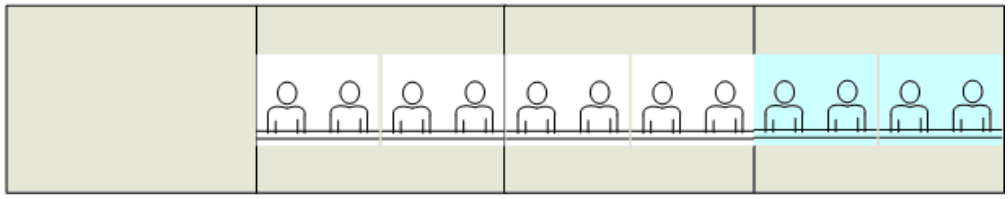


200 view

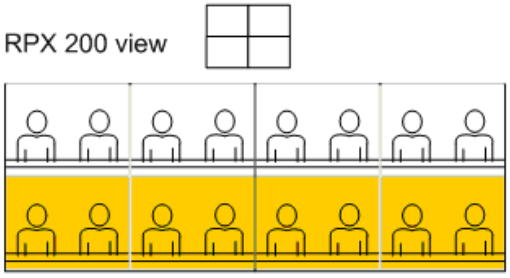


Category H: RPX 200 and 400 PARTICIPANTS

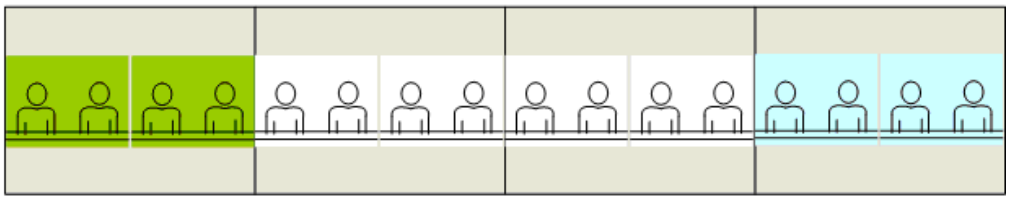
Scenario 9: 2 RPX 400s, 1 RPX 200 - RPX 400 view



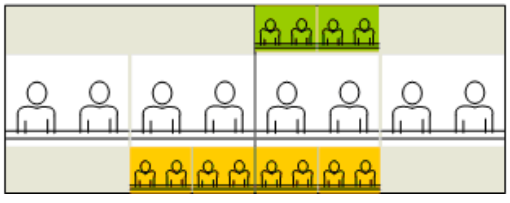
RPX 200 view



Scenario 10: 2 RPX 400s, 2 RPX 200s – RPX 400 View

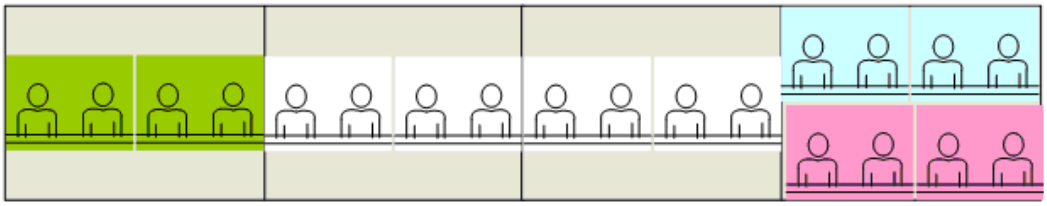


RPX 200 view

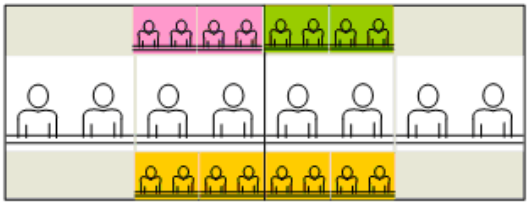


Category H: RPX 200 and 400 PARTICIPANTS

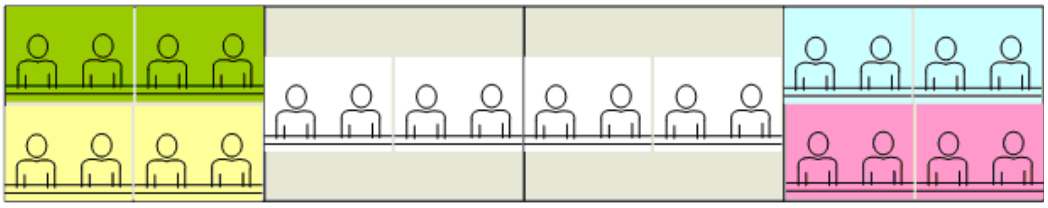
Scenario 11: 2 RPX 400, 3 RPX 200 - RPX 400 view



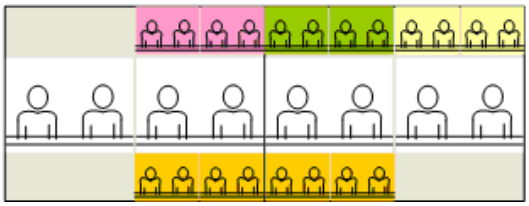
RPX 200 view



Scenario 12: 2 RPX 400s, 4 RPX 200s – RPX 400 View

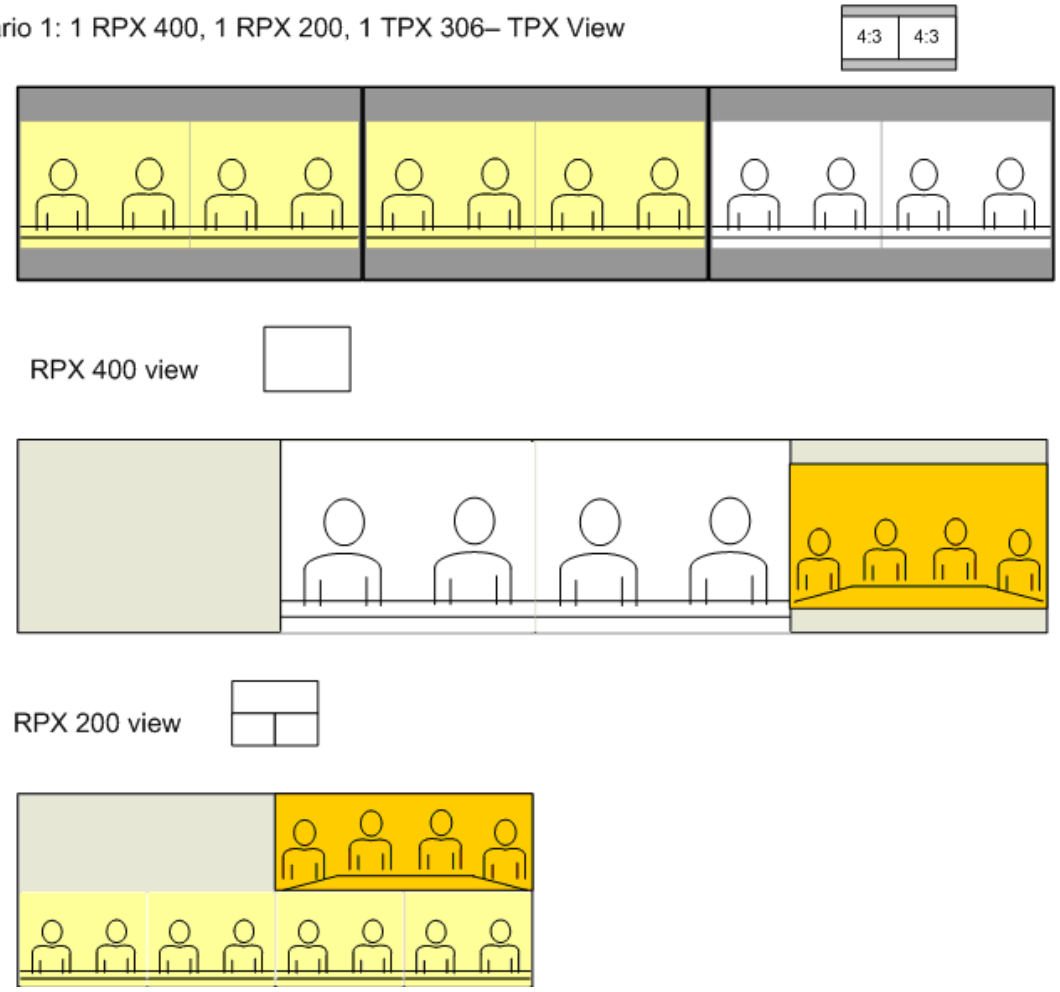


RPX 200 view



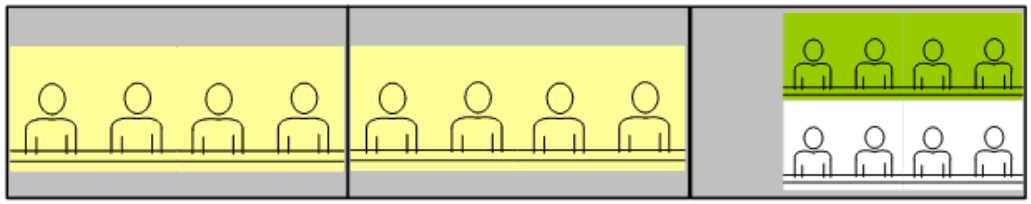
Category I: TPX 306, RPX 200 and RPX 400 PARTICIPANTS

