

# **Cybozu<sup>®</sup> ApprovalFlow<sup>™</sup>**

## Installation Guide

Third Edition

Cybozu, Inc.

# Introduction

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This guide describes how to install “Cybozu ApprovalFlow Version 1.0.x” and configuration after installation.

Be sure to read this guide before installing ApprovalFlow.

## Who should read this guide

This guide is written for users who are installing “Cybozu ApprovalFlow Version 1.0.x”.

## Typographic conventions

This guide uses the following typographic conventions.

Notation	Meaning
<b>IMPORTANT</b>	Describes particularly important warnings.
<b>CAUTION</b>	Describes items, limitations, etc. that should be noted during work.
<b>Note:</b>	Describes useful information such as descriptions of additional operations and alternate operating procedures.
- <i>page xx</i>	Indicates the page number to refer to.
-	Provides supplemental descriptions of terms and procedures, etc.
[ ]	Indicates buttons, links, and tabs on the screen.

## Production environment

Unless otherwise noted, the descriptions in this guide were written using the following environment.

OS	Microsoft Windows Server 2008
	Red Hat Enterprise Linux 5
Web browser	Internet Explorer 7
Product version	Cybozu ApprovalFlow Version 1.0.x

- The screen displays contained in this guide may differ depending on the web browser you are using.

## Product names and abbreviations

Product names in this guide are abbreviated as follows.

Product name	Abbreviation
Cybozu ApprovalFlow Version 1.0.x	ApprovalFlow

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# 1 Overview

This chapter explains the preparations and procedures for installing ApprovalFlow.

## 1.1 System requirements

The followings are ApprovalFlow's system requirements:

### Platform

OS	Server OS
Windows	Windows Server 2008 Standard Windows Server 2008 Enterprise Windows Server 2003, Standard Edition(SP2) Windows Server 2003, Enterprise Edition(SP2)
Windows (64-bit)	Windows Server 2008 Standard x64 Windows Server 2008 Enterprise x64 Windows Server 2003 R2, Standard x64 Edition(SP2) Windows Server 2003, Enterprise x64 Edition(SP2)
Linux	Red Hat Enterprise Linux 5 Advanced Platform
Linux (64-bit)	Red Hat Enterprise Linux 5 Advanced Platform

### Web server

OS	Software
Windows	Internet Information Services (IIS) 6.0 or 7.0
	Apache 2.2.x
Linux	Apache 2.2.x

### Web browser

OS	Software
Windows	Internet Explorer 6 or 7 or 8
	Mozilla Firefox 3.0

### Mail server

Protocol	Authentication method
SMTP	(None)
	POP before SMTP
	SMTP Authentication

#### Note:

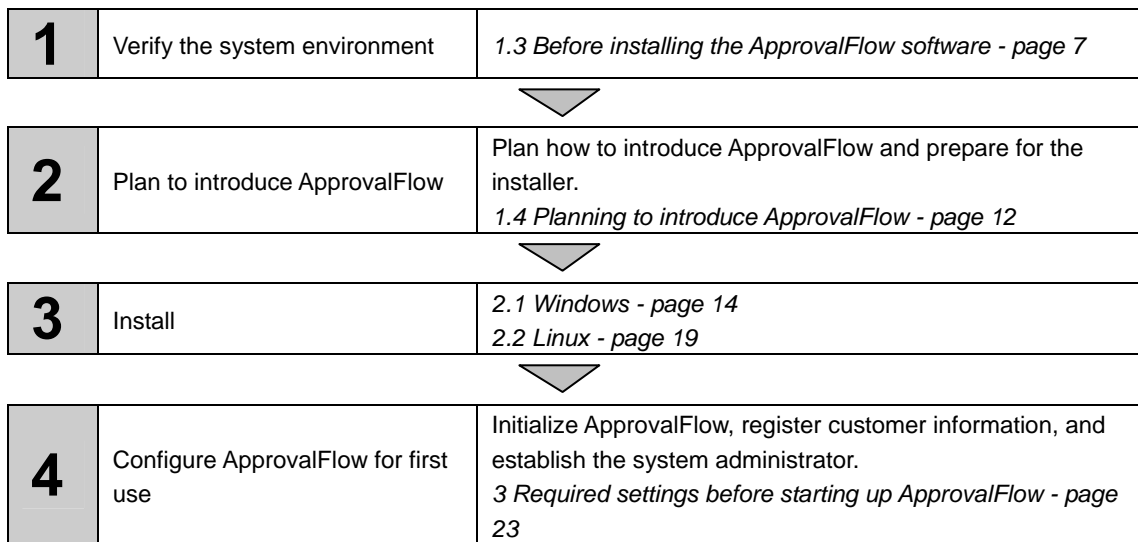
- For the latest system requirements, see:  
<http://cybozu.com/af/product/environment/>
- The screen display may differ depending on the web browser.

- Set up a mail server to use e-mail notifications.  
*3.15 Managing external servers of the Administration Guide*  
*4.2.6 Setting e-mail notifications of the User Guide*

## 1.2 Installation procedure

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Plan the followings before introducing ApprovalFlow.



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## 1.3 Before installing the ApprovalFlow software

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Verify network and web server configurations before installation.

### 1.3.1 Ensuring network security

To prevent unauthorized accesses, ensure the followings:

Did you close the port used to access the database from external networks?

The CGI program and the database engine of ApprovalFlow communicate using TCP/IP. The port number is 3770. Be sure to close this port for external networks.

Did you open the port in which the HTTP is using only for the HTTP communication?

ApprovalFlow uses HTTP and HTTPS protocols for communications. Usually, the HTTP port number is 80, and HTTPS is 443.

If you are accessing ApprovalFlow through a firewall, ensure that the port is open for these HTTP and/or HTTPS ports.

**Note:**

- The port number for ApprovalFlow may differ depending on the environment in which ApprovalFlow is installed.
- You can confirm the database engine port number in one of the following ways.
  - On the following installation screen:
    - Windows environment: "Ready to Install the Program" screen
    - Linux environment : "Summary of install configuration" screen
  - The [mysqld] section of the setting file (my.ini file) of the database server
- If you installed ApprovalFlow using the default directories, the my.ini file will be located in the following directories.
  - Windows environment : C:\Program Files\Cybozu\mysql-5.0\etc\my.ini
  - Linux environment : /usr/local/cybozu/mysql-5.0/etc/my.ini

### 1.3.2 Ensuring web server settings

Confirm the following web server settings.

Did you install the web server?

ApprovalFlow requires a capable web server.

*1.1 System requirements - page 5*

Did you create the virtual directory?

Confirm the alias and the physical path of the virtual directory.

- If your web server is IIS 7.0:

Alias	scripts
Physical path	C:\inetpub\scripts
- If your web server is Apache 2.2.x:

Alias	cgi-bin
Physical path	/var/www/cgi-bin

Is the CGI program executable in the virtual directory?

Can a web server "run as" user access the document root?

**Note:**

- If it is not set as described above, please contact the web server administrator.  
*Installing or configuring Microsoft IIS 7.0 – page 8*  
*Installing or configuring Microsoft IIS 6.0 – page 10*

### Installing or configuring Microsoft IIS 7.0

If you are using IIS 7.0 for ApprovalFlow, configure the settings accordingly.

The IIS 7.0 configuration requires Windows "Administrator" privileges.

The following explanations are written on the premise that the virtual directory's name is "scripts".

