

Plugin *LiveVoting*

Documentation

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Changes

Version 1.0, 31.03.2015	fsx	- created
Version 2.0, 09.03.2016	fsx	- Updated for new release 3.0.0
Version 2.1, 13.10.2106	ns	- updated for version 3.2.9
Version 2.2, 07.03.2017	ns	- updated for version 3.4.0
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Introduction

Feature overview

PL-Version	Changes
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1.0.0	LiveVoting is a repository object plugin which allows course admins to create short votings. User can easily vote with a token-based acces to ILIAS which also allows to implement a SMS Service.
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The results of a voting can be presented live!

2.0.0	Support for ILIAS 5
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3.0.0	Complete new version of ILIAS LiveVoting, featuring the following:
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- Voting types
- Multiple votings per LiveVoting session
- Presentator-driven navigation
- Better performance
- Complete Bootstrap support

3.2.9	New Features:
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- Voting rounds

Improvements and bug fixes:

- Performance improvements
- Chrome compatibility improvement
- Compatible with ILIAS 5.1

3.4.0	New Features:
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- Caching is now configurable.
- Result API
- Voters are shown while a Voting is running.

Improvements and bug fixes:

- ILIAS 5.0 support dropped
- ILIAS 5.2 is now supported

3.5.0	New Features:
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- New "Number Range" question type.

Changed:

- The "Free Input" question type, now groups equal answers together.
- The "Correct Order" question type, shuffles the items for each voting participant.

Improvements and bug fixes:

- Code clean up

Installation

Start in your ILIAS base directory and execute:

```
mkdir -p Customizing/global/plugins/Services/Repository/RepositoryObject
cd Customizing/global/plugins/Services/Repository/RepositoryObject
git clone https://github.com/studer-raimann/LiveVoting.git
cd LiveVoting
php composer.phar install
```

As ILIAS administrator go to "Administration->Plugins" and install/activate the plugin.

4.1 Shortlink-Config

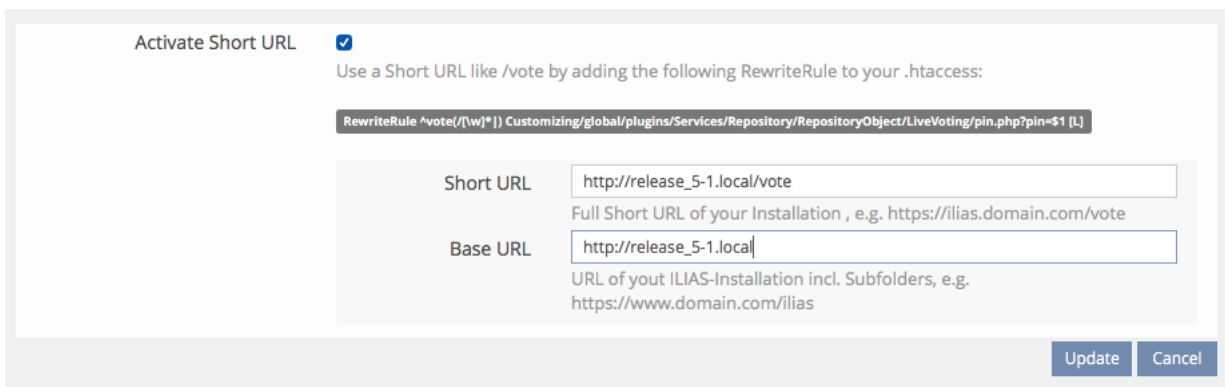
To use the shortlink-feature you must config a Rewrite Rule in .htaccess or Apache-Config:

```
<IfModule mod_rewrite.c>
RewriteRule ^vote(/[\w]*)$
Customizing/global/plugins/Services/Repository/RepositoryObject/LiveVoting/pin.php?pin=$1
[L]</IfModule>
```

This example allows to access a LiveVoting directly with <http://ilias.domain.org/vote/123>

4.2 Configure Shortlink

If you added the RewriteRule as mentioned above, open the plugin administration and activate the shortlink function:



If your installation runs on <https://ilias.yourdomain.com> insert the following:

```
Short-URL: https://ilias.yourdomain.com/vote
Base-URL: https://ilias.yourdomain.com
```

If your installation runs on <https://www.yourdomain.com/ilias> insert the following:

```
Short-URL: https://www.yourdomain.com/ilias/vote
Base-URL: https://ilias.yourdomain.com/ilias
```

4.3 Configuration on Multi-Client-Installations

LiveVoting is only compatible with One-Client-Installations or can at least only run on one client at the same time. To specify which client uses LiveVoting, provide a textfile called „client.txt“ in the plugin root (where the file plugin.php exists). Insert the client name which uses LiveVoting, e.g.:

```
root@vagrant-ubuntu-trusty-64:LiveVoting# echo "clientname" > client.txt
```

4.4 Configuration when using symlinks

In some server configurations LiveVoting has problems to determine the actual directory, where ILIAS runs. This leads to an exception like:

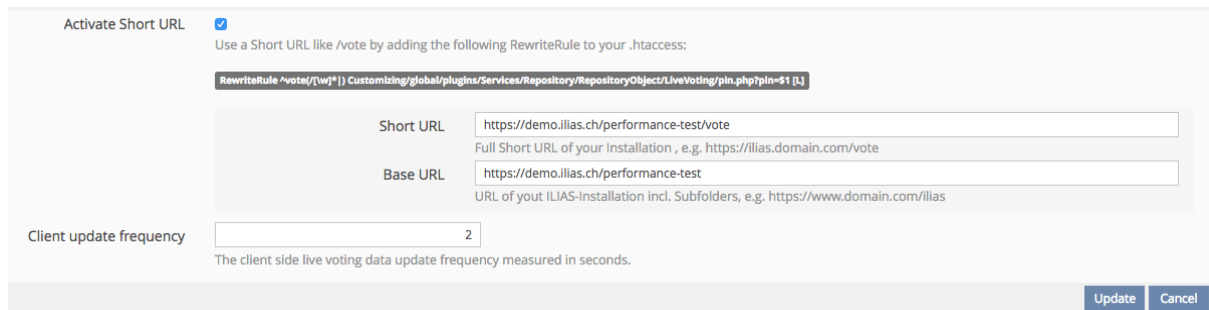
```
LiveVoting cannot determine correct directory. If your installation isn't located at  
'/var/www/mysymlink', LiveVoting is currently unable to run
```

In that case you should specify the path to the ILIAS-root in a file called „path.txt“ in the plugin-root (where the file plugin.php exists). E.g.:

```
root@vagrant-ubuntu-trusty-64:LiveVoting# echo "/var/www/ilias" > path.txt
```

4.5 Configure voter update frequency

Navigate to the LiveVoting plugin configuration.



Activate Short URL ☒

Use a Short URL like /vote by adding the following RewriteRule to your .htaccess:

```
RewriteRule ^vote/(.*) Customizing/global/plugins/Services/Repository/RepositoryObject/LiveVoting/plugin.php?pin=$1 [L]
```

Short URL

Full Short URL of your Installation , e.g. https://ilias.domain.com/vote

Base URL

URL of your ILIAS-Installation incl. Subfolders, e.g. https://www.domain.com/ilias

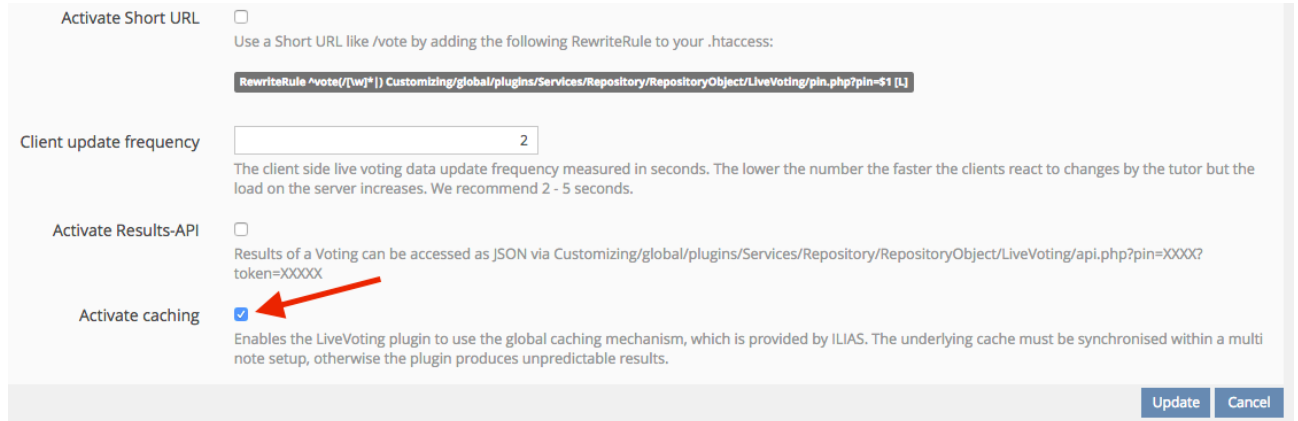
Client update frequency

The client side live voting data update frequency measured in seconds.

Now you can configure a value between 1 and 60 seconds. Be aware that this option has a strong impact on the LiveVoting performance. The default value for this option is 1 second, because that's the behaviour of older plugin versions.

4.6 Configure plugin cache

Navigate to the LiveVoting plugin configuration.




Activate Short URL ☐
Use a Short URL like /vote by adding the following RewriteRule to your .htaccess:

```
RewriteRule ^vote(/[tw]*) Customizing/global/plugins/Services/Repository/RepositoryObject/LiveVoting/pin.php?pin=$1 [L]
```

Client update frequency
The client side live voting data update frequency measured in seconds. The lower the number the faster the clients react to changes by the tutor but the load on the server increases. We recommend 2 - 5 seconds.