Scenario 1: 1 RPX 400, 1 RPX 200, 1 TPX 306– TPX View

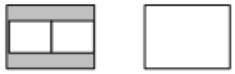


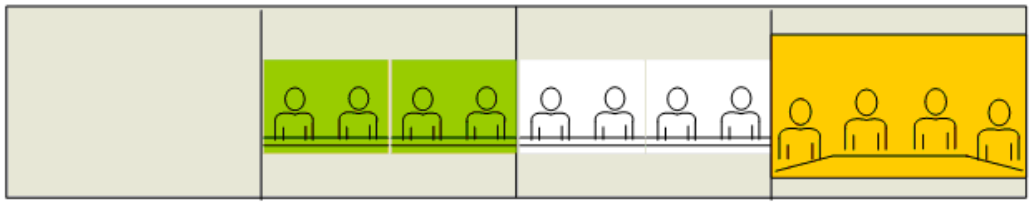
Category I: TPX 306, RPX 200 and RPX 400 PARTICIPANTS

Scenario 2: 1 RPX 400, 2 RPX 200s, 1 TPX 306 – TPX View

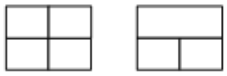


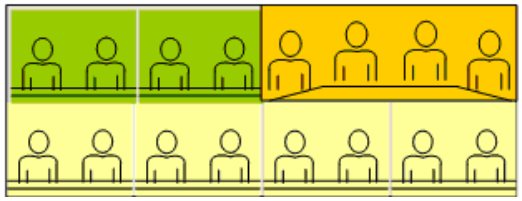
RPX 400 view





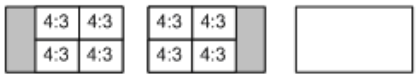
RPX 200 view

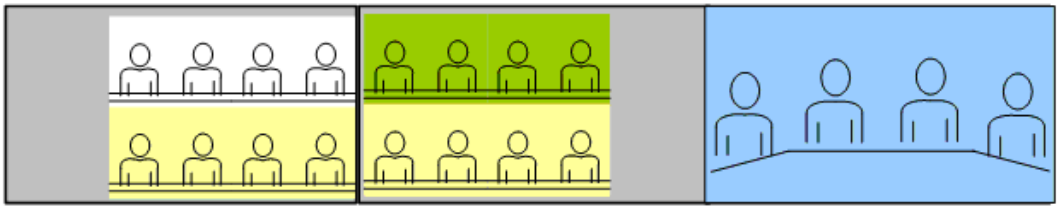




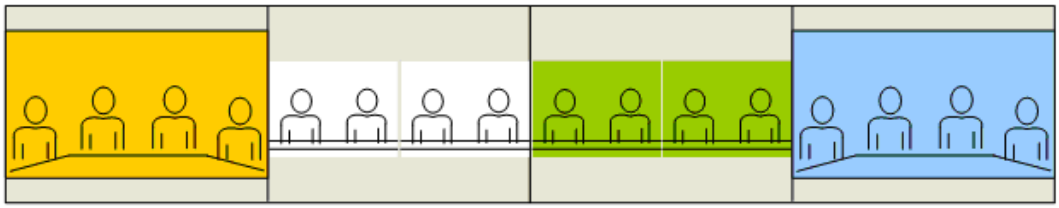
Category I: TPX 306, RPX 200 and RPX 400 PARTICIPANTS

Scenario 3: 1 RPX 400, 2 RPX 200s, 2 TPX 306s – TPX View

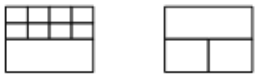


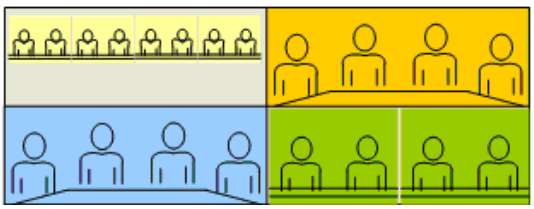


RPX 400 view



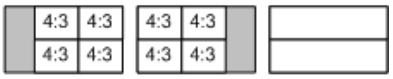
RPX 200 view

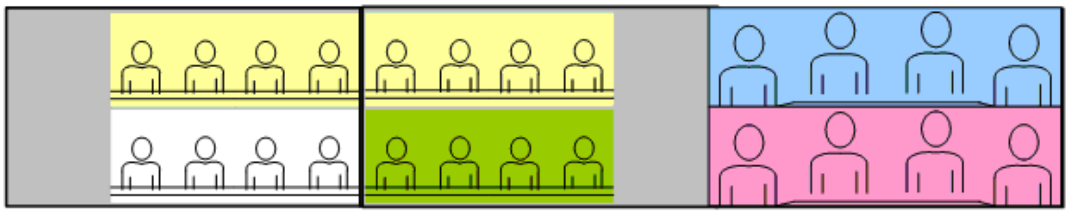




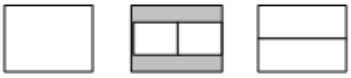
Category I: TPX 306, RPX 200 and RPX 400 PARTICIPANTS

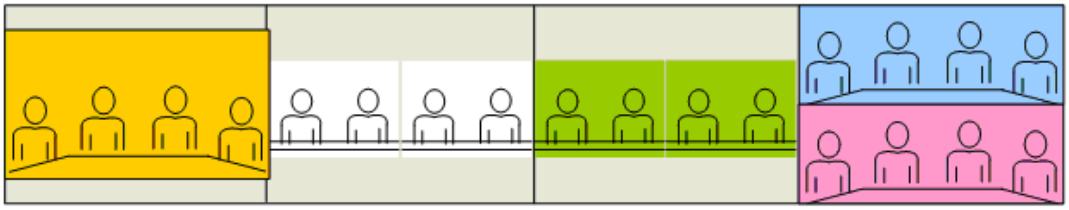
Scenario 4: 1 RPX 400, 2 RPX 200s, 3 TPX 306s – TPX View



