TITUS LEARNING

Read Only Moodle

Frozen but available

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Titus Learning

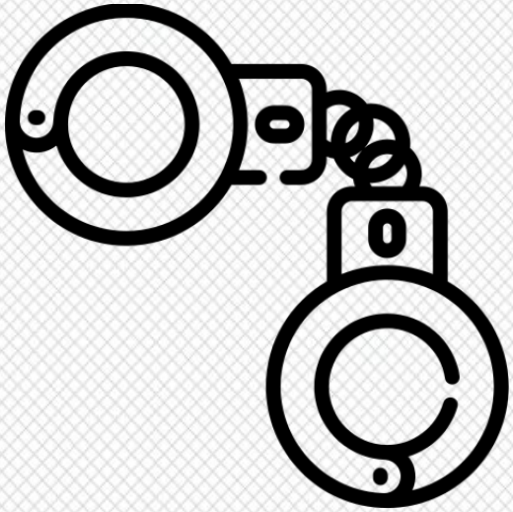
End of year problem

- Require ‘snapshot’ of student work
- Easy access to old learning material
- Reduce backup requirement on live systems

Potential solutions

- Using permissions transforms how Moodle looks
- Create course backups (mbz file)
- Freezing introduced with Moodle 3.6

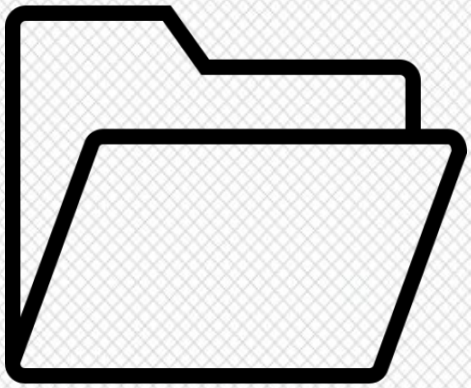
Using Moodle permissions



- Appears to be the ‘right’ way of doing things
- Complex and error prone
- Significantly changes appearance/access

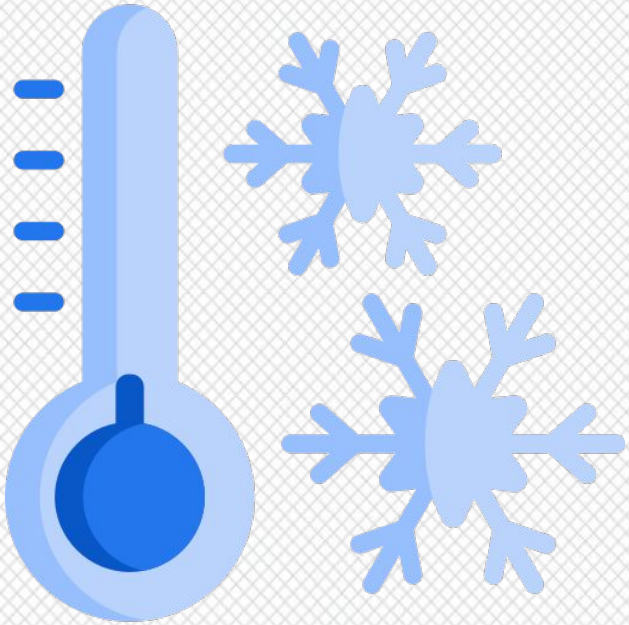
Moodle backups

- Not for the technophobe
- Where do you keep them?
- Restoring can sometimes cause issues



Moodle 3.6 context freezing

- An “experimental” feature
- Significantly changes appearance
- Only available in 3.6 Si



