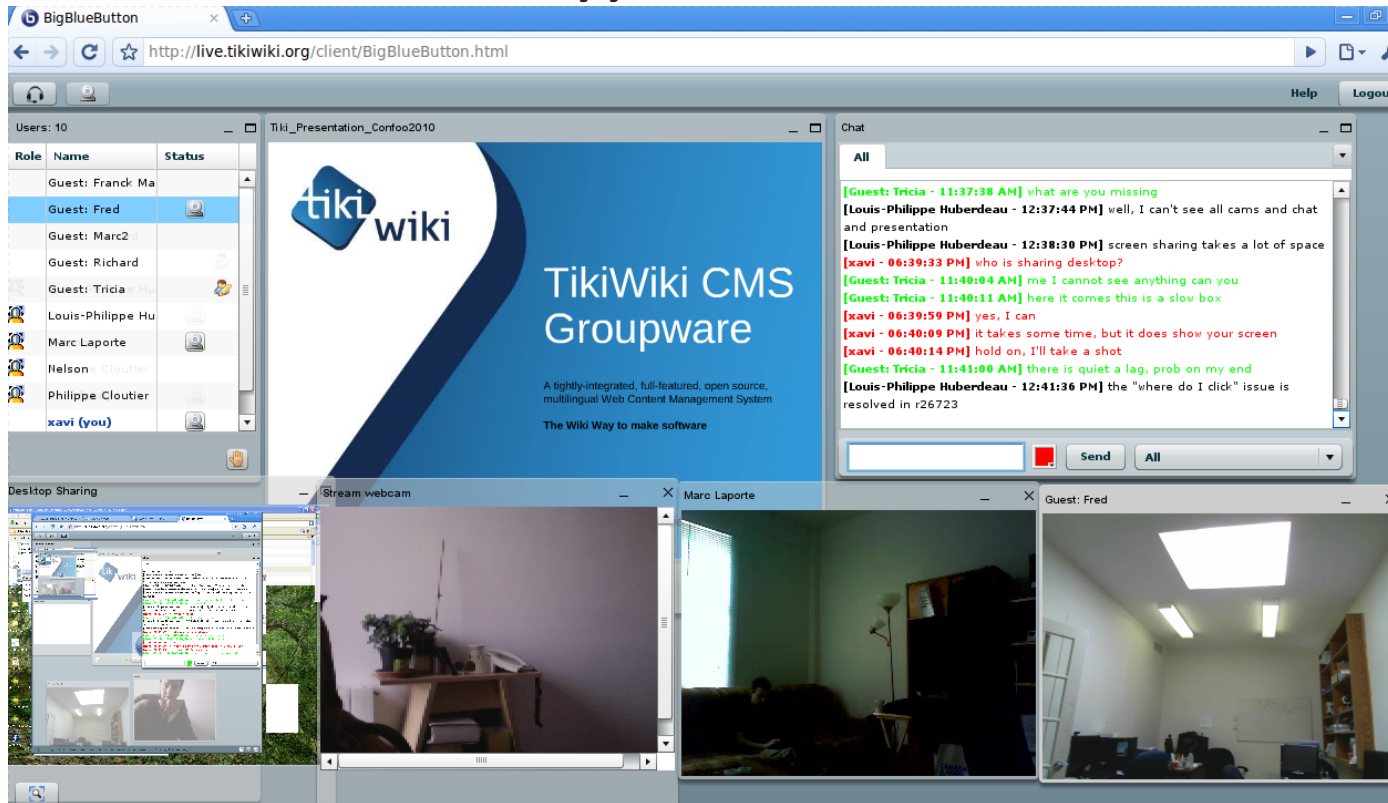


ë¹...ë, "ë£"ë²,,íŠ¼ (BigBlueButton)

ë¹...ë, "ë£"ë²,,íŠ¼ (BigBlueButton, BBB) ëŠ" ì¸í" ^ì¸ÈìŠ¸ì¸ ì¸¸ì¸¸æê°, í¸'ì—... ë,,êµ—ìž...ë¸^ë¸¸. (ì¸Èì,,± / í¸™"í¸ / í¸™"ë© 'ê³µì¸æ / ì¸±,,í¸È... / í¸™"ì¸'í¸,ë³'ë"æ / ë...ì¸È) ë"± ì' ì—→ëÿ→ ê°æì¸ ì¸¸í" ^ ì¸¸ÈìŠ¸ì¸ »'í—ë,,Èí¸, ì¸í—ì,,æ ì¸æìž'ë~ì—^ì¸æ¼ë©° ì¸ê²© êµì¸æì— ì¸'ì¸ì,, ë'ê³ ìž'ì¸µë¸^ë¸¸. ì,,ì¸š©ìžëŠ" ë, Èë¼ì¸š°ì €ì— í¸¸Èëž~ì¸æí¸¸Èë ^ì¸'—' í¸¸Èëÿ→ê°¸, ì¸,ëšÈ í¸,,ì¸š"í¸• ©ë¸^ë¸¸.



í¸™•ëÈÈí¸~ë¸æ©'í¸'è!