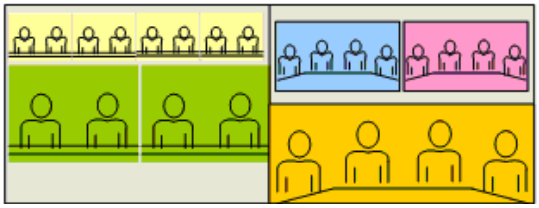


RPX 400 view



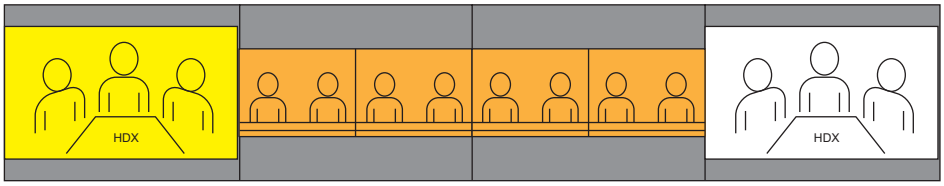


RPX 200 view

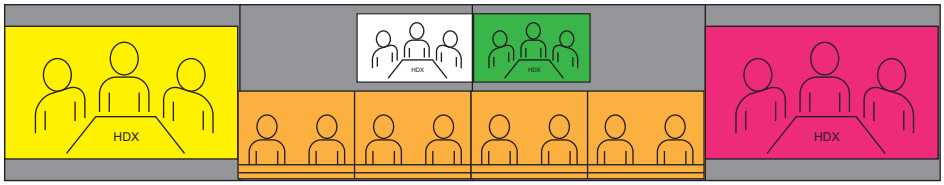


Category J: RPX 400 and HDX PARTICIPANTS

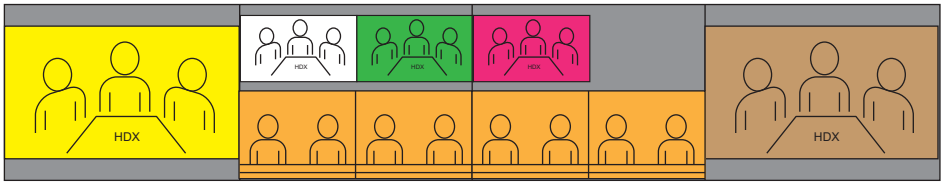
Scenario 1: 2 RPX 400s, up to 2 HDXs



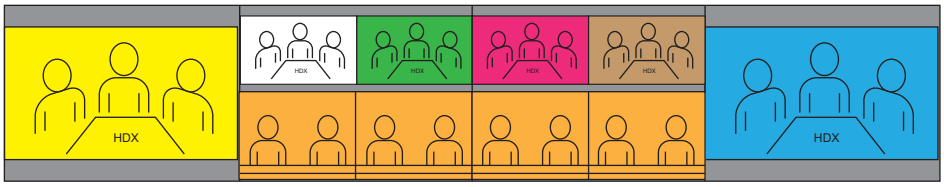
Scenario 2: 2 RPX 400s, 3 or 4 HDXs



Scenario 3: 2 RPX 400s, 5 HDXs

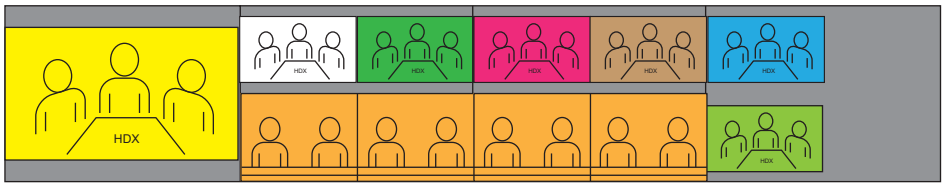


Scenario 4: 2 RPX 400s, 6 HDXs

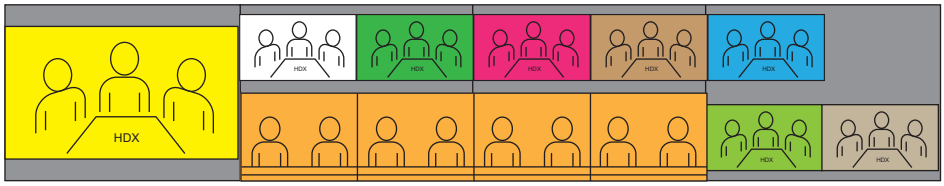


Category J: RPX 400 and HDX PARTICIPANTS

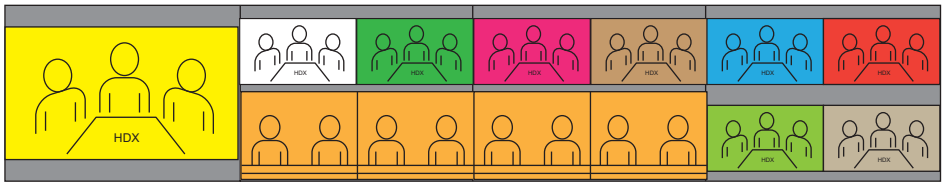
Scenario 5: 2 RPX 400s, 7 HDXs



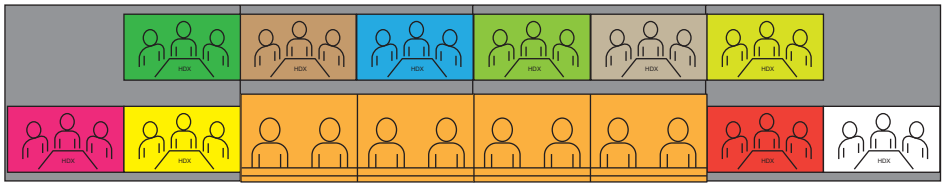
Scenario 6: 2 RPX 400s, 8 HDXs



Scenario 7: 2 RPX 400s, 9 HDXs

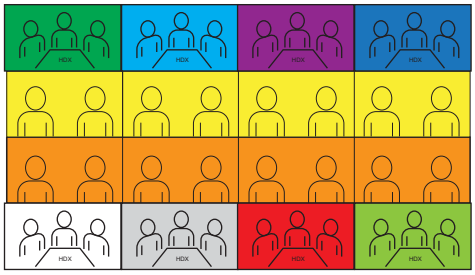


Scenario 8: 2 RPX 400s, 10 HDXs



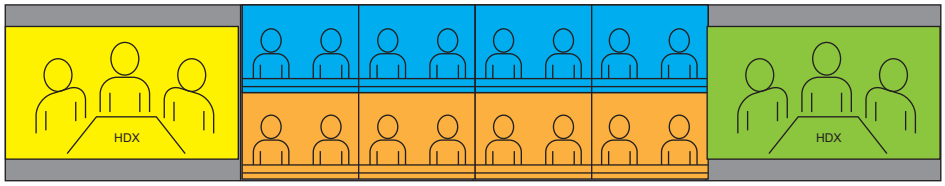
Category J: RPX 400 and HDX PARTICIPANTS

HDX View: Scenarios 1-8

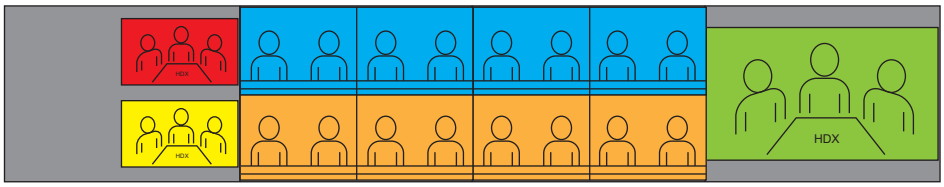


RPX participant video is zoomed and cropped to fill screen as seen below.