The read_only solution

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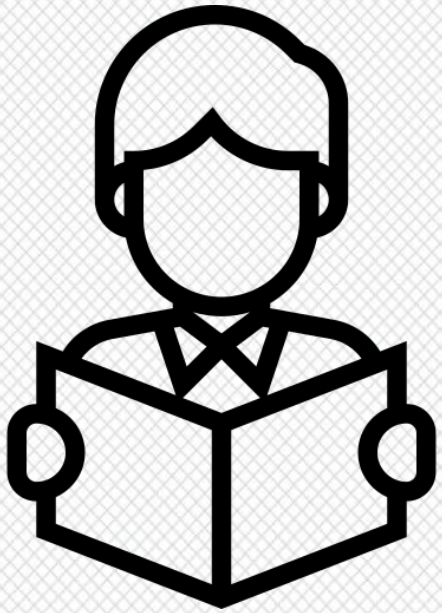
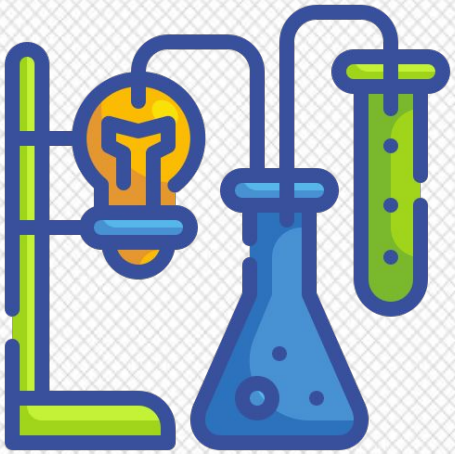
- Replace mysqli with mysqliro
- All database updates silently thrown away
- No change to appearance
  - (apart from warning on login)



Freezing is experimental



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TS101 Admin User

Test Site 101

Dashboard / Site administration / Development / Experimental / Experimental settings

Blocks editing on

Experimental settings

Context freezing
contextlocking

Default: No

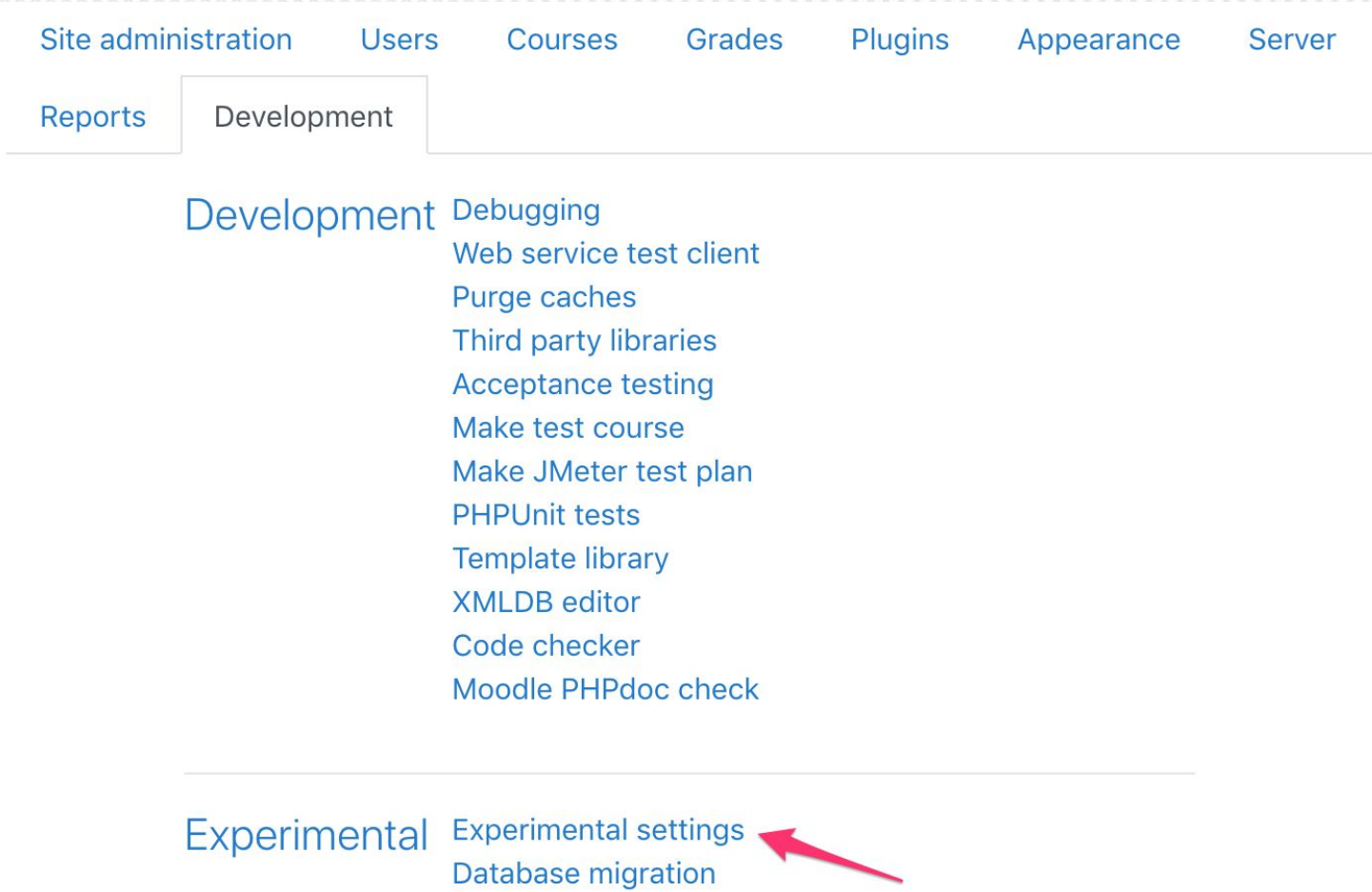
This setting enables read-only access to be set for selected categories, courses, activities or blocks.