ë¸©ì°":

ì¸¸Èê°æ

ì¸°í¸¸ì¸™ € ë¹...ë, "ë£"ë²,,í¸š¼ì¸~ í¸¸µí¸• ©ì¸~ ì¸£¼ì¸š" ê, °ëšÿë"¸

- í°í, x ì, ñš©ìž ìkœìšxí...œì,, ì'ìš©í• ñ—ñ 1-í'ë| ëiœê· ì, ìœ¼ëiœ ë¹...ë, "ëf"ë²,, íš¼ì—
ëiœê· ì, ê°€ëšŸ
- í°í, x ñ ê¶œí•œê³¼ ê·, ëf¹ ìkœìšxí...œì,, ítµí•œ ë¹...ë, "ëf"ë²,, íš¼ ì,, ì... ñ ìfi—ì,, œì~
ë<xì-í•œ ê¶œí•œê·, °ëšŸ
- í°í, x ë, 'ë¶œì—ì,, œ ë¹...ë, "ëf"ë²,, íš¼ ë...¹í™" ë, 'ì—ì,, ë, ñì—'

Tiki 5.0 ì—ì,,œëš" BBB 0.64 ëŸ¼ ìšœì>í• ñ~€ê³ , Tiki 5.1 (ê·, ëì—ê³ ì'í>,,) ë²,, ì, ì—ì,,œëš" BBB .64 ê³¼ .7 ì,, ë~ ë<x
ìšœì>í• ñ~€ìšµë<^ë<x

Tiki 8.0 ì—ì,,œëš" ë...¹í™" ñ™€ ìž—ìfê³¼ ê°™ì€ ë¹...ë, "ëf"ë²,, íš¼ 0.8 ì ìf^ ê·, °ëšŸ ìšœì>ì' ì¶"ê°€ë~ì—^ìšµë<^ë<x (ê·, ëì—ê³
BBB ì~ ì'ì, , ë²,, ì, ì' ê³,, ìtí• 'ì,, œ ìšœì>ë~ì—^ìšµë<^ë<x).

Tiki 9.0 ì—ì,,œëš" ë·, íœ...ì— ì°, ì—ñí• ê¶œí•œì' ä...ž²—ëš" ì, ñš©ìžë"xì—ê²œ ë...¹í™" "ë, 'ìš©ì,, ë³'ì—ñìf¼ëš" ê²fi,,
ì—^ìš©í•~ëš" ìf^ëiœìš' ê¶œí•œ (tiki_p_bigbluebutton_view_rec) ì' ì¶"ê°€ë~ì—^ìšµë<^ë<x

Tiki 10.0 ì~ ê'€ëì—ìžë"xì€ ì'ì œ ë...¹í™" "ë, 'ìš©ì,, ì, ì œí• ì~ ìž^ìšµë<^ë<x.

ë¹...ë, "ëf"ë²,, íš¼ ì, ñš©ìžë"xì€ í"œëž~ìkœê°€ ìž^ì—'ì¼ í• ©ë<^ë<x. ì,,œë²,, ì— ëœœí•~ì—ñ, 2ê·, ê°€ë°"ì'íš, ì~ ë—¼ëì—ì
AMì,, ê°€ìš,, ì, ìš© ì,,œë²,, ê°€ í•,, ìš"í• ©ë<^ë<x (ì'ëš" ì~ ìšxìš, ì—ì,,œ ê°€ìf ë~ ìk ì' ìšxì™ €í•'ì,, ìtµí•œ ê²fi' ì•,, ë<™ ë<^ë<x)

ë¹...ë, "ëf"ë²,, íš¼ì€ í°í, x ñ²~ëŸ¼ LGPL ìœ¼ëiœ ë¼ì'ì,, ¼ìšx ë©ë<^ë<x.

ì¶"ê°€ ì•ë³': <http://bigbluebutton.org/>

BBB ì, ñš©ë²•

ë¹...ë, "ëf"ë²,, íš¼ì,, ì, ñš©í•~ë xë©' ì>¹ë, œë¼ìš"ì €ì— í"œëž~ìkœì"œë ^ì'ì—'ëŸ¼ ìœ,, í•œ í"œëŸ—ê·, ì, ì' ñ—ë°"ëŸ'ê²œ
ì,, xì¹~ë~ì—'ìž^ì—'ì¼ í• ©ë<^ë<x.

ì'ëš" íšì • ìš'ì~ì²'ì œì™€ ë, œë¼ìš"ì €ì~ ìì°í• ©ì—ì,,œëš" ì½ê°, ë³µìžìí• ì~ë,, ìž^ìšµë<^ë<x. ì~ëŸ¼ ë"xë©', BBBì—
ì—°ê²"ì,, ì²"ìœ ìkœë,, í• ë•œ í"œëž~ìkœ í"œëŸ—ê·, ì, ì' ì~ê·, ò¹~ ì•šê²œ ì—ëž~ìkœëœ ì' ìž^ë<xë©' (ì~ëŸ¼ ë"xë©',