**CAUTION:**

- If web servers other than IIS 7.0 are running, stop them.
- We recommend you to adhere to the initial settings for the items that are not indicated in this guide. If those settings are changed, ApprovalFlow may not work normally.
- If the "User Account Control" dialog appears, click [Continue].

Installing IIS 7.0

- 1** From the Windows Start menu, select "Server Manager".
- 2** From the tree, select [Roles], and then click [Add Roles].
- 3** On the "Add Roles Wizard" screen, click [Next].

- 4** Select "Web Server (IIS)", and then click [Next] > [Add Required Features] > [Next].
- 5** Select "CGI", and then click [Next] > [Install].  
Installation starts.
- 6** When the "Installation Results" screen appears and the installation is complete, click [Close].
- 7** Start the web browser and access the following URL.  
http://localhost/  
If the IIS 7.0 page is displayed, the installation ended normally.

Creating the virtual directory on IIS 7.0

- 1** Start Windows Explorer and create the scripts folder in C:\inetpub.  
e.g. C:\inetpub\scripts
- 2** Right-click the scripts folder and select "Properties".
- 3** Select the "Security" tab, and then click [Edit] > [Add].
- 4** Click [Advanced] > [Find Now].
- 5** From the search results, select "Everyone", and then click [OK] > [OK].
- 6** Select "Allow" for "Full control", and then click [OK] > [OK].
- 7** From the Windows Start menu, select [Administrative Tools] > [Internet Information Services (IIS) Manager].
- 8** From the "Connections" window, select the web server, right-click "Default Web Site" under "Sites", and then select "Add Virtual Directory".
- 9** Configure as follows, and then click [OK].
  - Alias: scripts
  - Physical path: C:\inetpub\scriptsBelow "Default Web Site", the virtual directory "scripts" appears.

The virtual directory is created.

Allow IIS 7.0 to execute CGI programs

- 1** From the Windows Start menu, click [Administrative Tools] > [Internet Information Services (IIS) Manager].

- 2** In the "Connections" window, select the web server, and switch to the Features View. The "Home" page of the web server will be displayed.
- 3** Double-click "ISAPI and CGI Restrictions".
- 4** Click [Edit Feature Settings], select "Allow unspecified CGI modules", and then click [OK].
- 5** In the "Connections" window, select the virtual directory (scripts).
- 6** Double-click "Handler Mappings".
- 7** Select "CGI-exe", and then click [Edit Feature Permissions] in the "Actions" window.
- 8** Select "Execute", and then click [OK].

Configuration is complete.

## Installing or configuring Microsoft IIS 6.0

If you are using IIS 6.0 for ApprovalFlow, configure the settings accordingly.

The IIS 6.0 configuration requires Windows "Administrator" privileges.

The following explanations are written on the premise that the virtual directory's name is "scripts".

### **CAUTION:**

- If web servers other than IIS 6.0 are running, stop them.
- We recommend you to adhere to the initial settings for the items that are not indicated in this guide. If those settings are changed, ApprovalFlow may not work normally.
- If the "User Account Control" dialog appears, click [Continue].

## Installing IIS 6.0

- 8** From the Windows Start menu, select [Control Panel] > [Administrative Tools] > [Server Manager].
- 9** On the "Server Manager" screen, click [Add or delete roles].
- 10** On the "Server Composition Wizard", click [Next].
- 11** Select [Application Server (IIS)], and then click [Next] > [Next].  
Installation starts.
- 12** When the installation is completed, click [Complete].
- 13** Start the web browser and access the following URL.

<http://localhost/>

If the "It Works" screen appears, the installation ended normally.

Creating the virtual directory on IIS 6.0

- 1** Start Windows Explorer and create the scripts folder in C:\inetpub.  
e.g. C:\inetpub\scripts
- 2** Right-click the scripts folder and select "Properties".
- 3** Select the "Security" tab, and then click [Add].
- 4** Click [Advanced] > [Find Now].
- 5** From the search results, select "Everyone", and then click [OK].
- 6** Select "Allow" for "Full control", and then click [OK].
- 7** From the Windows Start menu, select [Administrative Tools] > [Internet Information Services (IIS) Manager].
- 8** Select "Web Site", and then right-click "Default Web Site".
- 9** Select "New" > "Virtual Directory".
- 10** On the "Add Virtual Directory Wizard" screen, click [Next].
- 11** Enter "scripts" for "Alias", and then click [Next].
- 12** Set "C:\inetpub\scripts" for "path", and then click [Next] > [Next] > [Complete].  
Below "Default Web Site", the virtual directory "scripts" appears.

The virtual directory is created.

Allow IIS 6.0 to execute CGI programs

- 1** From the Windows Start menu, click [Administrative Tools] > [Internet Information Services (IIS) Manager].
- 2** Select "Web Site" > "Default Web Site".
- 3** Right-click "scripts", and then select "Properties".

**4** Select the "Virtual Directory" tab, and then select "Scripts and Executables" from the "Execute Permissions" drop-down menu, and next click [OK].

**5** Select "Web Service Extensions".

**6** Select "Allow All Unknown CGI Extensions", and then click [Allow] > [Yes].

Configuration is complete.

### 1.3.3 Deactivating SELinux (for Linux only)

Ensure that SE Linux is disabled. If it is enabled, ApprovalFlow will not work normally. To learn how to disable SE Linux, see your OS manuals.

## 1.4 Planning to introduce ApprovalFlow

Item	Description
Installer	<ul style="list-style-type: none"> <li>- Windows (32-bit): cbaf-1.0.x-windows.exe</li> <li>- Windows (64-bit): cbaf-1.0.x-windows-x64.exe</li> <li>- Linux (32-bit): cbaf-1.0.x-linux.bin</li> <li>- Linux (64-bit): cbaf-1.0.x-linux-x64.bin</li> <li>• You can download the installer of the latest version from the following URL: <a href="http://cybozu.com/af/trial/">http://cybozu.com/af/trial/</a></li> </ul>
Administrator password	Required when initializing ApprovalFlow or logging in to ApprovalFlow as Administrator (super user).
System administrator information	The system administrator manages ApprovalFlow. Plan the following details: <ul style="list-style-type: none"> <li>- User name</li> <li>- Login name</li> <li>- Password</li> </ul>
Customer information	Gather the following information about the customer who will be introducing ApprovalFlow. <ul style="list-style-type: none"> <li>- Corporation name</li> <li>- Corporation name (pronunciation)</li> </ul> If you want ApprovalFlow to display a logo on every screen, prepare one of the followings: <ul style="list-style-type: none"> <li>- Image file</li> <li>- Image file location URL</li> </ul>
Document root	A directory on the web server where HTML files and image files for ApprovalFlow are located. Contact the web server administrator regarding the document root.
CGI directory	A directory on the web server where CGI programs and setting files for ApprovalFlow are located. CGI programs must be executable within this directory. Contact the web server administrator regarding the CGI directory.