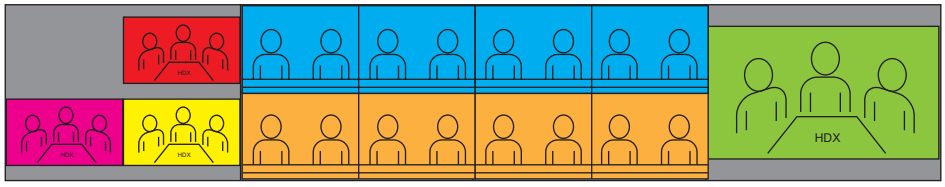
Scenario 9: 3 RPX 400s, up to 2 HDXs



Scenario 10: 3 RPX 400s, 3 HDXs

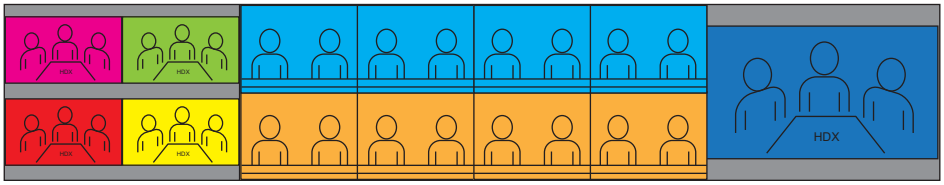


Scenario 11: 3 RPX 400s, 4 HDXs

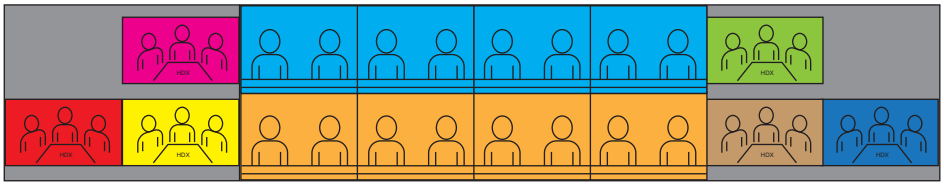


Category J: RPX 400 and HDX PARTICIPANTS

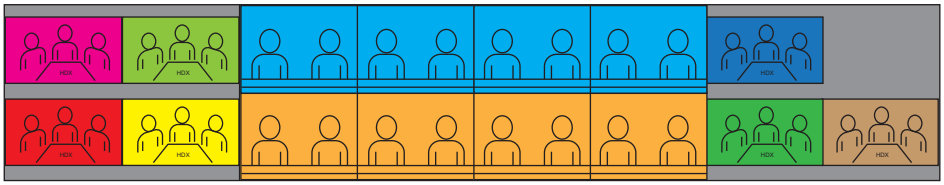
Scenario 12: 3 RPX 400s, 5 HDXs



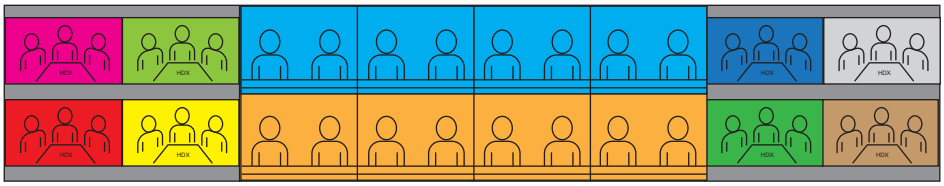
Scenario 13: 3 RPX 400s, 6 HDXs



Scenario 14: 3 RPX 400s, 7 HDXs

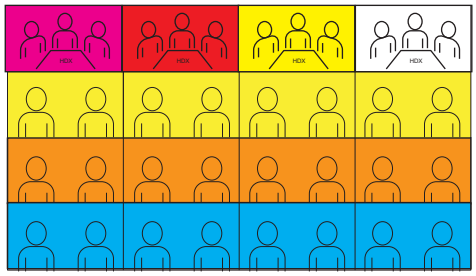


Scenario 15: 3 RPX 400s, 8 HDXs



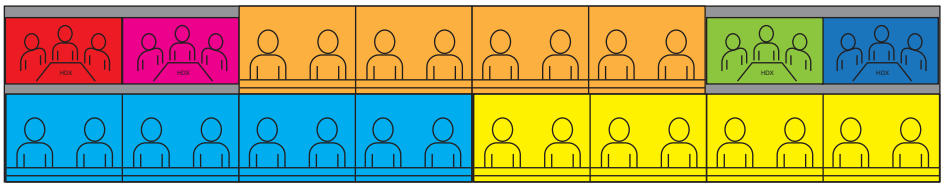
Category J: RPX 400 and HDX PARTICIPANTS

HDX View: Scenarios 9-15

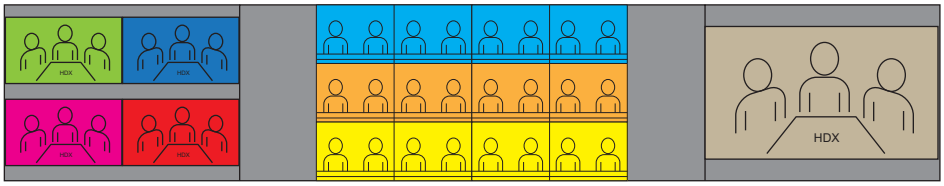


Top and bottom of RPX 400 systems are slightly cropped.
Some HDX participants not seen (can only accommodate up to 5).

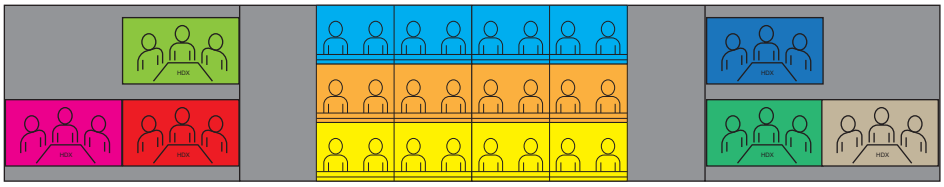
Scenario 16: 4 RPX 400s, up to 4 HDXs



Scenario 17: 4 RPX 400s, 5 HDXs



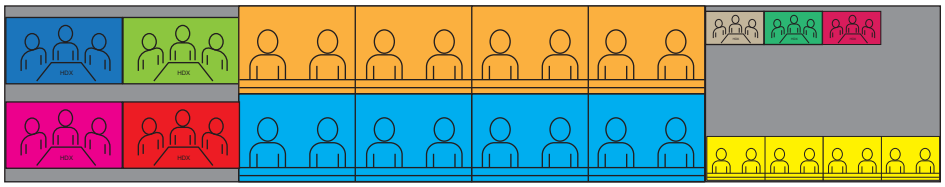
Scenario 18: 4 RPX 400s, 6 HDXs



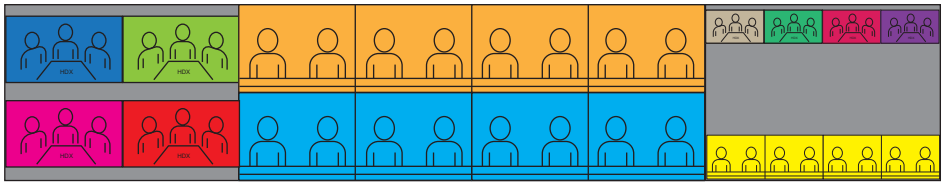
Layout scenarios 17 through 20 are available in 720p HD on RealPresence Collaboration Server with MPM+ only. Layout scenarios 17 through 20 can be used at SD/15fps on RealPresence Collaboration Server with MPM.

Category J: RPX 400 and HDX PARTICIPANTS

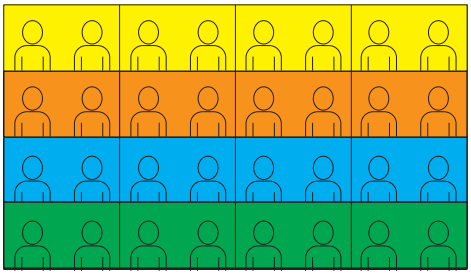
Scenario 19: 4 RPX 400s, 7 HDXs



Scenario 20: 4 RPX 400s, 8 HDXs



HDX View: 4 RPX 400s - Scenarios 16 - 20

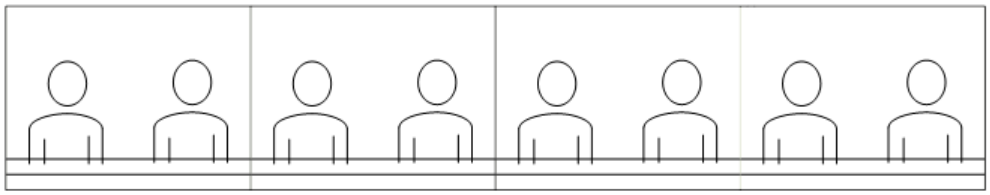


Top and bottom of RPX 400 systems are slightly cropped.
Other HDX participants not seen.

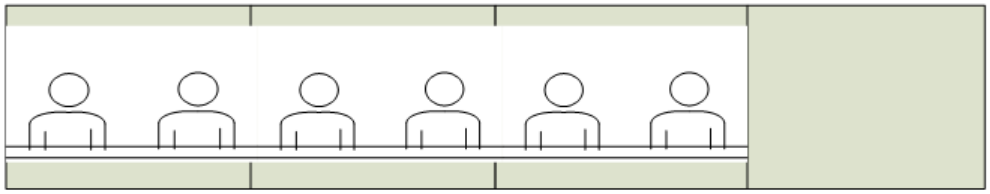
Layout scenarios 17 through 20 are available in 720p HD on RealPresence Collaboration Server with MPM+ only. Layout scenarios 17 through 20 can be used at SD/15fps on RealPresence Collaboration Server with MPM.

Category K: Voice Activated Room Switching (VARS) Layouts

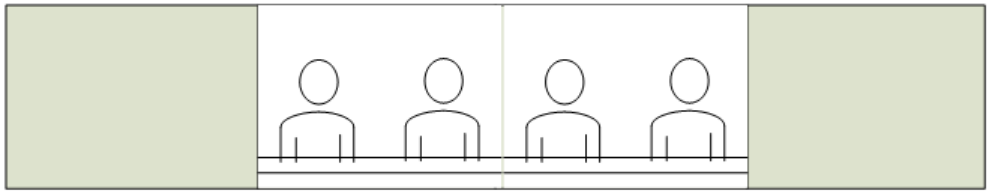
Scenario 1a: RPX 400 speaker viewed on RPX 400



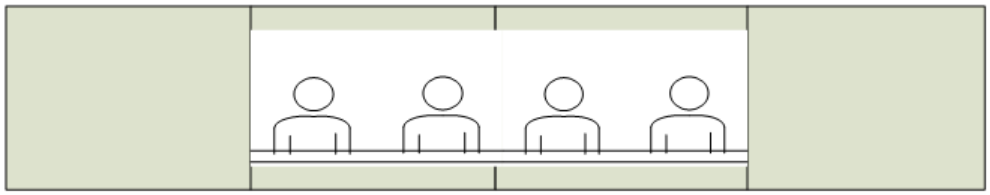
Scenario 1b: TPX 306 speaker viewed on RPX 400