GNU/Linux ê·, °ë~ì~ 64ë¹,, íš, ìš'ì³Ÿì²'ì œì'ê³ í"œëž~ìkœì"œëŸ—ê·, ì, ì, ìkœìšxí...œ ëì—ñì—ìšœì,, °ëì—ì—ì,,œ ì,, xì¹~ëŸ¼ í—^ì,,
ê²¼ìš°), ë<xìœì~ ë<~ê³,, ëŸ¼ ë°Ÿì•,, ì,,œ í"œëž~ìkœì"œëŸ—ê·, ì, ì, xì •ì,, ì~ì •í•~ëš" ê²fi,, ìkœë,, í• ì~ ìž^ìšµë<^ë<x:

- ë²"ìš^ë¼ íœœì'ì—'ìšxëŸ¼ ë, œë¼ìš"ì €ëiœ ì, ñš©í•~ê³ ë<xìœ ìµìšxí...ì...~ì,, ì,, xì¹~:

Flash-Aid:

- <https://addons.mozilla.org/en-us/firefox/addon/flash-aid/>
- "Quick Mode > Install beta flash"
 - http://www.macromedia.com/support/documentation/en/flashplayer/help/settings_manager06.html
- accept the connection from the server of your interest so that it doesn't ask you each time you try to connect to that bbb installation.

How to use BBB in Tiki

1.1.1. Enable the feature and a plugin

Enable the feature at "**Admin home > Community > BigBlueButton**" tab.

Enable the plugin at "**Admin home > Editing and plugins > Plugins > BigBlueButton plugin**"

1.1.2. Place the bbb plugin call in a wiki page

Select the BigBlueButton plugin from the plugin helper popup box through the edit box in the wiki page:

```
{bigbluebutton name="77777" prefix="guest" welcome="Welcome to the BBB from our web site"  
logout="http://mywebsite.org/myexitpage" recording="0"}
```

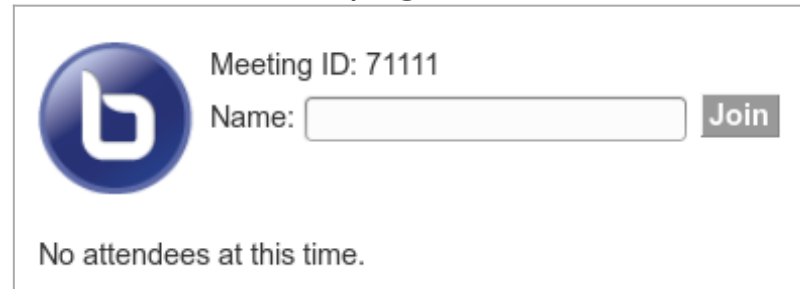
If you want to record your meetings, change the param recording from 0 to 1.

Note:

- Ensure that you are not caching that wiki page (set cache for that wiki page to "0". Otherwise, anonymous users willing to join a meeting might experience some connection problems in some cases.

1.1.3. Connect to BBB

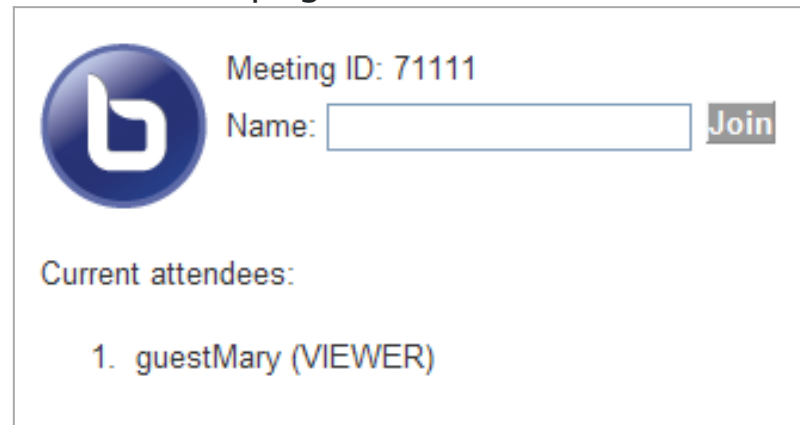
An anonymous user would see this in a wiki page when no one is connected to the meeting yet:



A screenshot of the BBB meeting join interface. On the left is a blue circular icon with a white 'b'. To its right, the text 'Meeting ID: 71111' is displayed. Below that, the label 'Name:' is followed by an empty text input field and a grey 'Join' button. At the bottom of the interface, the text 'No attendees at this time.' is shown.

click to expand

If there is another guest user connected (not logged in Tiki at the time of connection, thus logged in BBB as VIEWER), the page would look like:



A screenshot of the BBB meeting join interface. It features the same blue 'b' icon and 'Meeting ID: 71111' text as the previous screenshot. The 'Name:' input field and 'Join' button are also present. Below the input field, the text 'Current attendees:' is displayed, followed by a list containing one item: '1. guestMary (VIEWER)'.

click to expand

If a user logs in the page, new buttons will be seen for him, depending on his tiki permissions, but for sure the username will be taken from his tiki username, and permissions will be transferred from Tiki to BBB.

If that user connects to the BBB channel, then he will be connecting as MODERATOR.



