

The EPFL logo is displayed in a bold, red, sans-serif font.The Noto logo is written in a red, stylized, handwritten-style font.

January 2022

Moodle modules for Jupyter Hub

Installation & Administration

This document specifies how the two Moodle assignment modules ([submission](#) and [feedback](#)) are installed and configured.

Notes:

- Noto is the name of the JupyterHub/JupyterLab platform at EPFL
- The Moodle modules have been developed for EPFL/Noto and then modified to fit ETHZ needs - this is why there are still many references to Noto.
- Those two Moodle modules have been developed by Enovation Solutions and are targeting [Moodle 3.9](#)
- Those two Moodle modules communicate with an API running on the JupyterHub side in order to manage files remotely - this API is documented in another specification document.

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Assignment submission plugin

Installation

The plugin should be deployed in the following directory on the Moodle server:

`[moodle_root]/mod/assign/submission/notes`

Access

The plugin administration interface is visible in the following location :

[Dashboard](#) / [Site administration](#) / [Plugins](#) / [Activity modules](#) / [Assignment](#) / [Submission plugins](#) / [Jupyter Notebooks submissions](#)

Dashboard

→ Site administration

→ Plugins

→ Activity modules

→ Assignment

→ Submission plugins

→ Jupyter Notebooks submissions

Parameters

For EPFL installation

Aspect of module configuration page

Jupyter Notebooks submissions

Enabled by default <small>assignsubmission_noto default</small>	<input type="checkbox"/> Default: No
If set, this submission method will be enabled by default for all new assignments.	
ETHZ Installation <small>assignsubmission_noto ethz</small>	<input type="checkbox"/> Default: No
If checkbox is enabled, then only ETHZ installation settings will be showed.	
Noto server URL <small>assignsubmission_noto apiserver</small>	<input type="text" value="https://stag-noto.epfl.ch"/> Default: https://test-noto.epfl.ch
Path to Noto API <small>assignsubmission_noto apiwspath</small>	<input type="text" value="/api/assignment"/> Default: /api/assignment
Will be appended to Sevrer URL to form a full URL to NOTO API	
Path to Noto Notebooks <small>assignsubmission_noto apinotebookpath</small>	<input type="text" value="/user-redirect/lab/tree"/> Default: /user-redirect/lab/tree
Will be appended to Sevrer URL to form a full URL to redirect users to Notebooks	
Noto API username <small>assignsubmission_noto apiuser</small>	<input type="text" value="Szt7TQpqbCQHPCg0"/> Default: Empty
Noto API secret key <small>assignsubmission_noto apikey</small>	<input type="text" value="pHV2QrraLMVPb6Ns"/> Default: Empty
Maximum depth of filesystem tree <small>assignsubmission_noto maxdepth</small>	<input type="text" value="10"/> Default: 10
Password to access userprofile script <small>assignsubmission_noto userprofilepassword</small>	<input type="text" value="testnotoepflch"/> Default: Empty
ALPHANUM characters only	
Authentication method <small>assignsubmission_noto authmethod</small>	<input type="text" value="test"/> Default: test
"test" for the UAT platform and "noto" for the LIVE environment.	
Connection timeout <small>assignsubmission_noto connectiontimeout</small>	<input type="text" value="3"/> Default: 3
The number of seconds to wait while trying to connect.	
Execution timeout <small>assignsubmission_noto executiontimeout</small>	<input type="text" value="10"/> Default: 10
The maximum number of seconds to allow API functions to execute.	
<input type="button" value="Save changes"/>	

Recommended values

Parameter	Value for test	Value for production
Enabled by default	Unchecked	Unchecked
ETHZ installation	Unchecked	Unchecked
NOTO server URL	<code>https://test-noto.epfl.ch</code>	<code>https://noto.epfl.ch</code>
Path to Noto API	<code>/api/assignment</code>	<code>/api/assignment</code>
Path to Noto notebooks	<code>/user-redirect/lab/tree</code>	<code>/user-redirect/lab/tree</code>
Noto API username	<code>Szt7TQpqbCQHPCg0</code>	(not shared here)
Noto API secret key	<code>pHV2QrraLMVPb6Ns</code>	(not shared here)
Maximum depth of filesystem tree	10	10
Password to access userprofile script	<code>testnotoepflch</code>	<code>testnotoepflch</code>
Authentication method	<code>test</code>	<code>noto</code>
Connection timeout	3	3
Execution timeout	10	10

For ETHZ installation

Aspect of module configuration page

Jupyter Notebooks submissions

Enabled by default
assignsubmission_noto | default

☐ Default: No

If set, this submission method will be enabled by default for all new assignments.

