BigBlueButton module

In the administration the virtual classroom BigBlueButton can be activated. This article describes the configuration of multiple BigBlueButton servers, load balancing and setting up system-wide room templates.

Instructions on how to configure individual online dates are described in the chapter Course Element BigBlueButton.

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In the administration the tabs Server, Room templates, Online appointments and Calendar are available.

Server

The available BigBlueButton servers per OpenOlat instance are displayed here.

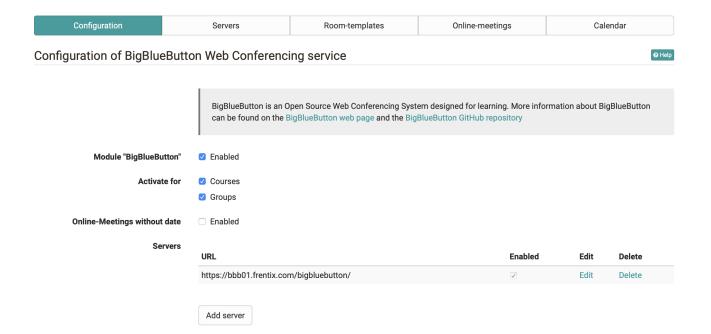
Configuration

- Module "BigBlueButton": Activation of the functionality
- Activate for courses/groups: Activate functionality for courses/groups
- · Online-Meetings without date: Additional option to activate "permanent room reservations" in addition to online-meetings
- Servers: In the configuration the available BigBlueButton servers per OpenOlat instance are entered.



Online-Meetings without date

Online-Meetings without a date (permanent room reservations) are not visible in the calendar and count as booked at all times towards the limits of the room template.



Add BigBlueButton-Server

- BigBlueButton API URL: URL of the BBB-Server
- Shared secret: API Key of the BBB-Server
- Capacity factor: Server weighting in load balancing
- Activate server: Server is available for load balancing

* BigBlueButton API URL	
	https://bigbluebutton.openolat.com/bigbluebutton/
* Shared secret	
Capacity factor	1.0
	A number between 1 and 100 (for example: 1.23)
Activate server	✓ Enabled
	Cancel Save Check server connection

Load balancing

The goal is to distribute the generated load of simultaneous online meetings to the available BigBlueButton server by considering a set of performance parameters (such as number of videos and number of participants in the meetings). OpenOlat has an integrated load-balancing for this purpose. At the initial start of the online-meeting (depending on the configuration by the moderator or the first participant) the server with the lowest load is selected for the meeting. The load is calculated from the different measurement factors and weights the result with the capacity factor. Using the filter above the list, the server key figures can be displayed over the entire BBB server or only the sessions of the current OpenOlat server.



The capacity factor is recorded with a value between 1 and 100 per server. The calculated number of users* on the server is multiplied by the capacity factor. In this way, a server with stronger performance (RAM/CPU/disk) adapts to a weaker one.

* Weighting when counting users from high to low: video users, audio users, viewer

Konfiguration	Server		Raumvorlagen			Online-Termine			Kalender	
				4 Einträg	ge					7- 0
URL	Kapazität	# Moderatoren	# Teilnehmer	# Listeners	# Voices	# Video	Max. Benutzer	# Recordings	# Br Rec	Alle OpenOlats Dieses OpenOlat
https://bbb01.frentix.com/bigbluebutton/	6	28	61	20	26	3	578	3	0	13.5
https://bbb02.frentix.com/bigbluebutton/	′ 4	1	7	0	7	1	16	1	0	4.2
https://bbb03.frentix.com/bigbluebutton,	4	2	2	0	2	2	4	1	0	2.5
https://bbb.frentix.com/bigbluebutton/	6	1	9	0	8	0	16	1	0	2.7

Room templates

The room templates are available for selection when creating a new online-meeting. Templates control the following characteristics:

- The available functions and standard settings in the online-meeting
- The number of possible simultaneous users per room
- · Limits regarding duration and number of online rooms available

Configuration of a room template

- Room name: Name of the room template
- **Description:** Description of the room template (e.g. learning scenario, field of application)
- Number of participants: Maximum number of participants
- Duration (minutes): Maximum length of online-meeting
- Enable room-template: Activated room templates are available in courses/groups for new online appointments and can be chosen by course owners
- Number of rooms: Maximum number of concurrent rooms of the template

- Open for external users: A direct link is automatically generated for external users so that they can enter the BigBlueButton room without having to call OpenOlat first. The link is then displayed in the room configuration and can also be changed by the course owner or coach if necessary, as well as passed on to guests.
- Room-template activated for <Role>: Determines which roles can use the room template for new online-meetings. If the "Group member" option is activated, the template can also be used and further configured in OpenOlat groups.

* Room name	Classes
Description	
	.#
* Number of participants	30
Duration (minutes)	240
Enable room-template	
Number of rooms	20
Open for external users	
Room-template activated for	☐ Group user
Room-template activated for	
	☑ Coach
	✓ Course owner ✓ Author
	✓ Administrator
Default settings of the room tem	plate
Webcams only for moderator	s Yes No
Webcains only for moderator	3 165 VIVO
Disable participar	nt Yes • No
microphone on joi	
Allow moderators to activat	
the participants microphon	e
A II	To Man O No.
Allow meeting recordin	g • Yes · No
Automatically start recordin	g Yes • No
Automatically Start recording	y Tes William
Allow to start / stop of	of Yes No
recording	
Allow breakout room	s • Yes O No
Put participants into loc	
mode on joi	II .
Prevent disabling of th	e Yes O No
automatic locking by th	
moderate	

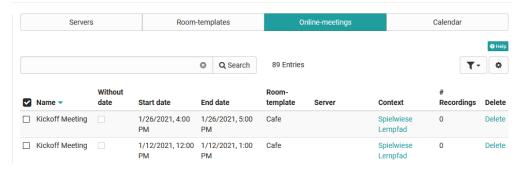
Default settings for locked participants

For locked participants...

disable webcam	O Yes O No
disable microphone	O Yes O No
disable public chat	• Yes O No
disable private chat	O Yes O No
disable shared-notes	O Yes O No
disable participant list	O Yes O No
disable layout changes	○ Yes ○ No

Online-Meetings

Overview of configured online-meetings with the possibility to switch directly to the course/group (context) and/or delete this online-meeting.



Calendar

Calendar overview of configured online-meetings to check times with high occupancy and graphically display overlaps. This gives you a quick overview of the scheduled synchronous meetings of the entire OpenOlat instance and, if necessary, you can quickly select an alternative date.