Meeting ID: 71111

Permissions

Join

Current attendees:

1. guestMary (VIEWER)

click to expand



Meeting ID: 71111

Name:

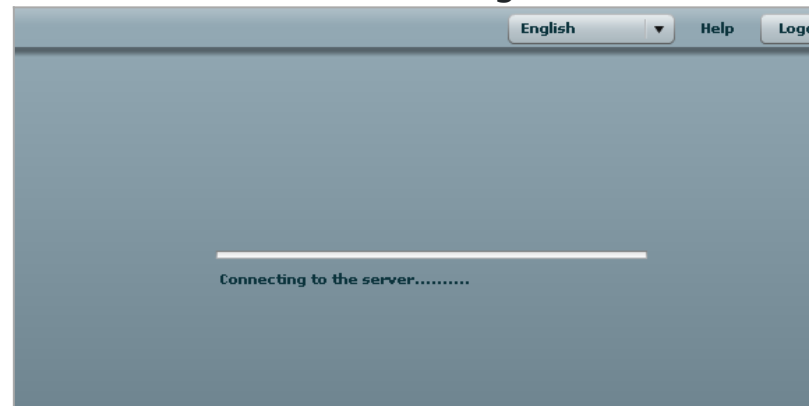
Join

Current attendees:

1. guestFatima Nunez (VIEWER)
2. Xavi (MODERATOR)

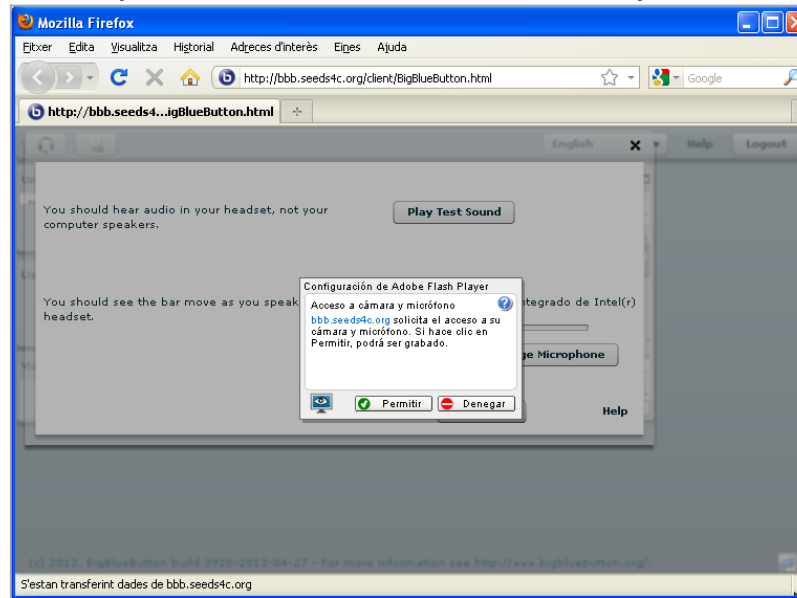
click to expand

Connecting:



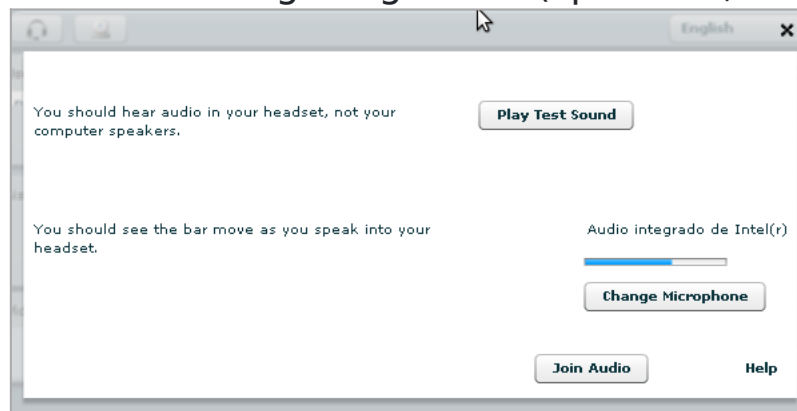
click to expand

Validating Flash permissions to share microphone and webcam:



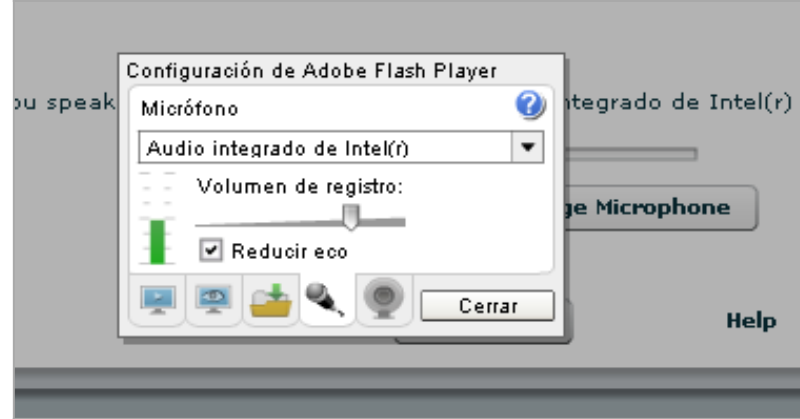
click to expand

Check your audio settings in general (speakers, microphone):



