

# INSTALLATION MANUAL ASSESSMENT TOOLS

**BUILDING BLOCK VERSION: 3.1** 



## **INSTALLATION**

#### Version

This installation manual was written for version 3.1. If you are currently using an older version, please contact the University of Groningen to receive the latest version. Version 3.1 has been designed specifically for Blackboard 9.1 (SP11).

There are no important changes in this manual since the last release. For a change log of the building block see <a href="http://b2catalog.citesi.nl/show/AssessmentTools">http://b2catalog.citesi.nl/show/AssessmentTools</a> (not yet available)

## User rights

In order to install the Assessment Tools, you will need System Admin rights in Blackboard. You also need a license key that is valid for your hostname. See 'contact information' for obtaining a license key

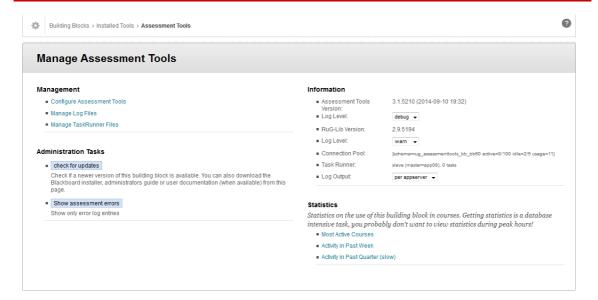
## Updating

**IMPORTANT!** If you are upgrading from a previous version of the building block, you will have to re-submit existing settings, see step 8 of the installation steps below.

## INSTALLATION STEPS

- 1. Go to the System Admin tab.
- 2. Go to 'Building Blocks'.
- 3. Click on 'Installed Tools'.
- 4. Go to 'Upload Building Blocks'.
- 5. Select the .war file on your computer, and press Submit.
- 6. The building block will now be installed.
- 7. Return to 'Installed Tools', and change the status of the AGT building block from 'Inactive' to 'Available' (you have to approve the requested privileges).
- 8. Click on the 'Settings' button. This will give you the Administration landing page (described in the next chapter). Click on 'Configure Assessment Tools' and configure the building bock (explained on page 4).
- To check if the installation has been successful, go to 'View Components' and check if among others 'Essay Assignment' and 'Assessment Folder' are displayed.

## ADMINISTRATION LANDING PAGE



The administration landing page lets you navigate to various pages relevant for system administrators

## **MANAGEMENT**

Configure Assessment Tools leads to the configuration page; you will rarely go there (only for initial install and upgrades). See the next chapter.

Manage Log Files allows you to view / download / remove the log files generated by the building block. This page is especially useful if you do not have access to the actual servers (Blackboard Managed Hosting for example). Note that this building block keeps a log file for every application server when you are using a cluster.

# **INFORMATION**

This section displays basic information about the installed version. Please include this information when reporting problems (see 'contact information'). You can also change how much detail will be added to the log files. INFO / WARN would be a good default and DEBUG/DEBUG would be good when reproducing problems. In general the log levels will have minimal impact on performance. Changing a log level will result in a green "thumbs up" icon being show (briefly). Using the "per appserver" logging has less chance of log statements getting lost or garbled; "consolidated" is more convenient when you need to look into reported issues.

## ADMINISTRATION TASKS

<u>check for updates</u> will bring you to a page from where the latest version of the building block can be downloaded (unfortunately Blackboard makes its update service not available for 3<sup>rd</sup> party building blocks).

## STATISTICS

Note that generating statistics is database intensive (especially the quarter statistics), so do not using during peak hours!

Most Active Courses

Lists the 10 courses that had the most activity (requests) in the past week.

Activity in Past Week

Lists the number of courses that used the Assessment Tools each day in the past week and how many requests were processed each day.

Activity in Past Quarter

Same as "activity in past week", but aggregated per week for the last quarter.

## **CONFIGURING ASSESSMENT TOOLS**

## CONFIGURATION STEPS

The first three settings (license key, errors and activity logging) are pretty much self-explanatory.

#### Assessment Tools database

The building block requires a database to keep track of scheduled exams. Even if you do not intend to use this part of the building block, these tables are required (in case you change your mind). Database objects (tables, indices, etc.) created by the building block all start with  $at_{-}$  to minimize the risk on conflicts with other objects in the configured database.

Using the Blackboard database

Easier to administer (no separate database to configure / backup etc.) and a little faster when synchronizing the number of enrolled persons. Downsides: Blackboard didn't like it when you used "their" database for other purposes. But that may have changed now that they support schemas for building blocks.

Using an external database

Keeps the building block data separate from the rest of Blackboard. Note that you do not necessarily need a fully separate database server for this option. For example, when using Oracle you could create a separate instance on the Blackboard database server or an additional schema in the Blackboard database. SQL Server probably has similar options.

Connection pool size

To limit the database load, there is a maximum size for the database connection pool. If there are more connections requested than allowed, users will see a "too busy" page. However, it will keep the rest of your Blackboard server responsive.

The configured pool size is per application server; if you also limit the number of connections on the database side use this rule: pool size \* application servers.

At Groningen University, we set our pool size at 15; with 9 application servers this seems to be enough for normal operations. Load testing with JMeter shows that with 20+ connections per application server Blackboard becomes unusable with heavy loads.

## Integration tokens

These parts of the configuration are specific to the Groningen setup. The Integration Secret Token is used to download exam details and submissions for creating test analyses. The SSO Token is used for a Single Signon from the Exam Environment. You can probably leave both fields empty.

## Access Handlers

As described in the user manual, items in an Assessment Folder are restricted by IP Addresses. As Blackboard does not support this by default, this is implemented by a kind of filter which handles *all* Blackboard requests. In general, you won't notice any difference, but in kind of problems, you could disable the "Assessment content access handler". However, this will open up your contents to all students that have access to the course.

The In Exam handler is used to prevent students taking an exam in one course to access another course. This handler is only applicable if you use the Assessment Tools exam environment. Otherwise, you can safely disable it.

# **CONTACT INFORMATION**

# **SUPPORT**

If you have any questions regarding the installation or functionality of the Assessment Tools, please contact Nestorsupport by phone (+31) 50 363 8282, or via e-mail: <a href="mailto:nestorsupport@rug.nl">nestorsupport@rug.nl</a>. Please note we do **not** offer support for users of the building block (for example, instructors).

## LICENSE KEY

Contact Nestorsupport to obtain a license key for testing or an updated license key (keys are usually valid for one year). A license key is specific for the hostname of your Blackboard installation. You can find the hostname in configuration screen. In step 1 (License key) the license domain is listed.

## REPORTING BUGS

When reporting a bug or problem in the Assessment Tools please include the following information:

- The version of the installed building block (found on the admin landing page) and the version of Blackboard you are using, and the platform where it is running (Microsoft Windows or Linux/Solaris)
- Whether you use the Blackboard database or an external database (found on the configuration page).
- The log file(s); click on <u>Manage Log files</u> on the admin landing page to download the relevant log(s). If it is an error you can reproduce then please do so after setting the log levels to 'debug' on the admin landing page before downloading the log files.