

# Adobe® Connect LMS Integration for Blackboard® Learn 9

## Install Guide

### Introduction

The Adobe® Connect LMS Integration for Blackboard® Learn 9 gives Instructors, Teaching Assistants and Course Builders the ability to seamlessly incorporate Adobe Acrobat Connect 7 meetings into their course offering and allows students to see upcoming Adobe Acrobat Connect meetings.

This document explains how to install and configure the Adobe® Connect LMS Integration for Blackboard® Learn 9.

### Requirements

- Adobe Acrobat Connect Pro 7 or later
- Blackboard Learn version 9x
- Administrative rights for Blackboard
- The Adobe® Connect LMS Integration for Blackboard® Learn 9 Building Block  
(ConnectBBIntegration-Bb-9-x.x.war)

### Overview

Installing and configuring the Adobe® Connect LMS Integration for Blackboard® Learn 9 is a three-step process:

1. Configure the shared secret for Adobe Acrobat Connect.
2. Configure LDAP for Blackboard and Connect. (Optional).
3. Install the Adobe® Connect LMS Integration for Blackboard® Learn 9 Building Block.
4. Configure the Building Block settings.

### Configuring the Shared Secret for Adobe Acrobat Connect

The integration uses a shared secret to enable users in Blackboard to automatically log on to Adobe Acrobat Connect without entering their passwords. The shared secret must be configured in Adobe Acrobat Connect and in the Building Block. (Both must be set to the same value.)

1. Log on to the machine that hosts your Adobe Acrobat Connect Server.
2. In the Adobe Acrobat Connect installation folder (for example, `c:\breeze`), open the file

named `custom.ini`, or if it does not exist, create it.

3. Create a setting named `SHARED_SECRET_TRUSTED_LOGIN` and set the value to the shared secret you want to use. For example:

```
SHARED_SECRET_TRUSTED_LOGIN=ADOBECONNECTPRO
```

4. Restart the Adobe Connect service.

**NOTE:** You must restart the Adobe Connect service whenever you change the shared secret.

## Configuring LDAP (Optional)

### Configuring Adobe Acrobat Connect 7 for LDAP

1. Choose *Start > Programs > Adobe Acrobat Connect Pro Server 7 > Configure Connect Pro Server 7*. The Application Management Console is launched in your web browser.
2. In the *Directory Service Settings* tab, under *LDAP Settings*, enter the required information in each of the subtabs:
  - *Connection Settings:*
    - LDAP Server URL: `<LDAP server host>:<LDAP server port>`
    - LDAP Connection Authentication Method: `Simple/MD5`
    - LDAP Connection Username: `<username>`
    - LDAP Connect Password: `<password>`
  - *User Profile Mapping:*
    - Login: Attribute in LDAP that contains the value to use as the Connect login ID
    - First Name: Attribute in LDAP that contains the value to use as the given name
    - Last Name: Attribute in LDAP that contains the value to use as the family name
    - E-mail: Depending on the Login policy in Connect, this field can either be same as the login field or any other attribute in LDAP that has a valid E-mail address
  - *User Branch:*
    - Branch DN : `CN=Users, DC=xxx, DC=xxxx, DC=xxxx, DC=com` (This should be set to the DN that contains the user)
    - Filter : `(objectClass=*)`
    - Subtree : `True`
  - *Authentication Settings:*
    - Enable LDAP Directory authentication: must be checked to enable LDAP authentication.
    - Enable Connect Pro fall-back on unsuccessful LDAP Directory authentication: If LDAP authentication fails, authenticate against the Adobe Acrobat Connect password database. If you enable fallback, you may also want to enable password

synchronization from LDAP. To do this, go to *Synchronization Settings > Policy Settings* and configure *Password Setup Policy* are required. Then, in the *Directory Service Settings* tab, click *Synchronization Actions*. Click **Synchronize** to import the LDAP records into the Connect database with the settings mentioned above.

## Configuring Blackboard for LDAP

For more information on the authentication settings described in this section, see the Blackboard Academic Suite Authentication Guide.