click to expand

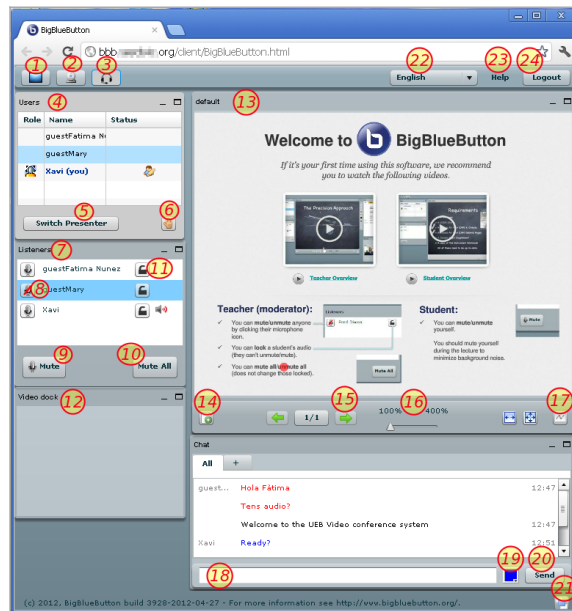
Change your microphone settings, if needed:



click to expand

1.1.4. Desktop Interface

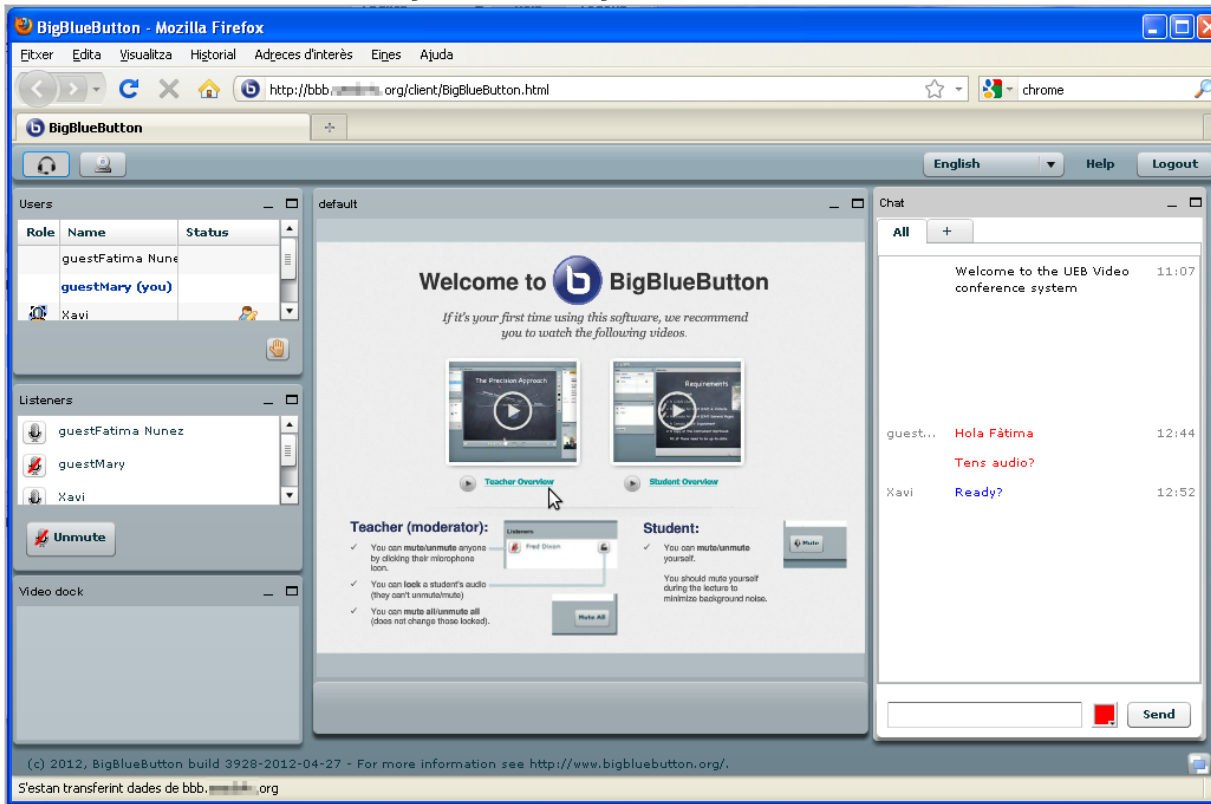
See the BBB desktop:



click to expand

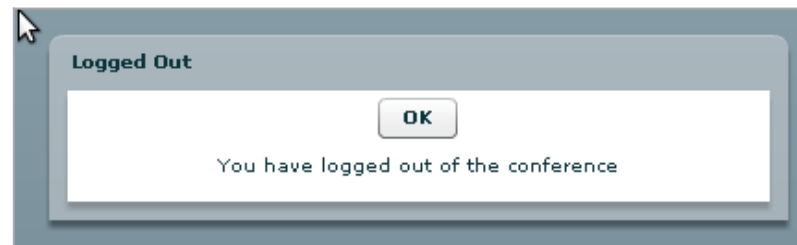
1. **Screen sharing** Show the screen sharing dock, to allow sharing your screen (Java required)
2. **Webcam.** Video streaming from your local webcam, if available
3. **Audio settings & Join Audio** Set up and join the microphone and speakers of your computer to join the audio conference
4. **Users** List of users connected at this moment
5. **Switch presenter** Click at one user from the list (as moderator) to grant the user the role of presenter, so that he/she can upload a presentation if needed, user the whiteboard, screensharing, etc.
6. **Raise your hand.** Ask for permission to talk, so that a moderator can unmute your microphone (if that's the case) for you use your turn to talk in the audio conference.
7. **Listeners** List of users who joined the audio conference
8. **Select user.** Click to select a user from the list of listeners
9. **Mute user** Click to mute the selected user
10. **Mute all** Click to mute all users
11. **Lock a user** in this case, the user will not be able to toggle his own audio status
12. **Video dock** When webcams are enabled, they show up here.
13. **Presentation area** When a slideshow is uploaded, the slides are shown here
14. **Presentation upload.** presenter can upload a slideshow through this button, to be converted into a flash presentation.
15. **Moving slides forward** (and backwards, with the arrow at the left)
16. **Zoom** moving the slider you can zoom in or out the slide size. Clicking and dragging you move the area of the slide receiving the focus.
17. **show the whiteboard controls**
18. **Chat.** write chat messages here
19. **font color** for chat. Choose the font color for your user messages
20. **Send chat messages**
21. **Restore display defaults** for bbb windows and docks in the desktop
22. **Language** choose language for the interface
23. **Help** Click there for help on the BBB system
24. **Logout button**

And the view of the same room by an anonymous users without moderator permissions:



click to expand

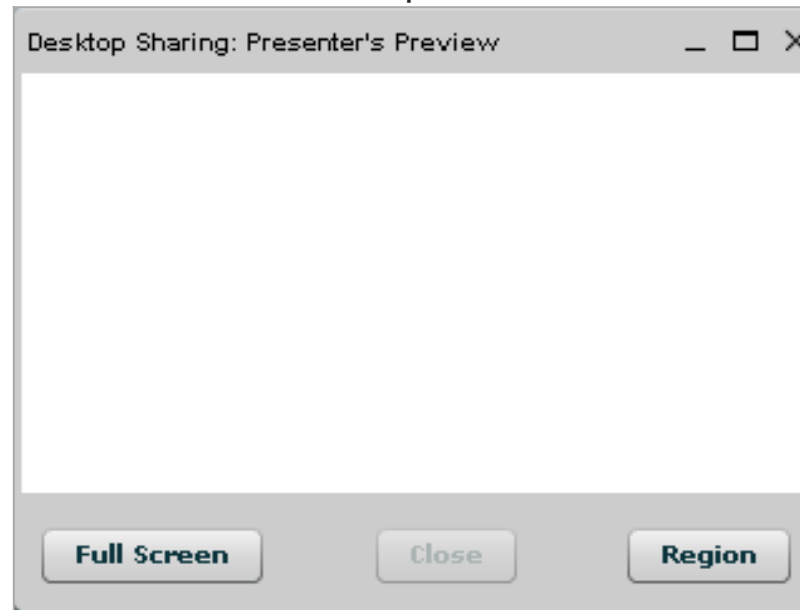
At the end:



