

## Blackboard Learning System Application Pack 1 Install Instructions

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### Overview

*Blackboard Learning System* Application Pack 1 introduces several new features as well as resolving some known issues reported in earlier releases. After installing the application pack, the system will be running Release 6.1.5. It is important to note that there is no process for installing Release 6.1.5 without first installing Release 6.1 and then installing application pack 1.

**Note:** Application Pack 1 must be installed on the *Blackboard Learning System* (Release 6.1). The installation will fail if it is run on an earlier version of the *Blackboard Learning System*.

If an earlier version of *Blackboard Learning System* is installed, all previous Updaters must be run to bring the system up to the release required to run the Updater. For example, if Release 6.0.10 is installed, update to Release 6.0.11 before updating to Release 6.1.

Installing the application pack will be a familiar process to those that have run a *Blackboard Learning System* updater.

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### Application Pack 1 Installer Information

The following information is important to note before running the *Blackboard Learning System* Application Pack 1 installer:

- The updater must be run using Java 2 SDK version 1.4. It will not work if run using 1.3.1.
- To install the application pack, Administrators must run the installer as root.
- Administrators must logout of the *Blackboard Learning System* and close out of all files in the Blackboard Installation directory before running the application pack installer.
- The installer must be run on the Web/application server. If multiple Web/application servers are used, the Updater must be run on each server. It is not necessary to run the installer on the database server (if using more than one server to run the *Blackboard Learning System*).
- The installer will automatically update all Virtual Installations.
- Please refer to the *Blackboard Learning System Minimum Hardware and System Software Requirements* for any questions pertaining to hardware and system software.
- After running the application pack installer, the system will be updated to Release 6.1.5. Once the application pack is installed, there is no process for rolling back to Release 6.1 without losing all new data entered after Release 6.1 was installed.

**Note:** Before running the application pack installer, create a backup of the **Blackboard file system and database**. The Updater does not include an uninstaller and only preserves backups of the files modified during the update.

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## Customizations and System Configurations

Customizations to supported parameters made to the `bb-config.properties` and the `snapshot.properties` file will be preserved during the update (although it is still a good practice to back up these configuration files). The installer will function correctly if clients have changed their Oracle port number.

Customizations made to other Blackboard files and third party files configured by Blackboard (such as `authentication.properties` and Tomcat and Apache configuration files) will not be preserved during the update.

The following information explains how configurations may be changed by the application pack installer:

- SSL Certificates will be lost during install; clients must re-install certificates after the installation is complete.
- A new template is included to support the `bbstats` database connection pooling. The deployment for this template will remove the configuration for `bbadmin` and virtual installation connection pooling. A backup of the configuration is saved in the `backups/<updateversion>` directory. Administrators must manually restore the configuration after the installation is complete.
- Configuration files for system specific tuning may be overwritten when the installer is run. Administrators should verify any custom tuning operations done to their systems after running the application pack installer.

All files that are modified during the installation are first saved to the backup directory. Please see the [Backup Files](#) section for more information.

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## Release 6.0.14 Warning

Those users that participated in the Early Release program and received Release 6.0.14 must run the following SQL statement before running the Application Pack 1 Installer:

```
DECLARE
  v_row_count NUMBER;
  sql_stmt VARCHAR2(500);
BEGIN
  SELECT COUNT(*) INTO v_row_count FROM user_tab_columns WHERE table_name='PLUGINS'
AND column_name = 'DEPLOY_TYPE';
  IF(v_row_count = 0) THEN
    EXECUTE IMMEDIATE 'ALTER TABLE PLUGINS ADD (DEPLOY_TYPE char(1) NULL) ';
  END IF;
END;
/
exit;
```

This will correct a problem where modules do not appear to some users as they should. In particular, the Login Module is not available to Guests.

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## Executing the Application Pack Installer

The following steps explain how to run the application pack installer through the console.

**Note:** Before running the installer, execute the `chmod +x` command on the executable file. The installer file must be downloaded in a binary format.