Context freezing applies to administrators
contextlockappliestoadmin

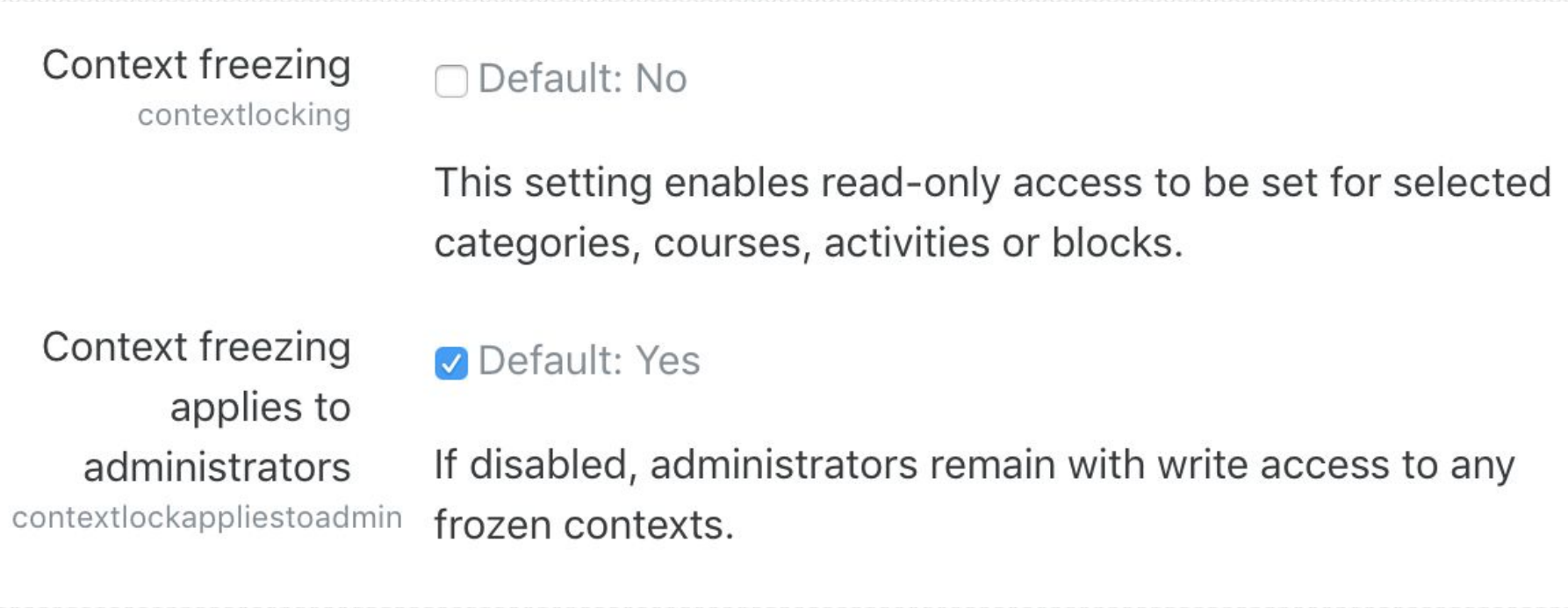
Default: Yes

If disabled, administrators remain with write access to any frozen contexts.