Item	Description
Installation identifier	<p>The installation identifier is the name of the directory in which the executable files, etc. is saved. Change the initial setting as necessary.</p> <p>Valid characters are as follows:</p> <ul style="list-style-type: none"> <li>- A through Z (upper case alphabets)</li> <li>- a through z (lower case alphabets)</li> <li>- 0 through 9 (numbers)</li> <li>- Symbols: _ (underscore)</li> </ul> <ul style="list-style-type: none"> <li>• You cannot start with "0-9".</li> <li>• You can enter at most 10 characters.</li> <li>• If ApprovalFlow has already been installed in a separate instance, use a different installation identifier to install ApprovalFlow into a new instance.</li> </ul>
Database administrator password	<p>Required to manage the database.</p> <ul style="list-style-type: none"> <li>- A through Z (upper case alphabets)</li> <li>- a through z (lower case alphabets)</li> <li>- 0 through 9 (numbers)</li> <li>- Symbols: _ (underscore)</li> </ul> <ul style="list-style-type: none"> <li>• The password must be 6 to 10 characters long.</li> <li>• Manage the password carefully to prevent unauthorized accesses.</li> </ul>
Database user password	<p>Required to manage ApprovalFlow data in the database.</p> <ul style="list-style-type: none"> <li>- A through Z (upper case alphabets)</li> <li>- a through z (lower case alphabets)</li> <li>- 0 through 9 (numbers)</li> <li>- Symbols: _ (underscore)</li> </ul> <ul style="list-style-type: none"> <li>• The password must be 6 to 10 characters long.</li> <li>• Manage the password carefully to prevent unauthorized accesses.</li> </ul>
Time zone	<p>Decide the standard time used in ApprovalFlow. Confirm your IT environment's time zone situation with your IT department.</p>

## 2 Installation

This chapter explains how to install ApprovalFlow.

The ApprovalFlow program, database engine, and image files will be installed in different directories.

### 2.1 Windows

The ApprovalFlow installation in the Windows environment requires Windows "Administrator" privileges.

The explanation is written on the premise that ApprovalFlow is installed in the following directories:

- Web server CGI directory : C:\inetpub\scripts
- Web server document root : C:\inetpub\wwwroot

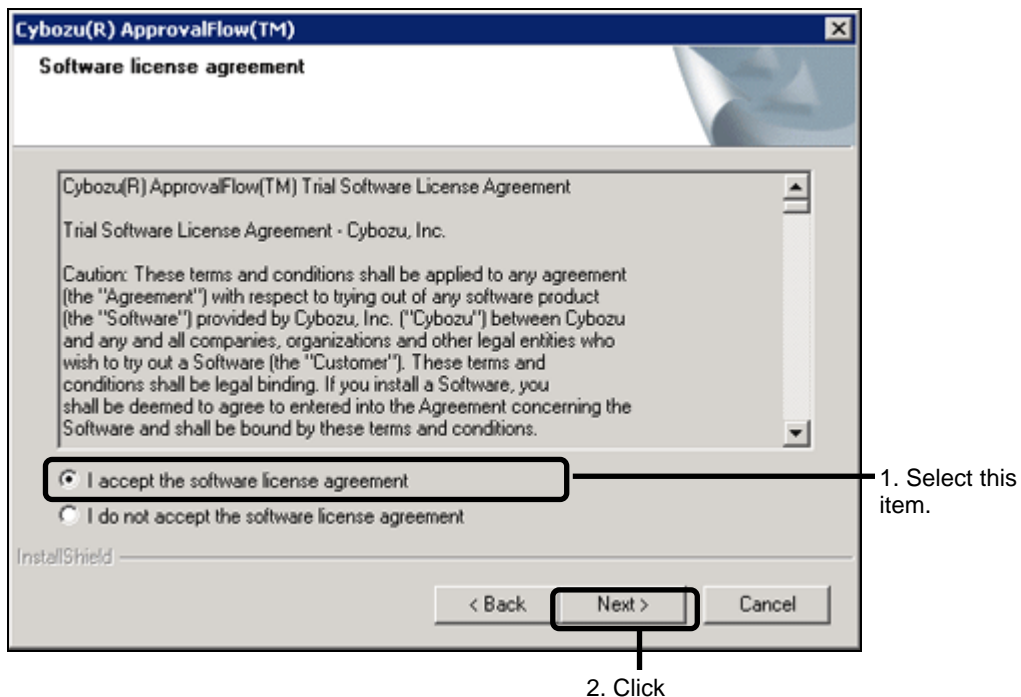
#### CAUTION:

- Be sure to read the following before installing.  
*1.3 Before installing the ApprovalFlow software - page 7*
- Close all other Windows programs before installing.
- If a web server is already installed in the server, be sure that it is running.

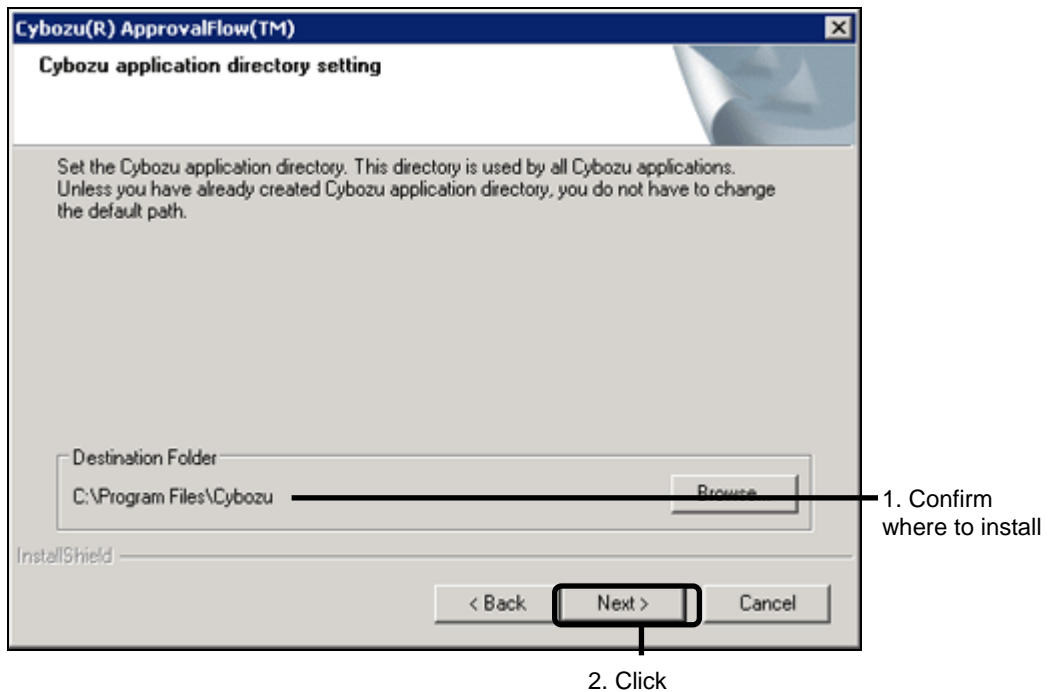
**1** Start the installer "cbaf-1.0.x-windows.exe" or "cbaf-1.0.x-windows-x64.exe" and then click [Next].

**2** Read the license agreement carefully. If you agree to the agreement, select "I accept the software license agreement", and then click [Next].