Activate Results-API ☐
Results of a Voting can be accessed as JSON via Customizing/global/plugins/Services/Repository/RepositoryObject/LiveVoting/api.php?pin=XXXX?token=XXXXX

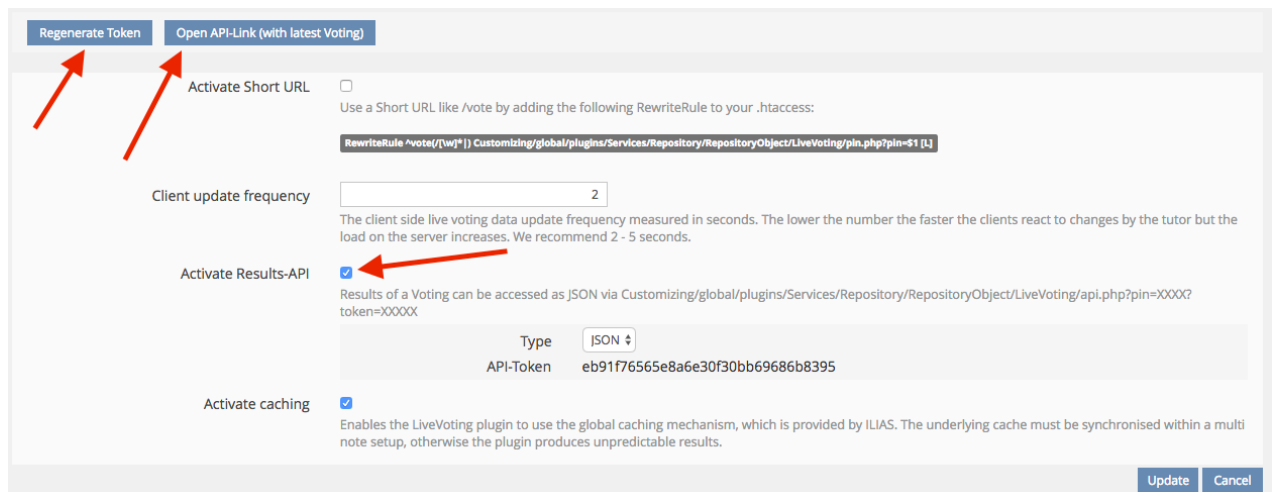
Activate caching ☒ 
Enables the LiveVoting plugin to use the global caching mechanism, which is provided by ILIAS. The underlying cache must be synchronised within a multi note setup, otherwise the plugin produces unpredictable results.

Update Cancel

Tick the “Activate caching” option to enable the plugin cache. Please make sure to enable the ILIAS global cache, otherwise LiveVoting is not able to use the cache.

4.7 Configure Results-API

Navigate to the LiveVoting plugin configuration.

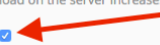


Regenerate Token Open API-Link (with latest Voting)

Activate Short URL ☐
Use a Short URL like /vote by adding the following RewriteRule to your .htaccess:

```
RewriteRule ^vote(/[tw]*) Customizing/global/plugins/Services/Repository/RepositoryObject/LiveVoting/pin.php?pin=$1 [L]
```

Client update frequency
The client side live voting data update frequency measured in seconds. The lower the number the faster the clients react to changes by the tutor but the load on the server increases. We recommend 2 - 5 seconds.

Activate Results-API ☒ 
Results of a Voting can be accessed as JSON via Customizing/global/plugins/Services/Repository/RepositoryObject/LiveVoting/api.php?pin=XXXX?token=XXXXX

Type	API-Token
JSON	eb91f76565e8a6e30f30bb69686b8395

Activate caching ☒
Enables the LiveVoting plugin to use the global caching mechanism, which is provided by ILIAS. The underlying cache must be synchronised within a multi note setup, otherwise the plugin produces unpredictable results.

Update Cancel

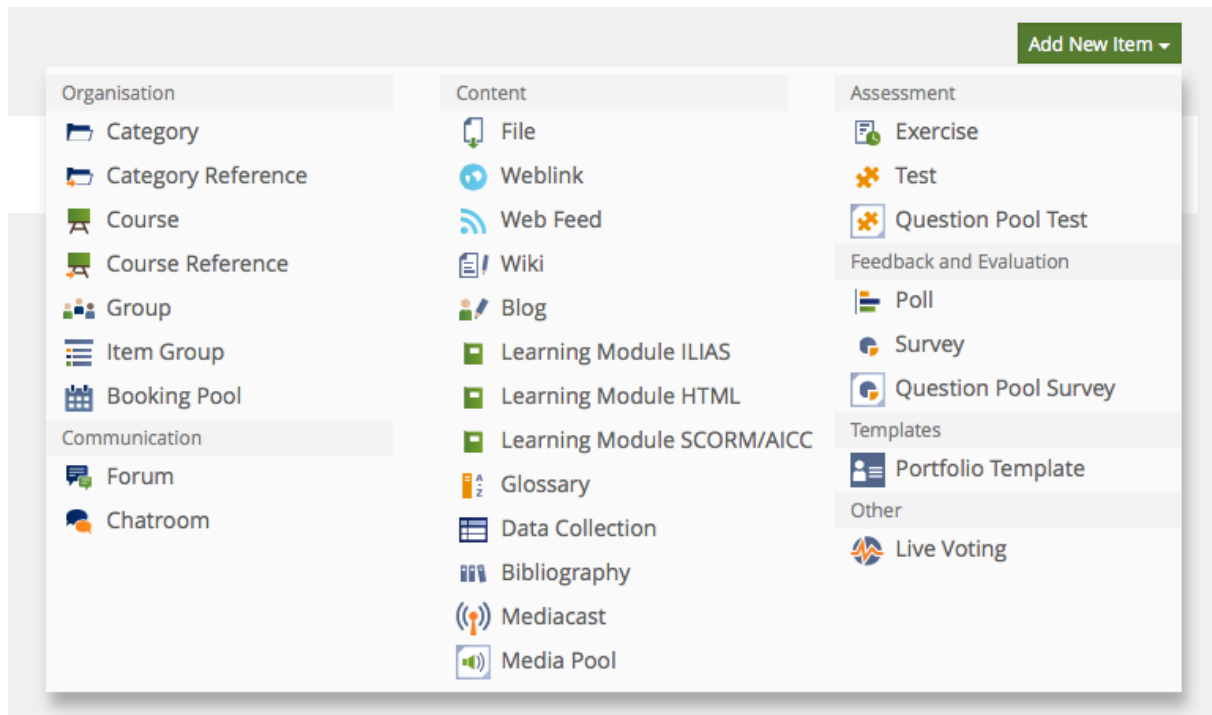
Tick the Activate Results-API to enable the API access. ILIAS will generate a token which must be used to access the API. The default output format of the API is JSON but it can be switch to XML if needed.