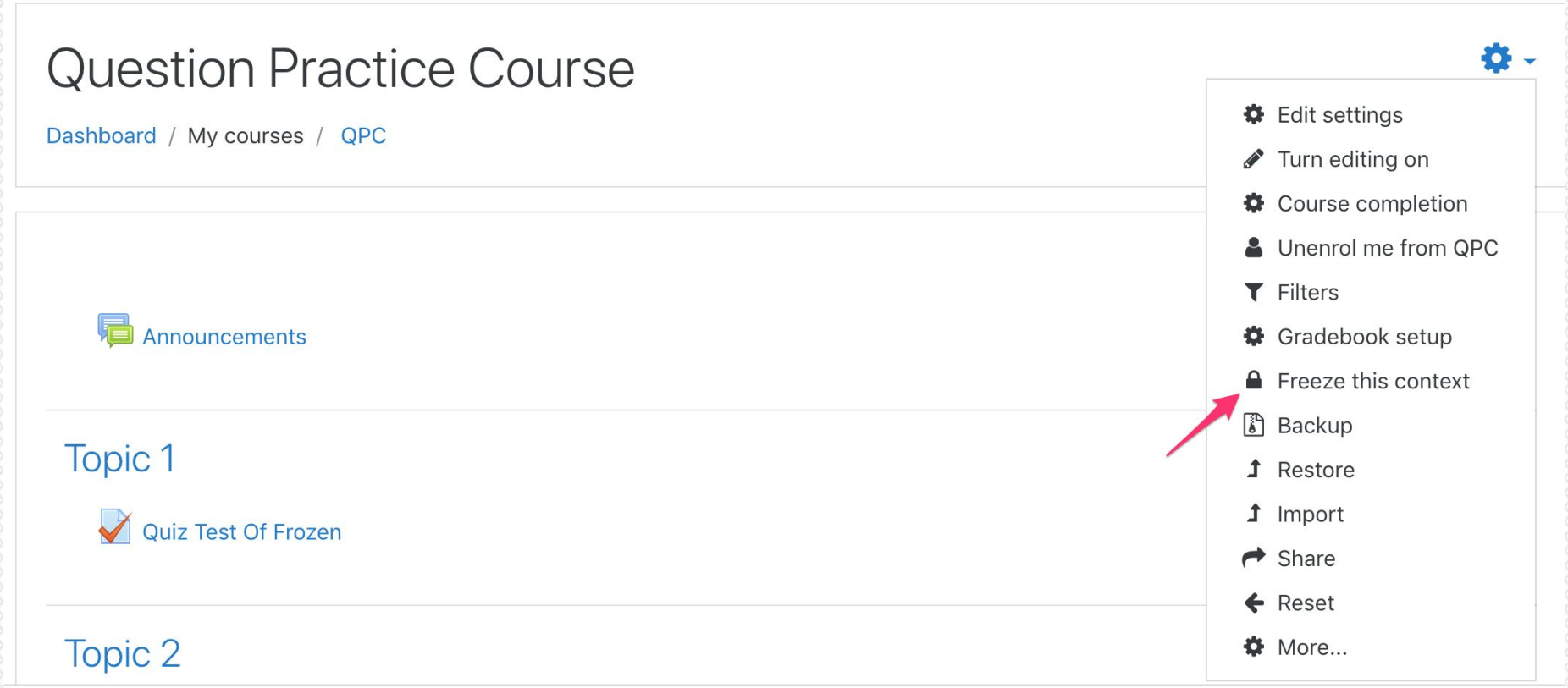
Turning freezing on



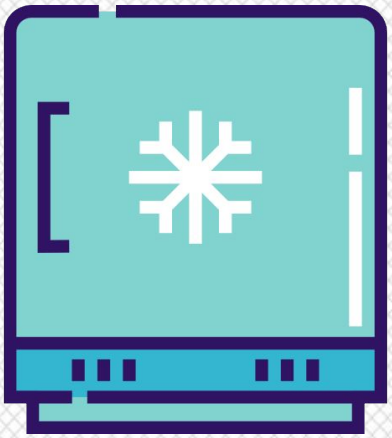
admin/settings.php?section=experimentalsettings



Freezing a course



Quiz on a frozen course



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Quiz Test Of Frozen

Grading method: Highest grade

◄ Announcements

Jump to...