**Step 1** Download the application pack installer.

Linux –  
`bb_ls_linux_6_1_0_1_to_6_1_5_1_AppPack1_b1.bin`

Solaris –  
`bb_ls_linux_6_1_0_1_to_6_1_5_1_AppPack1_b1.bin`

**Step 2** Verify that the current *Blackboard Learning System* version is Release 6.1.

**Step 3** Run the installer file. The user will be prompted for the location of the current *Blackboard Learning System* installation and for the location of the temp directory.

**Step 4** Accept the terms of the license agreement.

**Step 5** Select the setup configuration. The choices are a standard configuration or load balanced configuration.

Administrators who are running a multiple Web/application server configuration (Load Balanced) will have to run the installer on each *Blackboard Learning System* application server. The file system is shared across all application servers; therefore, it will be updated the first time the installer is run. The installer will also automatically update the database server the first time it is run. Each subsequent time the installer is run on the other application servers, updates to the database server and the file system will be skipped.

**Step 6** Enter the location of the Blackboard installation. The default is `/usr/local/blackboard`

**Step 7** Enter the location of the temp directory. The temp directory must exist, have free disk space, and be writable. If enough free space is not available, an error message may appear and the installer may fail. Guidelines for the amount of free space needed in the temp directory are listed on the installer screen. The default is `/tmp`.

**Step 8** The summary screen provides status information on the installation.

**Step 9** An "Installation Successful" message will appear when the installation is complete.

Login to the *Blackboard Learning System* after successfully running the installer. Verify that application pack 1 was installed by viewing the build information at the top of the System Control Panel. The build information should now report Release 6.1.5. This first login attempt may be slow as the system is compiling the new Java Server Pages (JSPs).

**Note:** The installer may be executed multiple times if a problem arises during installation. Please see the [Troubleshooting](#) section for more information.

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### Installing Application Pack 1 on Load Balanced Systems

The steps below explain how to install the Updater on a load balanced system:

- Step 1** Launch the application pack installer on the first Web/app server.
  - Step 2** When updating the first server, choose the standalone server configuration option. When updating additional Web/app servers, choose the Load Balanced configuration option.
  - Step 3** Follow the steps for installation.
  - Step 4** Repeat Steps 1-4 for each Web/app server.
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### Backup Files

When the installer is finished, a backup of the files that were modified or deleted is saved to the following location:

```
<Blackboard Install Dir>/backups/<versions updated>
```

The installer can be run multiple times if errors that occurred before execution is completed are resolved. A date and time stamp directory is located within the location above, providing access to the files that were modified or deleted each time the installer was run.

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### Log File

The installer log file may be found at the following location:

```
<Blackboard installation directory>/logs/bb-updater-log.txt
```

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### Troubleshooting

The installer verifies that certain requirements are met before modifying the *Blackboard Learning System* installation. This includes confirming the location of the *Blackboard Learning System* installation and verifying the version of the current installation.

Errors may occur while running the installer. An error message may appear during the installation and Administrators may check the log file to look for errors. Issues that may cause an error include supplying the incorrect location of the *Blackboard Learning System* installation or the system being unable to find the Java Virtual Machine. These problems may be remedied and the application pack installer run again.

If advanced technical issues arise or the source of the error cannot be detected, contact Blackboard Technical Support at <http://www.blackboard.com/products/services/support.htm> for assistance.

During installation, users may receive an error message stating that "no matching JVM was found". If this occurs, create a link to the location of the JDK when running the command to start the Updater as shown in the example below:

**Solaris**

```
./solarisBbUpdater.bin -is:javahome /usr/local/jdk1.4.2
```

**Linux**

```
./linuxBbUpdater.bin -is:javahome /usr/local/jdk1.4.2
```

Alternatively, users may simply create a symbolic link to the location of the JDK as shown below. On Solaris this link must be created in the /usr directory; on Linux this link is created in /usr/local.

```
ln -s <name of jdk directory> <actual jdk location>
```

For example on Solaris:

```
ln -s /usr/j2se /usr/jdk1.4.2
```

For example on Linux:

```
ln -s /usr/j2se /usr/local/jdk1.4.2
```

**Notes**

The following information is important to note about after installation:

- On UNIX platforms, ownership of all *Blackboard Learning System* files is changed to "bbuser" after the update.
- The updater creates the file <Blackboard InstallDir>\\_uninst during installation. This file is a temporary file used by Installshield during installation and may be deleted after the updater has run successfully.

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