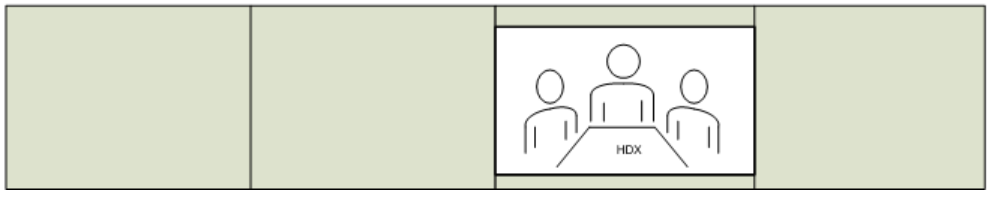
Scenario 1c: RPX 200 speaker viewed on RPX 400



Scenario 1d: TPX 204 speaker viewed on RPX 400

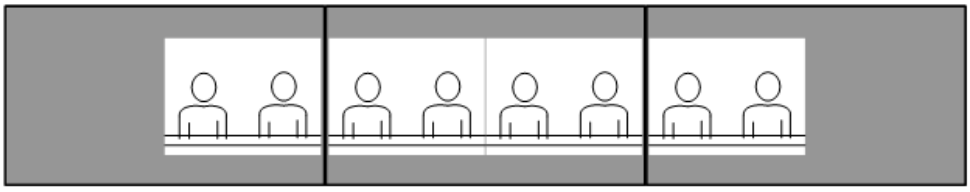


Scenario 1e: HDX speaker viewed on RPX 400

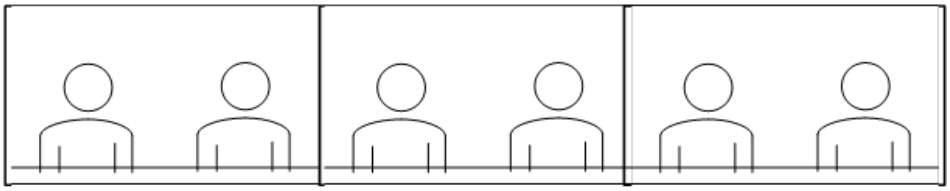


Category K: Voice Activated Room Switching (VARS) Layouts

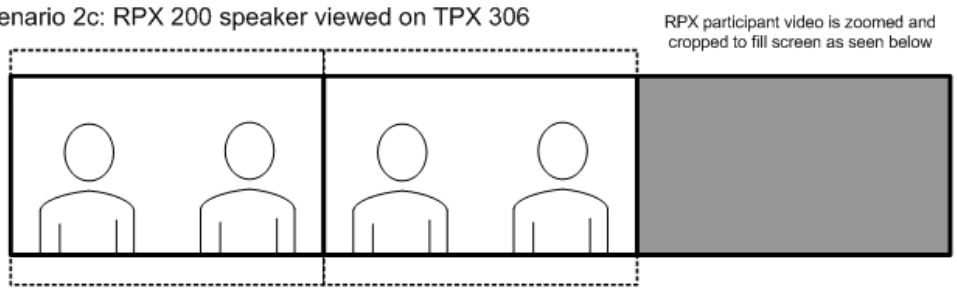
Scenario 2a: RPX 400 speaker viewed on TPX 306



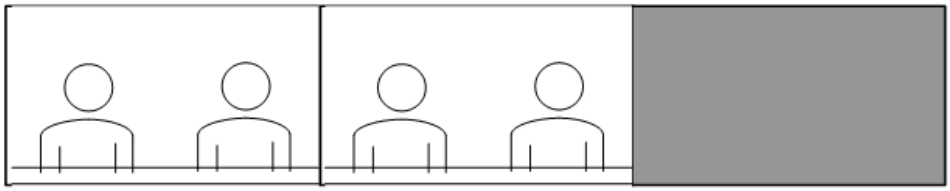
Scenario 2b: TPX 306 speaker viewed on TPX 306



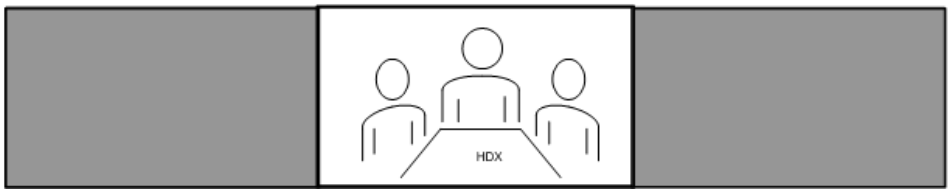
Scenario 2c: RPX 200 speaker viewed on TPX 306



Scenario 2d: TPX 204 speaker viewed on TPX 306

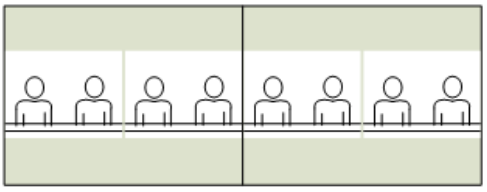


Scenario 2e: HDX speaker viewed on TPX 306

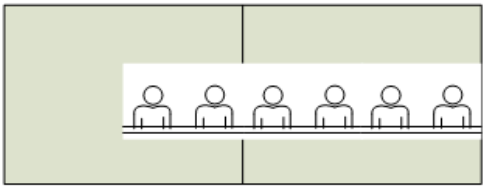


Category K: Voice Activated Room Switching (VARS) Layouts

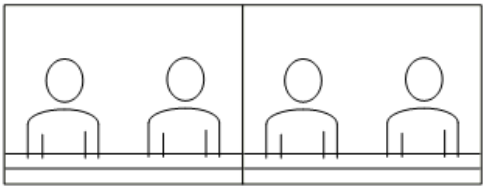
Scenario 3a: RPX 400 speaker viewed on RPX 200



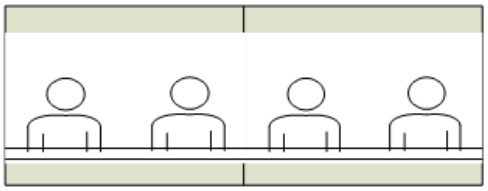
Scenario 3b: TPX 306 speaker viewed on RPX 200



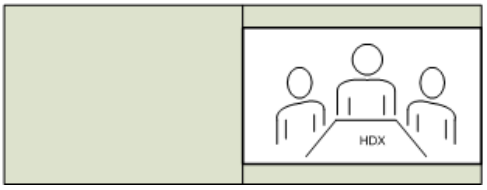
Scenario 3c: RPX 200 speaker viewed on RPX 200



Scenario 3d: TPX 204 speaker viewed on RPX 200

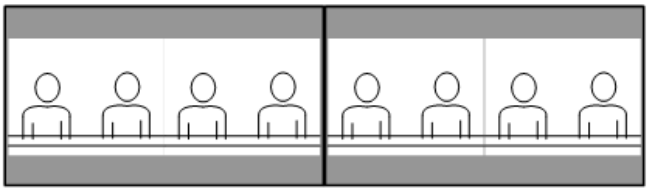


Scenario 3e: HDX speaker viewed on RPX 200

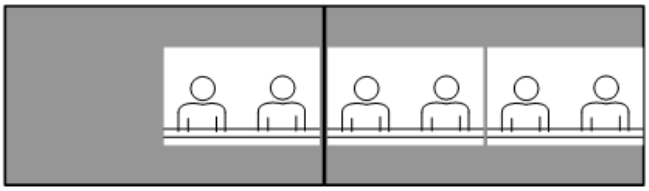


Category K: Voice Activated Room Switching (VARS) Layouts

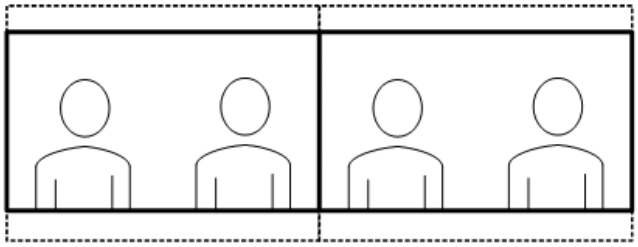
Scenario 4a: RPX 400 speaker viewed on TPX 204