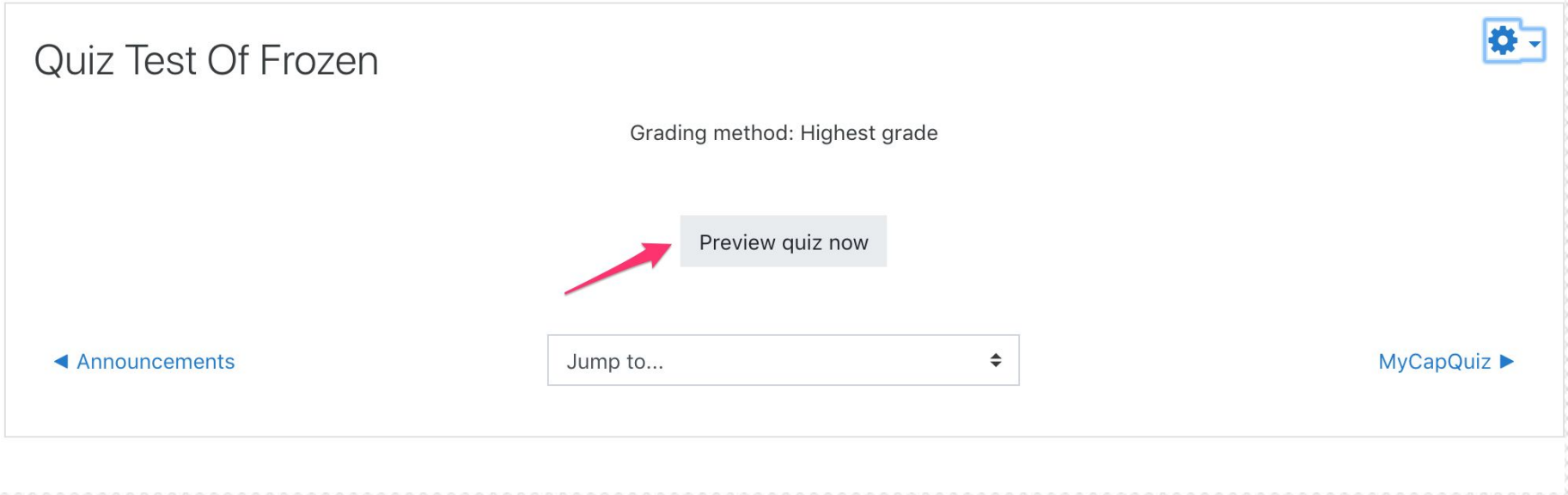
- Results
  - Grades
  - Responses
  - Statistics
- Permissions
- Logs
- Question bank
  - Questions
  - Categories
  - Import
  - Export