While the Results-API is enabled, token can be regenerated with the “Regenerate Token” button. The “Open API-Link” button opens the last voting done, which is useful for developers to get in touch with the Result-API.

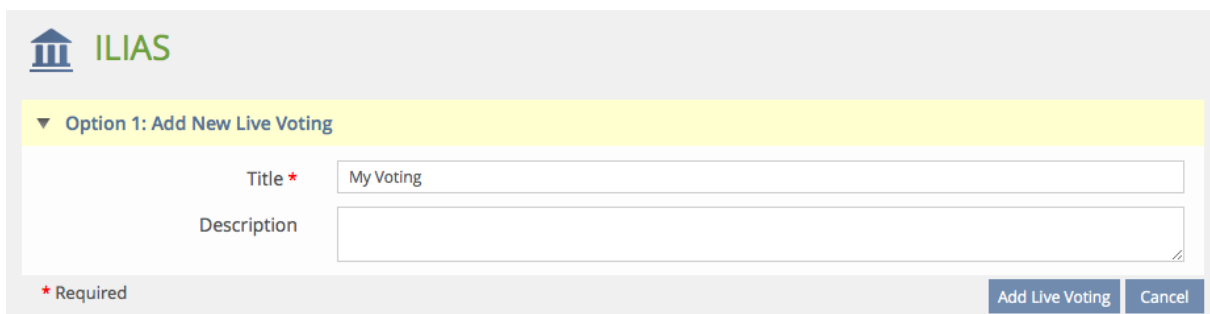
Usage of the plugin

4.8 Create LiveVoting sessions

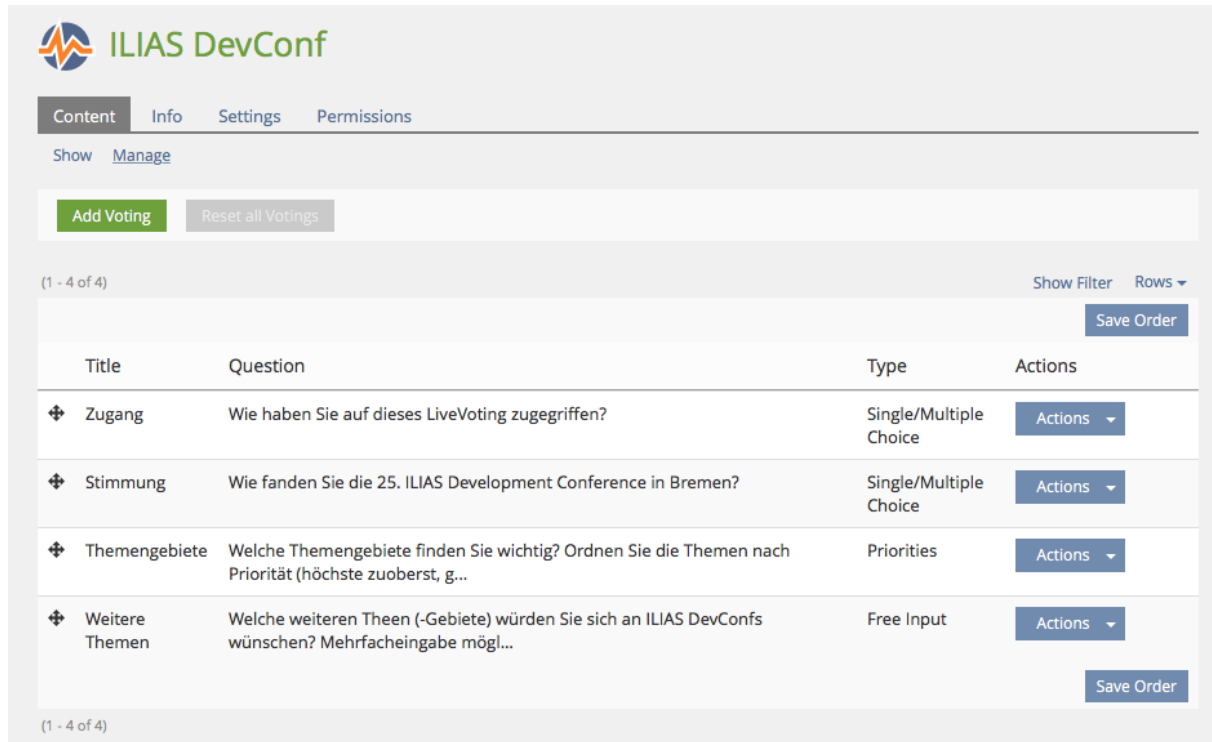
Create new voting sessions in the ILIAS-Repository:



Define a title and a description for your voting session:



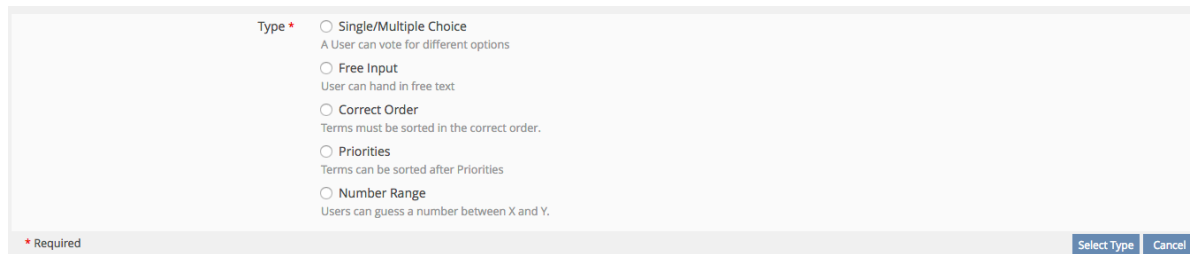
4.9 Add votings to the session



The screenshot shows the ILIAS DevConf interface. At the top, there's a navigation bar with 'Content', 'Info', 'Settings', and 'Permissions'. Below it, there's a 'Show Manage' link. A green 'Add Voting' button is prominent. Below the button, there's a table with 4 rows of votings. The table has columns for 'Title', 'Question', 'Type', and 'Actions'. The rows are: 'Zugang' (Single/Multiple Choice), 'Stimmung' (Single/Multiple Choice), 'Themengebiete' (Priorities), and 'Weitere Themen' (Free Input). Each row has an 'Actions' dropdown menu. There are 'Save Order' buttons at the top right and bottom right of the table.

Title	Question	Type	Actions
✚ Zugang	Wie haben Sie auf dieses LiveVoting zugegriffen?	Single/Multiple Choice	Actions
✚ Stimmung	Wie fanden Sie die 25. ILIAS Development Conference in Bremen?	Single/Multiple Choice	Actions
✚ Themengebiete	Welche Themengebiete finden Sie wichtig? Ordnen Sie die Themen nach Priorität (höchste zuoberst, g...	Priorities	Actions
✚ Weitere Themen	Welche weiteren Theen (-Gebiete) würden Sie sich an ILIAS DevConfs wünschen? Mehrfacheingabe mögl...	Free Input	Actions

Add new votings by clicking „Add Voting“. After that, a selection of the desired voting type is displayed:



The screenshot shows a dialog for selecting a voting type. It has a 'Type' label with a red asterisk. There are five radio button options: 'Single/Multiple Choice' (selected), 'Free Input', 'Correct Order', 'Priorities', and 'Number Range'. Each option has a brief description below it. At the bottom left, there's a red asterisk and the word 'Required'. At the bottom right, there are 'Select Type' and 'Cancel' buttons.

Type *

- ☒ Single/Multiple Choice
A User can vote for different options
- ☐ Free Input
User can hand in free text
- ☐ Correct Order
Terms must be sorted in the correct order.
- ☐ Priorities
Terms can be sorted after Priorities
- ☐ Number Range
Users can guess a number between X and Y.

* Required

Select Type Cancel

Each voting has a title and a question text. If the installation supports the RichTextEditor (RTE), some basic formats are allowed. Additionally each voting type has it's specific Settings:

CREATE Create Cancel

Title *

Frage 003

Question *

Lorem ipsum dolor sit amet?

TYPE-SETTINGS

Multiple Selection ☐

User can select more than one Option

Options

Option-Text

+

-

^

v

Lorem

Option-Text

+

-

^

v


Ipsum

* Required

Create

Cancel

4.10 Starting a voting session

 ILIAS DevConf

Content

Info

Settings

Permissions

Show

Manage

Start LiveVoting


Votings

Start LiveVoting and unfreeze directly

2428

http://release_5-1.local/vote/2428

0 Online



There are three option to start a voting session:

- Direct start („Start LiveVoting“) with first voting
- Start a specific voting (Dropdown „Votings“)
- Start with first voting and unfreeze directly

Since a voting session starts in frozen mode, the last option allows to directly unfreeze the voting session.

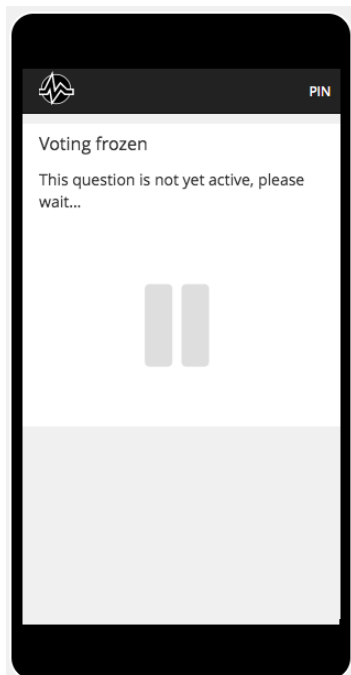
4.11 Accessing the Voting as Voter

The voters have three different options to participate the voting session:

- Open shortlink, e.g. http://release_5-1.local/vote/ and insert the voting PIN
- Accessing the shortlink URL incl. the PIN, e.g. http://release_5-1.local/vote/2428
- Scan the QR code and open the URL