click to expand

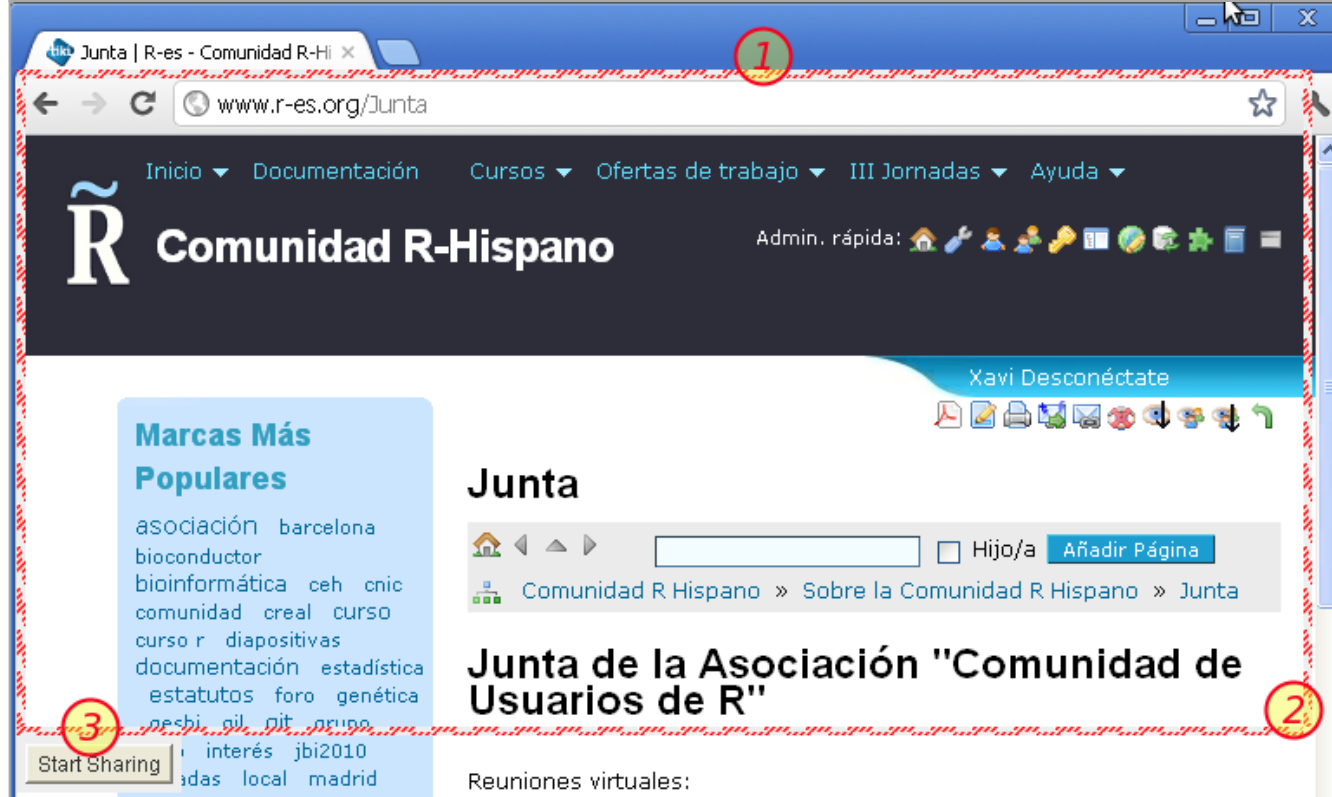
1.1.5. Desktop sharing

When you have the role of presenter, you can share your desktop for the other attendants to see it. Click the button in the upper left corner to share desktop (the icons that looks like a screen).



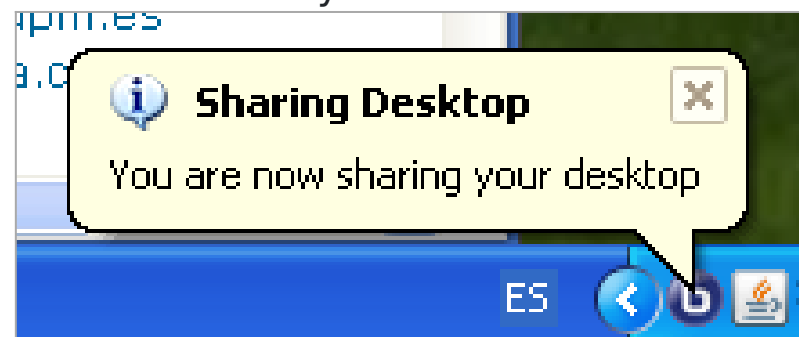
click to expand

Selecting a region of the desktop from the moderator user (a web page in this case). the lower right corner allows the resize of the window:



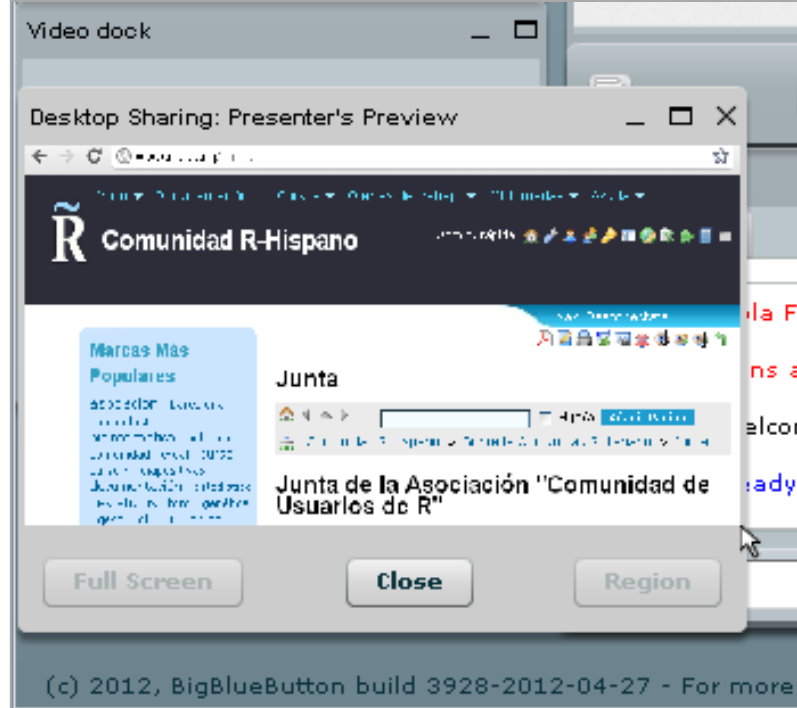
click to expand

Tray notification:



click to expand

And the sharing seen at the screen of the moderator itself:



click to expand

1.1.6. Permissions

Last, editing permissions for that BBB room name:

Assign permissions to this object

Assign Copy

Permissions

Toggle sections Show only selected

Anonymous	Registered	Editors	SubAdmins	Junta	Personas socias	Permission
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Can join a meeting (tiki_p_bigbluebutton_join)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Can moderate a meeting (tiki_p_bigbluebutton_moderate)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Can create a meeting (tiki_p_bigbluebutton_create)

Assign

click to expand

to be continued...