Scenario 4b: TPX 306 speaker viewed on TPX 204

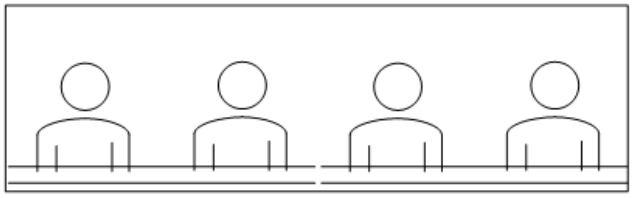


Scenario 4c: RPX 200 speaker viewed on TPX 204

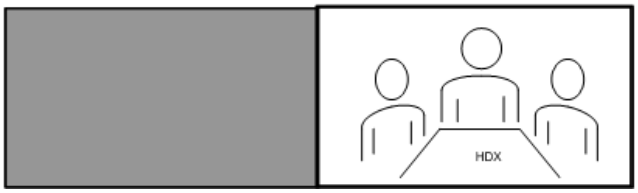


RPX participant video is zoomed and cropped to fill screen as seen below

Scenario 4d: TPX 204 speaker viewed on TPX 204

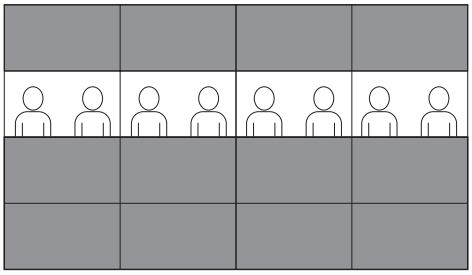


Scenario 4e: HDX speaker viewed on TPX 204



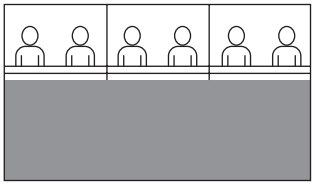
Category K: Voice Activated Room Switching (VARS) Layouts

Scenario 5a: RPX 400 speaker viewed on HDX

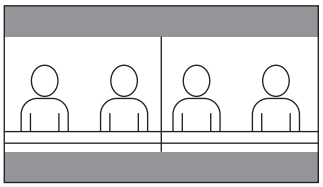


RPX participant video is zoomed and cropped to fill screen as seen below.

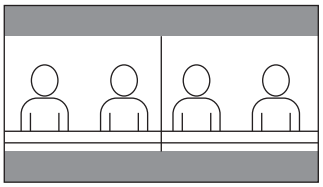
Scenario 5b: TPX 306 speaker viewed on HDX



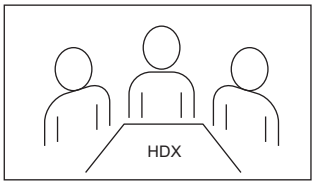
Scenario 5c: RPX 200 speaker viewed on HDX



Scenario 5d: RPX 204 speaker viewed on HDX

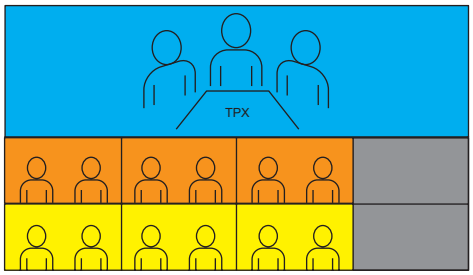


Scenario 5e: HDX speaker viewed on HDX

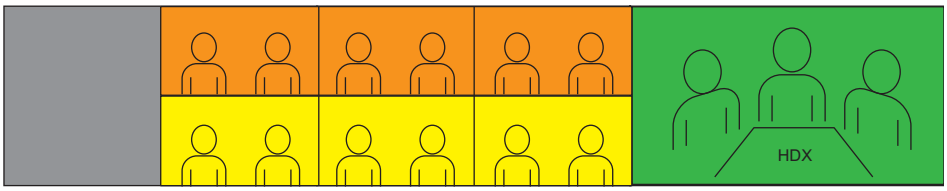


Category L: TPX, 3 Screen, and HDX PARTICIPANTS

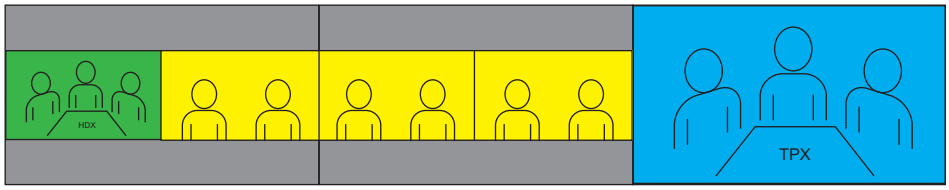
1 TPX, 2 3 Screens, 1 HDX (HDX View)



1 TPX, 2 3 Screens, 1 HDX (TPX View)



1 TPX, 2 3 Screens, 1 HDX (3 Screen View)



Manual Video Layout Framing Examples

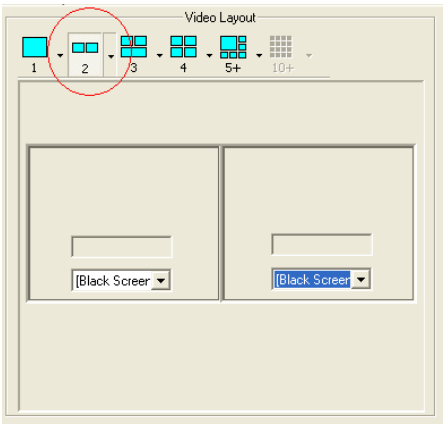
This appendix illustrates sample personal layouts for multipoint conferences that you can manually frame. However, Polycom recommends that you use the Multipoint Layout Application to automatically frame multipoint conferences.

In most cases, you should follow these guidelines:

- For multipoint conferences with only RPX suites: Either the two site side-by-side window layout option or the quad window layout option are typically suitable for framing the Suite.
- For multipoint conferences with both RPX and TPX suites in the same conference: Special window layout options are required, and these layouts are only available with RealPresence Collaboration Server 4000 and 2000.

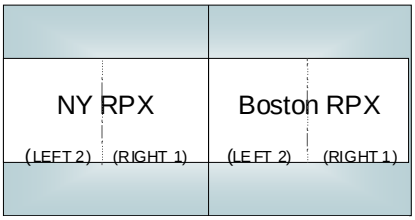
Example one: Multipoint meeting with three RPX HD 200 Series suites

- Site records involved:
  - RPX 200 Boston 140 CommAve 1
  - RPX 200 Boston 140 CommAve 2
  - RPX 200 LA Tower 1
  - RPX 200 LA Tower 2
  - RPX 200 NY MadAve 10th FL 1
  - RPX 200 NY MadAve 10th FL 2

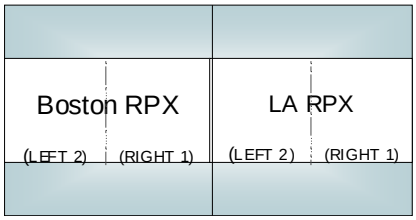


- **Once all sites are connected, each site must be manually framed as shown on the next slide using the MCU's two site side-by-side window layout option**

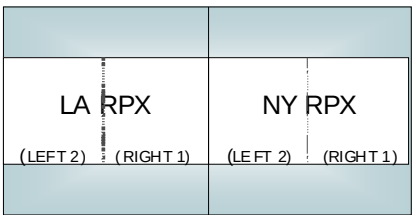
Example one: Site framing for three RPX HD 200 Series suites



LA LEFT *LA RIGHT*



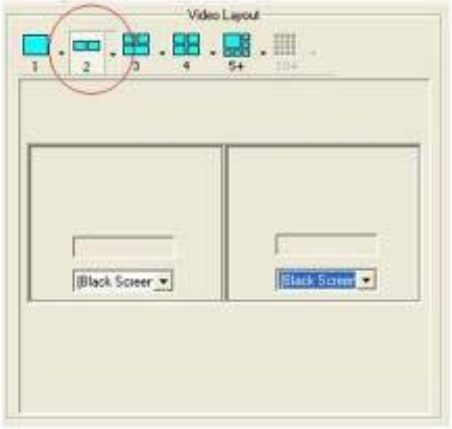
NY LEFT *NY RIGHT*



Boston LEFT *Boston RIGHT*

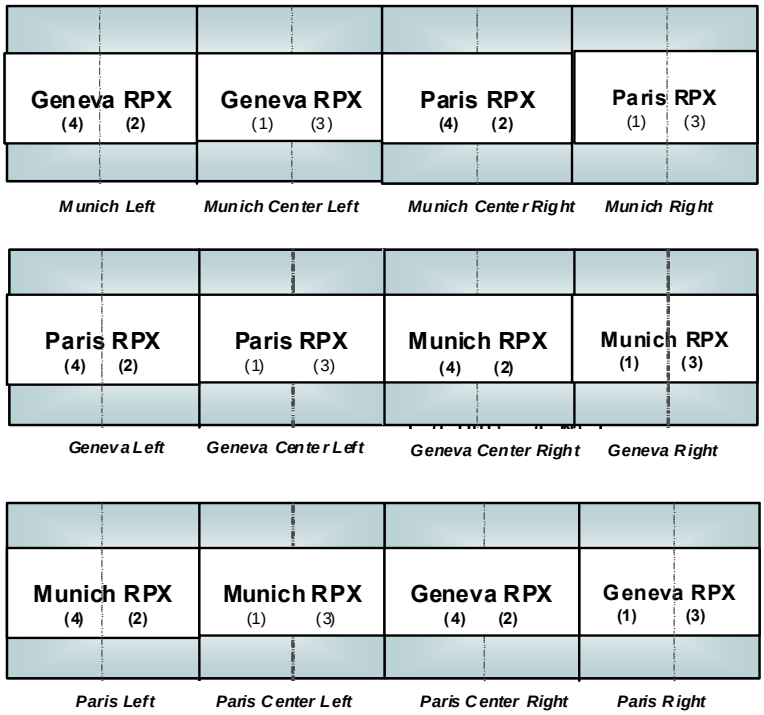
Example Two: Multipoint meeting with three RPX HD 400 Series suites