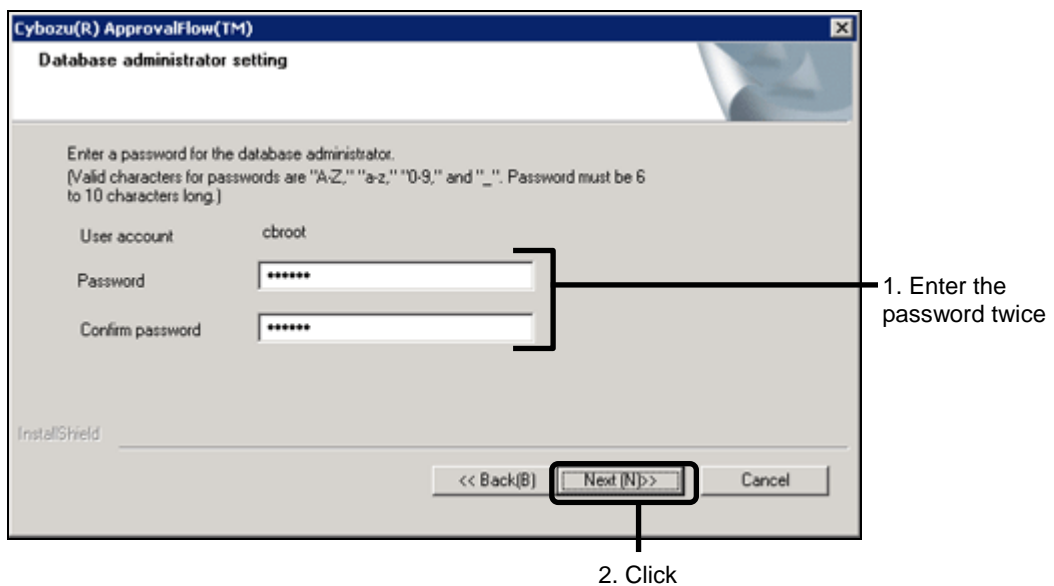
If you do not agree to the agreement, click [Cancel] to end the installation.



- 3** Confirm the directory in which ApprovalFlow will be installed, and then click [Next].  
To change the directory, click [Browse].



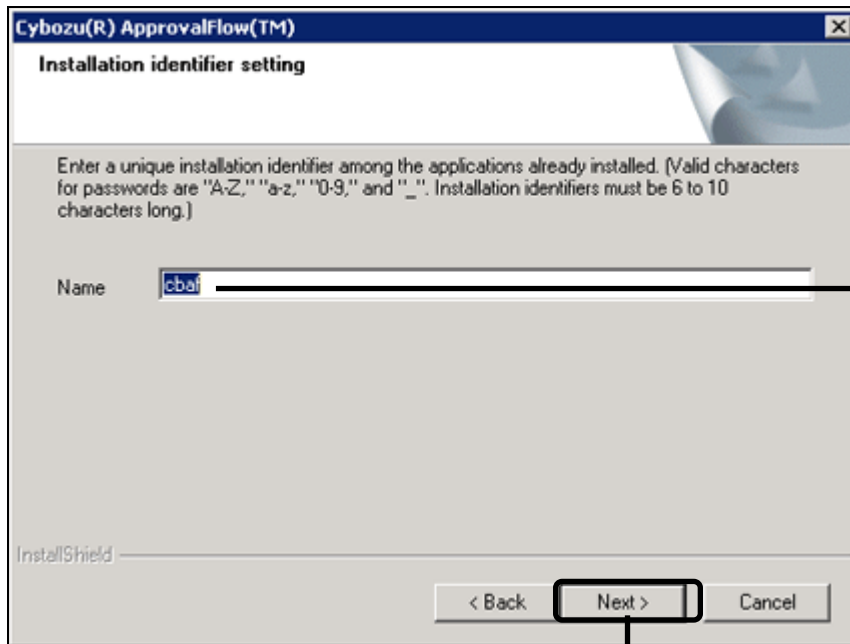
- 4** Enter the database administrator password, and then click [Next].



- Manage the database administrator password carefully. The password is required to restore data from a backup and for moving ApprovalFlow to another server.
- You cannot reset the database administrator password once it is set.

### 5 Confirm the installation identifier, and then click [Next].

If another Cybozu product is already installed, use a different installation identifier.



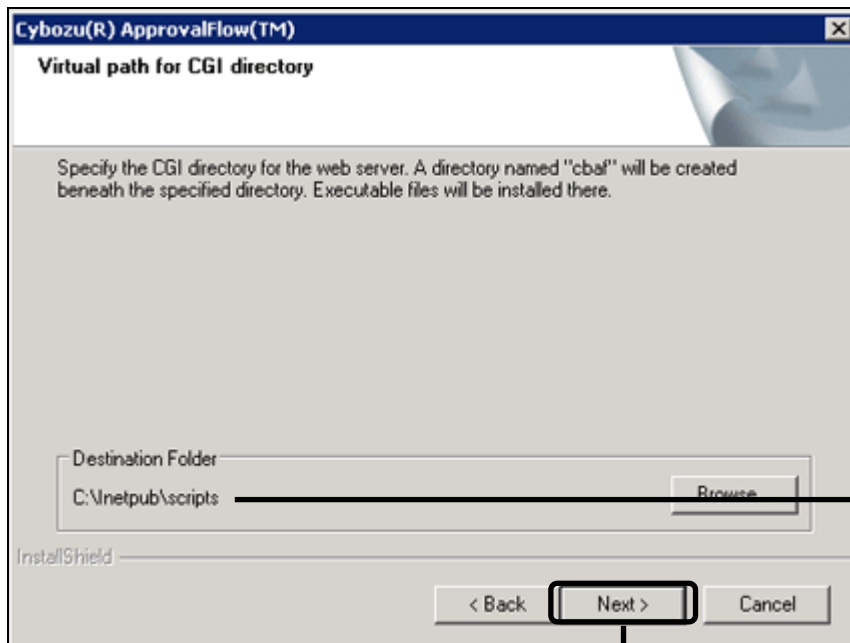
1. Confirm the installation identifier

2. Click

- The message "Do you wish to install the Web server?" may appear. Click [Yes] to install Apache. *Installing a web server - page 18*

### 6 Confirm the CGI directory for the web server, and then [Next].

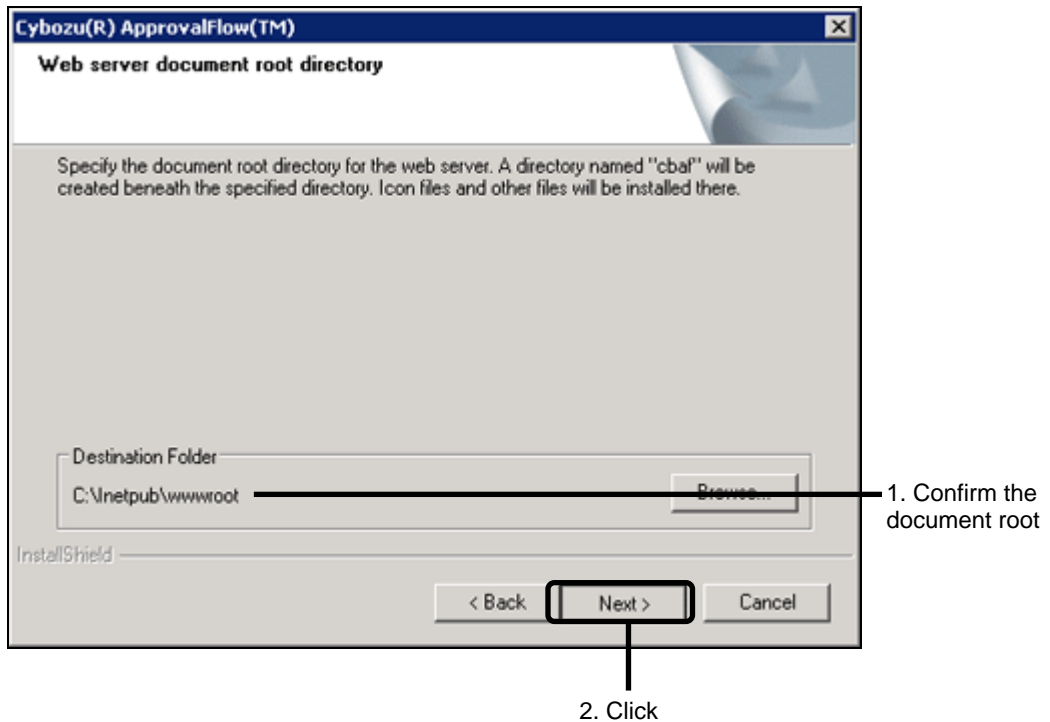
To change the CGI directory, click [Browse].