Videos about Tiki & BBB

The Tiki community Dogfoods BigBlueButton at tiki.org/live.

The Tiki community has been testing BigBlueButton for this type of live collaboration and members of the community have decided to enter in a long-term integration partnership to maintain it as a Tiki feature, starting in Tiki5.

About theÂ integration

Similar to Kaltura, BigBlueButton needs to be installed alongside Tiki (can be on a different physical server). Each project remains standalone, and we'll collaborate to continuously improve the glueware between the two. At first, Single Sign On, but over time, we expect that many features will meld. The Tiki community will DogFood extensively. Tiki8 integrated the new record and playback features from BigBlueButton 0.8

Set-up

Before setting up the tiki integration, the BigBlueButton server stack must be installed. Detailed instructions are provided for multiple platforms. However, using the provided virtual machine is the easiest way to go. Also note that there are heavy bandwidth requirements.

To enable the integration in tiki, you need the following information:

- The BigBlueButton server location.
- The server salt â€” a secret token used to generate call signatures. This value is located inside the bigbluebutton.properties file on the BigBlueButton server.
 - you can also have BBB report to you that server salt key with the command on the server:

```
bbb-conf --salt
```


Creating rooms

The user interface for BigBlueButton goes through a wiki plugin. You can use it in wiki pages or most wiki-parsed text areas. To schedule meetings on a calendar, you can use the calendar feature.

Sample

```
{bigbluebutton name=My Meeting Room}
```

If the server location was configured successfully, the BigBlueButton logo will appear. A create button will be proposed to create the new room (a permission is required, but administrators have all permissions). If the salt was set-up correctly, you will be redirected to the meeting room.

Going back to the plugin, you can set-up the permissions to select who can join the meeting room or moderate it. More info at [PluginBigBlueButton](#)

Asterisk

To use the voip feature when using a room name instead of a number:

Change

open the config: `sudo nano /etc/asterisk/bbb_extensions.conf` then replace: `exten => _XXXX.,1,Playback(conf-placeintoconf)` with: `exten => _.,1,Playback(conf-placeintoconf)` and replace: `exten = _XXXX.,n,Konference(${EXTEN},H)` with: `exten = _.,n,Konference(${EXTEN},H)` Than reboot the Big Blue Button server with `bbb-conf --restart`. note: if you don't have nano installed use `sudo apt-get install nano`

Uses

This will help with several related but slightly different uses.

Webinars / e-learning

Scheduled, live, interactive, one to many delivery of knowledge. The session could be one time (webinar) or an ongoing course with a regular schedule. This is BigBlueButton's core objective "our focus is to make the best web conferencing system for distance education."

Remote support

A visitor clicks a link on a brochure website and is put in contact with a representative of the organization. This is similar to Tiki's Live Support feature (ad hoc 1 on 1 chat help support), but with BigBlueButton's feature set, there are way more possibilities (screen sharing, co-browsing, etc.)

Team meetings

Useful for Teams to meet & coordinate. These are typically scheduled (for instance with PluginConvene since Tiki9 and Tiki Calendar) and have an agenda (presumably in a wiki page). Ideally, decisions are recorded (presumably in a wiki page). Everyone can be on audio & webcam. Headsets are recommended.

Broadcasting live events

This will be useful during TikiFests. A projector can be setup at the live event so all participants can see everyone and follow the discussion on the chat. Typically, remote participants can listen in, but will respond in the text chat. (Just because of logistics and ambient noise).

- An alternative is <http://www.ustream.tv/user/tikiwiki>
- An example: TikiFestBigBlueButton

Community chat

This is the place to go to hang out with "everyone". It's on 24/7 and can be idle for long whiles. It should be logged as a lot of knowledge, answers and links are shared there. Quick "decisions" are often taken there as well (ask a quick question and if *everyone* seems ok with it, it must be ok). Even if some users may be identified with special rights (ex. ops), the room is very p2p. It's possible to break out of the room into a smaller one for a short, focused or private discussion. Historically, we use irc.tiki.org but we could eventually develop an IRC to BigBlueButton gateway.

Surveillance camera

Typically a video stream which can be monitored and recorded.

Related links

- <http://bigbluebutton-blog.blogspot.com/2010/08/pictures-from-tikifestbigbluebutton.html>
 - <http://bigbluebutton-blog.blogspot.com/2010/04/tiki-wiki-looking-closely-at.html>
 - dev:BigBlueButton
 - <http://hostbbb.com/> which is known to work with Tiki
alias
-

- BBB ko
- Big Blue Button ko