- Site records involved:
  - RPX 400 Munich 1
  - RPX 400 Munich 2
  - RPX 400 Munich 3
  - RPX 400 Munich 4
  - RPX 400 Geneva 1
  - RPX 400 Geneva 2
  - RPX 400 Geneva 3
  - RPX 400 Geneva 4
  - RPX 400 Paris 1
  - RPX 400 Paris 2
  - RPX 400 Paris 3
  - RPX 400 Paris 4



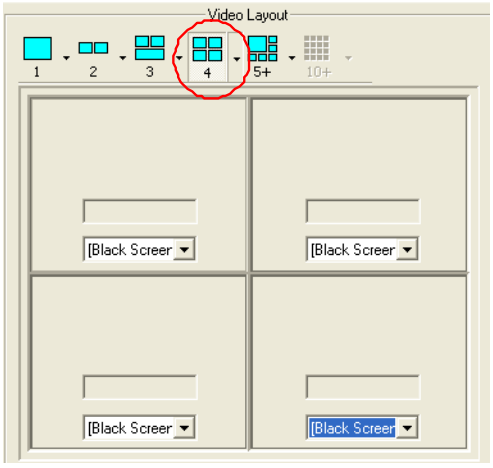
- **Once all sites are connected, each site must be manually framed as shown on the next slide using the MCU's two-site side by side window layout option**

Example Two: Site framing for three RPX HD 400 Series suites



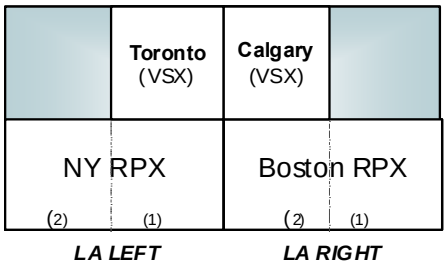
Example Three: Multipoint meeting with three RPX HD 200 Series suites and two traditional videoconferencing systems

- Site records involved:
  - RPX 200 Boston 140 CommAve 1
  - RPX 200 Boston 140 CommAve 2
  - RPX 200 LA Tower 1
  - RPX 200 LA Tower 2
  - RPX 200 NY MadAve 10th FL 1
  - RPX 200 NY MadAve 10th FL 2
  - VSX 7000 Toronto
  - VSX 3000 Calgary

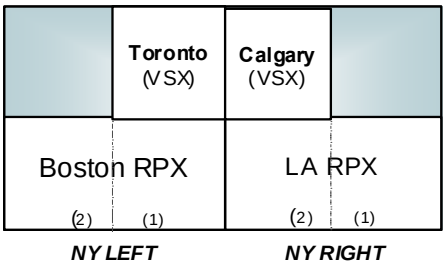


- **Once all sites are connected, each site must be manually framed as shown on the next slide using the MCU quad window layout option**

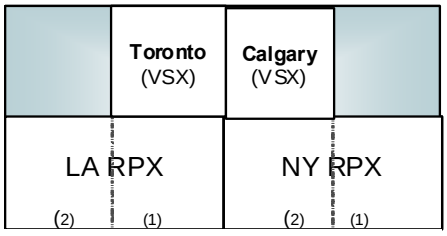
Example Three: Site framing for three RPX HD 200 Series suites and two traditional videoconferencing systems



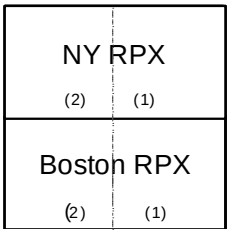
LA LEFT *LA RIGHT*



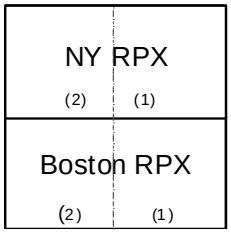
NY LEFT *NY RIGHT*



Boston LEFT *Boston RIGHT*



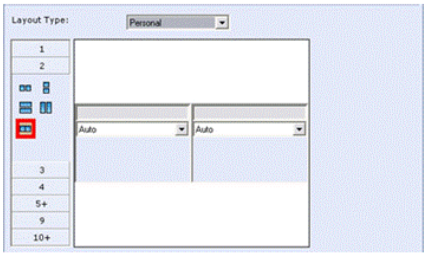
Toronto (Calgary & LA not shown by customer choice)

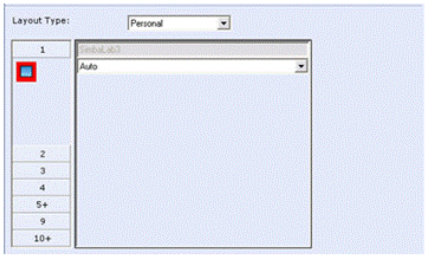


Calgary (Toronto & LA not shown by customer choice)

Example Four: Multipoint meeting with two RPX HD 200 Series suites and one TPX HD 306 system

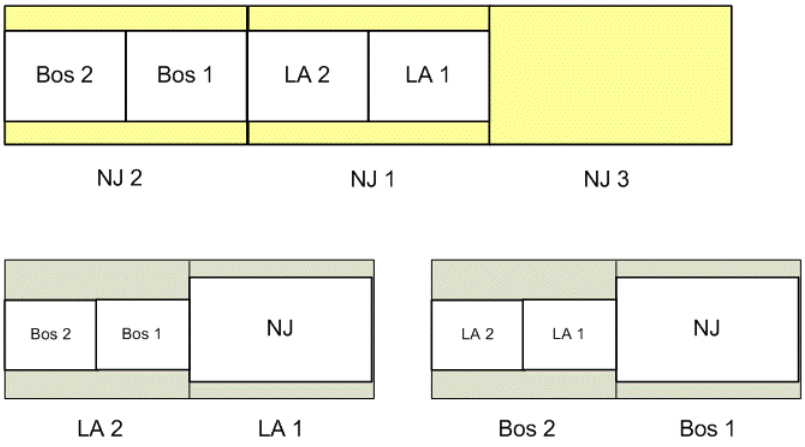
- Site records involved:
  - RPX 200 Boston 140 CommAve 1
  - RPX 200 Boston 140 CommAve 2
  - RPX 200 LA Tower 1
  - RPX 200 LA Tower 2
  - TPX 306 NY MadAve 10th FL 1
  - TPX 306 NY MadAve 10th FL 2
  - TPX 306 NY MadAve 10th FL 3





- **Once all sites are connected, each site must be manually framed as shown on the next slide using the window layout options shown**

Example Four: Site framing for two RPX HD 200 Series suites and one TPX HD 306 system



ITP Compatibility History (Version 3.1.0 and Earlier)

This appendix includes compatibility information for versions 3.1.0 and earlier. For information about versions newer than 3.1.0, refer to the ITP Release Notes for the specific version or the current Polycom Supported Products matrix located at PolycomService/support/us/support/service_policies.html.