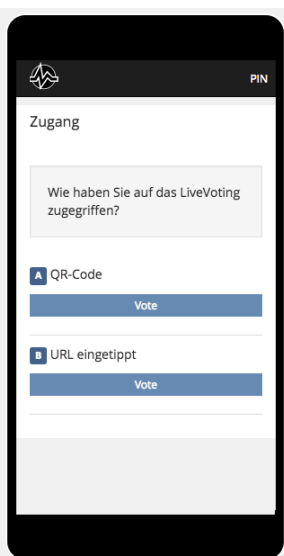

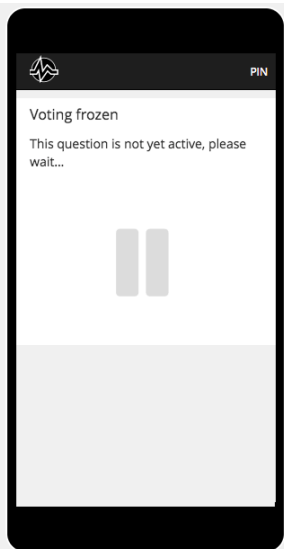



After opening the voter screen, voters will have to wait until the presenter unfreezes the voting:

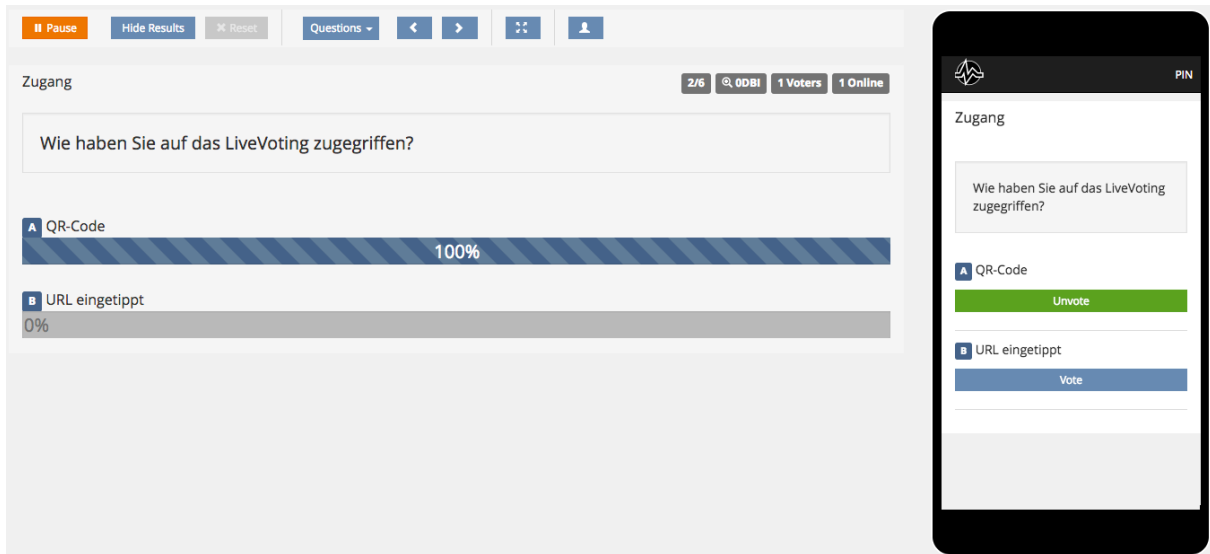


4.12 Navigating as presenter

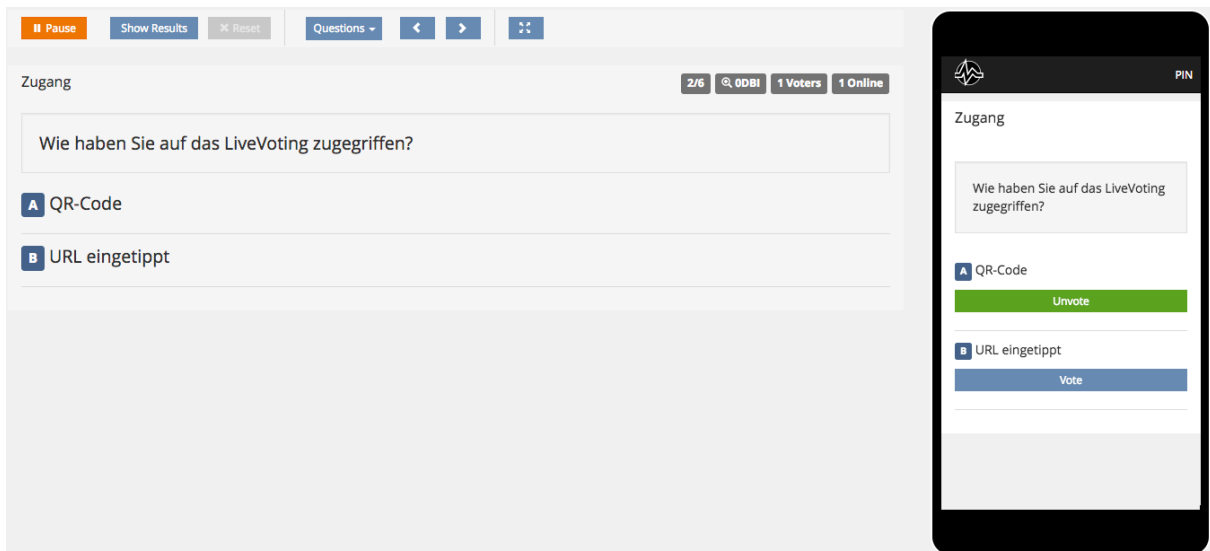
4.12.1 Freeze/Unfreeze



4.12.2 Show/Hide results



The screenshot displays the LiveVoting interface in a standard view. The top navigation bar includes buttons for 'Pause', 'Hide Results', 'Reset', 'Questions', and navigation arrows. The main content area shows the question 'Wie haben Sie auf das LiveVoting zugegriffen?' with two options: 'A QR-Code' (100%) and 'B URL eingetippt' (0%). To the right, a mobile app interface is shown, featuring the same question and options, with 'Unvote' and 'Vote' buttons.