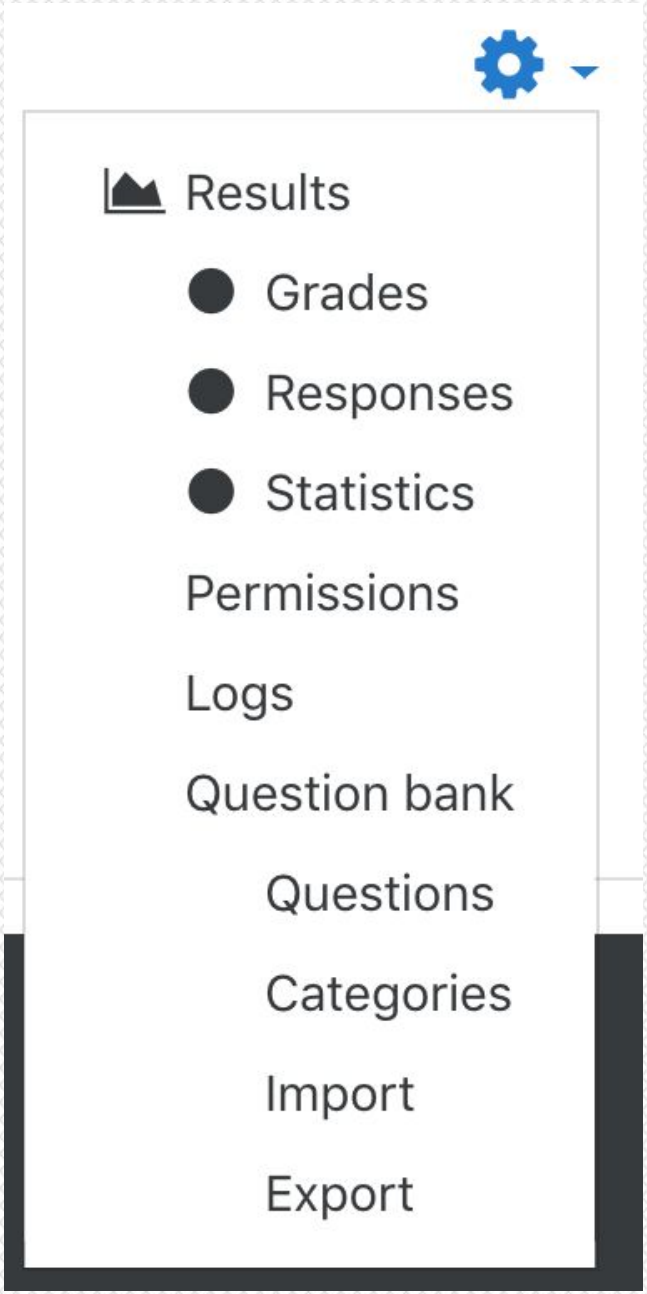
Moodle Docs for this page

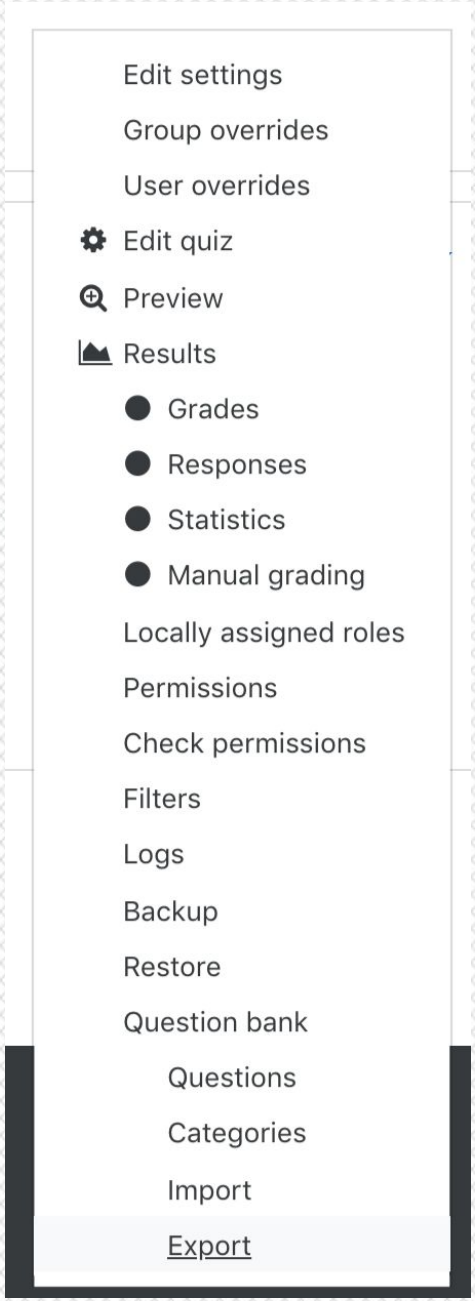
You are logged in as Admin User (Log out)

QPC

Quiz with read-only enabled







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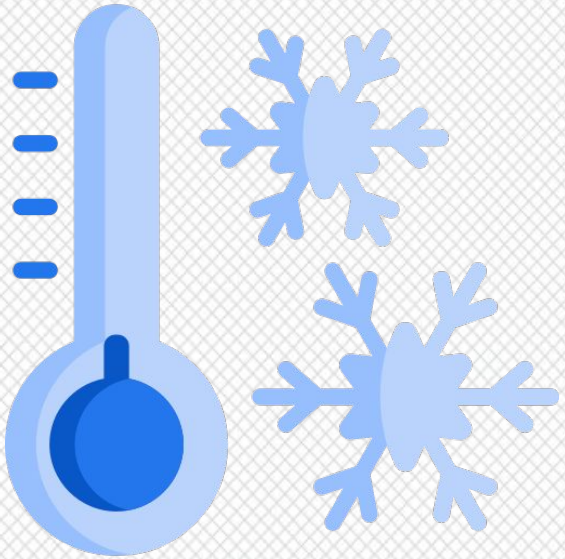
Limitations of Moodle 3.6 freezing

- You need Moodle 3.6
- It changes the appearance of things
- Some things cannot be frozen



Installing read-only

- git clone https://github.com/marcusgreen/local_read_only
- Copy “mysqlior_native_moodle_database.php to”
- moodle/lib/dml