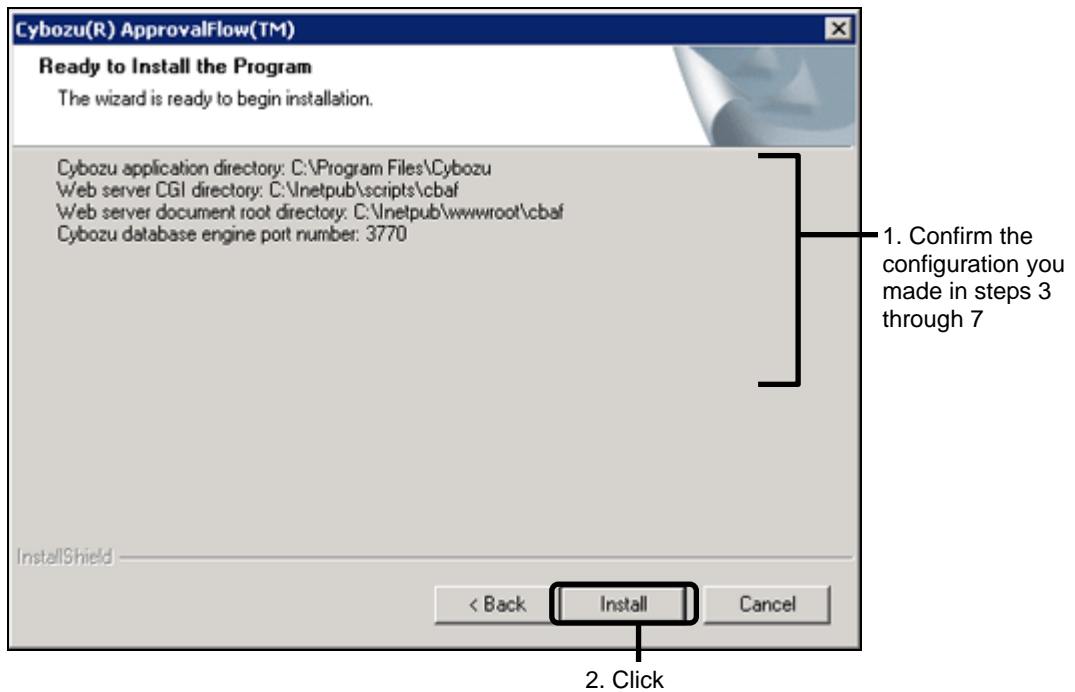
1. Confirm the CGI directory

2. Click

- 7** Confirm the document root for the web server, and then click [Next].  
To change the document root, click [Browse].



- 8** Confirm that the software configuration is correct, and then click [Install].  
Installation starts.



- 9** Click [Finish] on the "Install Shield Wizard Complete" screen.

**10** If a message "Jump to Cybozu(R) ApprovalFlow(TM) to page." appears, click [OK].

The ApprovalFlow installation is complete. Next, configure the initial settings.

*3 Required settings before starting up ApprovalFlow - page 23*

**Note:**

- If a message that indicates that you cannot install ApprovalFlow, confirm network or other environmental information.  
*1.3 Before installing the ApprovalFlow software - page 7*
- If ApprovalFlow pages are not displayed normally when you access it, confirm the web server settings.  
*1.3.2 Ensuring web server settings - page 8*

### Installing a web server

If a web server is not installed in the server or the web server is stopped, the message "Do you wish to install the Web server?" appears after step 5.

Click [Yes] to install a web server. Apache web server with the service name "Apache2" will be installed.

Click [No] to quit installing the web server and ApprovalFlow.

**Note:**

- If you install the web server using the ApprovalFlow installer, the web server will be installed in the following directories.
  - CGI directory : C:\Program Files\Cybozu\Apache2.2\cgi-bin
  - Document root : C:\Program Files\Cybozu\Apache2.2\htdocs

## 2.2 Linux

The ApprovalFlow installation in the Linux environment requires "root" privileges.

The following explanations are written on the premise that ApprovalFlow is installed in the following directories:

- Web server CGI directory : /var/www/cgi-bin
- Web server document root : /var/www/html

### CAUTION:

- Be sure to read the following page before installing.  
*1.3 Before installing the ApprovalFlow software - page 7*
- If a web server is already installed in the server, be sure that it is running.

**1** Move to the directory where the installer "cbaf-1.0.x-linux.bin" or "cbaf-1.0.x-linux-x64.bin" is located.

**2** Execute the installer "cbaf-1.0.x-linux.bin" or "cbaf-1.0.x-linux-x64.bin".

```
[root@server admin]# sh cbaf-1.0.x-linux.bin
```

**3** Enter Y or N according to the message shown, and then press the Enter key.

```
If you cannot read the above Japanese text, type 'N'.  
N
```

**4** Read the license agreement carefully. If you accept the agreement, enter "yes", and then press the Enter key.

- Press the space key or the Enter key to scroll down the screen.

If you do not agree to the agreement, enter "no", and then press the Enter key to end the installation.

```
Do you accept the terms of the LICENSE Agreement?  
yes or no: yes
```

**5 Confirm the installation identifier, and then press the Enter key.**

If another Cybozu product is already installed, set a different installation identifier.

Set the installation or uninstallation identifier.

To newly install the same application, set a different installation identifier. Valid characters are 'A-Z', 'a-z', '0-9', or '\_'. You cannot use numbers at the beginning of the text. You can enter up to 10 characters.

To upgrade the version or uninstall the application, set the same installation identifier as the application already installed.

[cbaf]:

Confirm the installation identifier

**6 Confirm the directory to save the ApprovalFlow program and the data, and then press the Enter key.**

To change the directory, enter the directory absolute path and then press the Enter key. MySQL 5.0 will be installed in this directory.

Specify the resident program and the data directory. Be sure that you have enough free disk space for those files.

[/usr/local/cybozu]:

Confirm the installation directory

**7 Enter the database administrator password, and then press the Enter key.**

Enter a password for the database administrator. Valid characters are 'A-Z', 'a-z', '0-9', or '\_'. Password must be 6 to 10 characters long.

New Password: cbadmin  
Retype Password: cbadmin

Enter the password twice

- Manage the database administrator password carefully. The password is required to restore data from a backup and for moving ApprovalFlow to another server.
- You cannot reset the database administrator password once it is set.

**8 Confirm the CGI directory for the web server, and then press the Enter key.**

To change the directory, enter the directory absolute path and then press the Enter key.