This screenshot shows the LiveVoting interface with the 'Show Results' button highlighted. The question and options remain the same, but the progress bars are not visible. The mobile app view on the right is identical to the previous one, showing the 'Unvote' and 'Vote' buttons.

4.12.3 Fullscreen mode

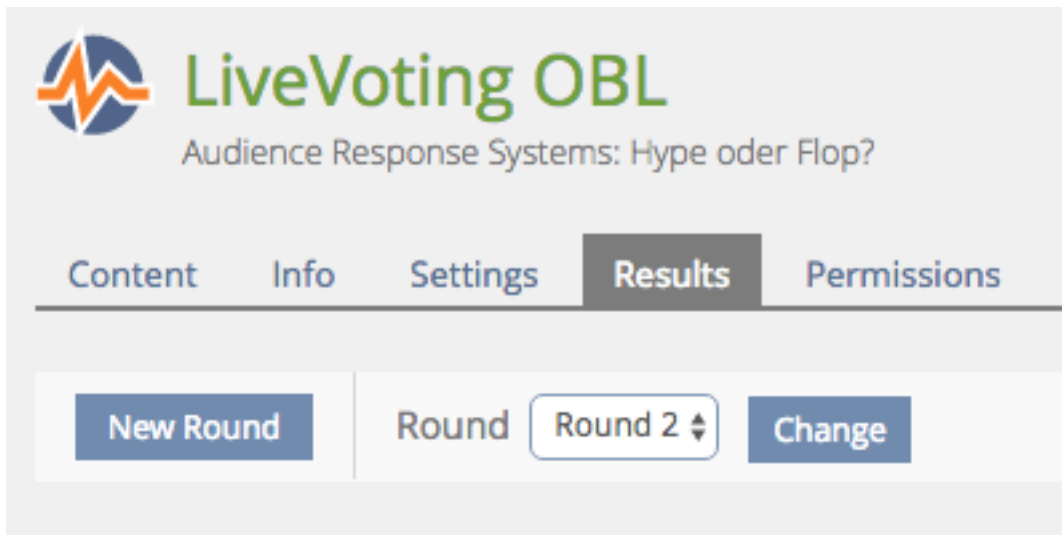


The screenshot shows the LiveVoting interface in fullscreen mode. The top navigation bar is visible, and the question 'Wie haben Sie auf das LiveVoting zugegriffen?' is displayed. The progress bars for 'A QR-Code' (100%) and 'B URL eingetippt' (0%) are clearly visible.

4.13 Start new voting round

Now it's supported to start new rounds and keep the old voting results.

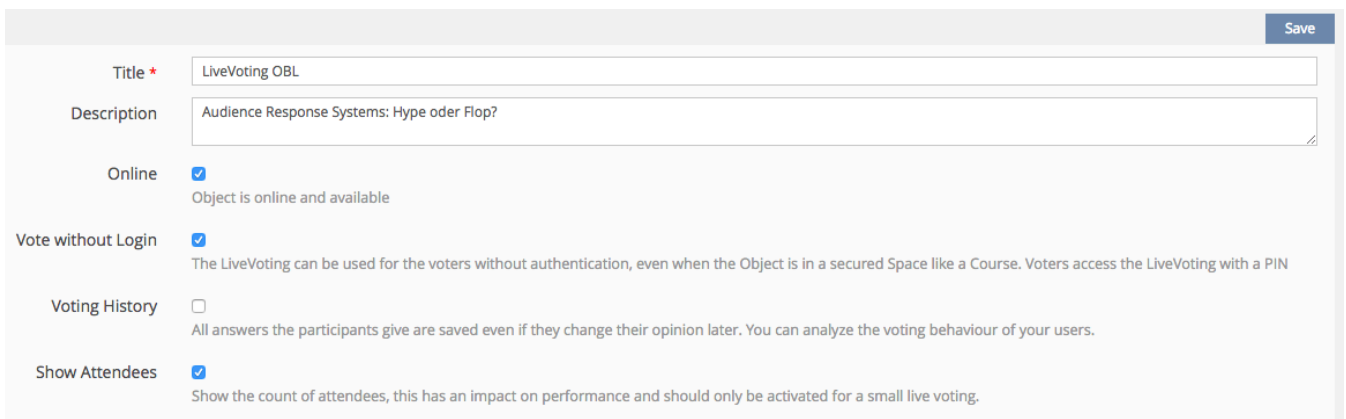
To start a new round navigate as presenter to the tap named Result and click onto the button labeled "New Round". It's important to know that you can't continue to use an old round the button Change only changes the results view and not the round of the player itself.