ETHZ Installation
assignsubmission_noto | ethz

☒ Default: No

If checkbox is enabled, then only ETHZ installation settings will be showed.

API URL
assignsubmission_noto | apiUrl

Default: https://web2-xxx-[courseid].vvv.ethz.ch

This API URL should include course id placeholder "[courseid]" (e.g. https://web2-xxx-[courseid].vvv.ethz.ch). It will be replaced automatically by course id.

API username
assignsubmission_noto | apiusername

Default: Empty

API secret key
assignsubmission_noto | apisecretkey

Default: Empty

API username parameter
assignsubmission_noto | apiusernameparam

Defines which profile field should be used for identification

API username parameter prefix
assignsubmission_noto | apiusernameparamprefix

Default: Empty

Defines prefix which should be used for username parameter

Connection timeout
assignsubmission_noto | connectiontimeout

Default: 3

The number of seconds to wait while trying to connect.

Execution timeout
assignsubmission_noto | executiontimeout

Default: 10

The maximum number of seconds to allow API functions to execute.

Save changes

Recommended values

Parameter	Value for test	Value for production
Enabled by default	Unchecked	Unchecked
ETHZ installation	checked	checked
API URL		
Noto API username		
Noto API secret key		
API username parameter	idnumber	idnumber
API username parameter prefix		
Connection timeout	3	3
Execution timeout	10	10

Assignment feedback plugin

Installation

The plugin should be deployed in the following directory on the Moodle server:

`[moodle_root]/mod/assign/feedback/noto`

Access

There is no administration interface for this module.

The `userprofile` page

To get information about the current user (especially in the case we have to debug and trace which user id is sent over to the JupyterHub), the following page provides the required information :

<https://epfl-uat.enovation.ie/mod/assign/submission/noto/userprofiles.php?password=testnotoepflch>

Note that the **password** parameter corresponds to the password set up in the administration interface.

Content of the userprofile page

stdClass Object

```
(
  [id] => 5
  [auth] => manual
  [confirmed] => 1
  [policyagreed] => 0
  [deleted] => 0
  [suspended] => 0
  [mnethostid] => 1
  [username] => test2
  [idnumber] => test2
  [firstname] => Test 2
  [lastname] => User
  [email] => test2@epfl.ch
  [emailstop] => 0
  [icq] =>
  [skype] =>
  [yahoo] =>
  [aim] =>
  [msn] =>
  [phone1] =>
  [phone2] =>
  [institution] =>
  [department] =>
  [address] =>
  [city] =>
  [country] =>
  [lang] => en
  [calendartype] => gregorian
  [theme] =>
  [timezone] => 99
  [firstaccess] => 1607353964
  [lastaccess] => 1622708279
  [lastlogin] => 1622558300
  [currentlogin] => 1622708279
  [lastip] => 90.114.37.152
  [secret] =>
  [picture] => 0
  [url] =>
  [descriptionformat] => 1
  [mailformat] => 1
  [maildigest] => 0
  [maildisplay] => 2
  [autosubscribe] => 1
  [trackforums] => 0
  [timecreated] => 1607351795
  [timemodified] => 1607351795
  [trustbitmask] => 0
  [imagealt] =>
  [lastnamephonetic] =>
  [firstnamephonetic] =>
  [middlename] =>
  [alternatename] =>
  [moodlenetprofile] =>
  [lastcourseaccess] => Array
    (
      [2] => 1622562014
      [4] => 1621515107
    )

  [currentcourseaccess] => Array
    (
      [2] => 1622708290
    )

  [groupmember] => Array
    (
      [profile] => Array
        (
          [sesskey] => xxx
          [preference] => Array
            (
              [auth_forcepasswordchange] => 0
              [core_message_migrate_data] => 1
              [email_bounce_count] => 1
              [email_send_count] => 68
              [filepicker_recentlicense] => public
              [filepicker_recentrepository] => 5
              [login_failed_count_since_success] => 2
              [_lastloaded] => 1622708308
            )

          [access] => Array
            (
              [ra] => Array
                (
                  [/1] => Array
                    (
                      [7] => 7
                    )

                  [/1/2] => Array
                    (
                      [8] => 8
                    )

                  [/1/3/37] => Array
                    (
                      [5] => 5
                    )

                  [/1/3/117] => Array
                    (
                      [5] => 5
                    )
                )

              [time] => 1622708280
              [rsw] => Array
                (
                )
            )

          [enrol] => Array
            (
              [enrolled] => Array
                (
                  [4] => 2147483647
                  [2] => 2147483647
                )

              [tempguest] => Array
                (
                )
            )

          [editing] => 0
        )
      )
    )
  )
)
```