Specify the CGI directory for the web server. The web server will actually be installed to the following directory: (CGI directory) /cbaf e.g. /var/www/cgi-bin/cbaf

[/var/www/cgi-bin]:

Confirm the CGI directory

**9 Confirm the document root for the web server, and then press the Enter key.**

To change the document root, enter the directory absolute path and then press the Enter key.

```
Specify the document root where image files and other files are installed.
The files will actually be installed to the following directory: (Document root) /cbaf e.g.
/var/www/html/cbaf
[/var/www/html]:
```

Confirm the document root

**10 Confirm the web server "run as" user name, and then press the Enter key.**

If incorrect, enter the correct "run as" user name, and then press the Enter key.

```
Specify the HTTP server 'run as' user. [apache]:
```

Confirm the web server "run as"

**11 Confirm the installation configuration. If the configuration is correct, enter "yes", and then press the Enter key.**

The installation process starts.

If the configuration is incorrect, enter "no", and then press the Enter key.

```
Summary of install configuration

Resident program install directory:  /usr/local/cybozu
Database administrator:              cbroot
Installation identifier:              cbaf
HTTP server user name:               apache
CGI install directory:               /var/www/cgi-bin/cbaf
Image file install directory:        /var/www/html/cbaf
Database communication port:         3770
Scheduling service start up script:  /etc/rc.d/init.d/cyafss_cbaf
Application deletion script:         /var/www/cgi-bin/cbaf/uninstall_cbaf
Database engine start up script:     /etc/rc.d/init.d/cyde_af_5_0
Database engine deletion script:     /usr/local/cybozu/mysql-af-5.0/uninstall_cyde_af_5_0

The application will be installed using these settings. Is this OK?
yes or no:
```

Confirm the configuration you made in step 5 to 10

## 12 Confirm that the installation is complete.

Installation completed normally. Access the following URL using a Web browser.

http://(Server's FQDN or IP address)/Virtual path for CGI directory/cbaf/af.cgi

ex)http://webserver.cybozu.co.jp/cgi-bin/cbaf/af.cgi

ex)http://10.10.203.55/cgi-bin/cbaf/af.cgi

[root@server admin]#

### Note:

- If a message that indicates that you cannot install ApprovalFlow, confirm the network and other environments.  
*1.3 Before installing the ApprovalFlow software - page 7*
- If ApprovalFlow pages are not displayed normally when you access it, confirm the web server settings.  
*1.3.2 Ensuring web server settings - page 8*

## 3 Required settings before starting up ApprovalFlow

This chapter explains how to initialize ApprovalFlow.

The explanation is written on the premise that ApprovalFlow is installed in the following directory with the following installation identifier set.

- Installation identifier: cbaf
- CGI directory:
  - Windows environment : C:\inetpub\scripts
  - Linux environment : /var/www/cgi-bin

### 3.1 Initializing

Initialize ApprovalFlow.

The explanation is written on the premise that the interface language is set to English.

#### CAUTION:

- Do not move to another page while initializing. If you move to another screen while initializing, initialization may fail.

#### 1 Access ApprovalFlow with a web browser.

The followings are access URLs:

- Windows environment : http://(server IP address or host name)/scripts/cbaf/af.exe
- Linux environment : http://(server IP address or host name)/cgi-bin/cbaf/af.cgi

#### 2 Select the interface language to use for the initialization process, and then click [Next].

Select "Use English for initializing screen".

#### 3 Set the fields accordingly, and then click [Next].

ApprovalFlow will be initialized.

Item	Description
Database administrator	Predetermined as "cbroot".
Database administrator password (*)	Enter the database administrator password you set during the ApprovalFlow installation process.
Database user	Predetermined as "cb_(installation identifier)".
Database user password (*)	Set the database user password. <i>1.4 Planning to introduce ApprovalFlow - page 12</i>
Database user password (Confirmation) (*)	Re-enter the database user password to prevent typing mistakes.
Administrator password	Enter the Administrator password so that the Administrator can access ApprovalFlow. - The Administrator (super user) has the privilege to manage the whole ApprovalFlow system and access all information.
Administrator password (Confirmation)	Re-enter the Administrator password to prevent typing mistakes.

- "\*" indicates a required field.
- Manage the database administrator password and the database user password carefully. You cannot reset the passwords once they are set.

#### **4 Set the locale, and then click [Next].**

Select the interface language and the time zone. For time zone, set the region, then the time difference and the city.

*1.4 Planning to introduce ApprovalFlow - page 12*

- The set interface language will be used as the initial value of the system.

#### **5 Select whether or not to install the sample data, and then click [Next].**

You can move to the system administration screen or the top page of Workflow from the "Cybozu ApprovalFlow is available now" screen.

- If you install the sample data, data such as organizations, users and application forms will be installed. Then you can try ApprovalFlow immediately.
- You can delete the installed sample data whenever you wish.

*Deleting sample data - page 24*

#### **Note:**

- If you are using Internet Explorer, the [Add to favorites] button will appear on the "Cybozu ApprovalFlow is available now." screen. Click the button to add the ApprovalFlow screens to your favorites.
- You can confirm the interface language and the time zone on the "System administration" screen.  
*1.5 System requirements of the Administration Guide*
- To change the time zone after initialization, you will need to edit a settings file (common.ini).  
*1.5 System requirements of the Administration Guide*

### Deleting sample data

To delete the sample data, log in to ApprovalFlow as Administrator, access the following URL, and initialize ApprovalFlow.

- Windows environment: [http://\(IP address or host name of the server\)/scripts/cbaf/af.exe/initialize](http://(IP address or host name of the server)/scripts/cbaf/af.exe/initialize)
- Linux environment : [http://\(IP address or host name of the server\)/cgi-bin/cbaf/af.cgi/initialize](http://(IP address or host name of the server)/cgi-bin/cbaf/af.cgi/initialize)

#### **CAUTION:**

- If you initialize ApprovalFlow, all registered data will be deleted.

## 3.2 Registering customer information

---

Register the customer information in the system administration screen.

- 1 Access the system administration screen in one of the following ways:**
  - On the "Cybozu ApprovalFlow is available now" screen shown after initialization, click [Manage ApprovalFlow].
  - Access via the following URLs:
    - Windows environment: `http://(server IP address or host name)/scripts/cbaf/af.exe/system/index`
    - Linux environment: `http://(server IP address or host name)/cgi-bin/cbaf/af.cgi/system/index`
  
- 2 Enter the login name and password of Administrator, and then click [Log in].**

To change the interface language, use the menu on the upper right corner of the page.  
If you want ApprovalFlow to use the same login name afterward, select "Remember me".
  
- 3 On the "System administration" screen, click [Basic system administration] > [Customer Information], and then [Verify customer information].**
  
- 4 Click [Change].**
  
- 5 Set the fields accordingly, and then click [Save changes].**

*1.4 Planning to introduce ApprovalFlow - page 12*

## 3.3 Appointing system administrator

Add users and grant them the Administrators role.  
Administrators can administer the ApprovalFlow system.

### Adding users

Register the ApprovalFlow users.

The registered users will be categorized to "(Users who are not a member of any organization)".

- 1** On the "System administration" screen, click [Basic system administration] > [Users], and then the [Organization/user settings].
- 2** Click [Add user].
- 3** Set the fields accordingly, and then click [Add].