4.14 Presenter settings

Navigate as presenter to the tab named Settings.

4.14.1 Properties

The screenshot shows the "Settings" page for LiveVoting OBL. At the top right is a "Save" button. The settings are organized into a list with labels on the left and input fields or checkboxes on the right. The settings are: "Title *" with the value "LiveVoting OBL"; "Description" with the value "Audience Response Systems: Hype oder Flop?"; "Online" with a checked checkbox and the text "Object is online and available"; "Vote without Login" with a checked checkbox and the text "The LiveVoting can be used for the voters without authentication, even when the Object is in a secured Space like a Course. Voters access the LiveVoting with a PIN"; "Voting History" with an unchecked checkbox and the text "All answers the participants give are saved even if they change their opinion later. You can analyze the voting behaviour of your users."; and "Show Attendees" with a checked checkbox and the text "Show the count of attendees, this has an impact on performance and should only be activated for a small live voting."

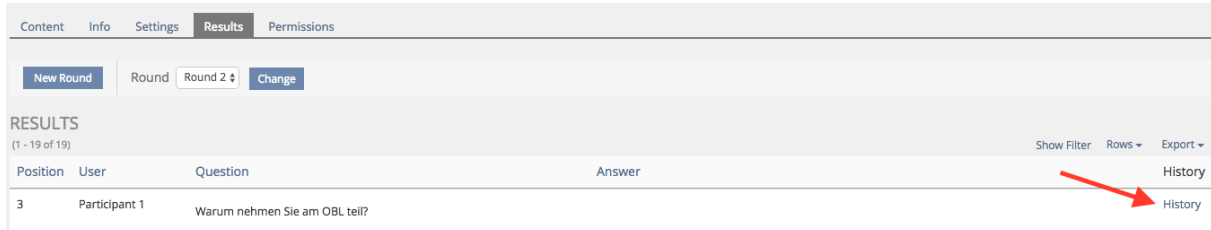
4.14.1.1 Vote without Login

The vote without login option is the recommended way to hold a LiveVoting in a big audience. This option allows participants to start the voting with a pin displayed by the presenter. If there are performance issues, this option may reduce the server load in some circumstances.

4.14.1.2 Voting History

This option activates a voting history for all participant. The voting history also includes changed votes of the participants.

Navigate as presenter to the tab named Result and click on the history link. Be aware that the history can't be generated for a LiveVoting which ran before the option was enabled.



Content	Info	Settings	Results	Permissions
New Round Round Round 2 Change				
RESULTS				
(1 - 19 of 19)				
Position	User	Question	Answer	History
3	Participant 1	Warum nehmen Sie am OBL teil?		History

4.14.1.3 Show Attendees

The show attendees option counts the number of participants of the ongoing LiveVoting based on the configured refresh time see chapter 4.5.

4.14.2 Behaviour while navigating

- | | |
|---------------------|---|
| Frozen-State | <ul style="list-style-type: none"><input checked="" type="radio"/> Question is always active after changing
Users can vote directly after switching question.<input type="radio"/> Question is always inactive after changing
Users can vote after the presentator presses the Vote-Button the question.<input type="radio"/> Reuse Status
Frozen-State is consistent after switching question. |
| Show Results | <ul style="list-style-type: none"><input checked="" type="radio"/> Results are always visible
Results are always visible after switching question.<input type="radio"/> Results are always hidden
Results are always hidden after switching question.<input type="radio"/> Reuse state
The State is consistent after switching question. |

4.14.2.1 Frozen-State

The frozen state describes the behavior of player takes after the presenter switches the question.

4.14.2.2 Show Results

The Show Results option describes the behavior of the result display after the question was changed by the presenter.

API

5.1 Results

5.1.1 Endpoints

The endpoint without URL rewriting looks as follows:

```
{(LIAS)}/Customizing/global/plugins/Services/Repository/RepositoryObject/LiveVoting/api.php?token={Token}&type={MediaType}&pin={LiveVotingPin}
```

5.1.1.1 Token

The token which can be acquired via the plugin configuration.

5.1.1.2 MediaType

The media type has two possible values.

1 = JSON

2 = XML

5.1.1.3 LiveVotingPin

The LiveVoting pin is shown at the start page of each LiveVoting.

5.1.2 Example JSON Response

```
{
  "Info": {
    "Title": "LiveVoting",
    "Round": "1",
    "RoundId": "1",
    "Pin": "0DBI",
    "Date": "2017-04-10T09:16:45+0200"
  },
  "Votings": {
    "4": {
      "Id": 4,
      "Title": "Zugang",
      "QuestionType": "SingleVote",
      "QuestionTypeId": 1,
      "Question": "Wie haben Sie auf das LiveVoting zugegriffen?",
      "Position": 4,
      "Options": [
        {
          "Id": 8,
          "Text": "QR-Code",
          "Position": 1
        },
        {
          "Id": 9,
          "Text": "URL eingetippt",
          "Position": 2
        }
      ]
    },
    "Voters": [
      {
        "Identifizier": "0",
        "AnswerIds": [
          ],
        "AnswerText": ""
      },
      {
        "Identifizier": "fdm01a7jj78r6omqkchnjciri4",
        "AnswerIds": [
          7
        ],
        "AnswerText": "QR-Code"
      }
    ]
  }
}
```