Configure the following setting in `bb-config.properties`:

```
bbconfig.auth.type=ldap
```

Configure the following settings in `authentication.properties`:

```
auth.type.ldap.impl=blackboard.platform.security.authentication.LDAPAuthModule
auth.type.ldap.use_challenge=false
```

```
# depends on requirement:
```

```
auth.type.ldap.error_fallback_to_bb=true
```

```
# depends on requirement:
```

```
auth.type.ldap.user_not_found_fallback_to_bb=true
```

```
auth.type.ldap.base_search_fdn.1=OU=people,DC=xxx,DC=com
```

```
auth.type.ldap.server_url.1=ldap://server:389
```

```
auth.type.ldap.use_priv_user.1=true
```

```
auth.type.ldap.user_fdn.1=CN=manager,DC=xxxx,DC=com
```

```
auth.type.ldap.user_pwd.1=xxxxxx
```

```
auth.type.ldap.user_tag.1=xxxxxx
```

## Installing the Adobe® Connect® Building Block

1. Log in to Blackboard as a System Administrator.
2. Click the *System Administration* tab.
3. Under *Building Blocks*, click **Building Blocks**.
4. Click **Installed Tools**.
5. Click **Upload Building Blocks**.
6. Browse to and select the Building Block war file.
7. Click **Submit** and then **OK**. When the upload is complete, the Building Blocks page is displayed.
8. In the list of Building Blocks, locate the name *Adobe Connect Pro*.
9. By default, the Building Block is inactive. Change the status to *Available* in both the *Availability* and *Course/Org* columns. Click **OK** when prompted to confirm.

## Configuring the Adobe® Connect® Building Block Settings

In the Building Blocks page, click the Adobe Connect Building Block's *Settings* button and configure the settings.

<i>Adobe Connect Pro Server URL</i>	The URL of the Adobe Connect server to be integrated with Blackboard.
<i>Automatically create accounts in Adobe Connect Pro</i>	Enable this option to create accounts automatically when creating meetings with participants who do not exist in Adobe Connect. If enabled, <i>Admin Login</i> and <i>Admin Password</i> must be set.
<i>Administrator Login</i>	The administrator login for Adobe Connect Server.
<i>Administrator Password</i>	The administrator password for Adobe Connect Server.
<i>Email Suffix</i>	The suffix that should be appended to the username to generate the email address when creating user accounts in Adobe Connect.
<i>Connect Pro is configured with LDAP</i>	Enable if your Connect server is configured with LDAP.
<i>Mapping attribute in LDAP</i>	The LDAP attribute to which the Blackboard username is mapped. For example, if <code>id=xxx</code> is an entry in the LDAP server and if Blackboard is configured with LDAP with the 'tag' in the <code>authentication.properties</code> file as <code>auth.type.ldap.user_tag.1=id</code> , this field should contain <code>id</code> as the Mapping Attribute
<i>Blackboard is configured with LDAP</i>	Enable if your Blackboard server is configured with LDAP.
<i>Organizations</i>	Enable the <i>Organizations</i> option to allow access to the Building Block to those organizations.

Click **Submit** to apply the settings.

In the next page, you have the option to upload a user mapping file. The user mapping file maps Blackboard usernames to Adobe Connect login IDs. If your Blackboard users' usernames are the same as their Adobe Connect login IDs, the integration will map their accounts automatically and you do not need to upload a user mapping file. You can simply click **Finish**.

To upload a user mapping file, browse to the file (a csv or txt file) and click **Upload and Finish**. If

the file is in the expected format, a successful upload message will appear when the upload is complete.

**Note:** The expected format of the user mapping file uploaded from the Building Block settings page is not the same as the format of the user mapping file stored in the Building Block's `config` directory, which does not contain the header line and uses three consecutive colons (`:::`) as the separator character instead of the comma.

## Setting the Shared Secret

You must set the shared secret to enable single sign-on between Blackboard and Adobe Connect. In your Blackboard install directory, go to the Building Block's configuration directory. For example, if Blackboard is installed in `d:\blackboard`, the Building Block configuration directory is `d:\blackboard\content\vi\bb60\plugins\Adbe-AdobeConnectPro\config`. Edit the `_globalconfig.dat` file and add the following line:

```
sharedSecret=xxxxxxx_
```

The value of `sharedSecret` must match the value configured for Adobe Connect.

## Adding the Adobe Connect Tool to the Tools Panel

1. In the *System Administration* tab, under *Communities*, click **Tabs and Modules**.
2. Click **Tool Panel**.
3. Click **Add Tool**.
4. Enter a title and select the `Adobe Connect Pro` from the *Tools* list.
5. Set *Available* to *Yes*.
6. Click **Submit**.

The Adobe Connect tool is now available in the Tools panel.

## Adding the My Adobe Connect Meetings Module

**Note:** This option is only available if you have Community licensing.

1. In the *My Institution* tab, click **Add Module**.
2. Select `My Adobe Connect Meetings`.
3. Click **Submit**.

The My Adobe Connect Meetings module is now displayed in the My Institution tab. It allows the user to view their current and upcoming meetings.

## Enabling Debug Mode

If you are experiencing problems with the integration, see the log file located in the Building Block's configuration directory. The `AdobeConnectPro.log` file displays error messages generated by the Building Block. You can enable debug mode to include more information in the log file. Set the debug setting in the `_globalconfig.dat` file to on as follows:

debug=on