### User information entry fields

Item	Description	Maximum length	Note
Name (*)	Enter the user name.	100	
Login name (*)	Enter the login name of the user.	100	Login name must be unique (not shared with any other user).
Password	Enter the user's password.	64	
Password (confirmation)	Re-enter the user's password to prevent typing mistakes.	64	
Organization membership	Shows which organizations the user is a member of. Click [Change organization membership] to change the organization membership.		
Priority organization	Sets the priority organization.		
Display order	Determines the order in which users are shown in the user list. If display orders are duplicated, users are displayed in the order registered in ApprovalFlow.	8	Display order must be an integer 0 or larger. The display is in ascending order.
Inactive	If you do not want the user to access ApprovalFlow any longer, deactivate the user account.		
Pronunciation	Enter the pronunciation of the user name.	100	
E-mail	Enter the e-mail address of the user.	100	
Notes	Enter notes if you wish.	65535	
Position	Enter the position of the user.	100	
Contact	Enter the contact of the user.	100	
URL	Enter the URL of the user or related to the user.	255	

Item	Description	Maximum length	Note
Image	Specifies an image file such as a photograph of the user. - You can select the image file from the directory by clicking [Browse]. - To clear the image, select [Delete] and then click [Save changes].		

- "\*" indicates a required field.

**Note:**

- You can change which user information items are displayed.  
*3.3 Managing users of the Administration Guide*

## Grant Administrators role to users

Grant Administrators role to users to assign them as system administrators.

- 1** On the "System administration" screen, click [Basic system administration] > [Users], and then the [Role Setting].
- 2** Click [Administrators], and then [Grant role to users].
- 3** Click [(Users who are not a member of any organization)].
- 4** Select a user, and then click [Add].

- Click [Remove] to remove the users of lists to grant roles to.

- 5** Click [Grant role].

# 4 Version upgrade

---

This chapter explains how to upgrade ApprovalFlow to a newer version.

## 4.1 Windows

---

This section explains how to upgrade ApprovalFlow in the Windows environment.

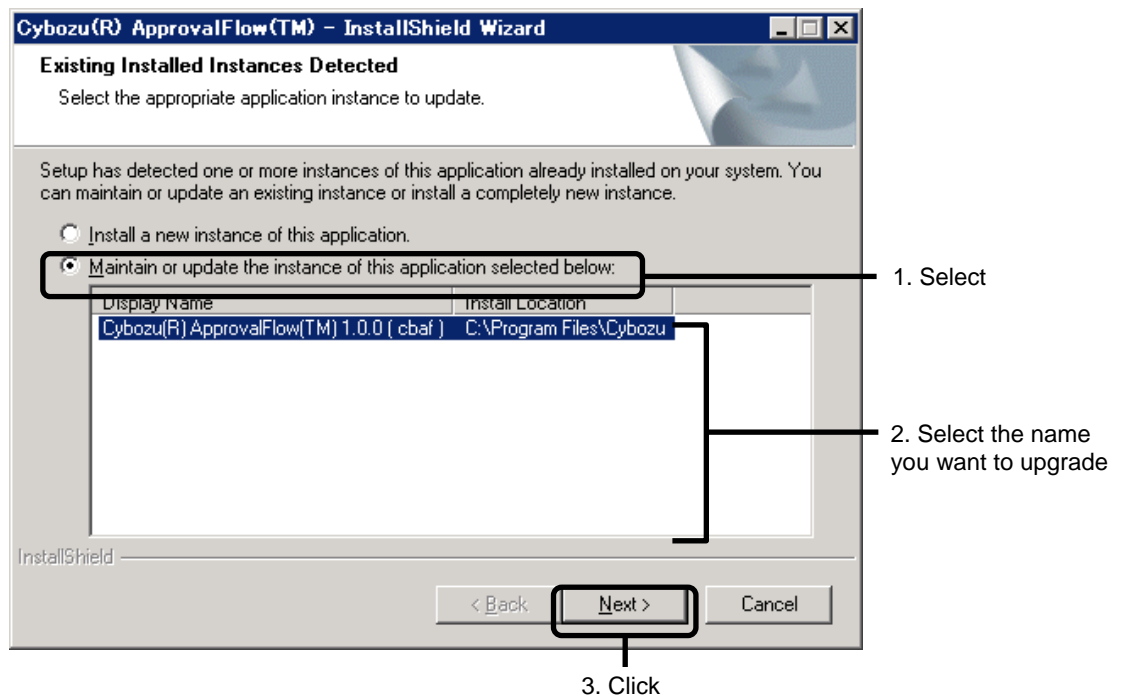
**CAUTION:**

- Upgrade in the Windows environment requires Windows "Administrator" privileges.
- Close all other programs before starting upgrade.
- Stop all scheduling services before starting upgrade.
- Deactivate the monitoring system if you set to the system to start up scheduling service automatically.
- Do not interrupt the operation until the upgrade process is complete.
- Close the "Service" window after step 6. Otherwise, upgrade may be failed.

**Note:**

- Upgrade requires the installer. You can download the installer of the latest version from the following URL:  
<http://cybozu.com/af/trial/>

- 1 Stop the web server.**
- 2 From the Windows Start menu, select [Control Panel] > [Administrative Tools] > [Services].**
- 3 Stop "Cybozu\_Scheduling\_Service\_cbaf" service.**  
The Scheduling service stops.
- 4 Stop "Cybozu\_ApprovalFlow\_Database\_Engine\_5\_0" service.**  
Database engine stops.
- 5 Back up ApprovalFlow data.**  
5.1 Backup and restoration of the Administration Guide
- 6 Start "Cybozu\_ApprovalFlow\_Database\_Engine\_5\_0" service.**  
Database engine starts.
- 7 Start the installer "cbaf-1.0.x-windows.exe" or "cbaf-1.0.x-windows-x64.exe"**
- 8 Select "Maintain or update the instance of this application selected below." and select the name you want to upgrade, and then click [Next].**



- 9** Click [Finish] on the "Update Complete" screen.
- 10** From the Windows Start menu, select [Control Panel] > [Administrative Tools] > [Services].
- 11** Confirm that "Cybozu\_Scheduling\_Service\_cbaf" service has started.
- 12** Start the web server.

**Note:**

- If a message " The setup has detected that version 1.0.x of Cybozu(R) ApprovalFlow(TM) is already installed..." appears, click [No]. You do not need to upgrade.

## 4.2 Linux

---

This section explains how to upgrade ApprovalFlow in the Linux environment.

**CAUTION:**

- Upgrade in the Linux environment requires "root" privileges.
- Stop all scheduling services before starting upgrade.
- Deactivate the monitoring system if you set to the system to start up scheduling service automatically.
- Be sure to save the installer in the directory in which web server "run as" user can write and execute.
- Permissions are necessary for all directories over the directory that the installer have been saved in.
- Do not interrupt the operation until the upgrade process is complete.