ITP Compatibility History

History of ITP and RealPresence Collaboration Server Software Compatibility

	RealPresence Collaboration Server Software Version										
ITP Software Version	**6.0.1**	**7.0.2**	**7.1.0**	**7.2.0**	**7.2.1**	**7.2.1.25**	**7.2.2.64**	**7.6.0.170**	**7.6.1**	**7.7.0**	**7.8.0**
Version 3.1.0									✔	✔	✔
Version 3.0.5									✔	✔	✔
Version 3.0.3	—	—	✔	✔	✔	✔	✔	✔	✔	✔	—
Version 3.0.2	—	—	✔	✔	✔	✔	—	—	—	—	—
Version 3.0.1	—	—	✔	✔	✔	✔	—	—	—	—	—
Version 2.7.1	✔	✔	✔	✔	✔	✔	—	—	—	—	—
Version 2.7	✔	✔	✔	✔	—	—	—	—	—	—	—
Version 2.6	✔	✔	✔	—	—	—	—	—	—	—	—
Version 2.5	✔	✔	✔	—	—	—	—	—	—	—	—
Version 2.0.3	✔	✔	—	—	—	—	—	—	—	—	—
Version 1.5	✔	✔	—	—	—	—	—	—	—	—	—
ATX SDK Software Version	**6.0.1**	**7.0.2**	**7.1.0**	**7.2.0**	**7.2.1**	**7.2.1.25**	**7.2.2.64**	**7.6.0.170**	**7.6.1**	**7.7.0**	**7.8.0**
Version 3.1.0									✔	✔	✔
Version 3.0.5									✔	✔	—
Version 3.0.3	—	—	—	✔	✔	✔	✔	✔	✔	✔	—

	RealPresence Collaboration Server Software Version										
ITP Software Version	**6.0.1**	**7.0.2**	**7.1.0**	**7.2.0**	**7.2.1**	**7.2.1.25**	**7.2.2.64**	**7.6.0.170**	**7.6.1**	**7.7.0**	**7.8.0**
Version 3.1.0									✔	✔	✔
Version 3.0.5									✔	✔	✔
Version 3.0.3	—	—	✔	✔	✔	✔	✔	✔	✔	✔	—
Version 3.0.2	—	—	✔	✔	✔	✔	—	—	—	—	—
Version 3.0.1	—	—	✔	✔	✔	✔	—	—	—	—	—
Version 2.7.1	✔	✔	✔	✔	✔	✔	—	—	—	—	—
Version 2.7	✔	✔	✔	✔	—	—	—	—	—	—	—
Version 2.6	✔	✔	✔	—	—	—	—	—	—	—	—
Version 2.5	✔	✔	✔	—	—	—	—	—	—	—	—
Version 2.0.3	✔	✔	—	—	—	—	—	—	—	—	—
Version 1.5	✔	✔	—	—	—	—	—	—	—	—	—
ATX SDK Software Version	**6.0.1**	**7.0.2**	**7.1.0**	**7.2.0**	**7.2.1**	**7.2.1.25**	**7.2.2.64**	**7.6.0.170**	**7.6.1**	**7.7.0**	**7.8.0**
Version 2.0.2	—	—	—	✔	✔	✔	—	—	—	—	—
Version 2.0 and 2.0.1	✔	✔	✔	✔	—	—	—	—	—	—	—
Version 1.1	✔	✔	—	—	—	—	—	—	—	—	—
Version 1.0	✔	✔	—	—	—	—	—	—	—	—	—

History of ITP and CMA Software Compatibility

	CMA Software Version				
ITP Software Version	**5.0.0**	**5.3.0**	**5.4.0**	**5.5**	**6.0.1**
Version 3.1.0				✔	✔
Version 3.0.5				✔	✔
Version 3.0.3	—	—	✔	✔	✔
Version 3.0.2	—	—	✔	✔	—
Version 3.0.1	—	—	✔	✔	—
Version 2.7.1	✔	✔	—	✔	—
Version 2.7	✔	✔	—	—	—

History of ITP and DMA Software Compatibility

	DMA Software Version		
ITP Software Version	**4.0**	**4.0.x**	**5.0**
Version 3.1.0			✔
Version 3.0.5		✔	
Version 3.0.3	✔		

ITP Software Version Matrices

Software Versions Used with ITP 3.1.0

ITP 3.1.0						
Product	**HDX® Software Version**	**Crestron Software Version**	**Polycom Telepresence Tool Version**	**Polycom Touch Control Operating System Version**	**Polycom Touch Control Applications Version**	**Polycom Multipoint Layout Application (MLA) Version**
RPX	3.1.0-23277	RPX_3.1-3	3.1.0.0	1.6.0-29	1.6.0-69	3.0.5.4
OTX	3.1.0-23277	TPX_3.1-3	3.1.0.0	1.6.0-29	1.6.0-69	3.0.5.4
TPX 306M	3.1.0-23277	TPX_3.1-3	3.1.0.0	1.6.0-29	1.6.0-69	3.0.5.4
ATX 300	3.1.0-23277	TPX_3.1-3	3.1.0.0	1.6.0-29	1.6.0-69	3.0.5.4
ATX SDK	3.1.0-23277	—	3.1.0.0	—	—	3.0.5.4

Software Versions Used with ITP 3.0.5

ITP 3.0.5						
Product	**HDX® Software Version**	**Crestron Software Version**	**Polycom Telepresence Tool Version**	**Polycom Touch Control Operating System Version**	**Polycom Touch Control Applications Version**	**Polycom Multipoint Layout Application (MLA) Version**
RPX	3.0.5-22695	RPX_3.0.5-2	3.0.5.4	1.5.0-18	1.5.0-60	3.0.5.4
OTX	3.0.5-22695	TPX_3.0.5-2	3.0.5.4	1.5.0-18	1.5.0-60	3.0.5.4
TPX 306M	3.0.5-22695	TPX_3.0.5-2	3.0.5.4	1.5.0-18	1.5.0-60	3.0.5.4
ATX 300	3.0.5-22695	TPX_3.0.5-2	3.0.5.4	1.5.0-18	1.5.0-60	3.0.5.4
ATX SDK	3.0.5-22695	—	3.0.5.4	—	—	3.0.5.4

Software Versions Used with ITP 3.0.3

ITP 3.0.3						
Product	HDX Software Version	Crestron Software Version	Polycom Telepresence Tool Version	Polycom Touch Control Operating System Version	Polycom Touch Control Applications Version	Polycom Multipoint Layout Application (MLA) Version
RPX	3.0.3-14451	RPX_3.0.3-4	3.0.3.5	1.3.0-17	1.3.0-103	3.0.3.5
OTX	3.0.3-14451	TPX_3.0.3-4	3.0.3.5	1.3.0-17	1.3.0-103	3.0.3.5
TPX 306M	3.0.3-14451	TPX_3.0.3-4	3.0.3.5	1.3.0-17	1.3.0-103	3.0.3.5
ATX 300	3.0.3-14451	TPX_3.0.3-4	3.0.3.5	1.3.0-17	1.3.0-103	3.0.3.5
ATX SDK	3.0.3-14451	—	3.0.3.5	—	—	3.0.3.5

Software Versions Used with ITP 3.0.2

ITP 3.0.2						
Product	HDX Software Version	Crestron Software Version	Polycom Telepresence Tool Version	Polycom Touch Control Operating System Version	Polycom Touch Control Applications Version	Polycom Multipoint Layout Application (MLA) Version
RPX	3.0.2-11176	RPX_3.0.2-2	3.0.2.5	1.2.0.65	1.2.0.38	3.0.1.3
OTX	3.0.2-11176	TPX_3.0.2-2	3.0.2.5	1.2.0.65	1.2.0.38	3.0.1.3
TPX 306M	3.0.2-11176	TPX_3.0.2-2	3.0.2.5	—	—	3.0.1.3
ATX 300	3.0.2-11176	TPX_3.0.2-2	3.0.2.5	1.2.0.65	1.2.0.38	3.0.1.3
ATX SDK	3.0.2-11176	—	3.0.2.5	—	—	3.0.1.3

Software Versions Used with ITP 3.0.1

ITP 3.0.1						
Product	**HDX Software Version**	**Crestron Software Version**	**Polycom Telepresence Tool Version**	**Polycom Touch Control Operating System Version**	**Polycom Touch Control Applications Version**	**Polycom Multipoint Layout Application (MLA) Version**
RPX	3.0.1-10628	RPX_3.0.1-3	3.0.1.5	1.0.3-17	1.1.0.73	3.0.1.3
OTX	3.0.1-10628	TPX_3.0.1-4	3.0.1.5	1.0.3-17	1.1.0.73	3.0.1.3
TPX 306M	3.0.1-10628	TPX_3.0.1-4	3.0.1.5	—	—	3.0.1.3
ATX 300	3.0.1-10628	TPX_3.0.1-4	3.0.1.5	1.0.3-17	1.1.0.73	3.0.1.3
ATX SDK	—	—	—	—	—	—

Software Versions Used with ITP 2.7.1

ITP 2.7.1						
Product	**HDX Software Version**	**Crestron Software Version**	**Polycom Telepresence Tool Version**	**Polycom Touch Control Operating System Version**	**Polycom Touch Control Applications Version**	**Polycom Multipoint Layout Application (MLA) Version**
RPX	ITP271-5267	RPX_2.7.1-1	2.7.1.1	—	—	2.7.1.1
OTX	ITP271-5267	TPX_2.7.1-3	2.7.1.1	—	—	2.7.1.1
TPX 306M	ITP271-5267	TPX_2.7.1-3	2.7.1.1	—	—	2.7.1.1
ATX 300	ITP271-5267	TPX_2.7.1-3	2.7.1.1	—	—	2.7.1.1
ATX SDK	ITP271-5267	—	2.7.1.1	—	—	2.7.1.1