Change mysqli to mysqliro

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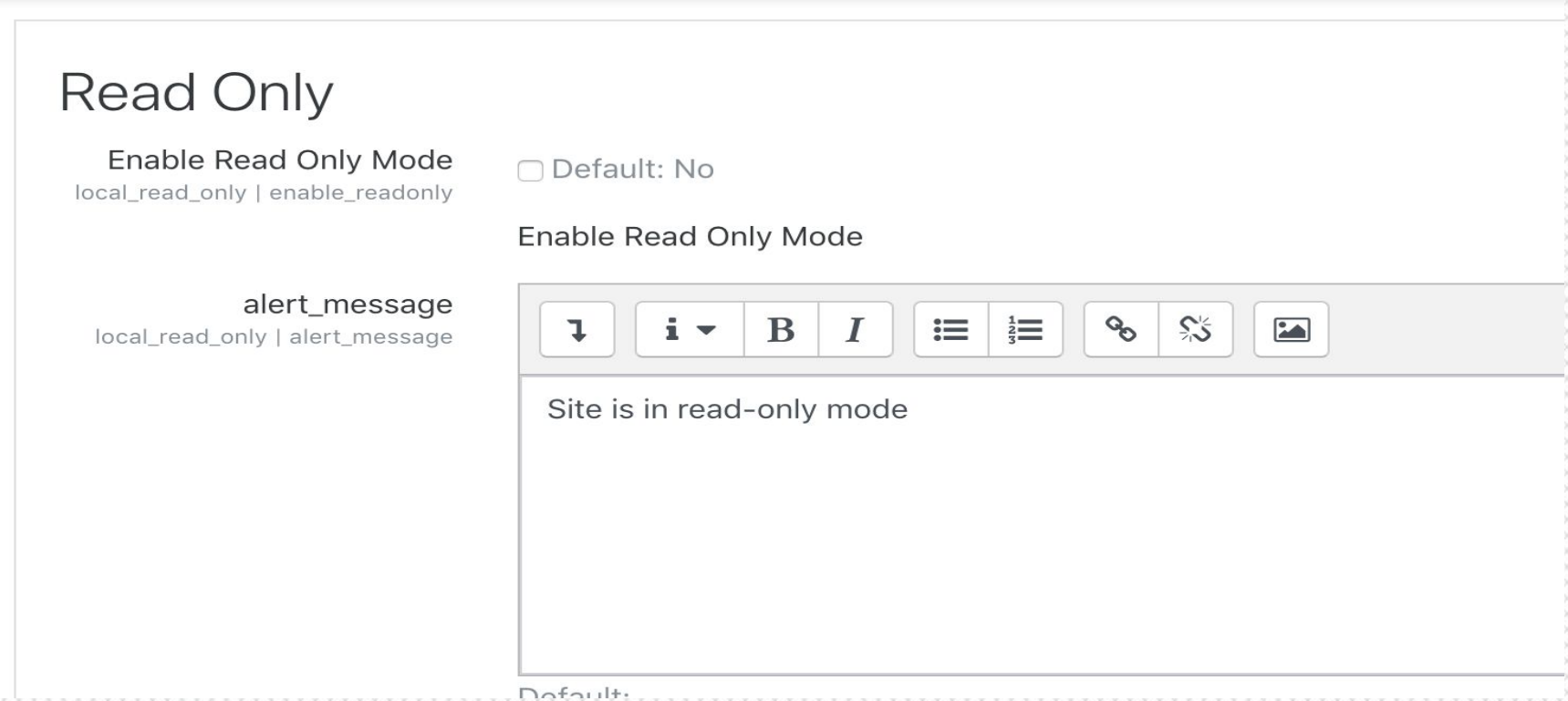
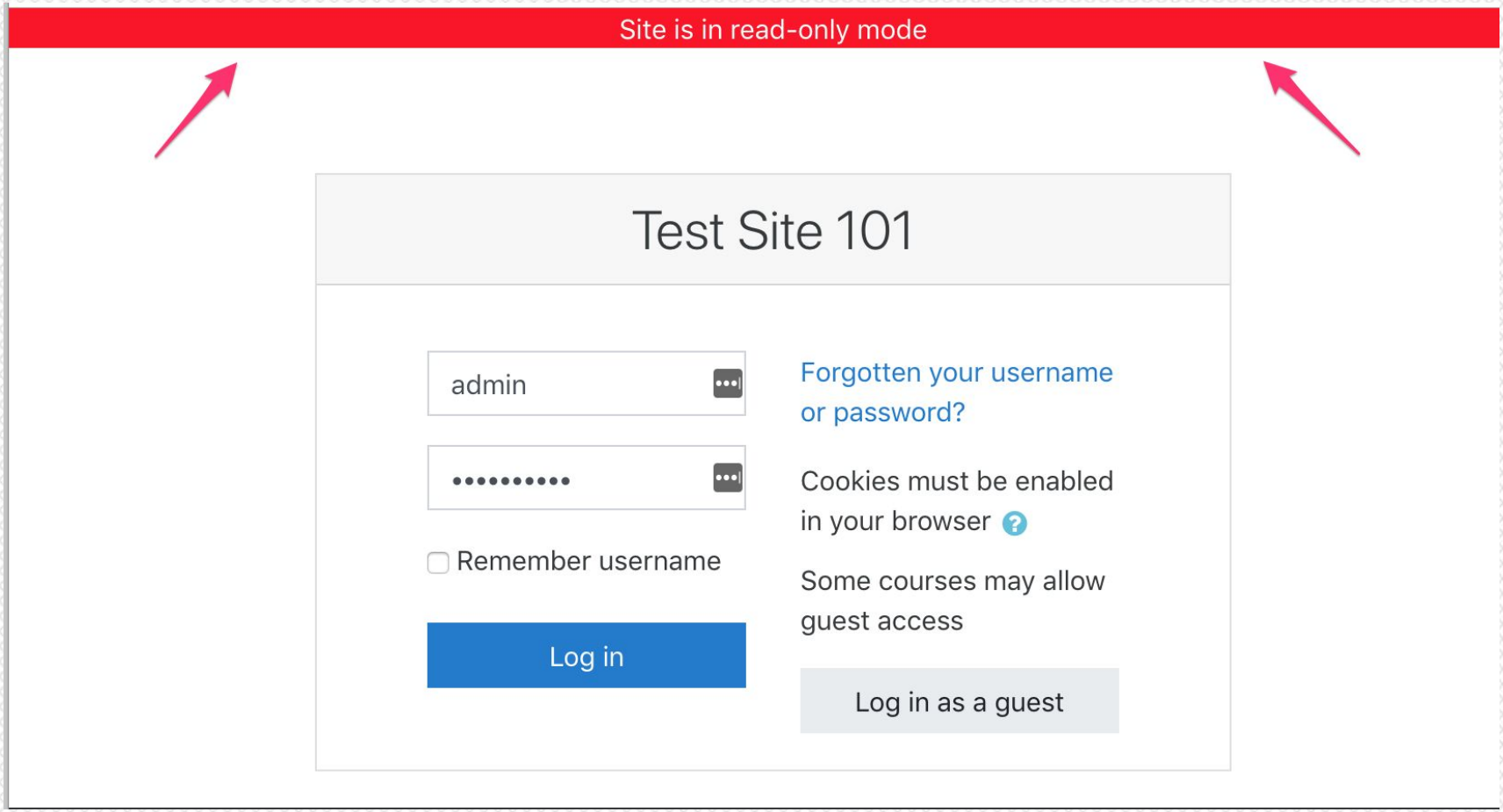
```
1   <?php  // Moodle configuration file
2
3   unset($CFG);
4   global $CFG;
5   $CFG = new stdClass();
6
7   $CFG->dbtype    = 'mysqli';
8   $CFG->dblibrary = 'native';
9   $CFG->dbhost    = 'localhost';
10  $CFG->dbname    = 'scss';
11  $CFG->dbuser    = '[redacted]';
12  $CFG->dbpass    = '[redacted]';
13  $CFG->prefix    = 'mdl_';
```

Configure the plugin




Site is in read-only mode
Test Site 101
admin
Forgotten your username or password?
Cookies must be enabled in your browser
Remember username
Some courses may allow guest access
Log in
Log in as a guest

How it works (simplified)

File mysqliro_native_moodle_database.php

Same principle for update and delete

```
public function insert_record_raw($table, More Params XX)
{
    $writabletables=$this->get_writable_tables();
    if(!in_array($table,$writabletables)){
        return true;//lying to Moodle that a write happened
    }
    return parent::insert_record_raw($table, More Param
XX);
}
```

Exampler of open source

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- Original concept by Marcus Green
- Code passed on to Hittesh Ahuja at Bath University
- Updated and available under GPL

Limitations

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- Not a standard plugin
- The whole site or not at all
  - (but we could work on that)
- MySQL only
  - should be easy to modify for other db’s

Fin

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Any Questions?