**Note:**

- Upgrade requires the installer. You can download the installer of the latest version from the following URL:

<http://cybozu.com/af/trial/>

### 1 Stop the web server.

```
[root@server admin]# /etc/init.d/httpd stop
```

### 2 Stop the scheduling service.

```
[root@server admin]# /etc/init.d/cyafss_cbaf stop
```

### 3 Stop database engine.

```
[root@server admin]# /etc/init.d/cyde_af_5_0 stop
```

### 4 Back up ApprovalFlow data.

5.1 Backup and restoration of the Administration Guide

### 5 Start database engine.

```
[root@server admin]# /etc/init.d/cyde_af_5_0 start
```

### 6 Move to the directory where the installer "cbaf-1.0.x-linux.bin" or "cbaf-1.0.x-linux-x64.bin" is located.

### 7 Execute the installer "cbaf-1.0.x-linux.bin" or "cbaf-1.0.x-linux-x64.bin".

```
[root@server admin]# sh cbaf-1.0.x-linux.bin
```

**8** Enter Y or N according to the message shown, and then press the Enter key.

```
If you cannot read the above Japanese text, type 'N'.
N
```

**9** Read the license agreement carefully. If you accept the agreement, enter "yes", and then press the Enter key.

- Press the space key or the Enter key to scroll down the screen.

If you do not agree to the agreement, enter "no", and then press the Enter key to end the installation.

```
Do you accept the terms of the LICENSE Agreement?
yes or no: yes
```

**10** Enter the installation identifier of the ApprovalFlow you want to upgrade, and then press the Enter key.

```
The installation identifier of the application already installed is as follows.
cbaf
```

```
Set the installation or uninstallation identifier.
```

```
To newly install the same application, set a different installation identifier.
Valid characters are 'A-Z', 'a-z', '0-9', or '_'. You cannot use numbers at the beginning of the text.
You can enter up to 10 characters.
```

```
To upgrade the version or uninstall the application, set the same installation identifier as the
application already installed.
```

```
[cbaf]:
```

```
Enter the installation identifier of the
ApprovalFlow you want to upgrade
```

- If you enter the installation identifier which have not been installed, ApprovalFlow will be installed as a new product.

**11** Enter "1" and then press the Enter key to upgrade the installed ApprovalFlow.

```
This application cbaf has already been installed.
1: Upgrade the version
2: Normal uninstallation (Customizable resource such as settings files will not be uninstalled)
3: Complete uninstallation (All application data directories are removed.)
[1|2|3]: 1
```

**12** Confirm the installation configuration. If the configuration is correct, enter "yes", and then press the Enter key.

```
Summary of install configuration

Resident program install directory: /usr/local/cybozu
Database administrator:             cbroot
Installation identifier:            cbaf
HTTP server user name:             apache
CGI install directory:             /var/www/cgi-bin/cbaf
Image file install directory:      /var/www/html/cbaf
Database communication port:       3770
Scheduling service start up script: /etc/rc.d/init.d/cyafss_cbaf
Application deletion script:       /var/www/cgi-bin/cbaf/uninstall_cbaf
Database engine start up script:   /etc/rc.d/init.d/cyde_af_5_0
Database engine deletion script:   /usr/local/cybozu/mysql-af-5.0/uninstall_cyde_af_5_0

The application will be installed using these settings. Is this OK?
yes or no: yes
```

Confirm the configuration you made in step 10 to 11

### 13 Confirm that the upgrade is complete.

```
Installation completed normally. Access the following URL using a Web browser.

http://(Server's FQDN or IP address)/Virtual path for CGI directory/cbaf/af.cgi

ex)http://webserver.cybozu.co.jp/cgi-bin/cbaf/af.cgi
ex)http://10.10.203.55/cgi-bin/cbaf/af.cgi
[root@server admin]#
```

### 14 Confirm the scheduling service has been started.

```
[root@server admin]# /etc/init.d/cyafss_cbaf status
```

### 15 Start web server.

```
[root@server admin]# /etc/init.d/httpd start
```

# 5 Uninstallation

This chapter explains how to uninstall ApprovalFlow.

## 5.1 Windows

The ApprovalFlow uninstallation from the Windows environment requires Windows "Administrator" privileges.

The explanation is written on the premise that ApprovalFlow is installed with the installation identifier set to the default (cbaf).

- 1** From the Windows Start menu, click [Control Panel] > [Programs] > [Programs and Features].
- 2** Select [Cybozu(R) ApprovalFlow(TM) 1.0.x (cbaf)], and then click [Uninstall/Change].
- 3** Select [Complete uninstallation], and then click [Next].

The files and data to be uninstalled differ depending on the uninstallation type.

Type	Description
Normal uninstallation	Settings files and template files will not be removed.
Complete uninstallation	All application data directories are removed.
Do not uninstall	Cancels uninstallation.

- 4** On the [Maintenance Complete] screen, click [Finish].
- 5** On the "Programs and Features" screen, select [Cybozu(R) ApprovalFlow(TM) Database Engine 5.0], and then click [Uninstall/Change].
- 6** Select [Complete uninstallation], and then click [Next].

The files and data to be uninstalled differ depending on the uninstallation type.

Type	Description
Normal uninstallation	Setting files and data in the data base will not be removed.
Complete uninstallation	All application data directories are removed.
Do not uninstall	Cancels uninstallation.

Uninstallation is complete.

## 5.2 Linux

---

Use the "cbaf-1.0.x-linux.bin" installer or the "cbaf-1.0.x-linux.bin-x64.bin" installer to uninstall ApprovalFlow from the Linux environment.

The ApprovalFlow uninstallation requires "root" privileges.

The explanation is written on the premise that ApprovalFlow is installed with the installation identifier set to the default (cbaf).

**1** Move to the directory where the installer "cbaf-1.0.x-linux.bin" or "cbaf-1.0.x-x64.bin" is located.

**2** Execute the installer "cbaf-1.0.x-linux.bin" or "cbaf-1.0.x-linux-x64.bin".

```
[root@server admin]# sh cbaf-1.0.x-linux.bin
```

**3** Enter Y or N according to the message shown, and then press the Enter key.

```
If you cannot read the above Japanese text, type 'N'.  
N
```

**4** Read the license agreement carefully. If you accept the agreement, enter "yes", and then press the Enter key.

If you do not agree to the agreement, enter "no", and then press the Enter key to end the uninstallation.

```
Do you accept the terms of the LICENSE Agreement?  
yes or no: yes
```

- Press the space key or the Enter key to scroll down the screen.

## 5 Enter the installation identifier of the ApprovalFlow you want to uninstall, and then press the Enter key.

```
The installation identifier of the application already installed is as follows.
cbaf

Set the installation or uninstallation identifier.

To newly install the same application, set a different installation identifier.
Valid characters are 'A-Z', 'a-z', '0-9', or '_'. You cannot use numbers at the beginning of the text.
You can enter up to 10 characters.

To upgrade the version or uninstall the application, set the same installation identifier as the
application already installed.
[cbaf]: cbaf
```

Enter the installation identifier of the ApprovalFlow you want to uninstall

## 6 Enter "3" and then press the Enter key to delete the installed ApprovalFlow.

To delete the files except for the settings files and template files, enter "2" and then press the Enter key.

```
This application cbaf has already been installed.
1: Do not uninstall
2: Normal uninstallation (Customizable resource such as settings files will not be uninstalled)
3: Complete uninstallation (All application data directories are removed.)
[1|2|3]: 3
```

## 7 Enter "3" and then press the Enter key to delete the database engine.

To delete the files except for the settings files and database files, enter "2" and then press the Enter key.

```
A application using the database is being uninstalled.
Do you wish to uninstall the database engine?
1: Do not uninstall
2: Normal uninstallation (Settings files and database files will not be uninstalled)
3: Complete uninstallation (All application data directories are removed.)
[1|2|3]: 3
```

Uninstallation is complete.

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